

GROUNDWATER SAMPLING & ANALYSIS
AND
COMPREHENSIVE ASBESTOS SURVEY
15563 WASHINGTON AVE.
SAN LORENZO, CALIFORNIA
FOR
MR. DON CALLAHAN

JOB NO. EC-517/E316-02
AUGUST 23, 1993

1993 Assessment of adjoining commercial property



ENVIRONMENTAL GEOTECHNICAL CONSULTANTS, INC.
CONSULTANTS IN APPLIED EARTH SCIENCE

2495 INDUSTRIAL PARKWAY WEST, HAYWARD, CALIFORNIA 94545
TELEPHONE (415) 786-0243 · FAX (415) 732-0289

Job No. EC-517/E316-02
August 23, 1993

Mr. Don K. Callahan
15250 Hesperian Boulevard
San Leandro, California 94578

SUBJECT: Groundwater Sampling and Comprehensive Asbestos Survey, 15563
Washington Boulevard, San Lorenzo, California

Dear Mr. Callahan:

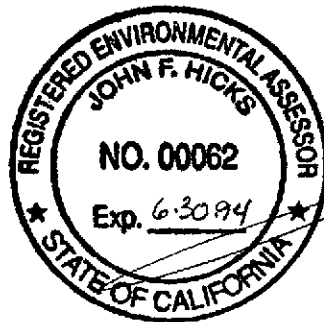
Per your request Environmental Geotechnical Consultants, Inc. (EGC) has completed groundwater sampling and a comprehensive asbestos survey at the above referenced site. The survey was carried out in general accordance with our Proposal No. EPH926, dated July 19, 1993.

In summary, groundwater was found to have been impacted by gasoline and significant amounts of asbestos containing materials (ACMs) were detected throughout the buildings located on the property. The attached report presents details of our findings.

Thank you for the opportunity to be of continued service to you on this project. If you have any questions or require additional information please feel free to contact EGC at your convenience.

Very truly yours,

ENVIRONMENTAL GEOTECHNICAL
CONSULTANTS, INC.



[Handwritten Signature]
John F. Hicks, P.E., R.E.A.
Principal

Duane K Graves
AHERA Accredited Building Inspector
and Management Planner
Division of Occupational Safety and Health
Certified Consultant

1.0 INTRODUCTION

1.1 Site Location and Description

The site is located at 15563 Washington Ave., in San Lorenzo, California. The site contains a single wood frame parking structure and a single story commercial building. The building includes 3 separate suites. It was not apparent that renovations have been performed to the site; however, if documentation exists on past renovations to the site, the extent and dates of the renovations were not made available to EGC prior to performance of the survey. The building is of a wood frame construction with a stucco and brick exterior. The interior finishes consist of drywall, carpeting, panelling, and various styles of linoleum flooring located in the restrooms and entries. The drywall was finished throughout with the exception of a storage area in suite B. The storage area drywall however was mudded and taped.

A Shell service station adjoins the subject property to the south.

1.2 Objectives and Scope of Work

1.2.1 Groundwater

The purpose of the groundwater sampling was to determine whether gasoline from leaking underground storage tanks (UST) at the neighboring Shell service station may have impacted groundwater beneath the subject site. The scope of the groundwater sampling and analysis included obtaining 3 groundwater samples from the subject property along the south property line adjacent to the Shell service station and submitting the samples under chain of custody procedure to Excelchem, a state certified analytical laboratory in Citrus Heights, California to be analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline, including benzene, toluene, ethylbenzene and xylene (BTEX) and TPH - diesel.

1.2.2 Asbestos

The purpose of the comprehensive asbestos survey was to assess all accessible areas of the site. All occupied and unoccupied areas of the site were inspected to ensure that all visually observed ACMs were assessed. The scope of the survey included:

1. Assessment of visually identifiable and accessible ACMs throughout the site.
2. Visual assessment of ACMs to determine condition and friability of the material.
3. Collection of bulk samples of suspected ACMs.
4. Provide an estimate of the quantity of ACMs.
5. Provide recommendations to reduce the potential for disturbance of ACMs and exposure to airborne asbestos due to confirmed ACMs on the property.

2.0 METHODS AND PROCEDURES

2.1 Groundwater

On August 9, 1993 an EGC representative visited the site to obtain groundwater samples from 3 locations along the south property line, adjacent to the Shell service station. Groundwater sampling was accomplished using a 6-foot section of decontaminated, perforated, 3/4 inch I.D. galvanized steel probe, with the bottom end capped. The perforated probe pipe was attached to 5-foot sections of decontaminated, non-perforated probe pipe. The probes were pneumatically driven to a tip depth of 20 feet below ground surface. Groundwater samples were collected with a decontaminated, stainless steel bailer and placed into laboratory supplied containers which were then labelled in the field.

2.2 Asbestos Survey

No construction drawings were provided to EGC. Prior to conducting the survey a walk through was performed by the inspector to become familiar with the floor plan of the buildings and building materials.

The inspector collected a total of 13 bulk samples. Both friable and non-friable materials were sampled including: drywall joint compound; linoleum; exterior stucco; transite panelling; HVAC sealant; and roofing materials.

The results of the analysis were combined with the observations of the inspector to determine the hazard potential for each type of material. A determination of the quantity, location and condition of these materials was also based on the observation of the inspector during the survey. Once a homogenous (or type) building material was found, the material was provided with a Homogenous Area Number (HA#) and the characteristics of the material were identified. Characteristics include type, color, design, texture and friability. Each time the same material was observed, the same HA# was assigned to the material.

2.3 Asbestos Sampling

During collection of materials for analysis, bulk samples were placed in plastic bags, sealed, and labeled with a sample identification number and delivered to a qualified laboratory for analysis. The sample identification number includes the HA# of the material, the assigned sample number and the date of collection.

2.4 Asbestos Sample Analysis

The bulk samples were examined at the laboratory under a stereomicroscope to identify suspected asbestos fibers. A polarized light microscope equipped with a dispersing staining objective was then used to determine if the sample contained asbestos fibers. The various types of asbestos were identified on the basis of optical characteristics and reported percentages were determined by visual volume estimates. All bulk samples were

analyzed by Precision Micro-Analysis which is a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory and were analyzed using the EPA-endorsed interim method of Polarized Light Microscopy (PLM).

3.0 RESULTS

3.1 Groundwater Results

The results of the groundwater analysis show that TPH-gasoline contamination of the groundwater beneath the subject property has occurred. The concentrations of TPH-gasoline range from 50 parts per billion (ppb) at location B-1, closest to Washington Boulevard (Figure 2), to Not Detected at B-2, to 4,500 ppb at B-1, the western-most sample. BTEX were detected in B-1 and B-3. TPH - diesel was not detected in any of the samples. Laboratory data are presented in Table 2 and laboratory data sheets are included in Appendix D.

3.2 Asbestos Results

Results of the survey indicated that the drywall joint compound on all drywall throughout the building, linoleum, transite panelling, and roof flashing tar were found to contain asbestos. Analytical results are included in Appendix A.

Analysis of the roofing material identified asbestos in the roof flashing tar which can be found on all flashing and penetrations throughout the roof. Other layers and types of roofing which would include aggregate, felts, and composition roofing were not found to contain asbestos. The roofing material was identified during the survey as non-friable asbestos containing material.

Also identified on the roof was transite panelling surrounding the HVAC fan units on the roof. The transite panelling was found to be in a non-friable condition, however, various panels were damaged and rendered friable.

The drywall joint compound found throughout the interior of the building and linoleum in two separate areas were identified during the survey as friable asbestos containing material.

4.0 CONCLUSIONS

4.1 Groundwater

Contamination of the groundwater is most likely caused by sub-surface migration of gasoline onto the subject property from the neighboring Shell service station. The highest concentration of contaminants was detected in B-3 at the southwest corner of the subject

property. The detected levels of TPH-gasoline and BTEX are all above action limits dictated by the state and county regulatory agencies.

4.2 Asbestos

Asbestos fibers are known to cause a number of diseases (including lung and other cancers) when inhaled or ingested. However, the mere presence of AC in a building does not in itself mean that there is a significant exposure risk. In order for a significant exposure risk to exist, the materials must be accessible and capable of releasing fibers (ie, be damaged to the extent of releasing fibers).

4.3 Friable Asbestos

Friable asbestos was identified at the site during the survey in the forms of linoleum in both the restrooms of Castro Insurance and Rice Photography, and drywall joint compound throughout the interior of the building. Approximately 61 sq. ft. of linoleum and 8,638 sq. ft. of drywall w/ joint compound. Although wood panelling was observed on walls in rice photography and suite B, it is assumed that drywall with w/ joint compound is behind the panelling.

Additionally, the non-friable transite panelling on the roof that was damaged was observed to be in a friable condition. It is estimated that approximately 10 sq. ft. of the transite panelling was found to be in a friable condition due to damage.

With the exception of the damaged transite panelling, all friable asbestos was found to be in a good condition.

4.4 Non-Friable Asbestos

Non-friable ACM was identified at the site in the forms of roof flashing tar and the undamaged transite panelling found on the roof. All roofing tar and transite panelling was observed to be in a good condition. Total of roofing was estimated at approximately 3,300 sq. ft.. Amount of roof flashing could not be estimated due to the nature of construction of the roof. Total amount of transite panelling was estimated at approximately 180 sq. ft.

5.0 RECOMMENDATIONS

5.1 Groundwater

A copy of this report should be sent to the Alameda County Health Care Services Agency which has local enforcement jurisdiction for leaking UST's in Alameda County.

5.2 Asbestos

As long as the ACM remains in good repair/condition and disturbance is kept to a minimum, few fibers will be released into the air. Minimizing fiber release through maintaining the integrity of the ACMs constitutes the basic premise of the following recommendations. Any materials that are determined to be in a moderate or poor condition based on the visual assessments should be removed, repaired, or enclosed in place to reduce the risk of fiber release.

All ACMs at 0.1% asbestos content or greater regardless of friability are regulated in the State of California by CAL-OSHA. These ACMs require strict removal and disposal methods as required by CAL-OSHA. Greater than 1% asbestos content friable ACMs or non-friable ACMs that have become friable, or will become friable during renovation or demolition activities are regulated by EPA and also require very strict removal and disposal standards. Improper removal or disposal of ACMs is a violation of EPA and CAL-OSHA regulatory standards for asbestos and can cause fines ranging up to \$25,000.00 per day per violation or in some cases criminal prosecution.

Due to the damage that has occurred with transite panelling on the roof and the location of HVAC supply fans that are immediately adjacent to the damaged transite, it is recommended that the damaged transite be removed as required as soon as possible to prevent any potential fiber release into the building through the air supply fan on the roof. This should be performed by a licensed and registered asbestos abatement contractor in conformance with applicable CAL-OSHA and EPA regulatory standards for friable asbestos containing materials.

5.3 Roofing

Any removal of existing roofing that contains the asbestos containing roof flashing tar should be performed in accordance with standards as required by CAL-OSHA for roofing work involving ACMs. These standards require special asbestos certification of the roofing contractor to perform that type of work properly and in accordance with regulatory standards for asbestos containing roofing materials.

5.4 Removal of friable and non-friable ACMs

Removal of friable asbestos containing materials such as linoleum and drywall that does not qualify as a small scale short duration project must be performed under full containment by a CAL-OSHA certified, licensed asbestos abatement contractor. Any removal of friable materials with a concentration of 1% or greater asbestos and at a quantity of 10 sq. ft. or greater would require notification to the Sacramento Metropolitan Air Quality Management District (SMAQMD) and would require engineering controls and disposal as required in the regulatory standards.

Removal of non-friable asbestos containing materials such as the roof flashing tar or transite panelling do not require removal under a full containment, and do not require notification to most air quality districts. Removal of such materials however do require conformance with CAL-OSHA standards for asbestos related work. Local regulations from

the air quality management district should be contacted for any local requirements that may apply to non-friable asbestos containing materials.

Removal of both friable and non-friable asbestos containing building materials greater than the limitations established by the local air quality districts and that will be disturbed during renovation or demolition activities must be removed prior to such activities in conformance with required standards for friable and non-friable asbestos containing materials.

Small scale short duration projects typically are maintenance related items such as small repair of walls and flooring and are defined as a project involving removal of materials that could be placed inside a single glove bag. Small scale short duration projects can be performed by a non-licensed contractor. Additionally, as much as 100 sq. ft. of ACMs can be removed per project by a non-licensed contractor. However, engineering controls, and disposal of materials must still meet CAL-OSHA standards. This would include removal of asbestos containing roofing materials.

The visual description of materials utilized in this survey is a valuable tool for initial identification when additional building materials are found within the complex that were not found during this survey. Although the visual method can be used for an initial identification of not previously identified materials, it is recommended that PLM analysis of any newly identified building material be performed if the material is to be treated as non-asbestos containing material.

5.5 Operations and Maintenance Plan

An O&M plan will include requirements for maintenance, small scale short duration removal, large scale asbestos abatement, training, notification, and ongoing survey and resurvey for ACMs that exist within the site. Based on the size of the site location, an Operations and Maintenance Plan is not recommended. It is recommended, however that the men's and women's restrooms and the storage room where asbestos containing materials are present are locked and sealed to prevent vandalism and damage to the material.

6.0 LIMITATIONS

The scope of work of this project and the basis for our conclusions was strictly limited to the groundwater sampling and analysis and comprehensive asbestos survey as described above.

No warranty, express or implied, is given regarding the presence of hidden or unidentified sources of contamination or ACMs on the subject property. Any additional information that becomes available concerning this site should be submitted to EGC so that our conclusions may be reviewed and modified, if necessary. This report was prepared for the sole use of Mr. Don Callahan.



NOTES
Scale: 1 = 24,000

DATE June 29, 1993
 JOB NO. E316-02
 DWG NO. E316-0201
 DRAWN J. Phillips
 CHKD J. Phillips
 APPD J. Hicks

EGC ENVIRONMENTAL GEOTECHNICAL CONSULTANTS, INC.
CONSULTANTS IN APPLIED EARTH SCIENCE

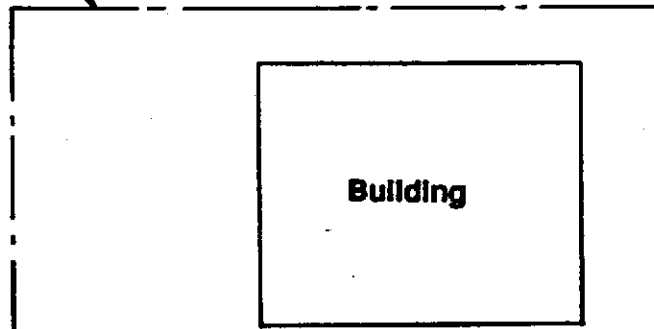
PROJECT SITE LOCATION MAP
 15563 Washington Avenue
 San Lorenzo, California

Mr. Don Callahan

FIGURE NO.
1
REV NO.



Property Line



Building

Subject Property

B-3
4900/18

B-2
ND/0.7

B-1
50/0.5

Shell Service Station

Washington Avenue

Via Enrico

LEGEND

- B-1 Groundwater Sample Location

TPH-C/B conc in ug/l

NOTES
Not To Scale

DATE June 29, 1993
 JOB NO. E316-02
 DWG NO. E316-02-02
 DRAWN J. Phillips
 CHKD J. Phillips
 APPD J. Hicks

EGC ENVIRONMENTAL GEOTECHNICAL CONSULTANTS, INC.
 CONSULTANTS IN APPLIED EARTH SCIENCE

SITE PLAN
 15563 Washington Avenue
 San Lorenzo, California

Mr. Don Callahan

FIGURE NO.
2
REV NO.

Table 1: Homogeneous Area Number and Material Description

Homogeneous Material Code	Material Description
L-1	Beige Linoleum with Brown Octagon Style
L-2	Tan Linoleum with Etching Style
JC-1,2	Drywall Joint Compound
RT-1	Black/Gray Roof Flashing Tar

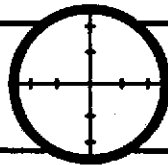
TABLE 2 - GROUNDWATER ANALYTICAL RESULTS

Sample ID	TPH - D	TPH - G	Benzene	Toluene	E-Benzene	Xylene
B-1	ND	50	0.5	0.5	ND	0.5
B-2	ND	ND	0.7	ND	ND	ND
B-3	ND	4,900	18	28	12	26

All the above results are in parts per billion.

APPENDIX A

POLARIZED LIGHT MICROSCOPY ANALYSIS REPORTS



PRECISION MICRO-ANALYSIS I N C

SPECIALISTS IN ASBESTOS-RELATED ANALYSIS

Bulk Sample Analysis (PLM) Report

Report # 93223008

Duane Graves
4804 Peale Dr.
Sacramento, CA 95842-

Date Collected:08/07/93
Date Received:08/10/93
Date Analyzed:08/11/93

Phone:(916)348-7992

Job Information:
J0806-93
15563 Washington Ave.
San Lorenzo, CA

Sample Number	Sample Location	Sample Description	Analytical Results
001 Lab # 93-115425	Rice Photo restroom	(L-1) Beige w/brown octogon lino. w/tan backing, off-white lino. w/lt. grey backing (OW lino. comprised approx. 50% of the sample)	Overall: 10-15% Chrysotile asbestos (Asbestos found in off-white lino.)
002 Lab # 93-115426	Rice Photo telephone room	(JC-1) White joint compound, off-white joint compound, tan paint	Overall: Trace Chrysotile asbestos OW JC: 10-15% Chrysotile asbestos W JC: No asbestos detected
003 Lab # 93-115427	Rice Photo roof hatch access	(JC-1) White joint compound, tan paint	No asbestos detected
004 Lab # 93-115428	Castro Insurance right angled wall	(JC-2) Off-white paint, 2 layers of white joint compound, 1 layer tan joint compound	Overall: Trace Chrysotile asbestos W JC: 3-8% Chrysotile asbestos (Asbestos found in outer layer of white joint compound)
005 Lab # 93-115429	Castro Insurance entry	(L-2) Brown with brick style linoleum	No asbestos detected
006 Lab # 93-115430	Castro Insurance bathroom	(L-3) Tan with etching linoleum and grey fibrous backing	20-25% Chrysotile asbestos (Asbestos found in fibrous backing)

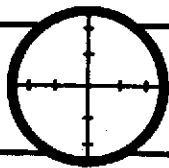
OFFICIAL NOTICE: After 45 days, samples are disposed of at a licensed waste disposal site unless client requests their return, identifying samples by our laboratory identification #'s. Charges for sample returns are a \$5.00 retrieval fee plus \$2.00 per sample to cover costs of retrieval, handling, and shipping.

Total Number of Samples: 13

Supervisor Duane Graves

Analyst Duane Graves Page 1 of 3

Note: The test result findings are made to the methodologies and parameters described on the reverse of this page.



PRECISION MICRO-ANALYSIS

SPECIALISTS IN ASBESTOS-RELATED ANALYSIS

Bulk Sample Analysis (PLM) Report

Report # 93223008

Duane Graves
4804 Peale Dr.
Sacramento, CA 95842-

Date Collected: 08/07/93
Date Received: 08/10/93
Date Analyzed: 08/11/93

Phone: (916) 348-7992

Job Information:
J0806-93
15563 Washington Ave.
San Lorenzo, CA

Sample Number	Sample Location	Sample Description	Analytical Results
007 Lab # 93-115431	Suite B entry	(L-4) Beige and tan linoleum with flower design	No asbestos detected
008 Lab # 93-115432	Bldg. exterior	(ST-1) Grey & white exterior stucco	No asbestos detected
009 Lab # 93-115433	Roof HVAC	(S-1) Beige seam sealant	No asbestos detected
010 Lab # 93-115434	Roof north	(R-1) Black built-up roofing	No asbestos detected 70-75% Cellulose fibers
011 Lab # 93-115435	Roof south	(R-1) Black built-up roofing	No asbestos detected 70-75% Cellulose fibers
012 Lab # 93-115436	Roof flashing	(RF-1) Black plysheet with grey-tan sealant (Ply comprised approx. 85% of the total sample)	Overall: 5-10% Chrysotile asbestos Ply: 5-10% Chrysotile asbestos Sealant: 3-8% Chrysotile asbestos

OFFICIAL NOTICE: After 45 days, samples are disposed of at a licensed waste disposal site unless client requests their return, identifying samples by our laboratory identification #'s. Charges for sample returns are a \$5.00 retrieval fee plus \$2.00 per sample to cover costs of retrieval, handling, and shipping.

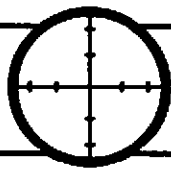
Total Number of Samples: 13

Supervisor Duane Graves

Analyst Duane Graves

Page 2 of 3

Note: The test result findings are made to the methodologies and parameters described on the reverse of this page.



PRECISION I
MICRO-ANALYSIS N
C

SPECIALISTS IN ASBESTOS-RELATED ANALYSIS

Bulk Sample Analysis (PLM) Report

Report # 93223008

Duane Graves
4804 Peale Dr.
Sacramento, CA 95842

Date Collected:08/07/93
Date Received:08/10/93
Date Analyzed:08/12/93

Phone:(916)348-7992

Job Information:
J0806-93
15563 Washington Ave.
San Lorenzo, CA

Sample Number	Sample Location	Sample Description	Analytical Results
013 Lab # 93-115437	Roof wall surrounding HVAC units	(T-1) Grey transite paneling with black paint	30-35% Chrysotile asbestos

OFFICIAL NOTICE: After 45 days, samples are disposed of at a licensed waste disposal site unless client requests their return, identifying samples by our laboratory identification #'s. Charges for sample returns are a \$5.00 retrieval fee plus \$2.00 per sample to cover costs of retrieval, handling, and shipping.

Total Number of Samples: 13

Supervisor *Duane Graves*

Analyst *Duane Graves*

Page 3 of 3

Note: The test result findings are made to the methodologies and parameters described on the reverse of this page.

APPENDIX B

GROUNDWATER LABORATORY DATA SHEETS

125311

SAMPLER BRAND BURFIELD CARRIER _____ DATE SHIPPED _____
 COOLER NO. _____ NO. OF COOLERS 1 DATE RECEIVED _____

SHIP TO: _____ TURNAROUND TIME: 24 HOURS 1 WEEK STANDARD
 SEND RESULTS TO:
 ENVIRONMENTAL GEOTECHNICAL CONSULTANTS, INC.
 2495 INDUSTRIAL PARKWAY WEST,
 HAYWARD, CA 94545
 TEL(415)786-0243
 FAX(415)732-0289
 ATTN: JOHN HICKS

ATTN: _____
 JOB NAME: _____ JOB NO.: E 516-02
 RELINQUISHED BY: (SIGNATURE) [Signature] RECEIVED BY: (SIGNATURE) [Signature] DATE: 8-9-93
 TIME: 1:30
 RELINQUISHED BY: (SIGNATURE) [Signature] RECEIVED BY: (SIGNATURE) Miner Somers DATE: 8-10-93
 TIME: 1:40
 RELINQUISHED BY: (SIGNATURE) _____ RECEIVED AT LAB BY: (SIGNATURE) _____ DATE: _____
 TIME: _____

ANALYSIS REQUEST

SAMPLE I D NO.	SAMPLED		MATRIX	SAMPLE CONTAINER	ANALYSIS REQUESTED	SAMPLE CONDITION UPON RECEIPT
	DATE	TIME				
B-1	8/9/93	12:00	WATER	3(40ml vials) (12 AMPER)	TPH AS GAS TPH AS DIESEL BTEX	
B-2	8/9/93	11:40	"	"	"	
B-3	8/9/93	10:19	"	"	"	

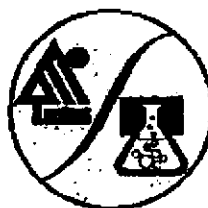
SPECIAL INSTRUCTIONS AND/OR COMMENTS:

TPH AS GAS } SAME ANALYSIS FOR
 TPH AS DIESEL } ALL SAMPLES.
 BTEX

NOTES _____

DATE _____	EGC ENVIRONMENTAL GEOTECHNICAL CONSULTANTS, INC. CONSULTANTS IN APPLIED EARTH SCIENCE <u>John Hicks</u> <u>4229 Northgate Blvd, Suite 3</u> <u>Sac. CA 95834</u>	FIGURE NO. _____
JOB NO. _____		
DRAWN BY _____		
CHECKED BY _____		
APP'D _____		

Excelchem
Environmental Labs
 8112 Patton Avenue
 Citrus Heights, CA 95610
 (916) 729-5313



ANALYSIS REPORT

Attention: Mr. John Hicks
 EGC, Inc.
 2495 Industrial Pkwy. West
 Hayward, CA 94545
 Project #: E316-02

Date Sampled : 8-09-93
 Date Received: 8-10-93
 BTEX Analyzed: 8-16-93
 TPHg Analyzed: 8-16-93
 Matrix: Water

	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TPHg
	<u>PPB</u>	<u>PPB</u>	<u>PPB</u>	<u>PPB</u>	<u>PPB</u>
Reporting Limit:	0.5	0.5	0.5	0.5	50

SAMPLE

Laboratory Identification:

B-1 W0893052	0.5	0.5	ND	0.5	50
B-2 W0893053	0.7	ND	ND	ND	ND

PPB = Parts per billion = ug/L = micrograms per liter
 ND = Not detected. Compound(s) may be present at concentrations below the reporting limit.

ANALYTICAL PROCEDURES

BTEX-- Benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) are analyzed by using EPA Method 602 which utilizes a gas chromatograph (GC) equipped with a photoionization detector (PID).
 TPHg--Total petroleum hydrocarbons as gasoline (low-to-medium boiling points) are analyzed by using modified EPA Method 8015, which utilizes a GC equipped with an FID.

Laboratory Representative

8-18-93
 Date Reported

EXCELICHEM ENVIRONMENTAL LABS IS CERTIFIED BY THE STATE OF CALIFORNIA
 DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY
 (Certification No. 1760)

Excelchem
Environmental Labs
 8112 Patton Avenue
 Citrus Heights, CA 95810
 (916) 729-5313



ANALYSIS REPORT

Attention: Mr. John Hicks
 EGC, Inc.
 2495 Industrial Pkwy. West
 Hayward, CA 94545
 Project #: E316-02

Date Sampled : 8-09-93
 Date Received: 8-10-93
 BTEX Analyzed: 8-16-93
 TPHg Analyzed: 8-16-93
 Matrix: Water

	Benzene PPB	Toluene PPB	Ethyl- benzene PPB	Total Xylenes PPB	TPHg PPB
Reporting Limit:	10	10	10	10	1000

SAMPLE

Laboratory Identification:

B-3 W0893054	18	28	12	26	4900
-----------------	----	----	----	----	------

PPB = Parts per billion = ug/L = micrograms per liter

ND = Not detected. Compound(s) may be present at concentrations below the reporting limit.

ANALYTICAL PROCEDURES

BTEX-- Benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) are analyzed by using EPA Method 602 which utilizes a gas chromatograph (GC) equipped with a photoionization detector (PID).

TPHg--Total petroleum hydrocarbons as gasoline (low-to-medium boiling points) are analyzed by using modified EPA Method 6015, which utilizes a GC equipped with an FID.

 Laboratory Representative

8-18-93

 Date Reported

EXCELICHEM ENVIRONMENTAL LABS IS CERTIFIED BY THE STATE OF CALIFORNIA
 DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY
 (Certification No. 1760)

Excelchem
Environmental Labs
 8112 Patton Avenue
 Citrus Heights, CA 95610
 (916) 729-5313



ANALYSIS REPORT

Attention: Mr. John Hicks
 EGC, Inc.
 2495 Industrial Pkwy. West
 Hayward, CA 94545

Date Sampled : 8-09-93
 Date Received: 8-10-93
 TPHd Analyzed: 8-17-93
 Matrix : Water

Project #: E316-02

Reporting Limit: TPHd
PPB
 100

SAMPLE
 Laboratory Identification

#1**	ND---
#2**	ND---
#3**	ND---

PPB = Parts per billion = ug/L = microgram per Liter

** = No sample identification on sample container.

--- = Peaks in diesel range.

ND = Not detected. Compound(s) may be present at concentrations below the reporting limit.

ANALYTICAL PROCEDURES

TPHd - Total petroleum hydrocarbons as diesel (high boiling points) are measured by extraction using EPA Method 3550 followed by modified EPA Method 8015 with direct sample injection into a GC equipped with an FID.

Laboratory Representative

8-18-93
Date Reported

EXCELCHEM ENVIRONMENTAL LABS IS CERTIFIED BY THE STATE OF CALIFORNIA
 DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY
 (Certification No. 1760)