

## DEPARTMENT OF TRANSPORTATION

BOX 23660  
OAKLAND, CA 94623-0660  
(510) 286-4444  
TDD (510) 286-4454



August 1, 2001

Mr. Barney Chan  
Alameda County Department of Health Services  
1131 Harborway Parkway  
Alameda, California 94502

AUG 06 2001

# 2933

Subject: Ground Water Monitoring Report for the First Quarter of 2001 at the South Oakland Maintenance Station located at 1112 29<sup>th</sup> Avenue in Oakland, Alameda County, California

Dear Mr. Chan:

Attached is a copy of Geocon Consultants, Inc. "*Quarterly Groundwater Monitoring Report, First Quarter 2001*" dated June 29, 2001 for work performed at the above-referenced site. Results of the cumulative sampling and analysis indicate that benzene and Methyl-tertiary-Butyl-Ether (MtBE) may have migrated down gradient from the former underground storage tank location.

We are preparing a Work Plan for a site investigation to install three boreholes down gradient and off-site to the Caltrans property to define the lateral and vertical extent of specific gasoline constituents in the ground water. At this time, no monitoring wells will be installed off-site and it is anticipated the fieldwork will be completed in September 2001.

A temporary construction easement from the property owners of All Aboard Mini Storage has been obtained. We will continue to sample the wells on a quarterly basis unless otherwise instructed by your office.

Still elevated MTBE/TAME/TButyl alcohol  
in MW-3

08/01/01

Mr. Barney Chan

Page 2 of 2

If you have any questions or require additional information, please contact Ms. Frances Maroni of my staff at (510) 286-5657.

Sincerely,

HARRY Y. YAHATA

District Director

By:

  
RAY BOYER

District Branch Chief

Office of Environmental Engineering

Attachment

cc: Regional Water Quality Control Board, SF Bay Region, File

QUARTERLY GROUNDWATER  
MONITORING REPORT

---

FIRST QUARTER 2001

SOUTH OAKLAND  
MAINTENANCE STATION  
1112 29<sup>TH</sup> AVENUE  
OAKLAND, CALIFORNIA



**GEOCON**

GEOTECHNICAL  
&  
ENVIRONMENTAL  
CONSULTANTS

PREPARED FOR

CALIFORNIA DEPARTMENT OF TRANSPORTATION  
DISTRICT 4

OAKLAND, CALIFORNIA

TASK ORDER NO. 04-987901-9B

GEOCON PROJECT NO. E8000-06-62

JUNE 2001

# GEOCON

CONSULTANTS, INC.

E N V I R O N M E N T A L ■ G E O T E C H N I C A L ■ M A T E R I A L S



Project No. E8000-06-62  
June 29, 2001

Ms. Frances Maroni  
California Department of Transportation  
District 4  
111 Grand Avenue, 14<sup>th</sup> Floor  
Post Office Box 23660  
Oakland, California 94623-0660

AUG 06 2001

Subject: GROUNDWATER MONITORING REPORT – FIRST QUARTER 2001  
SOUTH OAKLAND MAINTENANCE STATION – 1112 29<sup>TH</sup> AVENUE  
OAKLAND, CALIFORNIA  
CONTRACT NO. 43A0012  
TASK ORDER NO. 04-987901-9B

Dear Ms. Maroni:

In accordance with California Department of Transportation (Caltrans) Contract No. 43A0012 and Task Order No. 04-987901-9B, Geocon Consultants, Inc. has performed environmental engineering services at the project site. The project site consists of the South Oakland Maintenance Station located at 1112 29th Avenue in Oakland, California.

The accompanying report summarizes the services performed consisting of the collection of groundwater samples and laboratory analyses.

*The contents of this report reflect the views of Geocon Consultants, Inc., who is responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the State of California or the Federal Highway Administration. This report does not constitute a standard, specification, or regulation.*

If there are any questions concerning the contents of this report, or if Geocon may be of further service, please contact the undersigned at your convenience.

Sincerely,

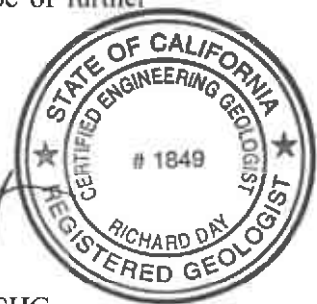
GEOCON CONSULTANTS, INC.

Ross J. White  
Sr. Staff Geologist

RJW:RWD:rjw

(5) Addressee

Richard W. Day, CEG, CHG  
Regional Manager



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- A. Laboratory Report and Chain-of-Custody Documentation

# SITE INVESTIGATION REPORT

## 1.0 INTRODUCTION

This Quarterly Groundwater Monitoring Report for the Caltrans South Oakland Maintenance Station was prepared under California Department of Transportation (Caltrans) Contract No. 43A0012 and Task Order (TO) No. 04-987901-9B.

### 1.1 Site Description

The subject site is located at 1112 29<sup>th</sup> Avenue in Oakland, California. The site is used by Caltrans to store and service maintenance vehicles and equipment. The approximate location of the site is depicted on the attached Vicinity Map presented as Figure 1. The approximate site boundaries and existing structures are depicted on the Site Plan presented as Figure 2.

### 1.2 Background

This section presents a summary of the project background information based on the background section of the subject TO.

In June 1990, Geo/Resource Consultants, Inc. drilled four soil boreholes in the vicinity of a former 6,000-gallon diesel underground storage tank (UST) and a former 1,000-gallon unleaded gasoline UST. Three of the boreholes were converted to monitoring wells MW2, MW3, and MW4. Soil and groundwater samples collected and analyzed did not exhibit detectable concentrations of total petroleum hydrocarbons as gasoline (TPHg); total petroleum hydrocarbons as diesel (TPHd); or benzene, toluene, ethylbenzene, and xylenes (BTEX).

Between June 13 and 15, 1994, GHH Engineering, Inc. (GHH) removed one 1,000-gallon gasoline UST along with its associated piping and fuel dispenser. The product piping was cut and capped at the dispenser island and at the edge of the tank excavation. Approximately 20 feet of piping was left in place. During the excavation activities, one soil sample was collected from beneath each tank end, one soil sample was collected from beneath the fuel dispenser, and composite soil samples were collected from the excavation stockpile. Groundwater was not encountered during the excavation activities.

The soil samples were analyzed for TPHg and BTEX. The composite soil samples collected from the excavation stockpile exhibited detectable concentrations of TPHg and BTEX. The other soil samples did not exhibit TPHg or BTEX concentrations greater than respective laboratory reporting limits.

In January 1998, additional groundwater samples were collected from each of the three monitoring wells and were analyzed for TPHg, TPHd, BTEX fuel oxygenate compounds (FOCs), volatile organic compounds (VOCs), and lead. The three groundwater samples exhibited TPHd concentrations ranging from 0.06 to 0.2 milligrams per liter (mg/l). The groundwater samples collected from monitoring wells MW3 and MW4 also exhibited lead concentrations of 0.05 and 0.07 mg/l, respectively.

In March 1998, one 6,000-gallon diesel fiberglass UST and its associated product piping were removed and 11 soil samples were collected from beneath the UST, along the piping trench, beneath the dispenser, and from the soil stockpile. TPHd was detected in the stockpile at a maximum concentration of 8.2 milligrams per kilogram (mg/kg). The other soil samples did not exhibit TPHd, BTEX, or methyl tertiary butylether (MTBE) concentrations greater than respective laboratory reporting limits.

Quarterly groundwater monitoring continued from November 1998 through April 2000. During this period the groundwater samples exhibited only concentrations of TPHd.

On April 18 and 19, 2000, additional soil and groundwater samples were collected from seven boreholes. One soil sample exhibited a bis(2-Ethylhexyl)phthalate concentration of 0.741 mg/kg. Other soil and groundwater samples did not exhibit TPHd, TPHg, BTEX, FOC, or SVOC concentrations greater than respective laboratory reporting limits.

Analytical laboratory results for the three most recent quarterly groundwater sampling events indicate that TPHg, BTEX, and FOCs are present in groundwater samples collected from monitoring wells MW1 and MW3. MTBE has also been detected in groundwater samples collected from monitoring well MW2.

### **1.3 Purpose**

The purpose of the scope of work performed by Geocon is to continue to monitor groundwater for the contaminants of concern to evaluate whether or not the constituents are migrating.

## 2.0 SCOPE OF SERVICES

The following scope of services was performed as requested by Caltrans in TO No. 04-987901-9B.

### 2.1 Pre-Field Activities

- Prepared a *Health and Safety Plan* for the proposed field activities. The health and safety plan provided guidelines on the use of personal protective equipment and the health and safety procedures to be implemented during the proposed field activities.
- Retained the services of: Advanced Technology Laboratories (ATL), a California-certified hazardous materials testing laboratory (ELAP No. 1838), to perform laboratory analyses.

### 2.2 Field Activities

On March 27, 2001, monitoring wells MW1 through MW4 were purged and subsequently sampled. The groundwater samples were analyzed for the presence of TPHg, TPHd, BTEX, FOCs, and VOCs.



### **3.0 INVESTIGATIVE METHODS**

#### **3.1 Groundwater Sampling**

At the time of groundwater sampling, groundwater was measured at depths ranging from 2.43 to 2.68 meters (7.96 to 8.79 feet) below the top of the well casings. Prior to sampling the wells, approximately three casing volumes of groundwater were purged from each well. The purging was accomplished utilizing a battery-operated submersible pump. The pump was cleansed prior to use by washing the pump with an Alconox solution followed by two rinses with distilled water. During the well purging, groundwater temperature, pH, and conductivity, were periodically recorded.

After purging the monitoring wells, groundwater samples were collected utilizing disposable polyethylene bailers. The groundwater samples were transferred to laboratory-provided containers, labeled, and placed in a cooler with ice and transported to ATL using chain-of-custody documentation. The purged groundwater was containerized in one 55-gallon drum and stored on-site pending disposal.

#### **3.2 Laboratory Analyses**

As required by the subject TO, Geocon instructed the analytical laboratory to perform the following laboratory analyses under a standard turn-around-time:

- TPHg following EPA Test Method 8015;
- BTEX following EPA Test Method 8020; and
- FOCs and VOCs following EPA Test Method 8260B.

Reproductions of the laboratory reports and chain of custody documentation are presented as Appendix A. The laboratory QA/QC procedures included the following:

- One method blank for every ten samples, batch of samples or type of matrix, whichever was more frequent.
- One sample analyzed in duplicate for every ten samples, batch of samples or type of matrix, whichever was more frequent.
- One spiked sample for every ten samples, batch of samples or type of matrix, whichever was more frequent, with spike made at ten times the detection limit or at the analyte level.

Prior to submitting the soil samples to the laboratory, the chain-of-custody documentation was reviewed for accuracy and completeness.

## 4.0 FIELD OBSERVATIONS AND INVESTIGATIVE RESULTS

### 4.1 Site Hydrogeology

Since June 27, 2000, groundwater beneath the site has ranged in elevation from approximately 88.96 to 91.08 feet above mean sea level. Historical groundwater level measurements are presented as Table 1. During the most recent sampling event the direction of the groundwater gradient is generally towards the east and ranges in magnitude from 0.0028 to 0.0096 ft/ft. A Groundwater Elevation Map is presented as Figure 3.

### 4.2 Analytical Results

A summary of the most recent analytical laboratory results is presented as a portion of Table 2. The results are discussed below:

- Gasoline-range hydrocarbons were detected in the groundwater sample collected from monitoring well MW3 at a concentration of 5.2 mg/l. The other groundwater samples did not exhibit gasoline-range hydrocarbons at concentrations greater than the laboratory reporting limit of 0.20 mg/l.
- Benzene, toluene, and ethylbenzene were detected in the groundwater sample collected from monitoring well MW3 at concentrations of 220, 5.9, and 2.2 micrograms per liter (ug/l), respectively by EPA Test Method 8020; and 280, 12, and 7.3 ug/l, respectively by EPA Test Method 8260B. The other groundwater samples did not exhibit BTEX concentrations greater than the respective laboratory reporting limits.
- MTBE, tertiary amyl methylether (TAME), and tert-butanol were detected in the groundwater sample collected from monitoring well MW3 at concentrations of 5,500, 12, and 270 ug/l, respectively. In addition, MTBE was also detected in the groundwater samples collected from monitoring wells MW1 and MW2 at concentrations of 29 and 110 ug/l, respectively. The groundwater sample collected from monitoring well MW4 did not exhibit FOC concentrations greater than the respective laboratory reporting limits.
- Chloroform was detected in the groundwater sample collected from monitoring well MW4 at a concentration of 5.1 ug/l. The other groundwater samples did not exhibit additional VOCs at concentrations greater than the respective laboratory reporting limits.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

Analytical laboratory data indicates that TPHg, BTEX, and FOC impacts appear to be limited to groundwater within the vicinity of monitoring well MW3. Since TPHg, and BTEX were not detected in groundwater samples collected from downgradient monitoring wells; these constituents do not appear to be migrating.

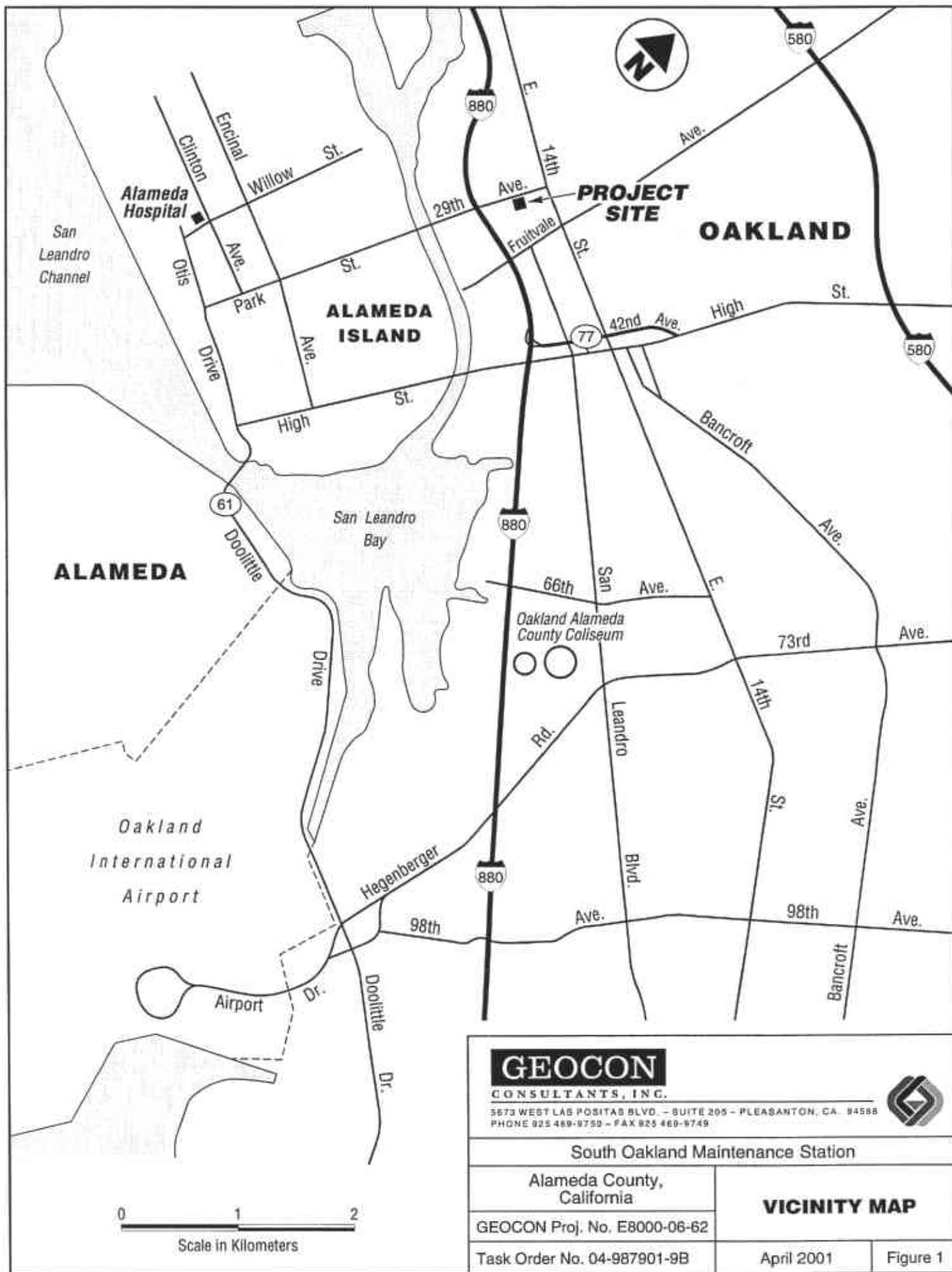
While MTBE was also detected in monitoring wells MW1 and MW2, the concentrations detected have not increased since the last sampling event. Consequently, MTBE does not appear to be migrating. Geocon recommends that the on-site monitoring wells continue to be monitored quarterly for TPHg, BTEX, and FOCs.

*gradient, if SW,  
would make MW-2 not dg of MW3*

## 6.0 REPORT LIMITATIONS

This report has been prepared exclusively for Caltrans. The information contained herein is only valid as of the date of the report, and will require an update to reflect additional information obtained.

This report is not a comprehensive site characterization and should not be construed as such. The findings as presented in this report are predicated on the results of the limited sampling and laboratory testing performed. In addition, the information obtained is not intended to address potential impacts related to sources other than those specified herein. Therefore, the report should be deemed conclusive with respect to only the information obtained. We make no warranty, express or implied, with respect to the content of this report or any subsequent reports, correspondence or consultation. Geocon strived to perform the services summarized herein in accordance with the local standard of care in the geographic region at the time the services were rendered.



**GEOCON**

CONSULTANTS, INC.

5573 WEST LAB POSITAB BLVD. - SUITE 205 - PLEASANTON, CA. 94588  
 PHONE 925 469-9750 - FAX 925 469-9749



South Oakland Maintenance Station

Alameda County,  
California

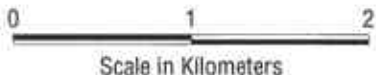
**VICINITY MAP**

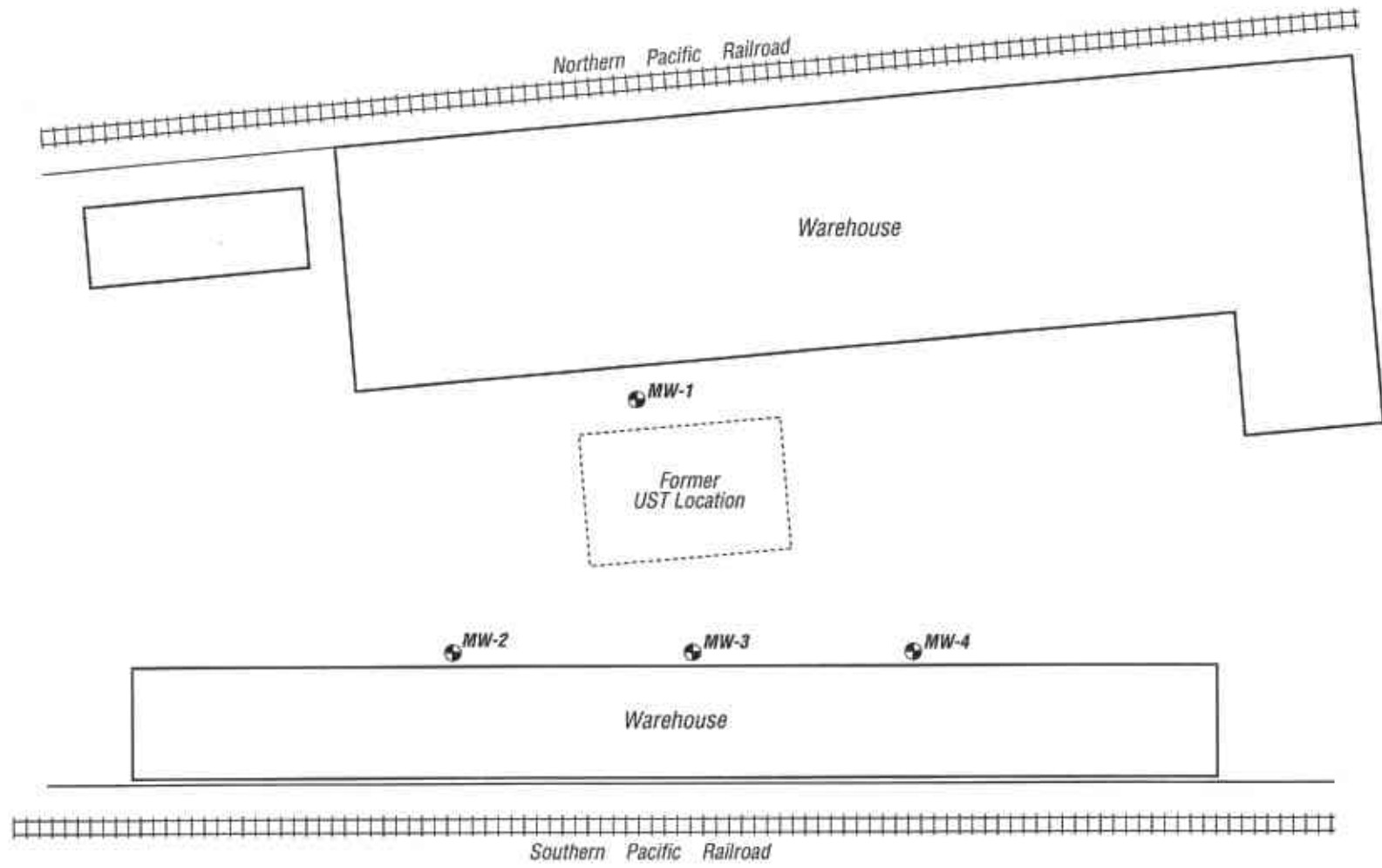
GEOCON Proj. No. E8000-06-62

Task Order No. 04-987901-9B

April 2001

Figure 1





LEGEND:

MW-1  Approximate Monitoring Well Location



**GEOCON**  
CONSULTANTS, INC.

5873 WEST LAS POSITAS BLVD. - SUITE 205 - PLEASANTON, CA. 94588  
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South Oakland Maintenance Station

Alameda County,  
California

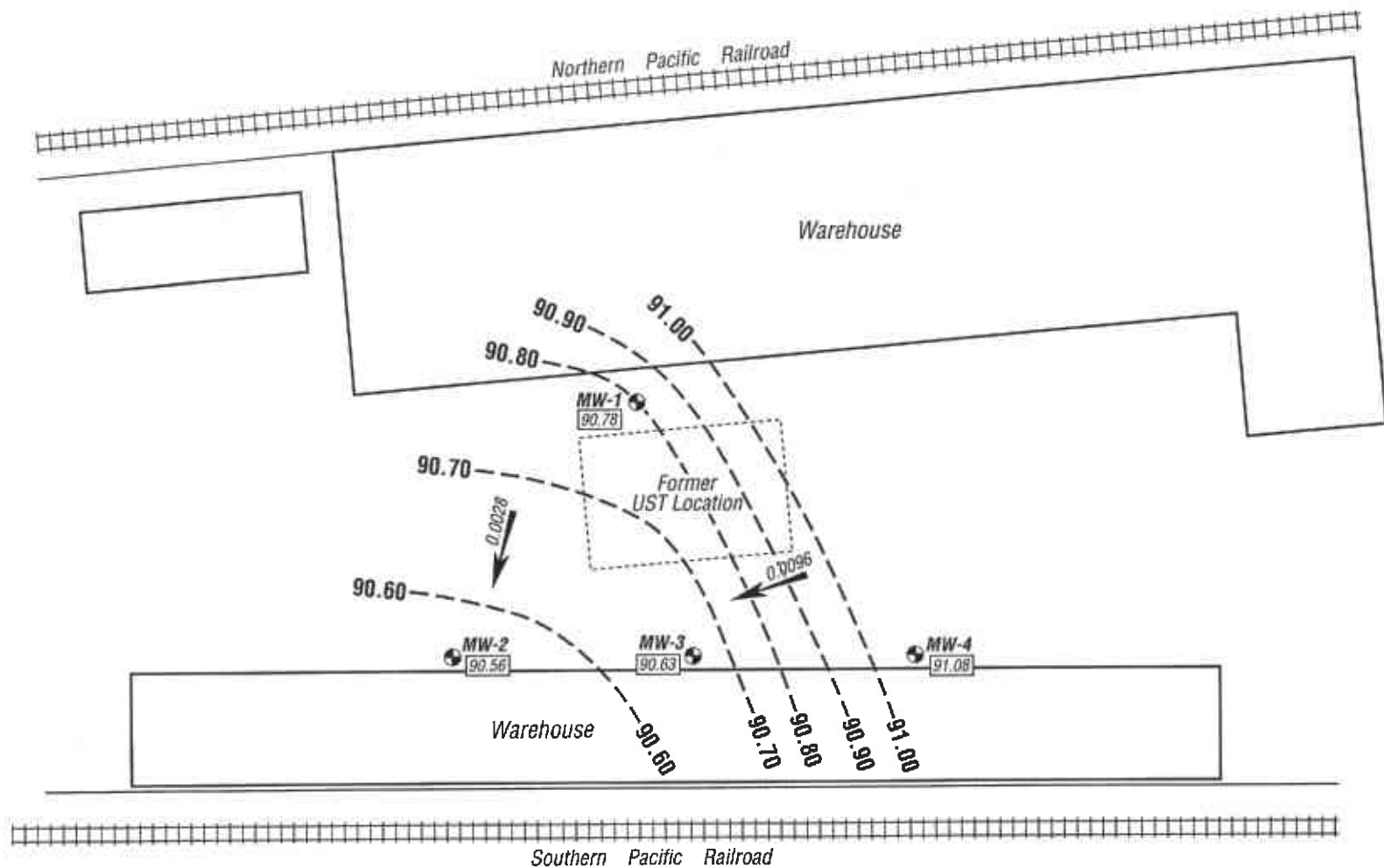
**SITE PLAN**

GEOCON Proj. No. E8000-06-62

Task Order No. 04-987901-9B

April 2001

Figure 2



**LEGEND:**

- MW-1 Approximate Monitoring Well Location
- Groundwater Elevation Contour (Interval = 0.10 Ft.)
- [90.56] MSL Elevation of Groundwater
- $0.0028$  Approximate Groundwater Direction & Gradient



**GEOCON**

CONSULTANTS, INC.

5673 WEST LAS POSITAS BLVD - SUITE 205 - PLEASANTON, CA. 94588  
PHONE 925 469-9750 - FAX 925 469-9749



South Oakland Maintenance Station

Alameda County,  
California

**GROUNDWATER  
ELEVATION MAP-  
MARCH 2001**

GEOCON Proj. No. E8000-06-62

Task Order No. 04-987901-9B

April 2001

Figure 3

**TABLE 2**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
**SOUTH OAKLAND MAINTENANCE STATION**

Well	Date	TPH <sub>g</sub> (mg/l)	TPH <sub>d</sub> (mg/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	ETBE (ug/l)	TAME (ug/l)	Tert-butanol (ug/l)	Di-isopropyl ether (ug/l)	Other VOCs (ug/l)
MW1	6/27/2000	0.85	--	20	<1.0	<1.0	19	880	--	<5	<50	--	--
	9/11/2000	0.92	--	14	<1.0	1.6	3.6	860	--	<5	190	--	--
	11/28/2000	<0.5	--	3.6	<2.5	<2.5	<7.5	610	--	<25	<250	--	--
	3/27/2001	<0.20	--	<0.50	<0.50	<0.50	<1.0	29	<5.0	<5.0	<200	<5.0	<5.0
MW2	6/27/2000	<0.5	--	<1.0	<1.0	<1.0	<3.0	86	--	<5	<50	--	--
	9/11/2000	<0.5	--	<1.0	<1.0	<1.0	<3.0	110	--	<5	<50	--	--
	11/28/2000	<0.5	--	<1.0	<1.0	<1.0	<3.0	130	--	<5	<50	--	--
	3/27/2001	<0.20	--	<0.50	<0.50	<0.50	<1.0	110	<5.0	<5.0	<200	<5.0	<5.0
MW3	6/27/2000	2.7	<0.4	73	1.7	1.2	4.6	5,000	--	11	1,500	--	--
	9/11/2000	1.9	--	19	<1.0	<1.0	<3.0	2,700	--	10	310	--	--
	11/28/2000	1.7	--	27	92	<10	<30	2,500	--	<100	<1,000	--	--
	3/27/2001	5.2	--	220	5.9	2.2	<1.0	<u>5,500</u>	<5.0	12	<u>270</u>	<5.0	Benzene = 280 Ethylbenzene = 7.3 Toluene = 12





**TABLE 2**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
**SOUTH OAKLAND MAINTENANCE STATION**

Well	Date	TPH <sub>g</sub> (mg/l)	TPH <sub>d</sub> (mg/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	ETBE (ug/l)	TAME (ug/l)	Tert-butanol (ug/l)	Di-isopropyl ether (ug/l)	Other VOCs (ug/l)
MW4	6/27/2000	< 0.5	---	< 1.0	< 1.0	< 1.0	< 3.0	18	---	< 5	< 50	---	---
	9/11/2000	< 0.5	---	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	---	< 5	< 50	---	---
	11/28/2000	< 0.5	---	< 0.5	< 0.5	< 0.5	< 1.5	< 1.0	---	< 5	< 50	---	---
	3/27/2001	< 0.20	---	< 0.50	< 0.50	< 0.50	< 1.0	< 5.0	< 5.0	< 5.0	< 200	< 5.0	Chloroform = 5.1

Notes:

- TPH<sub>g</sub> = Total Petroleum Hydrocarbons as gasoline following EPA Test Method 8015B
- TPH<sub>d</sub> = Total Petroleum Hydrocarbons as diesel following EPA Test Method 8015B
- BTEX = benzene, toluene, ethylbenzene, and total xylenes following EPA Test Method 8020
- FOCs = Fuel Oxygenate Compounds (tert-butanol, methyl tertiary butylether [MTBE], di-isopropyl ether, ethyl tertiary butylether [ETBE], and tertiary amyl methylether[TAME]) following EPA Test Method 8020/8260B
- VOCs = Volatile Organic Compounds following EPA Test Method 8260B
- mg/l = milligrams per liter
- ug/l = micrograms per liter
- = Analysis not performed or not reported
- < = less than indicated reporting limit

**TABLE 1**  
**SUMMARY OF GROUNDWATER LEVEL MEASUREMENTS**  
**SOUTH OAKLAND MAINTENANCE STATION**

Well	Date	TOC Elevation (Feet, MSL)	Depth to Water (Feet, BTOC)	Water Elevation (Feet, MSL)
MW1	6/27/2000	99.57	9.13	90.44
	9/11/2000	99.57	9.52	90.05
	11/28/2000	99.57	9.62	89.95
	3/27/2001	99.57	8.79	90.78
MW2	6/27/2000	98.91	9.05	89.86
	9/11/2000	98.91	9.95	88.96
	11/28/2000	98.91	9.94	88.97
	3/27/2001	98.91	8.35	90.56
MW3	6/27/2000	98.98	8.76	90.22
	9/11/2000	98.98	9.28	89.70
	11/28/2000	98.98	9.36	89.62
	3/27/2001	98.98	8.35	90.63
MW4	6/27/2000	99.04	8.74	90.30
	9/11/2000	99.04	9.30	89.74
	11/28/2000	99.04	9.32	89.72
	3/27/2001	99.04	7.96	91.08

Notes:

- Feet, BTOC = Feet below top of well casing
- TOC = Top of well casing
- Feet, MSL = Feet, with respect mean sea level

APPENDIX

A

S Oakland  
QL 1 2001

April 06, 2001

Ross White  
Geocon Environmental  
5673 W. Las Positas Blvd., Ste 205  
Pleasanton, CA 94588  
TEL: (925) 469-9750  
FAX (925) 469-9749

ELAP No: 1838

RE: S Oakland M.S. - E8000-06-62

Work Order No.: 050400

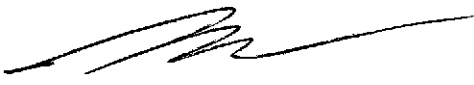
Attention: Ross White

Enclosed are the results for sample(s) received on April 02, 2001 by Advanced Technology Laboratories and tested for the parameters indicated in the enclosed chain of custody.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,



Edgar Caballero  
Laboratory Director

This cover letter is an integral part of this analytical report.



# FAX



Date 4/4/01

Number of pages including cover sheet 1

TO: DIANE/ADRIAN

FROM: Ross J. White  
Geocon Consultants, Inc.  
5673 W. Las Positas Blvd., Suite 205  
Pleasanton, CA 94588

Phone  
Fax Phone

Phone 925.469.9750  
Fax 925.469.9749

CC:

REMARKS:  Urgent  For your review  Reply ASAP  Please Comment

The <sup>water</sup> samples you received for ~~the~~ Geocon's projects:

- South Oakland MS (EB000-06-62), and
- Hegenberger MS (EB000-06-63)

Should also be analyzed for FOCs (B260). The CDC indicated VOCs (SVOCs (B260).

↑ This should have been FOCs.

If the samples have been analyzed for VOCs w/out FOCs, please re-analyze via B260 and include FOCs.

Thanks  
- Ross

# CHAIN OF CUSTODY RECORD

## FOR LABORATORY USE ONLY:



**Advanced Technology  
Laboratories**

1510 E. 33rd Street  
Signal Hill, CA 90807  
(562) 989-4045 • FAX (562) 989-4040

P.O.#: \_\_\_\_\_  
 Logged By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Method of Transport  
 Walk-in   
 Courier   
 UPS   
 FED. EXP.   
 ATL

Sample Condition Upon Receipt  
 1. CHILLED Y  N  4. SEALED Y  N   
 2. HEADSPACE (VOA) Y  N  5. # OF SPLS MATCH COC Y  N   
 3. CONTAINER INTACT Y  N  6. PRESERVED Y  N

Client: Geacow (Pentac) Address: 5673 W Las Positas Blvd #205 TEL: (925) 469-9750  
 Attn: Ross White City: San Pleasanton State: CA Zip Code: 94588 FAX: (925) 469-9749

Project Name: S OAKLAND M.S. Project #: 88000-06-22 Sampler: Trevin Mills (Printed Name) \_\_\_\_\_ (Signature) \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: 3/1 Time: 1700 Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: 1700  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: 4-201 Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

I hereby authorize ATL to perform the work indicated below:  
 Project Mgr /Submitter:  
 Print Name \_\_\_\_\_ Date \_\_\_\_\_  
 Signature \_\_\_\_\_

Send Report To:  
 Attn: \_\_\_\_\_  
 Co: \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Bill To:  
 Attn: \_\_\_\_\_  
 Co: \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Special Instructions/Comments:  
 \_\_\_\_\_

Unless otherwise requested, all samples will be disposed 45 days after receipt.

Sample Archive/Disposal:  
 Laboratory Standard  
 Other \_\_\_\_\_  
 Return To: \_\_\_\_\_  
 \* \$10.00 FEE PER HAZARDOUS SAMPLE DISPOSAL.

Circle or Add Analysis(es) Requested  
 8091 / 8092 (Pesticides/PCB/BC)  
 8280 (Polynates/GCM/MS)  
 825 / 8270 (BNA-SC/MS)  
 Metals Total (CAC-3010 / 7000)  
 8015M (TPH/G/TEX) (POM/MA/TOM)  
 8015M TPH/D (Diester/GC)  
SWPC-1 VOLs 2220

CIRCLE APPROPRIATE MATRIX  
 SOLID • SOIL • SLUDGE  
 OIL • SOLVENT • LIQUID  
 WATER • WASTEWATER  
 DRINKING WATER  
 AIR  
 WIPE • FILTER  
 OTHER \_\_\_\_\_

Container(s)  
 # \_\_\_\_\_ Type \_\_\_\_\_

PRESERVATION  
 RTNE   
 RWQCB   
 WIP   
 NAVY   
 CT   
 OTHER

ITEM	LAB USE ONLY:		Sample Description			
	Batch #:	Lab No.	Sample I.D.	Date	Time	
		50420-001	MW-4	3/21	1055	
		2	MW-3		1130	
		5	MW-2		1205	
		8	MW-1		1230	

• TAT starts 8 a.m. following day if samples received after 5 p.m.

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=HCl N=HNO<sub>3</sub> S=H<sub>2</sub>SO<sub>4</sub> C=4°C Z=Zn(AC)<sub>2</sub> O=NaOH T=Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>

**Advanced Technology Laboratories**

Print Date: 4/6/01

CLIENT: Geocon Environmental  
 Lab Order: 050400  
 Project: S Oakland M.S. - E8000-06-62  
 Lab ID: 050400-001A

Client Sample ID: MW-4  
 Collection Date: 3/27/01 10:55:00 AM  
 Matrix: Water

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>GASOLINE RANGE ORGANICS BY GC/FID</b>				<b>EPA 8015B(M)</b>		Analyst: JPC
RunID: GC6_010404A	BatchID: I018G20W055					PrepDate:
GRO	ND	0.20		mg/L	1	4/4/01
<b>VOLATILE ORGANIC COMPOUNDS BY GC/PID</b>				<b>EPA 8020A</b>		Analyst: JPC
RunID: GC6_010404A	BatchID: I018G20W055					PrepDate:
Benzene	ND	0.50		µg/L	1	4/4/01
Ethylbenzene	ND	0.50		µg/L	1	4/4/01
m,p-Xylene	ND	0.50		µg/L	1	4/4/01
o-Xylene	ND	0.50		µg/L	1	4/4/01
Toluene	ND	0.50		µg/L	1	4/4/01

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 DO - Surrogate Diluted Out

S - Spike/Surrogate outside of limits due to matrix interference.  
 H - Samples exceeding analytical holding time  
 E - Value above quantitation range  
 M - Not Monitored. Highly Reactive

Initials: 



# Advanced Technology Laboratories

Print Date: 4/6/01

CLIENT: Geocon Environmental

Client Sample ID: MW-4

Lab Order: 050400

Project: S Oakland M.S. - E8000-06-62

Collection Date: 3/27/01 10:55:00 AM

Lab ID: 050400-001A

Matrix: Water

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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**VOLATILE ORGANIC COMPOUNDS BY GC/MS**

EPA 8260B

Analyst: DJK

RunID: MS2\_010404A

BatchID: Q01VOCW074

PrepDate:

Di-isopropyl ether	ND	5.0		µg/L	1	4/4/01
Ethyl tert-butyl ether	ND	5.0		µg/L	1	4/4/01
MTBE	ND	5.0		µg/L	1	4/4/01
Tert-amyl methyl ether	ND	5.0		µg/L	1	4/4/01
Tert-Butanol	ND	200		µg/L	1	4/4/01

**VOLATILE ORGANIC COMPOUNDS BY GC/MS**

EPA 8260B

Analyst: DJK

RunID: MS2\_010404A


BatchID: Q01VOCW074

PrepDate:

1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	1	4/4/01
1,1,1-Trichloroethane	ND	5.0		µg/L	1	4/4/01
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	4/4/01
1,1,2-Trichloroethane	ND	5.0		µg/L	1	4/4/01
1,1-Dichloroethane	ND	5.0		µg/L	1	4/4/01
1,1-Dichloroethene	ND	5.0		µg/L	1	4/4/01
1,1-Dichloropropene	ND	5.0		µg/L	1	4/4/01
1,2,3-Trichlorobenzene	ND	5.0		µg/L	1	4/4/01
1,2,3-Trichloropropane	ND	5.0		µg/L	1	4/4/01
1,2,4-Trichlorobenzene	ND	5.0		µg/L	1	4/4/01
1,2,4-Trimethylbenzene	ND	5.0		µg/L	1	4/4/01
1,2-Dibromo-3-chloropropane	ND	5.0		µg/L	1	4/4/01
1,2-Dibromoethane	ND	5.0		µg/L	1	4/4/01
1,2-Dichlorobenzene	ND	5.0		µg/L	1	4/4/01
1,2-Dichloroethane	ND	5.0		µg/L	1	4/4/01
1,2-Dichloropropane	ND	5.0		µg/L	1	4/4/01
1,3,5-Trimethylbenzene	ND	5.0		µg/L	1	4/4/01
1,3-Dichlorobenzene	ND	5.0		µg/L	1	4/4/01
1,3-Dichloropropane	ND	5.0		µg/L	1	4/4/01
1,4-Dichlorobenzene	ND	5.0		µg/L	1	4/4/01
2,2-Dichloropropane	ND	5.0		µg/L	1	4/4/01
2-Chlorotoluene	ND	5.0		µg/L	1	4/4/01
4-Chlorotoluene	ND	5.0		µg/L	1	4/4/01
4-Isopropyltoluene	ND	5.0		µg/L	1	4/4/01
Benzene	ND	5.0		µg/L	1	4/4/01
Bromobenzene	ND	5.0		µg/L	1	4/4/01
Bromodichloromethane	ND	5.0		µg/L	1	4/4/01
Bromoform	ND	5.0		µg/L	1	4/4/01
Bromomethane	ND	5.0		µg/L	1	4/4/01
Carbon tetrachloride	ND	5.0		µg/L	1	4/4/01

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 DO - Surrogate Diluted Out

S - Spike/Surrogate outside of limits due to matrix interference.  
 H - Samples exceeding analytical holding time  
 E - Value above quantitation range  
 M - Not Monitored. Highly Reactive

Initials: 





# Advanced Technology Laboratories

Print Date: 4/6/01

CLIENT: Geocon Environmental  
 Lab Order: 050400  
 Project: S Oakland M.S. - E8000-06-62  
 Lab ID: 050400-001A

Client Sample ID: MW-4  
 Collection Date: 3/27/01 10:55:00 AM  
 Matrix: Water

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>						Analyst: DJK PrepDate:
RunID: MS2_010404A	BatchID: Q01VOCW074		EPA 8260B			
Chlorobenzene	ND	5.0		µg/L	1	4/4/01
Chloroethane	ND	5.0		µg/L	1	4/4/01
Chloroform	5.1	5.0		µg/L	1	4/4/01
Chloromethane	ND	5.0		µg/L	1	4/4/01
cis-1,2-Dichloroethene	ND	5.0		µg/L	1	4/4/01
Dibromochloromethane	ND	5.0		µg/L	1	4/4/01
Dibromomethane	ND	5.0		µg/L	1	4/4/01
Dichlorodifluoromethane	ND	5.0		µg/L	1	4/4/01
Ethylbenzene	ND	5.0		µg/L	1	4/4/01
Hexachlorobutadiene	ND	5.0		µg/L	1	4/4/01
Isopropylbenzene	ND	5.0		µg/L	1	4/4/01
m,p-Xylene	ND	5.0		µg/L	1	4/4/01
Methylene chloride	ND	5.0		µg/L	1	4/4/01
n-Butylbenzene	ND	5.0		µg/L	1	4/4/01
n-Propylbenzene	ND	5.0		µg/L	1	4/4/01
Naphthalene	ND	5.0		µg/L	1	4/4/01
o-Xylene	ND	5.0		µg/L	1	4/4/01
sec-Butylbenzene	ND	5.0		µg/L	1	4/4/01
Styrene	ND	5.0		µg/L	1	4/4/01
tert-Butylbenzene	ND	5.0		µg/L	1	4/4/01
Tetrachloroethene	ND	5.0		µg/L	1	4/4/01
Toluene	ND	5.0		µg/L	1	4/4/01
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	4/4/01
Trichloroethene	ND	5.0		µg/L	1	4/4/01
Trichlorofluoromethane	ND	5.0		µg/L	1	4/4/01
Vinyl chloride	ND	5.0		µg/L	1	4/4/01

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 DO - Surrogate Diluted Out

S - Spike/Surrogate outside of limits due to matrix interference.  
 H - Samples exceeding analytical holding time  
 E - Value above quantitation range  
 M - Not Monitored. Highly Reactive

Initials: 



# Advanced Technology Laboratories

Print Date: 4/6/01

CLIENT: Geocon Environmental

Client Sample ID: MW-3

Lab Order: 050400

Project: S Oakland M.S. - E8000-06-62

Collection Date: 3/27/01 11:30:00 AM

Lab ID: 050400-002A

Matrix: Water

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>GASOLINE RANGE ORGANICS BY GC/FID</b>				<b>EPA 8015B(M)</b>		Analyst: JPC
RunID: GC6_010404A	BatchID: I018G20W055					PrepDate:
GRO	5.2	0.20		mg/L	1	4/4/01
<b>VOLATILE ORGANIC COMPOUNDS BY GC/PID</b>				<b>EPA 8020A</b>		Analyst: JPC
RunID: GC6_010404A	BatchID: I018G20W055					PrepDate:
Benzene	220	0.50		µg/L	1	4/4/01
Ethylbenzene	2.2	0.50		µg/L	1	4/4/01
m,p-Xylene	ND	0.50		µg/L	1	4/4/01
o-Xylene	ND	0.50		µg/L	1	4/4/01
Toluene	5.9	0.50		µg/L	1	4/4/01

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 DO - Surrogate Diluted Out

S - Spike/Surrogate outside of limits due to matrix interference.  
 H - Samples exceeding analytical holding time  
 E - Value above quantitation range  
 M - Not Monitored. Highly Reactive

Initials:   P  



# Advanced Technology Laboratories

Print Date: 4/6/01

CLIENT: Geocon Environmental

Client Sample ID: MW-3

Lab Order: 050400

Project: S Oakland M.S. - E8000-06-62

Collection Date: 3/27/01 11:30:00 AM

Lab ID: 050400-002A


Matrix: Water

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS				EPA 8260B	Analyst: DJK	
RunID: MS2_010404A	BatchID: Q01VOCW074					PrepDate:
Di-isopropyl ether	ND	5.0		µg/L	1	4/4/01
Ethyl tert-butyl ether	ND	5.0		µg/L	1	4/4/01
MTBE	5500	500		µg/L	100	4/5/01
Tert-amyl methyl ether	12	5.0		µg/L	1	4/4/01
Tert-Butanol	270	200		µg/L	1	4/4/01

VOLATILE ORGANIC COMPOUNDS BY GC/MS				EPA 8260B	Analyst: DJK	
RunID: MS2_010404A	BatchID: Q01VOCW074					PrepDate:
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	1	4/4/01
1,1,1-Trichloroethane	ND	5.0		µg/L	1	4/4/01
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	4/4/01
1,1,2-Trichloroethane	ND	5.0		µg/L	1	4/4/01
1,1-Dichloroethane	ND	5.0		µg/L	1	4/4/01
1,1-Dichloroethene	ND	5.0		µg/L	1	4/4/01
1,1-Dichloropropene	ND	5.0		µg/L	1	4/4/01
1,2,3-Trichlorobenzene	ND	5.0		µg/L	1	4/4/01
1,2,3-Trichloropropane	ND	5.0		µg/L	1	4/4/01
1,2,4-Trichlorobenzene	ND	5.0		µg/L	1	4/4/01
1,2,4-Trimethylbenzene	ND	5.0		µg/L	1	4/4/01
1,2-Dibromo-3-chloropropane	ND	5.0		µg/L	1	4/4/01
1,2-Dibromoethane	ND	5.0		µg/L	1	4/4/01
1,2-Dichlorobenzene	ND	5.0		µg/L	1	4/4/01
1,2-Dichloroethane	ND	5.0		µg/L	1	4/4/01
1,2-Dichloropropane	ND	5.0		µg/L	1	4/4/01
1,3,5-Trimethylbenzene	ND	5.0		µg/L	1	4/4/01
1,3-Dichlorobenzene	ND	5.0		µg/L	1	4/4/01
1,3-Dichloropropane	ND	5.0		µg/L	1	4/4/01
1,4-Dichlorobenzene	ND	5.0		µg/L	1	4/4/01
2,2-Dichloropropane	ND	5.0		µg/L	1	4/4/01
2-Chlorotoluene	ND	5.0		µg/L	1	4/4/01
4-Chlorotoluene	ND	5.0		µg/L	1	4/4/01
4-Isopropyltoluene	ND	5.0		µg/L	1	4/4/01
Benzene	280	5.0		µg/L	1	4/4/01
Bromobenzene	ND	5.0		µg/L	1	4/4/01
Bromodichloromethane	ND	5.0		µg/L	1	4/4/01
Bromoform	ND	5.0		µg/L	1	4/4/01
Bromomethane	ND	5.0		µg/L	1	4/4/01
Carbon tetrachloride	ND	5.0		µg/L	1	4/4/01

Qualifiers: ND - Not Detected at the Reporting Limit      S - Spike/Surrogate outside of limits due to matrix interference.  
 J - Analyte detected below quantitation limits      H - Samples exceeding analytical holding time  
 B - Analyte detected in the associated Method Blank      E - Value above quantitation range  
 DO - Surrogate Diluted Out      M - Not Monitored. Highly Reactive

Initials: 



# Advanced Technology Laboratories

Print Date: 4/6/01

CLIENT: Geocon Environmental

Client Sample ID: MW-3

Lab Order: 050400

Project: S Oakland M.S. - E8000-06-62

Collection Date: 3/27/01 11:30:00 AM

Lab ID: 050400-002A

Matrix: Water

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS BY GC/MS</b>			<b>EPA 8260B</b>		Analyst: DJK	
RunID: MS2_010404A	BatchID: Q01VOCW074					PrepDate:
Chlorobenzene	ND	5.0		µg/L	1	4/4/01
Chloroethane	ND	5.0		µg/L	1	4/4/01
Chloroform	ND	5.0		µg/L	1	4/4/01
Chloromethane	ND	5.0		µg/L	1	4/4/01
cis-1,2-Dichloroethene	ND	5.0		µg/L	1	4/4/01
Dibromochloromethane	ND	5.0		µg/L	1	4/4/01
Dibromomethane	ND	5.0		µg/L	1	4/4/01
Dichlorodifluoromethane	ND	5.0		µg/L	1	4/4/01
Ethylbenzene	7.3	5.0		µg/L	1	4/4/01
Hexachlorobutadiene	ND	5.0		µg/L	1	4/4/01
Isopropylbenzene	ND	5.0		µg/L	1	4/4/01
m,p-Xylene	ND	5.0		µg/L	1	4/4/01
Methylene chloride	ND	5.0		µg/L	1	4/4/01
n-Butylbenzene	ND	5.0		µg/L	1	4/4/01
n-Propylbenzene	ND	5.0		µg/L	1	4/4/01
Naphthalene	ND	5.0		µg/L	1	4/4/01
o-Xylene	ND	5.0		µg/L	1	4/4/01
sec-Butylbenzene	ND	5.0		µg/L	1	4/4/01
Styrene	ND	5.0		µg/L	1	4/4/01
tert-Butylbenzene	ND	5.0		µg/L	1	4/4/01
Tetrachloroethene	ND	5.0		µg/L	1	4/4/01
Toluene	12	5.0		µg/L	1	4/4/01
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	4/4/01
Trichloroethene	ND	5.0		µg/L	1	4/4/01
Trichlorofluoromethane	ND	5.0		µg/L	1	4/4/01
Vinyl chloride	ND	5.0		µg/L	1	4/4/01

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike/Surrogate outside of limits due to matrix interference.

J - Analyte detected below quantitation limits

H - Samples exceeding analytical holding time

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

Initials:         

DO - Surrogate Diluted Out

M - Not Monitored. Highly Reactive

6



Advanced Technology  
Laboratories

3275 Walnut Avenue Signal Hill, CA 90807 Tel: 562 989-4045 Fax: 562 989-4040

**Advanced Technology Laboratories**

Print Date: 4/6/01


CLIENT: Geocon Environmental  
Lab Order: 050400  
Project: S Oakland M.S. - E8000-06-62  
Lab ID: 050400-003A

Client Sample ID: MW-2  
Collection Date: 3/27/01 12:05:00 PM  
Matrix: Water

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>GASOLINE RANGE ORGANICS BY GC/FID</b>		<b>EPA 8015B(M)</b>			Analyst: JPC	
RunID: GC6_010404A	BatchID: I018G20W055					PrepDate:
GRO	ND	0.20		mg/L	1	4/4/01
<b>VOLATILE ORGANIC COMPOUNDS BY GC/PID</b>		<b>EPA 8020A</b>			Analyst: JPC	
RunID: GC6_010404A	BatchID: I018G20W055					PrepDate:
Benzene	ND	0.50		µg/L	1	4/4/01
Ethylbenzene	ND	0.50		µg/L	1	4/4/01
m,p-Xylene	ND	0.50		µg/L	1	4/4/01
o-Xylene	ND	0.50		µg/L	1	4/4/01
Toluene	ND	0.50		µg/L	1	4/4/01

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike/Surrogate outside of limits due to matrix interference.  
H - Samples exceeding analytical holding time  
E - Value above quantitation range  
M - Not Monitored. Highly Reactive

Initials: 



# Advanced Technology Laboratories

Print Date: 4/6/01

CLIENT: Geocon Environmental

Client Sample ID: MW-2

Lab Order: 050400

Project: S Oakland M.S. - E8000-06-62

Collection Date: 3/27/01 12:05:00 PM

Lab ID: 050400-003A

Matrix: Water

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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**VOLATILE ORGANIC COMPOUNDS BY GC/MS**

EPA 8260B

Analyst: DJK

RunID: MS2\_010404A

BatchID: Q01VOCW074

PrepDate:

Di-isopropyl ether	ND	5.0		µg/L	1	4/4/01
Ethyl tert-butyl ether	ND	5.0		µg/L	1	4/4/01
MTBE	110	5.0		µg/L	1	4/4/01
Tert-amyl methyl ether	ND	5.0		µg/L	1	4/4/01
Tert-Butanol	ND	200		µg/L	1	4/4/01

**VOLATILE ORGANIC COMPOUNDS BY GC/MS**

EPA 8260B

Analyst: DJK

RunID: MS2\_010404A


BatchID: Q01VOCW074

PrepDate:

1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	1	4/4/01
1,1,1-Trichloroethane	ND	5.0		µg/L	1	4/4/01
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	4/4/01
1,1,2-Trichloroethane	ND	5.0		µg/L	1	4/4/01
1,1-Dichloroethane	ND	5.0		µg/L	1	4/4/01
1,1-Dichloroethene	ND	5.0		µg/L	1	4/4/01
1,1-Dichloropropene	ND	5.0		µg/L	1	4/4/01
1,2,3-Trichlorobenzene	ND	5.0		µg/L	1	4/4/01
1,2,3-Trichloropropane	ND	5.0		µg/L	1	4/4/01
1,2,4-Trichlorobenzene	ND	5.0		µg/L	1	4/4/01
1,2,4-Trimethylbenzene	ND	5.0		µg/L	1	4/4/01
1,2-Dibromo-3-chloropropane	ND	5.0		µg/L	1	4/4/01
1,2-Dibromoethane	ND	5.0		µg/L	1	4/4/01
1,2-Dichlorobenzene	ND	5.0		µg/L	1	4/4/01
1,2-Dichloroethane	ND	5.0		µg/L	1	4/4/01
1,2-Dichloropropane	ND	5.0		µg/L	1	4/4/01
1,3,5-Trimethylbenzene	ND	5.0		µg/L	1	4/4/01
1,3-Dichlorobenzene	ND	5.0		µg/L	1	4/4/01
1,3-Dichloropropane	ND	5.0		µg/L	1	4/4/01
1,4-Dichlorobenzene	ND	5.0		µg/L	1	4/4/01
2,2-Dichloropropane	ND	5.0		µg/L	1	4/4/01
2-Chlorotoluene	ND	5.0		µg/L	1	4/4/01
4-Chlorotoluene	ND	5.0		µg/L	1	4/4/01
4-Isopropyltoluene	ND	5.0		µg/L	1	4/4/01
Benzene	ND	5.0		µg/L	1	4/4/01
Bromobenzene	ND	5.0		µg/L	1	4/4/01
Bromodichloromethane	ND	5.0		µg/L	1	4/4/01
Bromoform	ND	5.0		µg/L	1	4/4/01
Bromomethane	ND	5.0		µg/L	1	4/4/01
Carbon tetrachloride	ND	5.0		µg/L	1	4/4/01

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 DO - Surrogate Diluted Out

S - Spike/Surrogate outside of limits due to matrix interference.  
 H - Samples exceeding analytical holding time  
 E - Value above quantitation range  
 M - Not Monitored. Highly Reactive

Initials: 



# Advanced Technology Laboratories

Print Date: 4/6/01

CLIENT: Geocon Environmental

Client Sample ID: MW-2

Lab Order: 050400

Project: S Oakland M.S. - E8000-06-62

Collection Date: 3/27/01 12:05:00 PM

Lab ID: 050400-003A

Matrix: Water

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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**VOLATILE ORGANIC COMPOUNDS BY GC/MS**

EPA 8260B

Analyst: DJK

RunID: MS2\_010404A

BatchID: Q01VOCW074

PrepDate:

Chlorobenzene	ND	5.0		µg/L	1	4/4/01
Chloroethane	ND	5.0		µg/L	1	4/4/01
Chloroform	ND	5.0		µg/L	1	4/4/01
Chloromethane	ND	5.0		µg/L	1	4/4/01
cis-1,2-Dichloroethene	ND	5.0		µg/L	1	4/4/01
Dibromochloromethane	ND	5.0		µg/L	1	4/4/01
Dibromomethane	ND	5.0		µg/L	1	4/4/01
Dichlorodifluoromethane	ND	5.0		µg/L	1	4/4/01
Ethylbenzene	ND	5.0		µg/L	1	4/4/01
Hexachlorobutadiene	ND	5.0		µg/L	1	4/4/01
Isopropylbenzene	ND	5.0		µg/L	1	4/4/01
m,p-Xylene	ND	5.0		µg/L	1	4/4/01
Methylene chloride	ND	5.0		µg/L	1	4/4/01
n-Butylbenzene	ND	5.0		µg/L	1	4/4/01
n-Propylbenzene	ND	5.0		µg/L	1	4/4/01
Naphthalene	ND	5.0		µg/L	1	4/4/01
o-Xylene	ND	5.0		µg/L	1	4/4/01
sec-Butylbenzene	ND	5.0		µg/L	1	4/4/01
Styrene	ND	5.0		µg/L	1	4/4/01
tert-Butylbenzene	ND	5.0		µg/L	1	4/4/01
Tetrachloroethene	ND	5.0		µg/L	1	4/4/01
Toluene	ND	5.0		µg/L	1	4/4/01
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	4/4/01
Trichloroethene	ND	5.0		µg/L	1	4/4/01
Trichlorofluoromethane	ND	5.0		µg/L	1	4/4/01
Vinyl chloride	ND	5.0		µg/L	1	4/4/01

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 DO - Surrogate Diluted Out

S - Spike/Surrogate outside of limits due to matrix interference.  
 H - Samples exceeding analytical holding time  
 E - Value above quantitation range  
 M - Not Monitored. Highly Reactive

Initials:     



# Advanced Technology Laboratories

Print Date: 4/6/01

CLIENT: Geocon Environmental

Client Sample ID: MW-1

Lab Order: 050400

Project: S Oakland M.S. - E8000-06-62

Collection Date: 3/27/01 12:30:00 PM

Lab ID: 050400-004A

Matrix: Water

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>GASOLINE RANGE ORGANICS BY GC/FID</b>				<b>EPA 8015B(M)</b>		Analyst: JPC
RunID: GC6_010404A	BatchID: I018G20W055					PrepDate:
GRO	ND	0.20		mg/L	1	4/4/01
<b>VOLATILE ORGANIC COMPOUNDS BY GC/PID</b>				<b>EPA 8020A</b>		Analyst: JPC
RunID: GC6_010404A	BatchID: I018G20W055					PrepDate:
Benzene	ND	0.50		µg/L	1	4/4/01
Ethylbenzene	ND	0.50		µg/L	1	4/4/01
m,p-Xylene	ND	0.50		µg/L	1	4/4/01
o-Xylene	ND	0.50		µg/L	1	4/4/01
Toluene	ND	0.50		µg/L	1	4/4/01

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 DO - Surrogate Diluted Out

S - Spike/Surrogate outside of limits due to matrix interference.  
 H - Samples exceeding analytical holding time  
 E - Value above quantitation range  
 M - Not Monitored. Highly Reactive

Initials:  10





**Advanced Technology Laboratories**

Print Date: 4/6/01

CLIENT: Geocon Environmental  
 Lab Order: 050400  
 Project: S Oakland M.S. - E8000-06-62  
 Lab ID: 050400-004A

Client Sample ID: MW-1  
 Collection Date: 3/27/01 12:30:00 PM  
 Matrix: Water

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS				EPA 8260B	Analyst: DJK	
RunID: MS2_010404A	BatchID: Q01VOCW074				PrepDate:	
Di-isopropyl ether	ND	5.0		µg/L	1	4/4/01
Ethyl tert-butyl ether	ND	5.0		µg/L	1	4/4/01
MTBE	29	5.0		µg/L	1	4/4/01
Tert-amyl methyl ether	ND	5.0		µg/L	1	4/4/01
Tert-Butanol	ND	200		µg/L	1	4/4/01

VOLATILE ORGANIC COMPOUNDS BY GC/MS				EPA 8260B	Analyst: DJK	
RunID: MS2_010404A	BatchID: Q01VOCW074				PrepDate:	
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	1	4/4/01
1,1,1-Trichloroethane	ND	5.0		µg/L	1	4/4/01
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	4/4/01
1,1,2-Trichloroethane	ND	5.0		µg/L	1	4/4/01
1,1-Dichloroethane	ND	5.0		µg/L	1	4/4/01
1,1-Dichloroethene	ND	5.0		µg/L	1	4/4/01
1,1-Dichloropropene	ND	5.0		µg/L	1	4/4/01
1,2,3-Trichlorobenzene	ND	5.0		µg/L	1	4/4/01
1,2,3-Trichloropropane	ND	5.0		µg/L	1	4/4/01
1,2,4-Trichlorobenzene	ND	5.0		µg/L	1	4/4/01
1,2,4-Trimethylbenzene	ND	5.0		µg/L	1	4/4/01
1,2-Dibromo-3-chloropropane	ND	5.0		µg/L	1	4/4/01
1,2-Dibromoethane	ND	5.0		µg/L	1	4/4/01
1,2-Dichlorobenzene	ND	5.0		µg/L	1	4/4/01
1,2-Dichloroethane	ND	5.0		µg/L	1	4/4/01
1,2-Dichloropropane	ND	5.0		µg/L	1	4/4/01
1,3,5-Trimethylbenzene	ND	5.0		µg/L	1	4/4/01
1,3-Dichlorobenzene	ND	5.0		µg/L	1	4/4/01
1,3-Dichloropropane	ND	5.0		µg/L	1	4/4/01
1,4-Dichlorobenzene	ND	5.0		µg/L	1	4/4/01
2,2-Dichloropropane	ND	5.0		µg/L	1	4/4/01
2-Chlorotoluene	ND	5.0		µg/L	1	4/4/01
4-Chlorotoluene	ND	5.0		µg/L	1	4/4/01
4-Isopropyltoluene	ND	5.0		µg/L	1	4/4/01
Benzene	ND	5.0		µg/L	1	4/4/01
Bromobenzene	ND	5.0		µg/L	1	4/4/01
Bromodichloromethane	ND	5.0		µg/L	1	4/4/01
Bromoform	ND	5.0		µg/L	1	4/4/01
Bromomethane	ND	5.0		µg/L	1	4/4/01
Carbon tetrachloride	ND	5.0		µg/L	1	4/4/01

Qualifiers: ND - Not Detected at the Reporting Limit      S - Spike/Surrogate outside of limits due to matrix interference.  
 J - Analyte detected below quantitation limits      H - Samples exceeding analytical holding time  
 B - Analyte detected in the associated Method Blank      E - Value above quantitation range      Initials:   DJ    
 DO - Surrogate Diluted Out      M - Not Monitored. Highly Reactive



# Advanced Technology Laboratories

Print Date: 4/6/01

CLIENT: Geocon Environmental

Client Sample ID: MW-1

Lab Order: 050400

Project: S Oakland M.S. - E8000-06-62

Collection Date: 3/27/01 12:30:00 PM

Lab ID: 050400-004A

Matrix: Water

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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**VOLATILE ORGANIC COMPOUNDS BY GC/MS**

EPA 8260B

Analyst: DJK

RunID: MS2\_010404A

BatchID: Q01VOCW074

PrepDate:

Chlorobenzene	ND	5.0		µg/L	1	4/4/01
Chloroethane	ND	5.0		µg/L	1	4/4/01
Chloroform	ND	5.0		µg/L	1	4/4/01
Chloromethane	ND	5.0		µg/L	1	4/4/01
cis-1,2-Dichloroethene	ND	5.0		µg/L	1	4/4/01
Dibromochloromethane	ND	5.0		µg/L	1	4/4/01
Dibromomethane	ND	5.0		µg/L	1	4/4/01
Dichlorodifluoromethane	ND	5.0		µg/L	1	4/4/01
Ethylbenzene	ND	5.0		µg/L	1	4/4/01
Hexachlorobutadiene	ND	5.0		µg/L	1	4/4/01
Isopropylbenzene	ND	5.0		µg/L	1	4/4/01
m,p-Xylene	ND	5.0		µg/L	1	4/4/01
Methylene chloride	ND	5.0		µg/L	1	4/4/01
n-Butylbenzene	ND	5.0		µg/L	1	4/4/01
n-Propylbenzene	ND	5.0		µg/L	1	4/4/01
Naphthalene	ND	5.0		µg/L	1	4/4/01
o-Xylene	ND	5.0		µg/L	1	4/4/01
sec-Butylbenzene	ND	5.0		µg/L	1	4/4/01
Styrene	ND	5.0		µg/L	1	4/4/01
tert-Butylbenzene	ND	5.0		µg/L	1	4/4/01
Tetrachloroethene	ND	5.0		µg/L	1	4/4/01
Toluene	ND	5.0		µg/L	1	4/4/01
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	4/4/01
Trichloroethene	ND	5.0		µg/L	1	4/4/01
Trichlorofluoromethane	ND	5.0		µg/L	1	4/4/01
Vinyl chloride	ND	5.0		µg/L	1	4/4/01

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike/Surrogate outside of limits due to matrix interference.

J - Analyte detected below quantitation limits

H - Samples exceeding analytical holding time

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

Initials: 

DO - Surrogate Diluted Out

M - Not Monitored. Highly Reactive

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Tel: 562 989-4045

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# Advanced Technology Laboratories

Date: 06-Apr-01

CLIENT: Geocon Environmental  
Work Order: 050400  
Project: S Oakland M.S. - E8000-06-62

## QC SUMMARY REPORT

Method Blank

Sample ID	Batch ID	Test Name	Units	mg/L	Analysis Date	Prep Date					
010404BLKW2	I018G20W055	GASOLINE RANGE ORGANICS BY GC/FID			4/4/01						
MBLK			SeqNo:	115676							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	0.20									J

Sample ID	Batch ID	Test Name	Units	µg/L	Analysis Date	Prep Date					
010404BLKW2	I018G20W055	VOLATILE ORGANIC COMPOUNDS BY GC/PID			4/4/01						
MBLK			SeqNo:	115662							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.50									
Ethylbenzene	ND	0.50									
m,p-Xylene	ND	0.50									
o-Xylene	ND	0.50									
Toluene	ND	0.50									

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank  
M - Not Monitored. Highly Reactive  
S - Spike/Surrogate outside of limits due to matrix interference

DO - Surrogate Diluted Out

Initials:



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CLIENT: Geocon Environmental  
Work Order: 050400  
Project: S Oakland M.S. - E8000-06-62

**QC SUMMARY REPORT**  
Method Blank

Sample ID 010404BLKW1 Batch ID: Q01VOCW074 Test Name VOLATILE ORGANIC COMPOUNDS BY GC/MS Units µg/L Analysis Date: 4/4/01 Prep Date:  
MBLK SeqNo: 115730

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	5.0									
1,1,2,2-Tetrachloroethane	ND	5.0									
1,1,2-Trichloroethane	ND	5.0									
1,1-Dichloroethane	ND	5.0									
1,1-Dichloroethene	ND	5.0									
1,2-Dibromoethane	ND	5.0									
1,2-Dichlorobenzene	ND	5.0									
1,2-Dichloroethane	ND	5.0									
1,2-Dichloropropane	ND	5.0									
1,3-Dichlorobenzene	ND	5.0									
1,4-Dichlorobenzene	ND	5.0									
2-Chloroethyl vinyl ether	ND	5.0									
Benzene	ND	5.0									
Bromodichloromethane	ND	5.0									
Bromoform	ND	5.0									
Bromomethane	ND	5.0									
Carbon tetrachloride	ND	5.0									
Chlorobenzene	ND	5.0									
Chloroethane	ND	5.0									
Chloroform	ND	5.0									
Chloromethane	ND	5.0									
cis-1,3-Dichloropropene	ND	5.0									
Di-isopropyl ether	ND	5.0									
Ethyl tert-butyl ether	ND	5.0									
Ethylbenzene	ND	5.0									
m,p-Xylene	ND	5.0									
Methylene chloride	ND	5.0									
MTBE	ND	5.0									

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank  
M - Not Monitored, Highly Reactive  
S - Spike/Surrogate outside of limits due to matrix interference

DO - Surrogate Diluted Out

Initials:       
2



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CLIENT: Geocon Environmental  
Work Order: 050400  
Project: S Oakland M.S. - E8000-06-62

**QC SUMMARY REPORT**  
Method Blank

o-Xylene	ND	5.0
Tert-amyl methyl ether	ND	5.0
Tert-Butanol	ND	200
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
Trichloroethene	ND	5.0
Trichlorofluoromethane	ND	5.0
Vinyl chloride	ND	5.0

Sample ID 010404BLKW3 Batch ID: Q01VOCW075 Test Name VOLATILE ORGANIC COMPOUNDS BY GC/MS Units µg/L Analysis Date: 4/5/01 Prep Date:  
MBLK SeqNo: 115752

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Di-isopropyl ether	ND	5.0									
Ethyl tert-butyl ether	ND	5.0									
MTBE	ND	5.0									
Tert-amyl methyl ether	ND	5.0									
Tert-Butanol	ND	200									

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank  
M - Not Monitored. Highly Reactive  
S - Spike/Surrogate outside of limits due to matrix interference

DO - Surrogate Diluted Out

Initials:



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CLIENT: Geocon Environmental  
Work Order: 050400  
Project: S Oakland M.S. - E8000-06-62

**QC SUMMARY REPORT**  
Method Blank

Sample ID 010404BLKW1 Batch ID: Q01VOCW074 Test Name VOLATILE ORGANIC COMPOUNDS BY GC/MS Units µg/L Analysis Date: 4/4/01 Prep Date:

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MBLK											
SeqNo: 115382											
1,1,1,2-Tetrachloroethane	ND	5.0									
1,1,1-Trichloroethane	ND	5.0									
1,1,2,2-Tetrachloroethane	ND	5.0									
1,1,2-Trichloroethane	ND	5.0									
1,1-Dichloroethane	ND	5.0									
1,1-Dichloroethene	ND	5.0									
1,1-Dichloropropene	ND	5.0									
1,2,3-Trichlorobenzene	ND	5.0									
1,2,3-Trichloropropane	ND	5.0									
1,2,4-Trichlorobenzene	ND	5.0									
1,2,4-Trimethylbenzene	ND	5.0									
1,2-Dibromo-3-chloropropane	ND	5.0									
1,2-Dibromoethane	ND	5.0									
1,2-Dichlorobenzene	ND	5.0									
1,2-Dichloroethane	ND	5.0									
1,2-Dichloropropane	ND	5.0									
1,3,5-Trimethylbenzene	ND	5.0									
1,3-Dichlorobenzene	ND	5.0									
1,3-Dichloropropane	ND	5.0									
1,4-Dichlorobenzene	ND	5.0									
2,2-Dichloropropane	ND	5.0									
2-Chlorotoluene	ND	5.0									
4-Chlorotoluene	ND	5.0									
4-Isopropyltoluene	ND	5.0									
Benzene	ND	5.0									
Bromobenzene	ND	5.0									
Bromodichloromethane	ND	5.0									
Bromoform	ND	5.0									

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank  
M - Not Monitored. Highly Reactive  
S - Spike/Surrogate outside of limits due to matrix interference

DO - Surrogate Diluted Out

Initials:



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3275 Walnut Avenue

Signal Hill, CA 90807

Tel: 562 989-4045

Fax: 562 989-4040

**CLIENT:** Geocon Environmental  
**Work Order:** 050400  
**Project:** S Oakland M.S. - E8000-06-62

**QC SUMMARY REPORT**  
Method Blank

Bromomethane	ND	5.0
Carbon tetrachloride	ND	5.0
Chlorobenzene	ND	5.0
Chloroethane	ND	5.0
Chloroform	ND	5.0
Chloromethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Dibromomethane	ND	5.0
Dichlorodifluoromethane	ND	5.0
Ethylbenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Isopropylbenzene	ND	5.0
m,p-Xylene	ND	5.0
Methylene chloride	ND	5.0
n-Butylbenzene	ND	5.0
n-Propylbenzene	ND	5.0
Naphthalene	ND	5.0
o-Xylene	ND	5.0
sec-Butylbenzene	ND	5.0
Styrene	ND	5.0
tert-Butylbenzene	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Trichloroethene	ND	5.0
Trichlorofluoromethane	ND	5.0
Vinyl chloride	ND	5.0

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank  
M - Not Monitored, Highly Reactive  
S - Spike/Surrogate outside of limits due to matrix interference

DO - Surrogate Diluted Out

**Initials:** 

CLIENT: Geocon Environmental  
Work Order: 050400  
Project: S Oakland M.S. - E8000-06-62

**QC SUMMARY REPORT**  
Method Blank

Sample ID 010404BLKW3 Batch ID: Q01VOCW075 Test Name VOLATILE ORGANIC COMPOUNDS BY GC/MS Units µg/L Analysis Date: 4/5/01 Prep Date:  
MBLK SeqNo: 115742

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	5.0									
1,1,1-Trichloroethane	ND	5.0									
1,1,2,2-Tetrachloroethane	ND	5.0									
1,1,2-Trichloroethane	ND	5.0									
1,1-Dichloroethane	ND	5.0									
1,1-Dichloroethene	ND	5.0									
1,1-Dichloropropene	ND	5.0									
1,2,3-Trichlorobenzene	ND	5.0									
1,2,3-Trichloropropane	ND	5.0									
1,2,4-Trichlorobenzene	ND	5.0									
1,2,4-Trimethylbenzene	ND	5.0									
1,2-Dibromo-3-chloropropane	ND	5.0									
1,2-Dibromoethane	ND	5.0									
1,2-Dichlorobenzene	ND	5.0									
1,2-Dichloroethane	ND	5.0									
1,2-Dichloropropane	ND	5.0									
1,3,5-Trimethylbenzene	ND	5.0									
1,3-Dichlorobenzene	ND	5.0									
1,3-Dichloropropane	ND	5.0									
1,4-Dichlorobenzene	ND	5.0									
2,2-Dichloropropane	ND	5.0									
2-Butanone	ND	50									
2-Chloroethyl vinyl ether	ND	5.0									
2-Chlorotoluene	ND	5.0									
2-Hexanone	ND	50									
4-Chlorotoluene	ND	5.0									
4-Isopropyltoluene	ND	5.0									
4-Methyl-2-pentanone	ND	50									

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank  
M - Not Monitored. Highly Reactive  
S - Spike/Surrogate outside of limits due to matrix interference

DO - Surrogate Diluted Out

Initials: W



CLIENT: Geocon Environmental  
Work Order: 050400  
Project: S Oakland M.S. - E8000-06-62

QC SUMMARY REPORT  
Method Blank

Acetone	ND	50
Acrolein	ND	50
Acrylonitrile	ND	50
Benzene	ND	5.0
Bromobenzene	ND	5.0
Bromochloromethane	ND	5.0
Bromodichloromethane	ND	5.0
Bromoform	ND	5.0
Bromomethane	ND	5.0
Carbon disulfide	ND	5.0
Carbon tetrachloride	ND	5.0
Chlorobenzene	ND	5.0
Chloroethane	ND	5.0
Chloroform	ND	5.0
Chloromethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
Cyclohexanone	ND	50
Dibromochloromethane	ND	5.0
Dibromomethane	ND	5.0
Dichlorodifluoromethane	ND	5.0
Ethyl Acetate	ND	50
Ethyl Ether	ND	50
Ethylbenzene	ND	5.0
Freon-113	ND	5.0
Hexachlorobutadiene	ND	5.0
Iodomethane	ND	5.0
Isopropylbenzene	ND	5.0
m,p-Xylene	ND	5.0
Methylene chloride	ND	5.0
MTBE	ND	5.0
n-Butylbenzene	ND	5.0
n-Propylbenzene	ND	5.0

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank  
M - Not Monitored. Highly Reactive  
S - Spike/Surrogate outside of limits due to matrix interference

DO - Surrogate Diluted Out

Initials:

CLIENT: Geocon Environmental  
 Work Order: 050400  
 Project: S Oakland M.S. - E8000-06-62

**QC SUMMARY REPORT**  
 Method Blank

Naphthalene	ND	5.0							
o-Xylene	ND	5.0							
sec-Butylbenzene	ND	5.0							
Styrene	ND	5.0							
tert-Butylbenzene	ND	5.0							
Tetrachloroethene	ND	5.0							
Toluene	ND	5.0							
trans-1,2-Dichloroethene	ND	5.0							
trans-1,3-Dichloropropene	ND	5.0							
Trichloroethene	ND	5.0							
Trichlorofluoromethane	ND	5.0							
Vinyl acetate	ND	50							
Vinyl chloride	ND	5.0							
Xylenes, Total	ND	10	50	0	0	0	0	0	0

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 R - RPD outside accepted recovery limits  
 B - Analyte detected in the associated Method Blank  
 M - Not Monitored. Highly Reactive  
 S - Spike/Surrogate outside of limits due to matrix interference  
 DO - Surrogate Diluted Out  
 Initials:

Advanced Technology Laboratories

Date: 06-Apr-01

CLIENT: Geocon Environmental  
 Work Order: 050400  
 Project: S Oakland M.S. - E8000-06-62

**QC SUMMARY REPORT**  
 Sample Duplicate

Sample ID	050402-002A	Batch ID:	I018G20W055	Test Name	GASOLINE RANGE ORGANICS BY GC/FID			Units	mg/L	Analysis Date:	4/4/01	Prep Date:	
DUP													
								SeqNo:	115682				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
GRO	0.163	0.20	0	0	0	0	0	0.198	19	30	J		

Sample ID	050402-002A	Batch ID:	I018G20W055	Test Name	VOLATILE ORGANIC COMPOUNDS BY GC/PID			Units	µg/L	Analysis Date:	4/4/01	Prep Date:	
DUP													
								SeqNo:	115668				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Benzene	2.66	0.50	0	0	0	0	0	2.732	3	30			
Ethylbenzene	ND	0.50	0	0	0	0	0	0	0	30			
m,p-Xylene	0.841	0.50	0	0	0	0	0	0.84	0	30			
o-Xylene	ND	0.50	0	0	0	0	0	0	0	30			
Toluene	0.785	0.50	0	0	0	0	0	0.817	4	30			

Sample ID	050405-001A	Batch ID:	Q01VOCW074	Test Name	VOLATILE ORGANIC COMPOUNDS BY GC/MS			Units	µg/L	Analysis Date:	4/4/01	Prep Date:	
DUP													
								SeqNo:	115732				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Di-isopropyl ether	ND	5.0	0	0	0	0	0	0	0	30			
Ethyl tert-butyl ether	ND	5.0	0	0	0	0	0	0	0	30			
MTBE	ND	5.0	0	0	0	0	0	0	0	30			
Tert-amyl methyl ether	ND	5.0	0	0	0	0	0	0	0	30			
Tert-Butanol	ND	200	0	0	0	0	0	0	0	30			

Qualifiers: ND - Not Detected at the Reporting Limit  
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 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank  
 M - Not Monitored. Highly Reactive  
 S - Spike/Surrogate outside of limits due to matrix interference

DO - Surrogate Diluted Out

Initials:



Advanced Technologies  
Laboratories

3275 Walnut Avenue Signal Hill, CA 90807 Tel: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Geocon Environmental  
**Work Order:** 050400  
**Project:** S Oakland M.S. - E8000-06-62

**QC SUMMARY REPORT**  
Sample Duplicate

Sample ID 050404-002A Batch ID: Q01VOCW075 Test Name VOLATILE ORGANIC COMPOUNDS BY GC/MS Units µg/L Analysis Date: 4/5/01 Prep Date:  
DUP SeqNo: 115760

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Di-isopropyl ether	9.65	5.0	0	0	0	0	0	10.87	12	30	
Ethyl tert-butyl ether	ND	5.0	0	0	0	0	0	0	0	30	
MTBE	ND	5.0	0	0	0	0	0	0	0	30	
Tert-amyl methyl ether	ND	5.0	0	0	0	0	0	0	0	30	
Tert-Butanol	ND	200	0	0	0	0	0	0	0	30	

**Qualifiers:** ND - Not Detected at the Reporting Limit B - Analyte detected in the associated Method Blank DO - Surrogate Diluted Out  
J - Analyte detected below quantitation limits M - Not Monitored, Highly Reactive  
R - RPD outside accepted recovery limits S - Spike/Surrogate outside of limits due to matrix interference

Initials:                       
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CLIENT: Geocon Environmental  
 Work Order: 050400  
 Project: S Oakland M.S. - E8000-06-62

## QC SUMMARY REPORT

Sample Duplicate

Sample ID 050405-001A Batch ID: Q01VOCW074 Test Name VOLATILE ORGANIC COMPOUNDS BY GC/MS Units µg/L Analysis Date: 4/4/01 Prep Date:

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	5.0	0	0	0	0	0	0	0	30	
1,1,1-Trichloroethane	ND	5.0	0	0	0	0	0	0	0	30	
1,1,2,2-Tetrachloroethane	ND	5.0	0	0	0	0	0	0	0	30	
1,1,2-Trichloroethane	ND	5.0	0	0	0	0	0	0	0	30	
1,1-Dichloroethane	ND	5.0	0	0	0	0	0	0	0	30	
1,1-Dichloroethene	ND	5.0	0	0	0	0	0	0	0	30	
1,1-Dichloropropene	ND	5.0	0	0	0	0	0	0	0	30	
1,2,3-Trichlorobenzene	ND	5.0	0	0	0	0	0	0	0	30	
1,2,3-Trichloropropane	ND	5.0	0	0	0	0	0	0	0	30	
1,2,4-Trichlorobenzene	ND	5.0	0	0	0	0	0	0	0	30	
1,2,4-Trimethylbenzene	ND	5.0	0	0	0	0	0	0	0	30	
1,2-Dibromo-3-chloropropane	ND	5.0	0	0	0	0	0	0	0	30	
1,2-Dibromoethane	ND	5.0	0	0	0	0	0	0	0	30	
1,2-Dichlorobenzene	ND	5.0	0	0	0	0	0	0	0	30	
1,2-Dichloroethane	ND	5.0	0	0	0	0	0	0	0	30	
1,2-Dichloropropane	ND	5.0	0	0	0	0	0	0	0	30	
1,3,5-Trimethylbenzene	7.5	5.0	0	0	0	0	0	7.72	3	30	
1,3-Dichlorobenzene	ND	5.0	0	0	0	0	0	0	0	30	
1,3-Dichloropropane	ND	5.0	0	0	0	0	0	0	0	30	
1,4-Dichlorobenzene	ND	5.0	0	0	0	0	0	0	0	30	
2,2-Dichloropropane	ND	5.0	0	0	0	0	0	0	0	30	
2-Chlorotoluene	ND	5.0	0	0	0	0	0	0	0	30	
4-Chlorotoluene	ND	5.0	0	0	0	0	0	0	0	30	
4-Isopropyltoluene	8.44	5.0	0	0	0	0	0	8.45	0	30	
Benzene	66.51	5.0	0	0	0	0	0	67.23	1	30	
Bromobenzene	ND	5.0	0	0	0	0	0	0	0	30	
Bromodichloromethane	ND	5.0	0	0	0	0	0	0	0	30	
Bromoform	ND	5.0	0	0	0	0	0	0	0	30	

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CLIENT: Geocon Environmental  
 Work Order: 050400  
 Project: S Oakland M.S. - E8000-06-62

QC SUMMARY REPORT

Sample Duplicate

Bromomethane	ND	5.0	0	0	0	0	0	0	0	30
Carbon tetrachloride	ND	5.0	0	0	0	0	0	0	0	30
Chlorobenzene	ND	5.0	0	0	0	0	0	0	0	30
Chloroethane	ND	5.0	0	0	0	0	0	0	0	30
Chloroform	ND	5.0	0	0	0	0	0	0	0	30
Chloromethane	ND	5.0	0	0	0	0	0	0	0	30
cis-1,2-Dichloroethene	ND	5.0	0	0	0	0	0	0	0	30
Dibromochloromethane	ND	5.0	0	0	0	0	0	0	0	30
Dibromomethane	ND	5.0	0	0	0	0	0	0	0	30
Dichlorodifluoromethane	ND	5.0	0	0	0	0	0	0	0	30
Ethylbenzene	182.2	5.0	0	0	0	0	0	188.5	3	30
Hexachlorobutadiene	ND	5.0	0	0	0	0	0	0	0	30
Isopropylbenzene	170.8	5.0	0	0	0	0	0	175.2	3	30
m,p-Xylene	40.51	5.0	0	0	0	0	0	40.87	1	30
Methylene chloride	ND	5.0	0	0	0	0	0	0	0	30
n-Butylbenzene	25.37	5.0	0	0	0	0	0	25.56	1	30
n-Propylbenzene	272.5	5.0	0	0	0	0	0	282	3	30
Naphthalene	45.18	5.0	0	0	0	0	0	45.44	1	30
o-Xylene	ND	5.0	0	0	0	0	0	0	0	30
sec-Butylbenzene	12.16	5.0	0	0	0	0	0	12.5	3	30
Styrene	ND	5.0	0	0	0	0	0	0	0	30
tert-Butylbenzene	20.73	5.0	0	0	0	0	0	21.42	3	30
Tetrachloroethene	ND	5.0	0	0	0	0	0	0	0	30
Toluene	24.39	5.0	0	0	0	0	0	24.55	1	30
trans-1,2-Dichloroethene	ND	5.0	0	0	0	0	0	0	0	30
Trichloroethene	ND	5.0	0	0	0	0	0	0	0	30
Trichlorofluoromethane	ND	5.0	0	0	0	0	0	0	0	30
Vinyl chloride	ND	5.0	0	0	0	0	0	0	0	30

Qualifiers: ND - Not Detected at the Reporting Limit  
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 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank  
 M - Not Monitored. Highly Reactive  
 S - Spike/Surrogate outside of limits due to matrix interference

DO - Surrogate Diluted Out

Initials:

Advanced Technology Laboratories

Date: 06-Apr-01

CLIENT: Geocon Environmental  
 Work Order: 050400  
 Project: S Oakland M.S. - E8000-06-62

**QC SUMMARY REPORT**  
 Sample Matrix Spike

Sample ID	010404BLKW1	Batch ID:	I018G20W055	Test Name	GASOLINE RANGE ORGANICS BY GC/FID				Units	mg/L	Analysis Date:	4/4/01	Prep Date:	
SeqNo: 115673														
<b>MS</b>														
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual			
GRO	0.919	0.20	1	0.056	86	50	119	0						

Sample ID	010404BLKW1	Batch ID:	I018G20W055	Test Name	GASOLINE RANGE ORGANICS BY GC/FID				Units	mg/L	Analysis Date:	4/4/01	Prep Date:	
SeqNo: 115674														
<b>MSD</b>														
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual			
GRO	0.934	0.20	1	0.056	88	50	119	0.919	2	20				

Sample ID	010404BLKW1	Batch ID:	I018G20W055	Test Name	VOLATILE ORGANIC COMPOUNDS BY GC/PID				Units	µg/L	Analysis Date:	4/4/01	Prep Date:	
SeqNo: 115659														
<b>MS</b>														
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual			
Benzene	4.843	0.50	5.5	0	88	60	136	0						
Toluene	25.96	0.50	30	0	87	61	128	0						

Sample ID	010404BLKW1	Batch ID:	I018G20W055	Test Name	VOLATILE ORGANIC COMPOUNDS BY GC/PID				Units	µg/L	Analysis Date:	4/4/01	Prep Date:	
SeqNo: 115660														
<b>MSD</b>														
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual			
Benzene	4.872	0.50	5.5	0	89	60	136	4.843	1	18				
Toluene	25.82	0.50	30	0	86	61	128	25.96	1	22				

Qualifiers: ND - Not Detected at the Reporting Limit  
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Initials: 

CLIENT: Geocon Environmental  
Work Order: 050400  
Project: S Oakland M.S. - E8000-06-62

**QC SUMMARY REPORT**  
Sample Matrix Spike

Sample ID 010404BLKW1 Batch ID: Q01VOCW074 Test Name VOLATILE ORGANIC COMPOUNDS BY GC/MS Units µg/L Analysis Date: 4/4/01 Prep Date:

MS SeqNo: 115380

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	111.1	5.0	100	0	111	71	120	0			
Benzene	114.1	5.0	100	0	114	82	122	0			
Chlorobenzene	101.2	5.0	100	0	101	81	121	0			
Toluene	112.1	5.0	100	0	112	81	125	0			
Trichloroethene	113.3	5.0	100	0	113	80	123	0			

Sample ID 010404BLKW1 Batch ID: Q01VOCW074 Test Name VOLATILE ORGANIC COMPOUNDS BY GC/MS Units µg/L Analysis Date: 4/4/01 Prep Date:

MSD SeqNo: 115381

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	97.13	5.0	100	0	97	71	120	111.1	13	21	
Benzene	102.7	5.0	100	0	103	82	122	114.1	11	19	
Chlorobenzene	92.3	5.0	100	0	92	81	121	101.2	9	18	
Toluene	99.46	5.0	100	0	99	81	125	112.1	12	20	
Trichloroethene	102.5	5.0	100	0	102	80	123	113.3	10	20	

Sample ID 010404BLKW3 Batch ID: Q01VOCW075 Test Name VOLATILE ORGANIC COMPOUNDS BY GC/MS Units µg/L Analysis Date: 4/5/01 Prep Date:

MS SeqNo: 115740

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	117.6	5.0	100	0	118	71	120	0			
Benzene	121.1	5.0	100	0	121	82	122	0			
Chlorobenzene	113.9	5.0	100	0	114	81	121	0			
Toluene	119.7	5.0	100	0	120	81	125	0			
Trichloroethene	107.7	5.0	100	0	108	80	123	0			

Qualifiers: ND - Not Detected at the Reporting Limit  
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DO - Surrogate Diluted Out

Initials:





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Laboratories

3275 Walnut Avenue Signal Hill, CA 90807 Tel: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Geocon Environmental  
**Work Order:** 050400  
**Project:** S Oakland M.S. - E8000-06-62

**QC SUMMARY REPORT**  
Sample Matrix Spike Duplicate

Sample ID 010404BLKW3 Batch ID: Q01VOCW075 Test Name VOLATILE ORGANIC COMPOUNDS BY GC/MS Units µg/L Analysis Date: 4/5/01 Prep Date:

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	SeqNo: 115741		RPD Ref Val	%RPD	RPDLimit	Qual
						LowLimit	HighLimit				
1,1-Dichloroethene	114	5.0	100	0	114	71	120	117.6	3	21	
Benzene	121.2	5.0	100	0	121	82	122	121.1	0	19	
Chlorobenzene	112.3	5.0	100	0	112	81	121	113.9	1	18	
Toluene	117.7	5.0	100	0	118	81	125	119.7	2	20	
Trichloroethene	111.7	5.0	100	0	112	80	123	107.7	4	20	

**Qualifiers:** ND - Not Detected at the Reporting Limit  
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S - Spike/Surrogate outside of limits due to matrix interference

DO - Surrogate Diluted Out

**Initials:**



**Advanced Technology Laboratories**

Date: 06-Apr-01

**CLIENT:** Geocon Environmental  
**Work Order:** 050400  
**Project:** S Oakland M.S. - E8000-06-62

**QC SUMMARY REPORT**  
 Laboratory Control Spike - generic

Sample ID	Batch ID	Test Name	Units	mg/L	Analysis Date	Prep Date					
010404LCSW1	I018G20W055	GASOLINE RANGE ORGANICS BY GC/FID			4/4/01						
LCS			SeqNo:	115686							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	0.869	0.20	1	0.056	81	64	107	0			

Sample ID	Batch ID	Test Name	Units	µg/L	Analysis Date	Prep Date					
010404LCSW1	I018G20W055	VOLATILE ORGANIC COMPOUNDS BY GC/PID			4/4/01						
LCS			SeqNo:	115672							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	5.676	0.50	5.5	0	103	58	131	0			
Ethylbenzene	7.399	0.50	8.6	0	86	58	131	0			
m,p-Xylene	30.83	0.50	35	0	88	58	131	0			
o-Xylene	11.12	0.50	12	0	93	58	131	0			
Toluene	24.45	0.50	30	0	81	58	131	0			

**Qualifiers:** ND - Not Detected at the Reporting Limit  
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 S - Spike/Surrogate outside of limits due to matrix interference

DO - Surrogate Diluted Out

**Initials:**

**CLIENT:** Geocon Environmental  
**Work Order:** 050400  
**Project:** S Oakland M.S. - E8000-06-62

**QC SUMMARY REPORT**  
 Laboratory Control Spike - generic

Sample ID **010404LCSW1** Batch ID: **Q01VOCW074** Test Name **VOLATILE ORGANIC COMPOUNDS BY GC/MS** Units **µg/L** Analysis Date: **4/4/01** Prep Date:

SeqNo: 115379											
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	115.4	5.0	100	0	115	30	150	0			
1,1,2,2-Tetrachloroethane	90.14	5.0	100	0	90	30	150	0			
1,1,2-Trichloroethane	123.1	5.0	100	0	123	30	150	0			
1,1-Dichloroethane	115.8	5.0	100	0	116	30	150	0			
1,1-Dichloroethene	117.3	5.0	100	0	117	30	150	0			
1,2-Dichlorobenzene	87.61	5.0	100	0	88	30	150	0			
1,2-Dichloroethane	128.2	5.0	100	0	128	30	150	0			
1,2-Dichloropropane	117.4	5.0	100	0	117	30	150	0			
1,3-Dichlorobenzene	86.84	5.0	100	0	87	30	150	0			
1,3-Dichloropropane	107.7	5.0	100	0	108	30	150	0			
1,4-Dichlorobenzene	89.14	5.0	100	0	89	30	150	0			
2-Chlorotoluene	89.67	5.0	100	0	90	30	150	0			
Benzene	122	5.0	100	0	122	30	150	0			
Bromodichloromethane	118.2	5.0	100	0	118	30	150	0			
Bromoform	117.5	5.0	100	0	118	30	150	0			
Bromomethane	108.4	5.0	100	0	108	30	150	0			
Carbon tetrachloride	113	5.0	100	0	113	30	150	0			
Chlorobenzene	109.9	5.0	100	0	110	30	150	0			
Chloroethane	119.9	5.0	100	0	120	30	150	0			
Chloroform	118.9	5.0	100	0	119	30	150	0			
Chloromethane	120.3	5.0	100	0	120	30	150	0			
Dibromomethane	128.6	5.0	100	0	129	30	150	0			
Dichlorodifluoromethane	130.2	5.0	100	0	130	30	150	0			
Ethylbenzene	107.4	5.0	100	0	107	30	150	0			
m,p-Xylene	220.1	5.0	200	0	110	30	150	0			
Methylene chloride	116	5.0	100	0	116	30	150	0			
o-Xylene	108.9	5.0	100	0	109	30	150	0			
Tetrachloroethene	110.8	5.0	100	0	111	30	150	0			

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 R - RPD outside accepted recovery limits

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 M - Not Monitored. Highly Reactive  
 S - Spike/Surrogate outside of limits due to matrix interference

DO - Surrogate Diluted Out

**Initials:**



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3275 Walnut Avenue Signal Hill, CA 90807 Tel: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Geocon Environmental  
**Work Order:** 050400  
**Project:** S Oakland M.S. - E8000-06-62

**QC SUMMARY REPORT**  
Laboratory Control Spike - generic

Toluene	118.6	5.0	100	0	119	30	150	0
trans-1,2-Dichloroethene	112.9	5.0	100	0	113	30	150	0
Trichloroethene	123.8	5.0	100	0	124	30	150	0
Trichlorofluoromethane	123.3	5.0	100	0	123	30	150	0
Vinyl chloride	114.6	5.0	100	0	115	30	150	0

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank  
M - Not Monitored. Highly Reactive  
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**Initials:**



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CLIENT: Geocon Environmental  
Work Order: 050400  
Project: S Oakland M.S. - E8000-06-62

**QC SUMMARY REPORT**  
Laboratory Control Spike - generic

Sample ID 010404LCSW2 Batch ID: Q01VOCW075 Test Name VOLATILE ORGANIC COMPOUNDS BY GC/MS Units µg/L Analysis Date: 4/5/01 Prep Date:

SeqNo: 115739											
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	115.4	5.0	100	0	115	30	150	0			
1,1,2,2-Tetrachloroethane	88.22	5.0	100	0	88	30	150	0			
1,1,2-Trichloroethane	124.5	5.0	100	0	124	30	150	0			
1,1-Dichloroethane	113.5	5.0	100	0	113	30	150	0			
1,1-Dichloroethene	117.8	5.0	100	0	118	30	150	0			
1,2-Dichlorobenzene	91.49	5.0	100	0	91	30	150	0			
1,2-Dichloroethane	127.1	5.0	100	0	127	30	150	0			
1,2-Dichloropropane	120.8	5.0	100	0	121	30	150	0			
1,3-Dichlorobenzene	93.26	5.0	100	0	93	30	150	0			
1,3-Dichloropropane	109.4	5.0	100	0	109	30	150	0			
1,4-Dichlorobenzene	94.92	5.0	100	0	95	30	150	0			
2-Chloroethyl vinyl ether	95.28	5.0	100	0	95	30	150	0			
2-Chlorotoluene	93.54	5.0	100	0	94	30	150	0			
Benzene	123.9	5.0	100	0	124	30	150	0			
Bromodichloromethane	118.7	5.0	100	0	119	30	150	0			
Bromoform	117	5.0	100	0	117	30	150	0			
Bromomethane	104.3	5.0	100	0	104	30	150	0			
Carbon tetrachloride	114.7	5.0	100	0	115	30	150	0			
Chlorobenzene	111.3	5.0	100	0	111	30	150	0			
Chloroethane	122.1	5.0	100	0	122	30	150	0			
Chloroform	117	5.0	100	0	117	30	150	0			
Chloromethane	136.2	5.0	100	0	136	30	150	0			
cis-1,3-Dichloropropene	106.2	5.0	100	0	106	30	150	0			
Dibromomethane	127.3	5.0	100	0	127	30	150	0			
Dichlorodifluoromethane	131.4	5.0	100	0	131	30	150	0			
Ethylbenzene	110.5	5.0	100	0	111	30	150	0			
m,p-Xylene	222.5	5.0	200	0	111	30	150	0			
Methylene chloride	117.4	5.0	100	0	117	30	150	0			

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank  
M - Not Monitored. Highly Reactive  
S - Spike/Surrogate outside of limits due to matrix interference

DO - Surrogate Diluted Out

Initials:



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Laboratories

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**CLIENT:** Geocon Environmental  
**Work Order:** 050400  
**Project:** S Oakland M.S. - E8000-06-62

**QC SUMMARY REPORT**  
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MTBE	114	5.0	100	0	114	30	150	0
o-Xylene	111	5.0	100	0	111	30	150	0
Tetrachloroethene	112.4	5.0	100	0	112	30	150	0
Toluene	120.1	5.0	100	0	120	30	150	0
trans-1,2-Dichloroethene	112.3	5.0	100	0	112	30	150	0
trans-1,3-Dichloropropene	104.4	5.0	100	0	104	30	150	0
Trichloroethene	131	5.0	100	0	131	30	150	0
Trichlorofluoromethane	122.2	5.0	100	0	122	30	150	0
Vinyl chloride	118	5.0	100	0	118	30	150	0
Xylenes, Total	333.5	10	300	0	111	30	150	0

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