



ENVIRONMENTAL
PROTECTION
97 AUG 21 PM 2:52

August 20, 1997

STOP 3952
LS

Mr. Steve Chrissanthos
Alameda Cellars
1709 Otis Drive
Alameda, California 94501

RE: Offsite Groundwater Investigation Letter Report
2425 Encinal Avenue, Alameda, California
ACC Project No. 96-6039-002.08

Dear Mr. Chrissanthos:

This letter report has been prepared by ACC Environmental Consultants, Inc., (ACC) at the request of Alameda County Health Care Services Agency (ACHCSA) on behalf of Mr. Steve Chrissanthos, owner for the site located at 2425 Encinal Avenue, Alameda, California (Figure 1). The work included drilling two exploratory borings, collecting grab groundwater samples, and preparing a letter report of the findings for the purpose of evaluating whether impacted groundwater is migrating toward residential areas which may pose a significant human health risk.

BACKGROUND

In March 1990, two 10,000-gallon gasoline underground storage tanks (USTs) were removed from the subject site. Analysis of the soil samples collected from beneath the USTs indicated concentrations up to 710 parts per million (ppm) total petroleum hydrocarbons as gasoline (TPHg).

In December 1992, ACC performed a subsurface investigation, including drilling five borings on site. Three of the borings were converted into monitoring wells MW-1, MW-2a, and MW-3. Analytical results of the soil collected during drilling and sampling indicated concentrations up to 1,365 ppm TPHg and up to 18.9 ppm benzene. Initial groundwater samples collected in January 1993 from the monitoring wells indicated up to 5,680 parts per billion (ppb) in well MW-2a and up to 1,560 ppb benzene in well MW-1.

An additional soil investigation was conducted in May 1993 to evaluate the extent of impact in the soil and groundwater. Findings of the additional investigation indicated the lateral extent of petroleum hydrocarbon impacted soil did not appear to extend beyond the property boundaries along the northern, western, and eastern sides. However, along the southern side, the impacted soil appeared to extend off site into Park and Encinal Avenues. Field observations made during the additional investigation and soil sample analysis indicated impacted soil existed primarily around the former tank excavation and the former dispenser island. The vertical extent of petroleum hydrocarbons in the soil occurs at the soil/groundwater interface.

Analytical results of grab groundwater samples collected from borings drilled during the additional investigation indicate that residual petroleum hydrocarbons from the former tank excavation and dispenser island are migrating off site via the groundwater.

In December 1993, three additional monitoring wells (MW-4, MW-5, and MW-6) were installed on and adjacent to the property to further evaluate the extent of petroleum hydrocarbon impact to groundwater. Laboratory analysis of the soil samples collected from each boring indicated no detectable concentrations of constituents above laboratory reporting limits, which verifies the lateral extent of soil impact.

Laboratory analysis of the groundwater samples collected from monitoring wells MW-5 and MW-6 have consistently indicated no detectable concentrations above laboratory reporting limits of constituents evaluated, indicating a lateral extent of groundwater impact to the west and north. Laboratory analysis of groundwater collected from monitoring well MW-4 indicated detectable concentrations of constituents, which indicated the southern edge of the groundwater plume. The location of the southern edge of the groundwater impact is just off site to the south. This crossgradient movement is attributed to the relatively flat gradient and possible recharge into the excavated area.

ACC conducted a risk assessment in December 1996 to evaluate the potential risk that impacted subsurface soil and groundwater have on usage of the property. Based on the risk assessment, the remaining impacted soil and groundwater at the site would not pose a significant risk to onsite workers. ACHCSA agreed with the findings. However, ACHCSA requested that an evaluation be conducted in residential areas adjacent to the subject site, to determine whether the impacted groundwater is migrating toward residential areas which may pose a human health risk. In a letter dated April 11, 1997, ACHCSA requested that offsite groundwater investigation be conducted adjacent to neighboring residences.

SCOPE OF WORK

Excavation and drilling permits were obtained from the Alameda County Public Works before drilling and sampling activities. The locations of the proposed borings were marked with white paint. Underground Service Alert was notified more than 48 hours before work began.

On August 4, 1997, to evaluate whether offsite groundwater is impacted with petroleum hydrocarbons originating from previous onsite practices, ACC advanced two exploratory borings (R-1 and R-2) into the shallow groundwater and collected grab groundwater samples in the borings, adjacent to residential areas downgradient of the subject property.

Drilling was performed using a pneumatic Geoprobe®, 2-inch-diameter, hydraulically driven sampling probe, which was advanced into groundwater. Groundwater samples were collected with the use of precleaned stainless steel bailers and new string. Groundwater was encountered at a depth of 15 feet below ground surface (bgs) in borings R-1 and R-2. The water was very silty and yellowish brown. Groundwater was encountered at a depth of 15 feet bgs in boring R-1. The water in boring

R-1 was slow to recharge and a groundwater sample was collected at a depth of 15.5 to 16 feet bgs. ACC encountered refusal conditions in boring R-2 at 16.5 feet bgs approximately the soil/groundwater interface. Groundwater was not obtainable due to extremely slow recharge conditions; therefore, ACC primed the boring with 60 to 100 milliliters of deionized water. Once primed, ACC purged approximately 80 milliliters of water from the point before collection of sample R-2. Water collected from the borings using precleaned stainless steel bailers and new string. Upon collection, the water from the bailer was immediately transferred to laboratory supplied, precleaned sample containers, without head space, sealed, labeled, and stored in a prechilled insulated container pending transport to a certified analytical laboratory. Groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and total xylenes (BTEX), and methyl tertiary butyl ether (MTBE). The boring locations are illustrated on Figure 2. A copy of the analytical results and chain of custody record is attached.

TABLE 1 - GROUNDWATER SAMPLE ANALYTICAL RESULTS

| Sample Number | TPHg (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethylbenzene (µg/L) | Total Xylenes (µg/L) | MTBE (µg/L) |
|---------------|-------------|----------------|----------------|---------------------|----------------------|-------------|
| R-1 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <5.0 |
| R-2 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <5.0 |

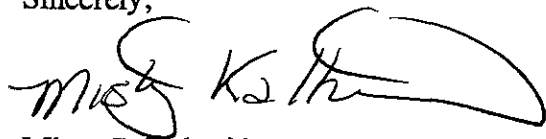
Notes: µg/L = micrograms per liter

CONCLUSIONS

Based on the current and previous analytical results, ACC concludes that no impacted groundwater is migrating from the subject site toward residences on Park Avenue and Encinal Avenue. Because the offsite impact has not extended to residential areas and the remaining onsite impacted soil and groundwater will not pose a significant risk to onsite workers as determined in ACC's Risk Assessment Report, ACC requests closure of the subject property from further investigation.

If you have any questions regarding this letter report, please call me at (510) 638-8400.

Sincerely,

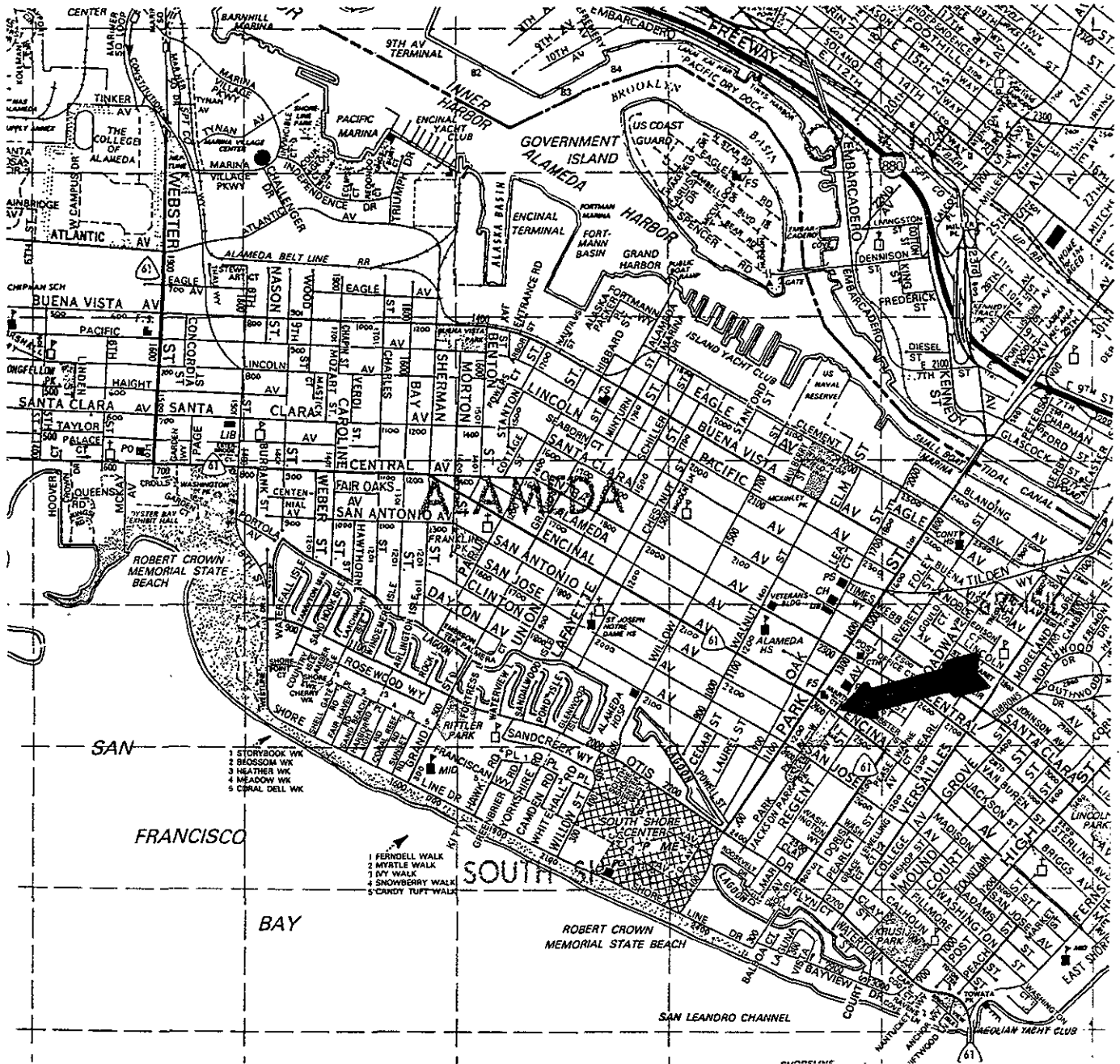


Misty C. Kaltreider
Senior Project Geologist

/mcr:mck

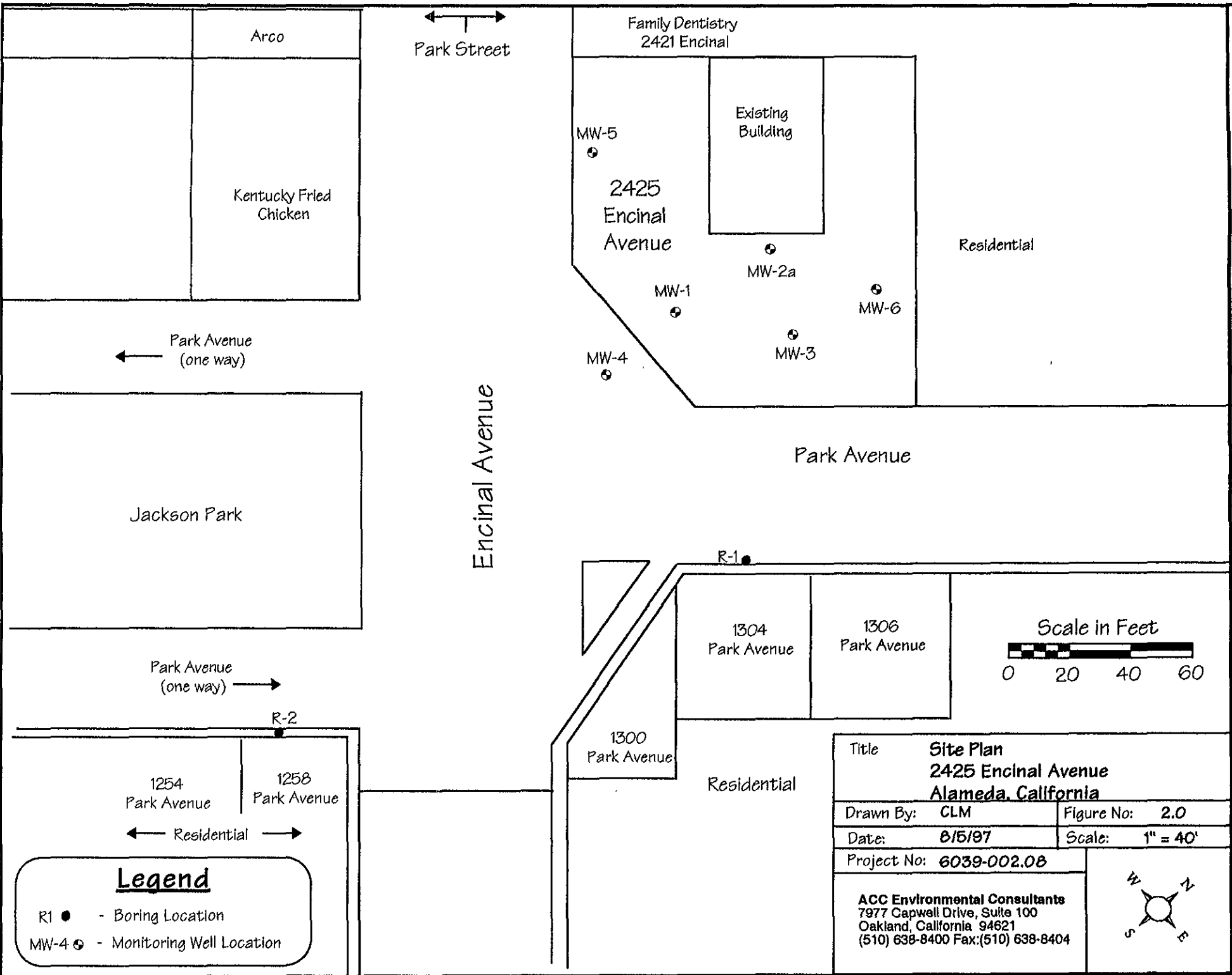
Attachments

cc: Ms. Juliet Shin, ACHCSA



SOURCE: THOMAS BROTHERS GUIDE, 1990 ed.

| | |
|--|--------------------|
| Title: Location Map 2425 Encinal Avenue Alameda, California | |
| Figure Number: 1.0 | Scale: 1" = 1/4 mi |
| Drawn By: JVC | Date: 3/19/96 |
| Project Number: 6039-5 | |
| ACC Environmental Consultants 7977 Capwell Drive, Suite 100 Oakland, California 94621 (510) 638-8400 Fax: (510) 638-8404 | |
| | |



Arco

Kentucky Fried
Chicken

↔
Park Street

Family Dentistry
2421 Encinal

MW-5

Existing
Building

2425
Encinal
Avenue

Residential

MW-2a

MW-1

MW-6

MW-4

MW-3

← Park Avenue
(one way)

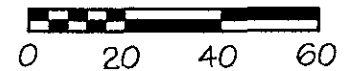
Encinal Avenue

Park Avenue

Jackson Park

R-1

Scale in Feet



1304
Park Avenue

1306
Park Avenue

Park Avenue
(one way) →

R-2

1300
Park Avenue

Residential

Title **Site Plan**
2425 Encinal Avenue
Alameda, California

Drawn By: CLM

Figure No: 2.0

Date: 8/5/97

Scale: 1" = 40'

Project No: 6039-002.08

ACC Environmental Consultants
7977 Capwell Drive, Suite 100
Oakland, California 94621
(510) 638-8400 Fax: (510) 638-8404



Legend

R1 ● - Boring Location

MW-4 ⦿ - Monitoring Well Location

↔ Residential ↔

CHROMALAB, INC.

Environmental Services (SDB)

August 11, 1997

Submission #: 9708037

ACC ENVIRONMENTAL CONSULTANTS

Atten: Misty Kaltreider

Project: 2425 ENCINAL AVE
Received: August 4, 1997

Project#: 6039-002.08

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: R-1

Spl#: 142586


Matrix: WATER


Sampled: August 4, 1997

Run#: 8091

Analyzed: August 6, 1997

| ANALYTE | RESULT (ug/L) | REPORTING LIMIT (ug/L) | BLANK RESULT (ug/L) | BLANK SPIKE (%) | DILUTION FACTOR |
|---------------|------------------|------------------------------|---------------------------|-----------------------|--------------------|
| GASOLINE | N.D. | 50 | N.D. | 88 | 1 |
| MTBE | N.D. | 5.0 | N.D. | 90 | 1 |
| BENZENE | N.D. | 0.50 | N.D. | 108 | 1 |
| TOLUENE | N.D. | 0.50 | 0.80 | 109 | 1 |
| ETHYL BENZENE | N.D. | 0.50 | N.D. | 107 | 1 |
| XYLENES | N.D. | 0.50 | 1.1 | 103 | 1 |


Marianne Alexander
Gas/BTEX Supervisor


For Chip Poalinelli
Operations Manager

CHROMALAB, INC.

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Atten: Misty Kaltreider

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Received: August 4, 1997

Project#: 6039-002.08

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: R-2

Spl#: 142587

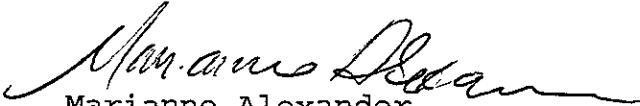
Matrix: WATER


Sampled: August 4, 1997

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| MTBE | N.D. | 5.0 | N.D. | 90 | 1 |
| BENZENE | N.D. | 0.50 | N.D. | 108 | 1 |
| TOLUENE | N.D. | 0.50 | 0.80 | 109 | 1 |
| ETHYL BENZENE | N.D. | 0.50 | N.D. | 107 | 1 |
| XYLENES | N.D. | 0.50 | 1.1 | 103 | 1 |


Marianne Alexander
Gas/BTEX Supervisor


For Chip Poalinelli
Operations Manager

CHROMALAB, INC.

Environmental Service (SDB)

Sample Receipt Checklist

Client Name: ACC ENVIRONMENTAL CONSULTANTS Date/Time Received: 08/04/97 | 1200

Reference/Submis: 34937 | 9708037 Received by: RT

Checklist completed by: Chris Rowley 8/5/97 Reviewed by: MJ 8/5/97
Signature Date Initials Date

Matrix: H2O Carrier name: Client - C/L

- Shipping container/cooler in good condition? Yes No Not Present
- Custody seals intact on shipping container/cooler? Yes No Not Present
- Custody seals intact on sample bottles? Yes No Not Present
- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No
- Samples in proper container/bottle? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No
- All samples received within holding time? Yes No
- Container/Temp Blank temperature in compliance? Temp: 7.0 °C Yes No
- Water - VOA vials have zero headspace? No VOA vials submitted Yes No
- Water - pH acceptable upon receipt? Adjusted? Checked by chemist for VOAs

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted: _____ Date contacted: _____ Person contacted: _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action: _____

