



April 21, 1995

Inspector Hugh Murphy
 HAYWARD FIRE DEPARTMENT
 City of Hayward Hazardous Materials Office
 25151 Clawiter Road
 Hayward, California 94545-2731

VIA FACSIMILE
 (510) 293-5017

Subject: Airport Plaza
 TCE Investigation and Remediation
 Hesperian and West Winton Avenues

Dear Inspector Murphy:

This will follow-up our telephone conversation of yesterday regarding the above referenced property.

The purpose of my telephone call yesterday was to determine the reason(s) that Sheldon McClellan of the Hayward Planning Department had not yet received some indication from you that our workplan had been approved. As you know, my client has planned to embark on a regentrification of the subject property and to eventually demolish all of the structures and construct a shopping center with some satellite out-buildings. It is my understanding that the City is generally in favor of such a development for many reasons.

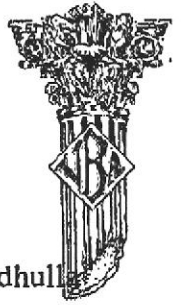
I was dismayed to learn that you had either failed to advise me or have developed new criteria with regard to our submitted environmental workplan for the investigation of the source and extent of the known volatile organic compounds found in groundwater beneath the property. The workplan was submitted to Alameda County Health Department, the Regional Water Quality Control Board, and your department for review and approval so that we can continue our investigation into the source(s) and extent of the known groundwater contamination. As you know, groundwater remediation is in progress as this letter is being written. A vapor extraction system is now operating and has proven extremely beneficial to groundwater contaminate levels at the former Texaco Station located next door. In the past, we have sent you all available investigation reports on the subject property.

We do consider the workplan a continuation of the previous studies. The primary purpose of our workplan submittal and supplying you with such information was to keep you apprised of our work on an updated basis. You had advised me on several occasions that you would not perform

**VAN BRUNT
 ASSOCIATES**

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Inspector Hugh Murphy
April 21, 1995
Page 2



primary review and approval functions, but would rather take a back seat and allow Madhulla Logan of Alameda County Health to be the primary oversight agency.

When I spoke to you yesterday, you advised me that not only would you not approve the workplan, but that you would not allow or at least support any planning activities for the proposed development. You advised me that you were seriously concerned about the health, safety and welfare of several class of workers on the property. You defined these workers as environmental investigation personnel (such as employees of my firm or subcontractors, such as drilling rig crews), employees of demolition crews for the eventual removal of the buildings, employees of contracting firms performing building construction, and finally, employees of the various retail stores such as the proposed Taco Bell immediately in the vicinity of the historical dry cleaners operation. You asked that you be assured that any possible risk facing these employees would be addressed in written form for your review.

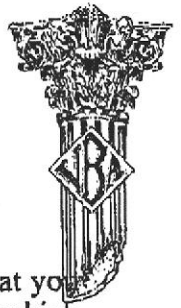
I want to clearly state for the record once again that we have not asked the fire department for an approval to develop or construct buildings. We are merely requesting that you review the workplan and either approve it or provide some other written notification that you do not have any objections to our planned investigative approach. It is my understanding that since we did not receive your approval as of 5:00 p.m. yesterday, my client will not have the benefit of being on the next available Planning Commission agenda.

In the final analysis, we are only asking that you review our workplan to pursue the continued investigation and remediation of a known underground environmental problem associated with the property.

Although I cannot speak for Mr. McClellan, it was my impression that he wanted to hear from his own in-house hazardous materials expert that the known conditions on the site did not represent an unusual or especially hazardous condition that would be an area of concern in the predevelopment phase of the project. Specifically, he reportedly needs information to assist him in completing the necessary questionnaires to fulfill certain California environmental quality act guidelines. It would have been my hope that Mr. McClellan would have learned that there has been a long established underground storage tank investigation and remediation program in place next door affecting our property for quite some time. Quarterly groundwater sampling has shown a dramatic decrease in the initial reported levels of certain VOC's in the groundwater. Accordingly, we believe our workplan is a continuation of historical investigations and the remediation presently underway. The net result of the performance of our planned work will be more precise soil and groundwater sampling data, which we will use to (1) confirm the effectiveness of the existing remediation, (2) provide an accurate ISO concentration map on which we will base a treatment or soil removal program of soil contamination, and (3) assist us in the installation of additional monitoring/extraction wells (if any).

Even after our conversation of yesterday, questions remain about your requirements for us to continue in the development planning process. It would be extremely beneficial for us to meet you in your office to discuss your concerns and suggested approaches to answer the various questions that you may have. I believe it would be a good idea to have Madhulla Logan of Alameda County Health present so that we can maintain clean lines of communication between the various authorities having jurisdiction. May I suggest a meeting in your office on Tuesday, April 25, at 10:00 a.m. for the purpose of summarizing the known information to date, and to review the workplan as necessary to ensure that you understand the project completely.

Inspector Hugh Murphy
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Page 3



May I also request that you be prepared to present the source of the regulatory authority that you have to oversee this project. Specifically, we request to see the City of Hayward ordinance which adopts the uniform fire code, life safety code, or other codes or regulations that you may have at your disposal for enforcement purposes. This would be very helpful for me to understand the source of the fire department's authority and scope of involvement in this investigative and remediation project.

May I also ask that the Fire Marshall be present during at least a portion of the meeting so that we may bring him or her up to speed with our activities to date and planned approach.

In closing, I want to assure you that we take your concerns extremely seriously and are requesting a more formal approach to our meetings and discussions to avoid future confusion with regard to your requirements.

Please let me know if my suggested date and time will fit into your schedule. I will take the responsibility of coordinating your calendar with Madhulla's. I know this will be a very beneficial meeting for us and I look forward to finally meeting you in person.

Sincerely

VAN BRUNT ASSOCIATES

Linda Van Brunt
Michael W. Van Brunt *for*
Principal

MVB:lmr
94502.27

cc: Ms. Madhulla Logan, Alameda County Health Department
(Via Facsimile - 510-337-9335)



February 2, 1995

Jim Crafts, Esq., Co-Trustee
Adolph P. Schuman Marital Trust
400 Sansome Street
San Francisco, California 94111

Subject: 23958 Hesperian Boulevard

Dear Mr. Crafts:

Please find enclosed our schedule for the development and approval of the remediation workplan for the above referenced site. You will note that some tasks are already complete and many are in progress.

We have completed our Phase I Environmental Site Assessment (ESA) and have not found any new or unexpected information in comparison to the Krazan reports. We are reproducing our report now and will submit it to you, Krazan & Texaco shortly.

If you have any questions, feel free to call.

Sincerely,

VAN BRUNT ASSOCIATES

Michael W. Van Brunt
Principal

MVB/lmw:94502.15

Enclosure

cc: VIA FACSIMILE w/Enclosure

- Ms. Karen Petryna, Texaco Refining & Marketing
- Mr. Tony Miller, Taco Bell Const. Mgr
- Mr. Hugh Murphy, Divine Assoc., Taco Bell Architect
- Mr. Roy Wunderlich, Alconco, Taco Bell Const. Mgr
- Mr. Dane Mathis, Krazan Assoc., Taco Bell Consultant
- Ms. Madhulla Logan, Alameda Public Health Dept.
- Mr. Eddy So, CRWQCB, San Francisco Bay Region
- Mr. Hugh Murphy, Inspector, Hayward Fire Dept.

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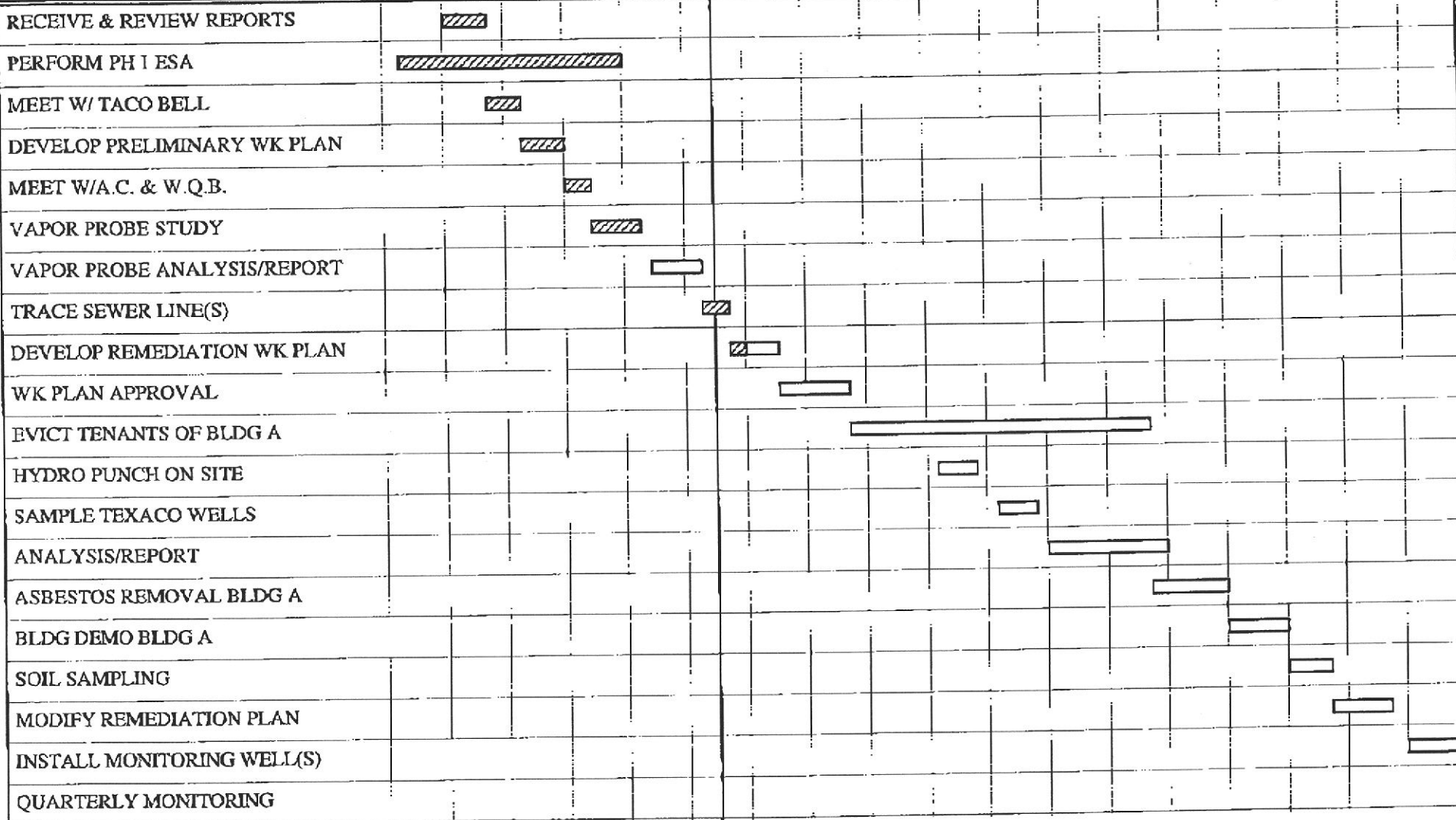
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P.03
510 945 8606
VAN BRUNT ASSOCIATES



23958 HESPERIAN/TCE

Jan '95 Feb '95 Mar '95 Apr '95
 26 2 9 16 23 30 6 13 20 27 6 13 20 27 3 10 17 24



**AIRPORT PLAZA
 GROUNDWATER CONTAMINATION INVESTIGATION
 REMEDIATION WORKPLAN SCHEDULE
 ISSUED 1/25/95 FOR APPROVAL
 REVISED 1/31/95**

LEGEND

PLANNED DURATION 
 COMPLETE 



ENVIRONMENTAL
PROTECTION

95 APR -7 PM 1:13

March 20, 1995

Ms. Madhulla Logan, M.S.
Hazardous Materials Specialist
Alameda County Health Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Mr. Eddy P. So, P.E., CHMM
Associate Water Resources Control Engineer
California Regional Water Quality Control Board
CRWQCB-San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, CA 94612

Subject: 23958 Hesperian Boulevard, Hayward, CA
Remedial Action Workplan

Dear Ms. Logan and Mr. So:

Van Brunt Associates is pleased to submit the attached Remedial Action Workplan. This workplan has been designed to:

- 1) Determine the source(s) of Volatile Organic Compounds (VOC's) in the groundwater and soil; and
- 2) Determine the location and extent of residual VOC's present in the soil; and
- 3) Characterize the location, concentration, and extent of residual VOC's in the groundwater; and
- 4) Provide a comprehensive clean up plan, as necessary; and
- 5) Perform the work in incremental phases for the full and complete disclosure of our findings to the authorities having jurisdiction and affected property owner(s).

This workplan takes into account regulations promulgated by both of your departments and the Bay Area Air Quality Management District (BAAQMD).

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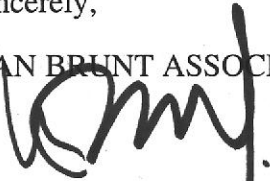
Ms. Madhulla Logan, M.S.
Mr. Eddy P. So, P.E., CHMM
March 20, 1995
Page 2

We would greatly appreciate your expeditious review of the Remedial Action Workplan to allow us to proceed with all possible speed. We intend to proceed as soon as we receive permission. This workplan takes into account the information that we have obtained pursuant to our recent Phase I Environmental Audit and soil gas vapor study.

Do not hesitate to contact us at your earliest opportunity to discuss any necessary modifications to this workplan.

Sincerely,

VAN BRUNT ASSOCIATES


Michael W. Van Brunt
Principal

MVB/lmw
94502.19
Enclosure


Glenn A. Romig
Senior Engineer



ENVIRONMENTAL
PROTECTION
95 APR -7 PH 1:13

**REMEDIAL ACTION WORKPLAN
FOR
THE INVESTIGATION OF THE
SOURCE, LOCATION, AND EXTENT OF
VOLATILE ORGANIC COMPOUNDS (VOC'S)
FOUND IN GROUNDWATER
AT
AIRPORT PLAZA SHOPPING CENTER
N/W CORNER OF HESPERIAN AND W. WINTON
23958 HESPERIAN BOULEVARD
HAYWARD, CA**

PREPARED FOR:

Adolph P. Schuman Marital Trust
Jim Crafts, Esq., Co-Trustee
400 Sansome Street
San Francisco, California 94111

and

Alameda County Health Agency
Ms. Madhulla Logan, M.S.
Hazardous Materials Specialist
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

and

**California Regional Water Quality Control Board
CRWQCB-San Francisco Bay Region**
Mr. Eddy P. So, P.E., CHMM
Associate Water Resources Control Engineer
2101 Webster Street, Suite 500
Oakland, CA 94612

PREPARED BY:

Van Brunt Associates
Michael W. Van Brunt, Principal
Glenn Romig, P.E.
1517 N. Main Street, Suite 204
Walnut Creek, CA 94596
Phone: (510) 685-5900
Fax: (510) 945-0606

March, 1995

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1. INTRODUCTION

1.1 INTRODUCTION

This workplan has been carefully designed to quantify the location(s) and concentration(s) of the known limited residual Volatile Organic Compounds (VOC's) in the soil and groundwater on and off site.

Several studies have been performed on the subject site and the adjacent property by consulting firms. These reports have identified the presence of small, but measurable, quantities of VOC's in the groundwater. The available records and reports have been reviewed and the conditions on site have been confirmed by our own site inspection.

This work plan identifies the best approach to systematically determine the source, location, and extent of the known VOC's in the soil and groundwater. Section 5 lists the reports and studies in existence at this time that have been made available to us. Each document has been listed in chronological order. We have submitted copies of these reports to both the Alameda County Health Agency and the California Regional Water Quality Control Board.

Periodic reports documenting our efforts and conclusion(s) will be sent to your department(s) on a schedule acceptable to your office.

Volatile organic compounds (VOC's) have been detected in the groundwater beneath the subject site and beneath the former Texaco service station next door. Historically, two dry cleaning operations have existed on the subject site which may have caused or contributed to the cause of the finding of VOC's in the groundwater. There is no direct evidence at the present time that the VOC's found in the groundwater were caused by or came from any of the dry cleaning operations on the property.

1.2 BACKGROUND

Krazan & Associates, Inc., of Sacramento, California, completed a Phase I Environmental Site Assessment on November 11, 1994 on the subject property (23700 - 23958 Hesperian Boulevard) for the Taco Bell Corporation. Van Brunt Associates has field checked the contents of that report and found it to be thorough, complete, and accurate. Van Brunt Associates has issued a separate Phase I Environmental Audit dated March 10, 1995 for the benefit of the property's current owner.

Krazan & Associates then performed a Limited Phase II investigation on the subject property on November 22, 1994. Four soil borings were performed. One soil sample from each boring was analyzed for TPHg, TPHd, BTEX, and selected halogenated organics. Only one soil sample has a detectable amount of TPHg of 1.9 mg/kg. All four soil samples were "none detected" for the tested halogenated volatile organics. All water samples were found to contain various levels of petroleum constituents and halogenated volatile organics. See enclosed Krazan Phase II report excerpts in Section 5 - References.

A former Texaco Service Station located on the adjacent property (on the corner of Hesperian Boulevard and Winton Avenue) is now an Exxon Station which is still in operation. Groundwater contaminated by petroleum hydrocarbon constituents and halogenated volatile organics have been discovered under the service station. These products are also present in the

groundwater of the subject site. This was determined from laboratory tests of groundwater samples from the subject property.

The responsible party (Texaco Refining, Inc.) of the existing Leaking Underground Storage Tanks (LUST) at the adjacent Texaco site (23390 Hesperian) believes that the VOC's found in the several monitoring wells sampled have come from "off site" and suspects the subject property.

2. PROPOSED WORKPLAN

The following workplan has been designed to investigate and eventually remediate soil and groundwater in the vicinity of the property. This workplan has been based on the information and reports from previous investigations, our Phase I Environmental Audit, and the soil vapor study recently completed. This workplan illustrates the best method to investigate, characterize, and remediate the site.

2.1 WORKPLAN TASKS

Task 1 Phase I Environmental Audit (Completed)

A Phase I Environmental Audit was performed by Van Brunt Associates (VBA) to confirm and validate an earlier Phase I Environmental Site Assessment performed by Krazan & Associates. This work was just completed and has been documented in the VBA report dated March 10, 1995. Both the Krazan and VBA Phase I studies revealed that the property was undeveloped land prior to 1961. Historically, two other dry cleaning operations have existed on the subject property. These separate businesses operated at different time and from different (but adjacent) site locations in the same building.

Task 2 Soil Vapor Study (Completed)

Van Brunt Associates performed an extensive soil vapor gas survey to develop preliminary indications of groundwater concentrations both on and off site. This work has been completed and is documented in the Transglobal Environmental Geochemistry (TEG) report dated February 6, 1995. The locations of the 40 soil gas borings are shown on Figure 5 of this workplan; the results of the soil gas survey are shown on Figure 6; and the laboratory report for the survey is included in Appendix 6.1.

The measurement of the relative concentrations of VOC compounds from the vapor samples has helped to establish the presence and lateral extent of potential product plumes. Please note that this soil gas chromatography geochemical survey has provided only relative concentrations of certain VOC's, and that future chemical analysis of a representative number of water and/or soil samples will be necessary to define the actual groundwater and/or soil quality.

Task 3 Sewer As-Built Plan (Completed)

We have performed an as-built survey of the existing cast iron sewer lateral that services the "L" shaped building. We found it to be relatively deep (4' to 6') in the area of the building.

Task 4 Monitoring Well Sampling (Completed)

We have just sampled the existing Texaco monitoring wells located on and off site (monitoring wells MW-3A through MW-3H) to obtain a current record of reported VOC's in the groundwater. The existing monitoring wells are shown in Figure 4. The laboratory data from this sampling is included in Appendix 6.2.

every 5 feet in what?

Gradient?

Task 5 Soil Sampling

Soil samples will be collected from the most strategic locations on site. Our preliminary proposed boring locations are shown in Figure 3. We will use a driven boring device which does not generate soil cuttings. The borings will be at strategic depths and locations to adequately characterize the extent of soil contamination. The soil sampling will also focus on the immediate area around the existing sewer line beneath the "L" shaped building which historically (and currently) contains the dry cleaning operations. The planned detailed sampling of the soil near the sewer line will require the demolition of the building which is planned in the future.

Soil samples will be carefully retrieved and the sample ends will be covered with Teflon tape and capped with non-reactive plastic caps. No headspace will be allowed in the brass sampling tubes. Samples will be labeled and placed on ice for storage pending delivery to the accredited laboratory for analysis. Appropriate chain of custody documentation will be used.

Task 6 Groundwater Sampling

We will perform groundwater sampling by either hydropunch (grab sampling) or installing 2" diameter monitoring well(s) as needed. Each monitoring well installed will be sampled using State and EPA approved sampling techniques. Water samples will be collected in appropriate containers and packed on ice for delivery to the laboratory with chain of custody documentation. The location of the new well(s) will be established after we correlate the current groundwater quality information available from monitoring wells MW-3A through MW-3H and our extensive soil sampling Task 5 above.

Groundwater extracted during well development will be stored on site in EPA approved drums. Following receipt of the analytical results, the drummed groundwater will be disposed of, as appropriate.

2.2 SAMPLE ANALYSIS

Both soil and groundwater samples will be transferred to a State of California Department of Health Services certified laboratory for analysis. A formal chain-of-custody form will accompany the delivery.

Analysis will be undertaken for Volatile Organic Compounds (VOC's) using EPA approved Test Methods 8010 or 8240.

2.3 FIELD NOTES AND CHAIN-OF-CUSTODY

As each soil and groundwater sample is collected, necessary information will be logged into the field notebook and then transferred to the sample label. The label will contain: sample ID; date and time sampled; location; client; analytical method; sampler's initials. The labels will be affixed to a clean, dry surface on the sample container.

Chain-of-Custody forms will be filled out as the samples are collected so that samples do not have to be removed from the ice chest except for potential repacking prior to delivery to the analyzing laboratory. All field documents, log books, sample labels and chain-of-custody forms

will be filled out legibly in waterproof ink. These documents will be part of the permanent project file.

2.4 HEALTH AND SAFETY

All project members and subcontractors will abide by the VBA Health & Safety Plan (HASP) established for the on site work. All hot zone work will be conducted by individuals who have received OSHA 40 training for Hazardous Waste and Emergency Response Personnel who are currently under medical monitoring. The HASP has been written and will be used on the project during all phases of work.

2.5 REPORT AND RECOMMENDATIONS

We will prepare a reconnaissance groundwater quality investigation report presenting the results of our study. The report will summarize the field and laboratory test data and present our conclusions and recommendations. The lateral extent and concentration of impacted soil and groundwater will be discussed and suitable isoconcentration maps will be developed. We will evaluate the need for remediating all impacted soil and groundwater. If remediation is necessary, we will evaluate the feasibility, scheduling, and the cost of various remediation techniques and present a recommended approach for approval to the regulatory agencies.

3. FIGURES

- FIGURE 1 REGIONAL LOCATION MAP
- FIGURE 2 SUBJECT SITE PLAN
- FIGURE 3 PROPOSED SOIL AND GROUNDWATER SAMPLES
- FIGURE 4 EXISTING ON AND OFF SITE MONITORING WELLS
- FIGURE 5 SOIL VAPOR SAMPLE LOCATIONS
- FIGURE 6 TEG SOIL GAS SURVEY RESULTS

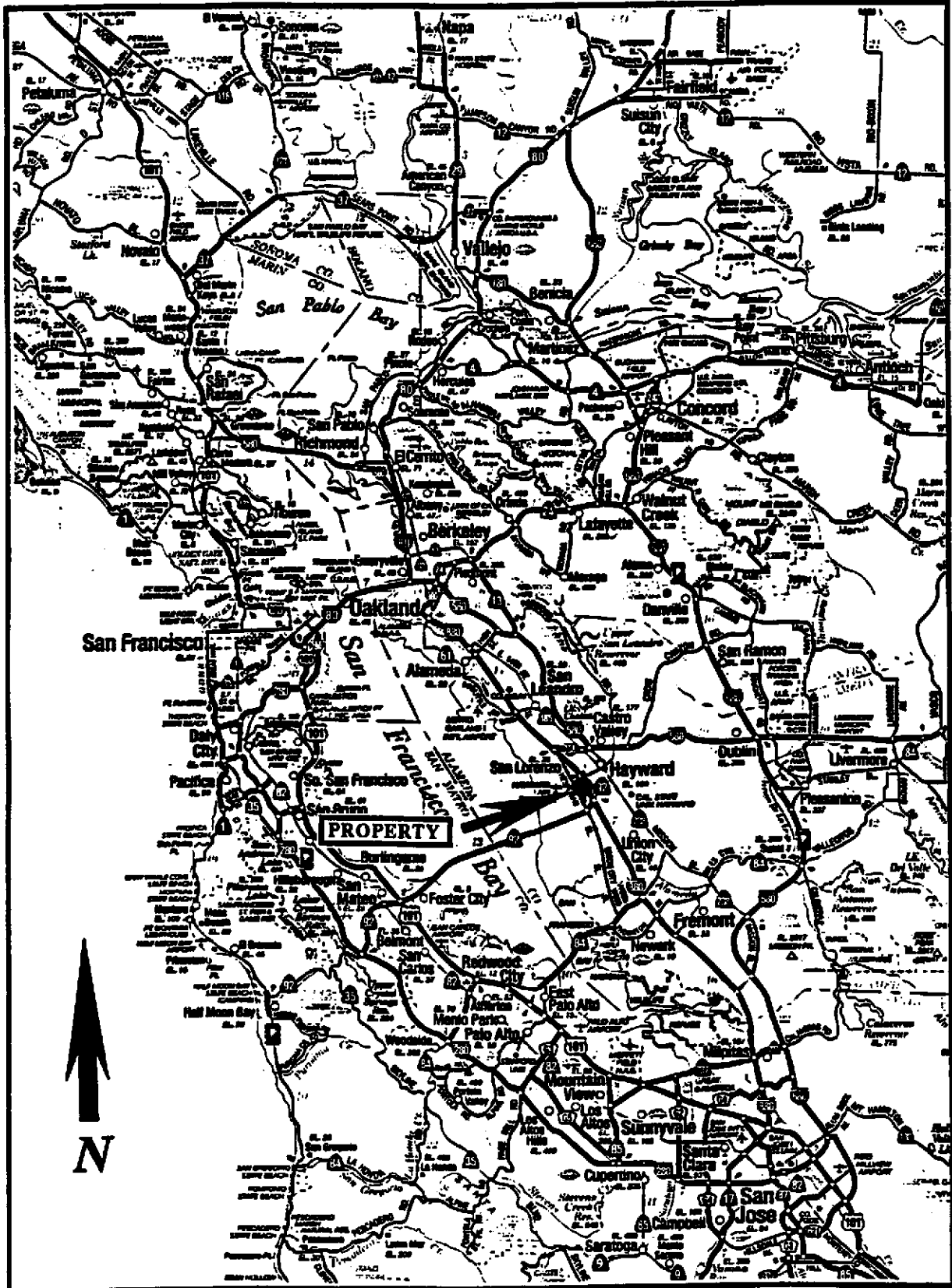


Figure 1
Regional Location Map

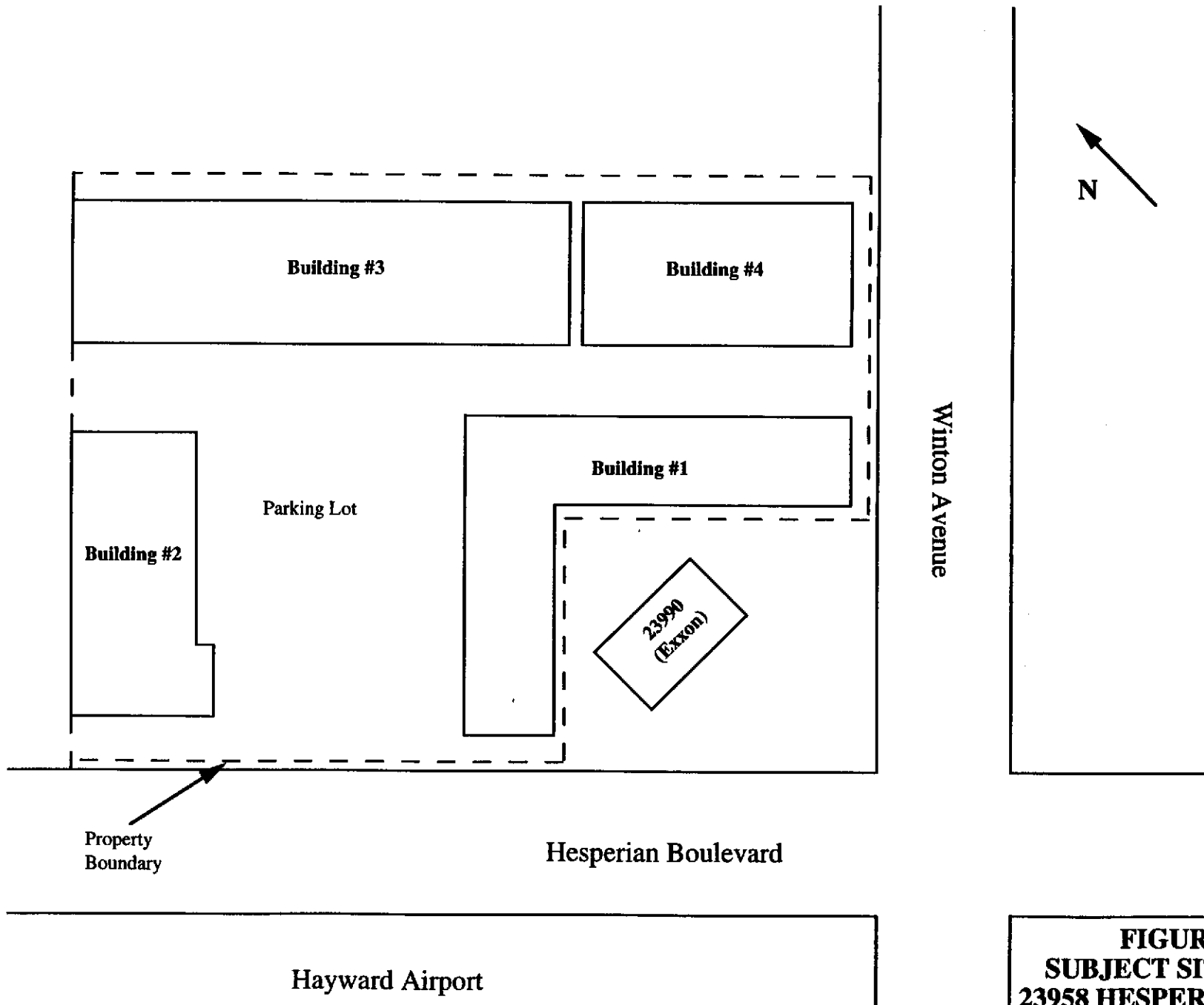
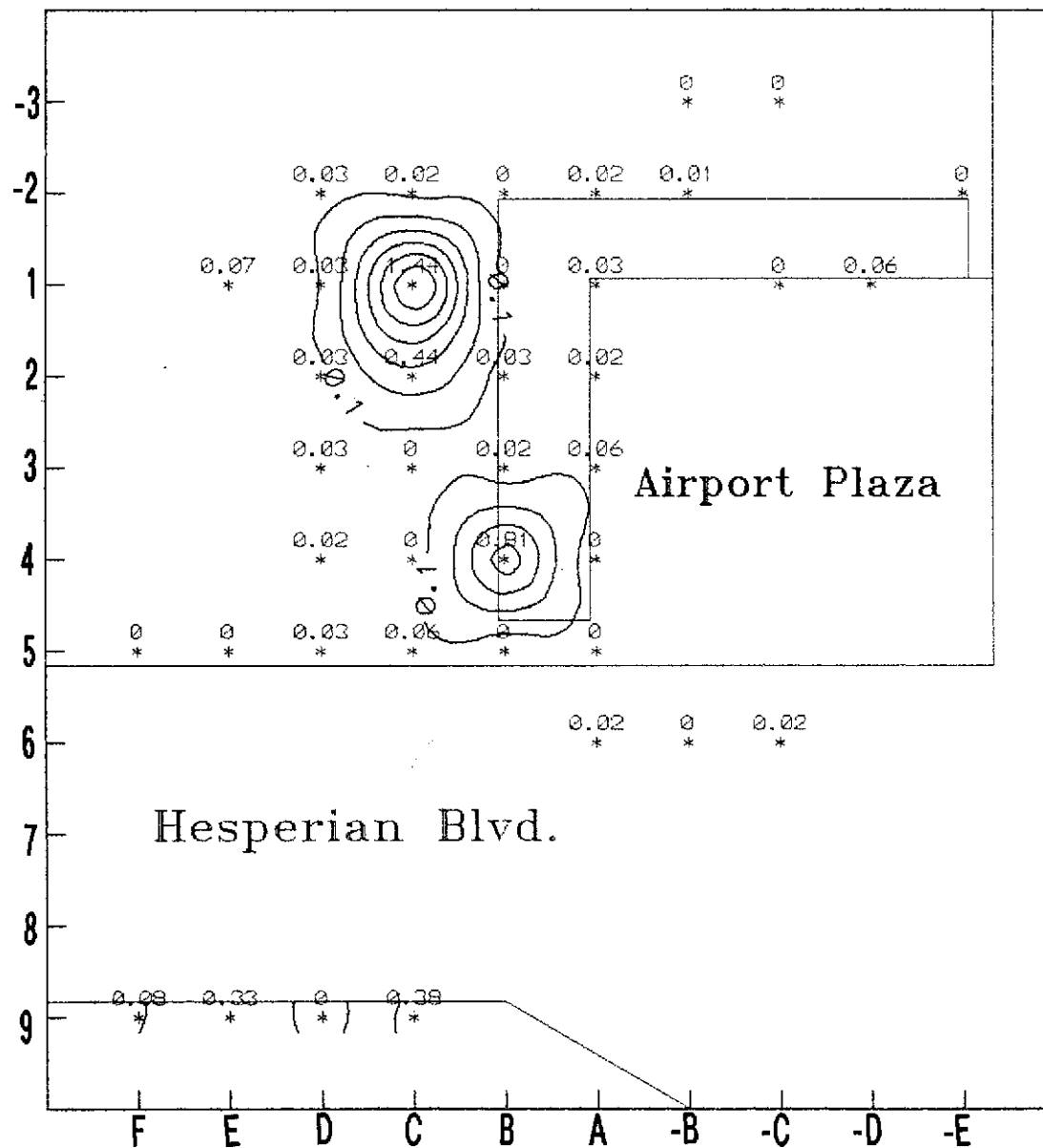


FIGURE 2
SUBJECT SITE PLAN
23958 HESPERIAN BLVD.
HAYWARD, CA

Soil Gas Survey Results



Van Brunt Associates

Job No. 94502
Hayward, CA

West Winton

PCE in ppmV

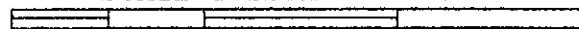
Jan. 23-24, 1995

Transglobal Environmental
Geochemistry
Northern California

Minimum Contour = 0.1 ppmV
Contour Interval = 0.2 ppmV

FIGURE 6
TEG SOIL GAS
SURVEY RESULTS

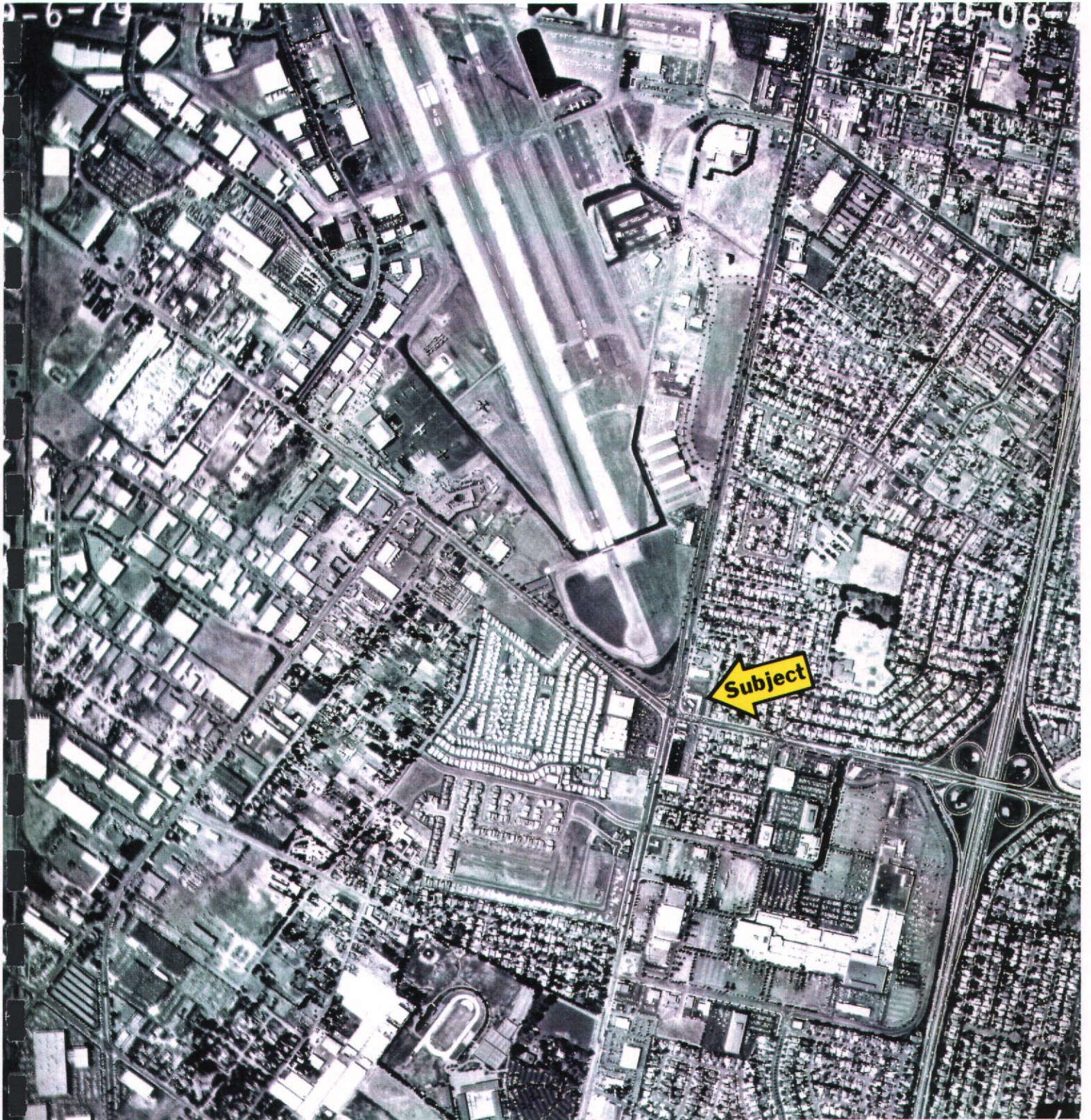
SCALE 1 inch = 80 Feet



4. PHOTOGRAPH DOCUMENTATION

4.1 AERIAL PHOTOGRAPHS

1979



5. REFERENCES

Chronological Order

HARDING LAWSON ASSOCIATES

Environmental Assessment Report (October 13, 1989)
Former Texaco Service Station - 23990 Hesperian Blvd., Hayward, CA

HARDING LAWSON ASSOCIATES

Quarterly Technical Report, Second Quarter of 1990 (August 30, 1990)
Former Texaco Service Station - 23990 Hesperian Blvd., Hayward, CA

INTERNATIONAL TECHNOLOGY CORPORATION

Excerpt from Report (December 18, 1990)
Former Texaco Service Station - 23990 Hesperian Blvd., Hayward, CA

CEECON

Letter Report Vapor Extraction Test (July 29, 1993)
Former Texaco Service Station - 23990 Hesperian Blvd., Hayward, CA

TERRA VAC

Dual Vacuum Extraction Remediation
Letter Work Plan (December 14, 1993)
Former Texaco Service Station - 23990 Hesperian Blvd., Hayward, CA

RESNA

Fourth Quarter 1993 Quarterly Report (December 29, 1993)
Former Texaco Service Station - 23990 Hesperian Blvd., Hayward, CA

TERRA VAC

Dual Vacuum Extraction Remediation
Letter Modification to Work Plan (January 21, 1994)
Drilling Report (February 17, 1994)
Former Texaco Service Station - 23990 Hesperian Blvd., Hayward, CA

TEXACO ENVIRONMENTAL SERVICES

Letter re Groundwater Monitoring & Sampling (June 10, 1994)
Former Texaco Service Station - 23990 Hesperian Blvd., Hayward, CA

HAZARDOUS MATERIALS MANAGEMENT PLAN

23958 Hesperian Blvd., Norge Cleaners (July 20, 1994)

TEXACO ENVIRONMENTAL SERVICES

Letter re Groundwater Monitoring & Sampling (August 30, 1994)
Former Texaco Service Station - 23990 Hesperian Blvd., Hayward, CA

KRAZAN & ASSOCIATES, INC.

Geotechnical Engineering Investigation (October 10, 1994)
Airport Plaza -23958 Hesperian Blvd., Hayward, CA

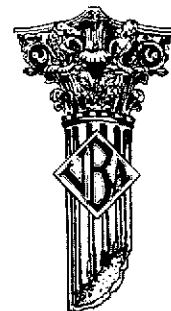
KRAZAN & ASSOCIATES, INC.
Letter re Limited Level II ESA (November 8, 1994)
Airport Plaza -23958 Hesperian Blvd., Hayward, CA

KRAZAN & ASSOCIATES, INC.
Phase I ESA (November 11, 1994)
Airport Plaza -23958 Hesperian Blvd., Hayward, CA

KRAZAN & ASSOCIATES, INC.
Limited Level II ESA (November 22, 1994)
Airport Plaza -23958 Hesperian Blvd., Hayward, CA

TRANSGLOBAL ENVIRONMENTAL GEOCHEMISTRY
Soil Vapor Survey performed at the direction of Van Brunt Associates (February 6, 1995)
W. Winton and Hesperian Blvd., Hayward, CA

VAN BRUNT ASSOCIATES
Phase I Environmental Audit (March 10, 1995)
Four Commercial Buildings, Airport Plaza, S.C., Hayward, CA



VAN BRUNT ASSOCIATES

ENVIRONMENTAL CONSULTANTS TO REAL ESTATE
PROTECTION OWNERS, MANAGERS & LENDERS

95 APR -7 PM 1:13

DISTRIBUTION: Madhulla Logan, Alameda County Health
Eddy P. So, CRWQCB-San Francisco Bay Region
Jim Crafts, Esq., Schuman Marital Trust
Bruce Meyers, Krazan & Associates
Karen Petryna, Texaco Refining & Marketing
Hugh Murphy, Hayward Fire Dept.
Sheldon McClellan, Hayward Planning Dept.

Transmittal Letter No: 94502.22
Date: April 5, 1995
Project: 23958 Hesperian Blvd., Hayward
Subject: Workplan

We are sending you:

- | | | |
|--|--|---|
| <input type="checkbox"/> Contract/Authorization To Proceed | <input type="checkbox"/> Report(s) | <input type="checkbox"/> Estimates/Bids |
| <input type="checkbox"/> Schedule | <input type="checkbox"/> Calculations/Data | <input type="checkbox"/> Copy of Letter |
| <input type="checkbox"/> Plans/Sketches | <input type="checkbox"/> Test Results | <input type="checkbox"/> Samples/Submittals |
| <input type="checkbox"/> Shop Drawings | <input type="checkbox"/> Request For Information (RFI) | <input checked="" type="checkbox"/> Other: |
| <input type="checkbox"/> Change Order | <input type="checkbox"/> Request For Proposal (RFP) | |

Via: Hand Fax Courier Overnight Mail

Item	Copies	Date	Description
1	1	3/20/95	Remedial Action Workplan for the Investigation of the Source, Location, and Extent of Volatile Organic Compounds (VOC'S) Found In Groundwater

Transmitted As Checked Below:

- | | | |
|---|--|---|
| <input type="checkbox"/> For Your Approval | <input type="checkbox"/> For Pricing/Estimate | <input type="checkbox"/> Approved As Noted |
| <input type="checkbox"/> For Your Review & Comments | <input type="checkbox"/> For Bid Due: _____ | <input type="checkbox"/> Returned For Corrections |
| <input type="checkbox"/> For Your Signature | <input type="checkbox"/> Approved & Submitted | <input type="checkbox"/> Re-Submit For Approval |
| <input type="checkbox"/> For Your Use/Records | <input checked="" type="checkbox"/> As Requested | <input type="checkbox"/> Please Return |

REMARKS:

BY: Michael W. Van Brunt
TITLE: Principal

PAGE 1 **OF** 1 **INITIALS:** *MM*

6. APPENDIX

6.1 TEG SOIL VAPOR SURVEY ANALYSES RESULTS AND CALIBRATION DATA

6.2 AEN LABORATORY REPORT FOR MONITORING WELL ANALYSIS



VAN BRUNT Associates - Project #94502
West Winton & Hesperian - Hayward California

TEG PROJECT #50123C

EPA METHOD 8010 ANALYSES OF SOIL VAPORS in ppmV

SAMPLE NUMBER:	Blank	Blank	Blank	-A.-1	-A.-2	-A.6	-B.-2	-B.1	-B.6
COLLECTION DATE:	1/23/95	1/24/95	1/24/95	1/23/95	1/24/95	1/24/95	1/24/95	1/24/95	1/24/95
COLLECTION TIME:	09:12	07:28	14:59	15:46	11:22	08:39	11:41	16:05	07:43
COLLECTION DEPTH:				19.0	18.0	18.0	20.0	5.0	18.0
VINYL CHLORIDE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1 DICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
trans-1,2 DICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1 DICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
cis-1,2 DICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROFORM (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1 TRICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
CARBON TETRACHLORIDE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,2 DICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
TETRACHLOROETHENE (ppmV)	nd	nd	nd	0.01	nd	nd	nd	nd	0.02
BROMOFORM (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2,2 TETRACHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd

REPORTING LIMITS FOR ABOVE COMPOUNDS = 0.01 Parts per Million by Volume (ppmV) (1.0 ppmV for Vinyl Cl)

'nd' NOT DETECTED AT LISTED REPORTING LIMITS

ANALYSES PERFORMED IN TEG's DHS CERTIFIED MOBILE LAB

ANALYSES PERFORMED BY: Mr. Henry Wilkinson

DATA REVIEWED BY: Mr. Mark Jerpbak

Mark Jerpbak 2-6-95

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VAN BRUNT Associates - Project #94502
West Winton & Hesperian - Hayward California

TEG PROJECT #50123C

EPA METHOD 8010 ANALYSES OF SOIL VAPORS in ppmV

	SAMPLE NUMBER:	-C.1	-D.-1	A.-1	A.1	A.2	A.3	A.4	A.5	A.6
	COLLECTION DATE:	1/24/95	1/23/95	1/23/95	1/23/95	1/23/95	1/23/95	1/23/95	1/23/95	1/24/95
	COLLECTION TIME:	16:16	09:33	10:51	13:35	13:45	13:59	14:36	14:58	08:12
	COLLECTION DEPTH:	5.0	15.0	18.0	5.0	5.0	5.0	5.0	5.0	19.0
VINYL CHLORIDE	(ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1 DICHLOROETHENE	(ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
trans-1,2 DICHLOROETHENE	(ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1 DICHLOROETHANE	(ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
cis-1,2 DICHLOROETHENE	(ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROFORM	(ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1 TRICHLOROETHANE	(ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
CARBON TETRACHLORIDE	(ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,2 DICHLOROETHANE	(ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLOROETHENE	(ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
TETRACHLOROETHENE	(ppmV)	0.06	nd	0.02	0.03	0.02	0.06	nd	nd	0.02
BROMOFORM	(ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2,2 TETRACHLOROETHANE	(ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd

REPORTING LIMITS FOR ABOVE COMPOUNDS = 0.01 Parts per Million by Volume (ppmV) (1.0 ppmV for Vinyl Cl)

'nd' NOT DETECTED AT LISTED REPORTING LIMITS

ANALYSES PERFORMED IN TEG's DHS CERTIFIED MOBILE LAB

ANALYSES PERFORMED BY: Mr. Henry Wilkinson

DATA REVIEWED BY: Mr. Mark Jerpbak

Handwritten signature and date: 2-6-95

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VAN BRUNT Associates - Project #94502
West Winton & Hesperian - Hayward California

TEG PROJECT #50123C

EPA METHOD 8010 ANALYSES OF SOIL VAPORS in ppmV

SAMPLE NUMBER:	B.-1	B.1	B.2	B.2	B.3	B.4	B.5	C.-1	C.1
COLLECTION DATE:	1/23/95	1/23/95	1/23/95	DUP	1/23/95	1/23/95	1/23/95	1/24/95	1/24/95
COLLECTION TIME:	15:26	12:26	11:56	11:56	11:12	11:32	17:09	16:54	11:04
COLLECTION DEPTH:	20.0	19.0	19.0	19.0	19.0	18.0	19.0	18.0	18.0
VINYL CHLORIDE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1 DICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
trans-1,2 DICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1 DICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
cis-1,2 DICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROFORM (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1 TRICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
CARBON TETRACHLORIDE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,2 DICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
TETRACHLOROETHENE (ppmV)	nd	nd	0.03	0.03	0.02	0.81	nd	0.02	1.44
BROMOFORM (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2,2 TETRACHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd

REPORTING LIMITS FOR ABOVE COMPOUNDS = 0.01 Parts per Million by Volume (ppmV) (1.0 ppmV for Vinyl Cl)

'nd' NOT DETECTED AT LISTED REPORTING LIMITS

ANALYSES PERFORMED IN TEG's DHS CERTIFIED MOBILE LAB

ANALYSES PERFORMED BY: Mr. Henry Wilkinson

DATA REVIEWED BY: Mr. Mark Jerpbak

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M. Jerpbak



TEG PROJECT #50123C

EPA METHOD 8010 ANALYSES OF SOIL VAPORS in ppmV

SAMPLE NUMBER:	C.2	C.2	C.3	C.4	C.5	C.9	D.-1	D.1	D.2
COLLECTION DATE:	1/24/95	DUP	1/23/95	1/24/95	1/23/95	1/24/95	1/24/95	1/24/95	1/24/95
COLLECTION TIME:	10:45	10:46	16:10	09:59	16:48	15:10	16:38	13:12	12:48
COLLECTION DEPTH:	18.0	18.0	19.0	19.0	19.0	18.0	19.0	18.0	18.0
VINYL CHLORIDE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1 DICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
trans-1,2 DICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1 DICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
cis-1,2 DICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROFORM (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1 TRICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
CARBON TETRACHLORIDE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,2 DICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	0.02
TETRACHLOROETHENE (ppmV)	0.44	0.40	nd	nd	0.06	0.38	0.03	0.03	0.03
BROMOFORM (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2,2 TETRACHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd

REPORTING LIMITS FOR ABOVE COMPOUNDS = 0.01 Parts per Million by Volume (ppmV) (1.0 ppmV for Vinyl Cl)

'nd' NOT DETECTED AT LISTED REPORTING LIMITS

ANALYSES PERFORMED IN TEG's DHS CERTIFIED MOBILE LAB

ANALYSES PERFORMED BY: Mr. Henry Wilkinson

DATA REVIEWED BY: Mr. Mark Jerpbak

M. Jerpbak 2-6-95

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TEG PROJECT #50123C

EPA METHOD 8010 ANALYSES OF SOIL VAPORS in ppmV

SAMPLE NUMBER:	D.3	D.4	D.5	D.9	E.1	E.5	E.9	F.5	F.9
COLLECTION DATE:	1/24/95	1/24/95	1/23/95	1/24/95	1/24/95	1/24/95	1/24/95	1/24/95	1/24/95
COLLECTION TIME:	10:20	09:49	16:28	14:52	17:13	09:01	14:35	09:20	14:18
COLLECTION DEPTH:	18.0	18.0	19.0	19.0	18.0	19.0	18.0	19.0	18.0
VINYL CHLORIDE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1 DICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
trans-1,2 DICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1 DICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
cis-1,2 DICHLOROETHENE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROFORM (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1 TRICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
CARBON TETRACHLORIDE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,2 DICHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLOROETHENE (ppmV)	0.03	nd	0.01	nd	nd	nd	nd	nd	nd
TETRACHLOROETHENE (ppmV)	0.03	0.02	0.03	nd	0.07	nd	0.33	nd	0.08
BROMOFORM (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2,2 TETRACHLOROETHANE (ppmV)	nd	nd	nd	nd	nd	nd	nd	nd	nd

REPORTING LIMITS FOR ABOVE COMPOUNDS = 0.01 Parts per Million by Volume (ppmV) (1.0 ppmV for Vinyl Cl)
'nd' NOT DETECTED AT LISTED REPORTING LIMITS

ANALYSES PERFORMED IN TEG's DHS CERTIFIED MOBILE LAB

ANALYSES PERFORMED BY: Mr. Henry Wilkinson

DATA REVIEWED BY: Mr. Mark Jerpak

M. Jerpak 2-6-95



VAN BRUNT Associates - Project #94502
West Winton & Hesperian - Hayward California

TEG PROJECT #50123C

CALIBRATION DATA - AREA COUNTS

	1,1 DCE	t-1,2 DCE	1,1 DCA	c-1,2 DCE	Cl-Form	1,2 DCA	TCE	PCE
Average RF	549.2	400.9	588.7	331.0	347.1	787.8	1002.0	583.3

Continuing Calibration

1/23/95	482.1 87.8%	360.7 90.0%	527.0 89.5%	374.0 113.0%	326.3 94.0%	691.1 87.7%	861.7 86.0%	525.0 90.0%
1/23/95	618.0 112.5%	428.8 107.0%	646.1 109.8%	372.6 112.6%	371.3 107.0%	807.4 102.5%	1070.7 106.9%	642.0 110.1%
1/24/95	475.9 86.7%	436.5 108.9%	663.4 112.7%	358.2 108.2%	309.7 89.2%	735.6 93.4%	1107.4 110.5%	623.3 106.9%
1/24/95	579.0 105.4%	437.9 109.2%	631.1 107.2%	354.4 107.1%	325.9 93.9%	858.4 109.0%	1119.9 111.8%	618.3 106.0%

ANALYSES PERFORMED IN TEG's DHS CERTIFIED MOBILE LAB

ANALYSES PERFORMED BY: Mr. Henry Wilkinson

DATA REVIEWED BY: Mr. Mark Jerpbak

Mark Jerpbak 2-6-95

Transglobal Environmental Geochemistry

PO Box 162580, Sacramento, CA 95816 Phone: (916) 736-3233 Fax: (916) 452-5806

VAN BRUNT ASSOCIATES

SAMPLE ID: MW-3A
 AEN LAB NO: 9503266-01
 AEN WORK ORDER: 9503266
 CLIENT PROJ. ID: BKKON GAS STA.

DATE SAMPLED: 03/15/95
 DATE RECEIVED: 03/15/95
 REPORT DATE: 03/24/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
VOCs in Water by 8240	EPA 8240				
Acetone	67-64-1	ND	100	ug/L	03/22/95
Benzene	71-43-2	ND	5	ug/L	03/22/95
Bromodichloromethane	75-27-4	ND	5	ug/L	03/22/95
Bromoform	75-25-2	ND	5	ug/L	03/22/95
Bromomethane	74-83-9	ND	10	ug/L	03/22/95
2-Butanone	78-93-3	ND	100	ug/L	03/22/95
Carbon Disulfide	75-15-0	ND	10	ug/L	03/22/95
Carbon Tetrachloride	56-23-5	ND	5	ug/L	03/22/95
Chlorobenzene	108-90-7	ND	5	ug/L	03/22/95
Chloroethane	75-00-3	ND	10	ug/L	03/22/95
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	03/22/95
Chloroform	67-66-3	ND	5	ug/L	03/22/95
Chloromethane	74-87-3	ND	10	ug/L	03/22/95
Dibromochloromethane	124-48-1	ND	5	ug/L	03/22/95
1,1-Dichloroethane	75-34-3	ND	5	ug/L	03/22/95
1,2-Dichloroethane	107-06-2	ND	5	ug/L	03/22/95
1,1-Dichloroethene	75-35-4	ND	5	ug/L	03/22/95
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	03/22/95
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	03/22/95
1,2-Dichloropropane	78-97-5	ND	5	ug/L	03/22/95
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	03/22/95
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	03/22/95
Ethylbenzene	100-41-4	ND	5	ug/L	03/22/95
2-Hexanone	591-78-6	ND	5	ug/L	03/22/95
Methylene Chloride	75-09-2	ND	50	ug/L	03/22/95
4-Methyl-2-pentanone	108-10-1	ND	20	ug/L	03/22/95
Styrene	100-42-5	ND	50	ug/L	03/22/95
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	03/22/95
Tetrachloroethene	127-18-4	ND	5	ug/L	03/22/95
Toluene	108-88-3	ND	5	ug/L	03/22/95
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	03/22/95
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	03/22/95
Trichloroethene	79-01-6	ND	5	ug/L	03/22/95
Vinyl Acetate	108-05-4	ND	5	ug/L	03/22/95
Vinyl Chloride	75-01-4	ND	50	ug/L	03/22/95
Xylenes, Total	1330-20-7	ND	10	ug/L	03/22/95

ND = Not detected at or above the reporting limit
 * = Value at or above reporting limit

VAN BRUNT ASSOCIATES

SAMPLE ID: MW-3B
 AEN LAB NO: 9503266-02
 AEN WORK ORDER: 9503266
 CLIENT PROJ. ID: EXXON GAS STA.

DATE SAMPLED: 03/15/95
 DATE RECEIVED: 03/15/95
 REPORT DATE: 03/24/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
VOCs in Water by 8240	EPA 8240				
Acetone	67-64-1	ND	5000	ug/L	03/22/95
Benzene	71-43-2	12,000 *	300	ug/L	03/22/95
Bromodichloromethane	75-27-4	ND	300	ug/L	03/22/95
Bromoform	75-25-2	ND	300	ug/L	03/22/95
Bromomethane	74-83-9	ND	500	ug/L	03/22/95
2-Butanone	78-93-3	ND	5000	ug/L	03/22/95
Carbon Disulfide	75-15-0	ND	500	ug/L	03/22/95
Carbon Tetrachloride	56-23-5	ND	300	ug/L	03/22/95
Chlorobenzene	108-90-7	ND	300	ug/L	03/22/95
Chloroethane	75-00-3	ND	500	ug/L	03/22/95
2-Chloroethyl Vinyl Ether	110-75-8	ND	500	ug/L	03/22/95
Chloroform	67-66-3	ND	300	ug/L	03/22/95
Chloromethane	74-87-3	ND	500	ug/L	03/22/95
Dibromochloromethane	124-48-1	ND	300	ug/L	03/22/95
1,1-Dichloroethane	75-34-3	ND	300	ug/L	03/22/95
1,2-Dichloroethane	107-06-2	ND	300	ug/L	03/22/95
1,1-Dichloroethene	75-35-4	ND	300	ug/L	03/22/95
cis-1,2-Dichloroethene	156-59-2	ND	300	ug/L	03/22/95
trans-1,2-Dichloroethene	156-60-5	ND	300	ug/L	03/22/95
1,2-Dichloropropane	78-87-5	ND	300	ug/L	03/22/95
cis-1,3-Dichloropropene	10061-01-5	ND	300	ug/L	03/22/95
trans-1,3-Dichloropropene	10061-02-6	ND	300	ug/L	03/22/95
Ethylbenzene	100-41-4	3500 *	300	ug/L	03/22/95
2-Hexanone	591-78-6	ND	3000	ug/L	03/22/95
Methylene Chloride	75-09-2	ND	1000	ug/L	03/22/95
4-Methyl-2-pentanone	108-10-1	ND	3000	ug/L	03/22/95
Styrene	100-42-5	ND	300	ug/L	03/22/95
1,1,2,2-Tetrachloroethane	79-34-5	ND	300	ug/L	03/22/95
Tetrachloroethene	127-18-4	ND	300	ug/L	03/22/95
Toluene	108-88-3	26,000 *	300	ug/L	03/22/95
1,1,1-Trichloroethane	71-55-6	ND	300	ug/L	03/22/95
1,1,2-Trichloroethane	79-00-5	ND	300	ug/L	03/22/95
Trichloroethene	79-01-6	ND	300	ug/L	03/22/95
Vinyl Acetate	108-05-4	ND	3000	ug/L	03/22/95
Vinyl Chloride	75-01-4	ND	500	ug/L	03/22/95
Xylenes, Total	1330-20-7	18,000 *	500	ug/L	03/22/95

ND = Not detected at or above the reporting limit
 * = Value at or above reporting limit

VAN BRUNT ASSOCIATES

SAMPLE ID: MW-3C
 AEN LAB NO: 9503266-03
 AEN WORK ORDER: 9503266
 CLIENT PROJ. ID: EXXON GAS STA.

DATE SAMPLED: 03/15/95
 DATE RECEIVED: 03/15/95
 REPORT DATE: 03/24/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
VOCs in Water by 8240	EPA 8240				
Acetone	67-64-1	ND	500	ug/L	03/22/95
Benzene	71-43-2	170 *	30	ug/L	03/22/95
Bromodichloromethane	75-27-4	ND	30	ug/L	03/22/95
Bromoform	75-25-2	ND	30	ug/L	03/22/95
Bromomethane	74-82-9	ND	50	ug/L	03/22/95
2-Butanone	78-93-3	ND	500	ug/L	03/22/95
Carbon Disulfide	75-15-0	ND	50	ug/L	03/22/95
Carbon Tetrachloride	56-23-5	ND	30	ug/L	03/22/95
Chlorobenzene	108-90-7	ND	30	ug/L	03/22/95
Chloroethane	75-00-3	ND	50	ug/L	03/22/95
2-Chloroethyl Vinyl Ether	110-75-8	ND	50	ug/L	03/22/95
Chloroform	67-66-3	ND	30	ug/L	03/22/95
Chloromethane	74-87-3	ND	50	ug/L	03/22/95
Dibromochloromethane	124-48-1	ND	30	ug/L	03/22/95
1,1-Dichloroethane	75-34-3	ND	30	ug/L	03/22/95
1,2-Dichloroethane	107-06-2	ND	30	ug/L	03/22/95
1,1-Dichloroethene	75-35-4	ND	30	ug/L	03/22/95
cis-1,2-Dichloroethene	156-59-2	ND	30	ug/L	03/22/95
trans-1,2-Dichloroethene	156-60-5	ND	30	ug/L	03/22/95
1,2-Dichloropropane	78-87-5	ND	30	ug/L	03/22/95
cis-1,3-Dichloropropene	10061-01-5	ND	30	ug/L	03/22/95
trans-1,3-Dichloropropene	10061-02-6	ND	30	ug/L	03/22/95
Ethylbenzene	100-41-4	460 *	30	ug/L	03/22/95
2-Hexanone	591-78-6	ND	300	ug/L	03/22/95
Methylene Chloride	75-09-2	ND	100	ug/L	03/22/95
4-Methyl-2-pentanone	108-10-1	ND	300	ug/L	03/22/95
Styrene	100-42-5	ND	30	ug/L	03/22/95
1,1,2,2-Tetrachloroethane	79-34-5	ND	30	ug/L	03/22/95
Tetrachloroethene	127-18-4	ND	30	ug/L	03/22/95
Toluene	108-88-3	ND	30	ug/L	03/22/95
1,1,1-Trichloroethane	71-55-6	ND	30	ug/L	03/22/95
1,1,2-Trichloroethane	79-00-5	ND	30	ug/L	03/22/95
Trichloroethene	79-01-6	ND	30	ug/L	03/22/95
Vinyl Acetate	108-05-4	ND	300	ug/L	03/22/95
Vinyl Chloride	75-01-4	ND	50	ug/L	03/22/95
Xylenes, Total	1330-20-7	150 *	50	ug/L	03/22/95

ND = Not detected at or above the reporting limit
 * = Value at or above reporting limit

VAN BRUNT ASSOCIATES

SAMPLE ID: MW-3D
 AEN LAB NO: 9503266-04
 AEN WORK ORDER: 9503266
 CLIENT PROJ. ID: EXXON GAS STA.

DATE SAMPLED: 03/15/95
 DATE RECEIVED: 03/15/95
 REPORT DATE: 03/24/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
VOCs in Water by 8240	EPA 8240				
Acetone	67-64-1	ND	100	ug/L	03/22/95
Benzene	71-43-2	ND	5	ug/L	03/22/95
Bromodichloromethane	75-27-4	ND	5	ug/L	03/22/95
Bromoform	75-25-2	ND	5	ug/L	03/22/95
Bromomethane	74-83-9	ND	10	ug/L	03/22/95
2-Butanone	78-93-3	ND	100	ug/L	03/22/95
Carbon Disulfide	75-15-0	ND	10	ug/L	03/22/95
Carbon Tetrachloride	56-23-5	ND	5	ug/L	03/22/95
Chlorobenzene	108-90-7	ND	5	ug/L	03/22/95
Chloroethane	75-00-3	ND	10	ug/L	03/22/95
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	03/22/95
Chloroform	67-66-3	ND	5	ug/L	03/22/95
Chloromethane	74-87-3	ND	10	ug/L	03/22/95
Dibromochloromethane	124-48-1	ND	5	ug/L	03/22/95
1,1-Dichloroethane	75-34-3	ND	5	ug/L	03/22/95
1,2-Dichloroethane	107-06-2	ND	5	ug/L	03/22/95
1,1-Dichloroethene	75-35-4	ND	5	ug/L	03/22/95
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	03/22/95
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	03/22/95
1,2-Dichloropropane	78-97-5	ND	5	ug/L	03/22/95
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	03/22/95
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	03/22/95
Ethylbenzene	100-41-4	ND	5	ug/L	03/22/95
2-Hexanone	591-78-6	ND	5	ug/L	03/22/95
Methylene Chloride	75-09-2	ND	50	ug/L	03/22/95
4-Methyl-2-pentanone	108-10-1	ND	20	ug/L	03/22/95
Styrene	100-42-5	ND	50	ug/L	03/22/95
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	03/22/95
Tetrachloroethene	127-18-4	ND	5	ug/L	03/22/95
Toluene	108-98-3	ND	5	ug/L	03/22/95
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	03/22/95
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	03/22/95
Trichloroethene	79-01-6	ND	5	ug/L	03/22/95
Vinyl Acetate	108-05-4	ND	5	ug/L	03/22/95
Vinyl Chloride	75-01-4	ND	50	ug/L	03/22/95
Xylenes, Total	1330-20-7	ND	10	ug/L	03/22/95

ND = Not detected at or above the reporting limit
 * = Value at or above reporting limit

VAN BRUNT ASSOCIATES

SAMPLE ID: MW-3E
 AEN LAB NO: 9503266-05
 AEN WORK ORDER: 9503266
 CLIENT PROJ. ID: EXXON GAS STA.

DATE SAMPLED: 03/15/95
 DATE RECEIVED: 03/15/95
 REPORT DATE: 03/24/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
VOCs in Water by 8240	EPA 8240				
Acetone	67-64-1	ND	100	ug/L	03/22/95
Benzene	71-43-2	ND	5	ug/L	03/22/95
Bromodichloromethane	75-27-4	ND	5	ug/L	03/22/95
Bromoform	75-25-2	ND	5	ug/L	03/22/95
Bromomethane	74-83-9	ND	10	ug/L	03/22/95
2-Butanone	78-93-3	ND	100	ug/L	03/22/95
Carbon Disulfide	75-15-0	ND	10	ug/L	03/22/95
Carbon Tetrachloride	56-23-5	ND	5	ug/L	03/22/95
Chlorobenzene	108-90-7	ND	5	ug/L	03/22/95
Chloroethane	75-00-3	ND	10	ug/L	03/22/95
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	03/22/95
Chloroform	67-66-3	ND	5	ug/L	03/22/95
Chloromethane	74-87-3	ND	10	ug/L	03/22/95
Dibromochloromethane	124-48-1	ND	5	ug/L	03/22/95
1,1-Dichloroethane	75-34-3	ND	5	ug/L	03/22/95
1,2-Dichloroethane	107-06-2	ND	5	ug/L	03/22/95
1,1-Dichloroethene	75-35-4	ND	5	ug/L	03/22/95
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	03/22/95
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	03/22/95
1,2-Dichloropropane	78-87-5	ND	5	ug/L	03/22/95
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	03/22/95
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	03/22/95
Ethylbenzene	100-41-4	ND	5	ug/L	03/22/95
2-Hexanone	591-78-6	ND	5	ug/L	03/22/95
Methylene Chloride	75-09-2	ND	50	ug/L	03/22/95
4-Methyl-2-pentanone	108-10-1	ND	20	ug/L	03/22/95
Styrene	100-42-5	ND	50	ug/L	03/22/95
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	03/22/95
Tetrachloroethane	127-18-4	14 *	5	ug/L	03/22/95
Toluene	108-88-3	ND	5	ug/L	03/22/95
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	03/22/95
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	03/22/95
Trichloroethene	79-01-6	ND	5	ug/L	03/22/95
Vinyl Acetate	108-05-4	ND	5	ug/L	03/22/95
Vinyl Chloride	75-01-4	ND	50	ug/L	03/22/95
Xylenes, Total	1330 20-7	ND	10	ug/L	03/22/95

ND = Not detected at or above the reporting limit
 * = Value at or above reporting limit

VAN BRUNT ASSOCIATES

SAMPLE ID: MW-3F
 AEN LAB NO: 9503266-06
 AEN WORK ORDER: 9503266
 CLIENT PROJ. ID: EXXON GAS STA.

DATE SAMPLED: 03/15/95
 DATE RECEIVED: 03/15/95
 REPORT DATE: 03/24/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
VOCs in Water by 8240	EPA 8240				
Acetone	67-64-1	110 *	100	ug/L	03/22/95
Benzene	71-43-2	ND	5	ug/L	03/22/95
Bromodichloromethane	75-27-4	ND	5	ug/L	03/22/95
Bromoform	75-25-2	ND	5	ug/L	03/22/95
Bromomethane	74-83-9	ND	10	ug/L	03/22/95
2-Butanone	78-93-3	ND	100	ug/L	03/22/95
Carbon Disulfide	75-15-0	ND	10	ug/L	03/22/95
Carbon Tetrachloride	56-23-5	ND	5	ug/L	03/22/95
Chlorobenzene	108-90-7	ND	5	ug/L	03/22/95
Chloroethane	75-00-3	ND	10	ug/L	03/22/95
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	03/22/95
Chloroform	67-66-3	ND	5	ug/L	03/22/95
Chloromethane	74-87-3	ND	10	ug/L	03/22/95
Dibromochloromethane	124-48-1	ND	5	ug/L	03/22/95
1,1-Dichloroethane	75-34-3	ND	5	ug/L	03/22/95
1,2-Dichloroethane	107-06-2	ND	5	ug/L	03/22/95
1,1-Dichloroethene	75-35-4	ND	5	ug/L	03/22/95
cis-1,2-Dichloroethene	156-59-2	65 *	5	ug/L	03/22/95
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	03/22/95
1,2-Dichloropropane	78-87-5	ND	5	ug/L	03/22/95
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	03/22/95
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	03/22/95
Ethylbenzene	100-41-4	ND	5	ug/L	03/22/95
2-Hexanone	591-78-6	ND	50	ug/L	03/22/95
Methylene Chloride	75-09-2	ND	20	ug/L	03/22/95
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	03/22/95
Styrene	100-42-5	ND	5	ug/L	03/22/95
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	03/22/95
Tetrachloroethene	127-18-4	42 *	5	ug/L	03/22/95
Toluene	108-88-3	ND	5	ug/L	03/22/95
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	03/22/95
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	03/22/95
Trichloroethene	79-01-6	29 *	5	ug/L	03/22/95
Vinyl Acetate	108-05-4	ND	50	ug/L	03/22/95
Vinyl Chloride	75-01-4	92 *	10	ug/L	03/22/95
xylene, Total	1330-20-7	ND	10	ug/L	03/22/95

ND = Not detected at or above the reporting limit
 * = Value at or above reporting limit

VAN BRUNT ASSOCIATES

SAMPLE ID: MW-3G
 AEN LAB NO: 9503266-07
 AEN WORK ORDER: 9503266
 CLIENT PROJ. ID: EXXON GAS STA.

DATE SAMPLED: 03/15/95
 DATE RECEIVED: 03/15/95
 REPORT DATE: 03/24/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
VOCs in Water by 8240	EPA 8240				
Acetone	67-64-1	ND	100	ug/L	03/22/95
Benzene	71-43-2	ND	5	ug/L	03/22/95
Bromodichloromethane	75-27-4	ND	5	ug/L	03/22/95
Bromoform	75-25-2	ND	5	ug/L	03/22/95
Bromomethane	74-83-9	ND	10	ug/L	03/22/95
2-Butanone	78-93-3	ND	100	ug/L	03/22/95
Carbon Disulfide	75-15-0	ND	10	ug/L	03/22/95
Carbon Tetrachloride	56-23-5	ND	5	ug/L	03/22/95
Chlorobenzene	108-90-7	ND	5	ug/L	03/22/95
Chloroethane	75-00-3	ND	10	ug/L	03/22/95
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	03/22/95
Chloroform	67-66-3	ND	5	ug/L	03/22/95
Chloromethane	74-87-3	ND	10	ug/L	03/22/95
Dibromochloromethane	124-48-1	ND	5	ug/L	03/22/95
1,1-Dichloroethane	75-34-3	ND	5	ug/L	03/22/95
1,2-Dichloroethane	107-06-2	ND	5	ug/L	03/22/95
1,1-Dichloroethene	75-35-4	ND	5	ug/L	03/22/95
cis-1,2-Dichloroethene	156-59-2	5 *	5	ug/L	03/22/95
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	03/22/95
1,2-Dichloropropane	78-87-5	ND	5	ug/L	03/22/95
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	03/22/95
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	03/22/95
Ethylbenzene	100-41-4	ND	5	ug/L	03/22/95
2-Hexanone	591-78-6	ND	50	ug/L	03/22/95
Methylene Chloride	75-09-2	ND	20	ug/L	03/22/95
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	03/22/95
Styrene	100-42-5	ND	5	ug/L	03/22/95
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	03/22/95
Tetrachloroethene	127-18-4	150 *	5	ug/L	03/22/95
Toluene	108-88-3	ND	5	ug/L	03/22/95
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	03/22/95
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	03/22/95
Trichloroethene	79-01-6	11 *	5	ug/L	03/22/95
Vinyl Acetate	108-05-4	ND	50	ug/L	03/22/95
Vinyl Chloride	75-01-4	ND	10	ug/L	03/22/95
Xylenes, Total	1230-20-7	ND	10	ug/L	03/22/95

ND = Not detected at or above the reporting limit

* = Value at or above reporting limit

VAN BRUNT ASSOCIATES

SAMPLE ID: MW-3H
 AEN LAB NO: 9503266-08
 AEN WORK ORDER: 9502266
 CLIENT PROJ. ID: EXXON GAS STA.

DATE SAMPLED: 03/15/95
 DATE RECEIVED: 03/15/95
 REPORT DATE: 03/24/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
VOCs in Water by 8240	EPA 8240				
Acetone	67-64-1	ND	100	ug/L	03/22/95
Benzene	71-43-2	ND	5	ug/L	03/22/95
Bromodichloromethane	75-27-4	ND	5	ug/L	03/22/95
Bromoform	75-25-2	ND	5	ug/L	03/22/95
Bromomethane	74-83-9	ND	10	ug/L	03/22/95
2-Butanone	78-93-3	ND	100	ug/L	03/22/95
Carbon Disulfide	75-15-0	ND	10	ug/L	03/22/95
Carbon Tetrachloride	56-23-5	ND	5	ug/L	03/22/95
Chlorobenzene	108-90-7	ND	5	ug/L	03/22/95
Chloroethane	75-00-3	ND	10	ug/L	03/22/95
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	03/22/95
Chloroform	67-66-3	ND	5	ug/L	03/22/95
Chloromethane	74-87-3	ND	10	ug/L	03/22/95
Dibromochloromethane	124-48-1	ND	5	ug/L	03/22/95
1,1-Dichloroethane	75-34-3	ND	5	ug/L	03/22/95
1,2-Dichloroethane	107-06-2	ND	5	ug/L	03/22/95
1,1-Dichloroethene	75-35-4	ND	5	ug/L	03/22/95
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	03/22/95
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	03/22/95
1,2-Dichloropropane	78-87-5	ND	5	ug/L	03/22/95
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	03/22/95
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	03/22/95
Ethylbenzene	100-41-4	ND	5	ug/L	03/22/95
2-Hexanone	591-78-6	ND	50	ug/L	03/22/95
Methylene Chloride	75-09-2	ND	20	ug/L	03/22/95
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	03/22/95
Styrene	100-42-5	ND	5	ug/L	03/22/95
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	03/22/95
Tetrachloroethene	127-18-4	59 *	5	ug/L	03/22/95
Toluene	108-88-2	ND	5	ug/L	03/22/95
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	03/22/95
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	03/22/95
Trichloroethene	79-01-6	ND	5	ug/L	03/22/95
Vinyl Acetate	108-05-4	ND	50	ug/L	03/22/95
Vinyl Chloride	75-01-4	ND	10	ug/L	03/22/95
Xylenes, Total	1330-20-7	ND	10	ug/L	03/22/95

ND = Not detected at or above the reporting limit.

* = Value at or above reporting limit

AEN Job No: 03266

Client Project ID: _____

Project Footnotes

The following footnotes apply to the indicated project samples and will appear on the final report:

Client IDs	AEN IDs	Test	Footnotes
<u>MW-3B, MW-3C</u>	<u>2, 3</u>	<u>8240 W</u>	<u>04</u>

Footnotes

- 01: Reporting limits (RLs) elevated due to matrix interference.
- 02: RL(s) elevated for _____ due to hydrocarbon interference.
- 03: RL(s) elevated for _____ due to hydrocarbon interference in the _____ range.
- 04: RL(s) elevated due to high levels of target compounds. Sample(s) run at dilution.
- 05: RL(s) elevated due to high levels of non-target compounds. Sample(s) run at dilution.
- 06: RL(s) elevated for _____ due to background contamination.
- 07: Duplicate analysis showed surrogate recoveries outside of QC limits. Results are estimated concentrations.

* _____

** _____

For your information, the following footnotes will not appear on the final report unless requested: 8240 W Analysis

MW-3C - Sample contains non-target compounds.
MW-3F -
 ↓

If you have any questions, please contact Client Services at (510) 930-9090. Thank you!

