

LAW OFFICES OF
TOMMY A. CONNER

ENVIRONMENTAL
PROTECTION
97 JUL 00 PM 2:14

444 De Haro Street
Suite 121
San Francisco, CA 94107
Tel 415-621-3939
Fax 415-621-3999

July 25, 1997

4610

Barney Chan
Alameda County Health
Care Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 95402


Re: Subsurface Investigation at 3927 E. 14th Street, Oakland, California 94601

Dear Mr. Chan:

Enclosed is a copy of the *Second Quarter 1997 Groundwater Monitoring Report* prepared for Ruben Hausauer's 3927 East 14th Street, Oakland, California site. This report documents the results of the second quarter of groundwater monitoring performed at the site. Groundwater monitoring was performed on 28 May 1997 by ATC Environmental Inc. personnel. This report was prepared by ATC Environmental Inc. at the request of Ruben Hausauer.

If you have any questions or comments, please call either ATC Environmental Inc. at (408) 474-0280, or me at (415) 621-3939. Thank you for your time and attention.

Very truly yours,



Tommy A. Conner

TAC:syr

Enclosure

cc: State Water Resources Control Board (w/encl)
P. O. Box 944212
Sacramento, California 94244-2120

need copy of
2/25/97 report
need summary table to include
for release

VATC ASSOCIATES INC.

ENVIRONMENTAL, GEOTECHNICAL AND MATERIALS PROFESSIONALS

2380 Qume Drive, Suite C
San Jose, CA 95131
(408) 474-0280
Fax (408) 434-6662

ENVIRONMENTAL
PROTECTION
97 JUL 29 PM 2:14

24 July 1997
61137.0002

Mr. Tommy A. Conner, Esq.
Law Offices of Tommy A. Conner
444 De Haro Street, Suite 121
San Francisco, California 94107

Attention: Mr. Tommy A. Conner, Esq.

SUBJECT: SECOND QUARTER 1997, GROUNDWATER MONITORING REPORT,
3927 EAST 14TH STREET, OAKLAND, CALIFORNIA

Dear Tommy:

ATC Associates Inc. (ATC) is pleased to submit this report summarizing the results of the second quarter 1997 groundwater monitoring activities conducted on 28 May 1997 at the New Genico facility located at 3927 East 14th Street in Oakland, California (site, Figure 1). The work was conducted in general accordance with Proposal No. SJ960103 dated 19 February 1997, between ATC Associates Inc. and Mr. Ruben Hausauer. The work was conducted, at your request and authorization, to interpret the groundwater flow direction and to assess the concentrations of petroleum hydrocarbons at the New Genico site.

It is the understanding of ATC Associates Inc. that Mr. Ruben Hausauer has been required to conduct quarterly groundwater monitoring by the Alameda County Department of Environmental Health (ACDEH) and the Regional Water Quality Control Board (RWQCB) in response to a release from a former 550 gallon underground storage tank (UST). The ACDEH has requested that Mr. Hausauer coordinate sampling activities with Motor Partners. The information contained herein is based on samples collected concurrent with Motor Partners.

OBJECTIVES

The objectives were to interpret the groundwater flow direction and to assess the concentrations of petroleum hydrocarbons in groundwater.

GROUNDWATER MONITORING

Groundwater monitoring during the second quarter 1997 sampling event (conducted on 28 May 1997) included the measurement of groundwater levels, and the collection and analysis of groundwater samples from three monitoring wells (Figure 2). Historical groundwater elevations and sample analytical results from previous reports are included in Table 1 and 2, respectively.

To assess the piezometric conditions at the site, the groundwater levels in each of the monitoring wells were measured within an approximate 15-minute period, prior to the initiation of groundwater sampling. Groundwater levels were measured using a Solinst water level indicator which measures to one-hundredth of an inch. Static groundwater elevations from the current sampling event and historic groundwater piezometric elevations are presented in Table 1a. Groundwater elevations from the current sampling event for the Motor Partners Site are presented in Table 1b. Groundwater elevations have decreased in the three gauged wells an average of 1.7 feet since they were last measured in February 1997.

Static water level elevations were calculated from depth to groundwater data and top of casing (TOC) elevations, as surveyed by Kier & Wright Civil Engineers & Surveyors, Inc. (Kier & Wright) on 22 August 1996. Depth to water measurements were recorded by both ATC Associates Inc. and Gary Rogers, Ph.D., for the New Genico site and the Motor Partners facility (located across 40th Avenue), respectively. The recently surveyed TOC elevations for both sites (by Kier & Wright), were used to calculate groundwater elevations, which were used to interpret the groundwater gradient and flow direction. Depth to groundwater measurements for the 1234 40th Avenue, Oakland, California property, as measured by Gary Rogers, were obtained by ATC from his faxed information dated 14 July 1997. Based on the resulting groundwater elevations calculated for the area proximate to both sites, a predominantly southerly groundwater gradient has been interpreted by ATC. Piezometric groundwater levels as measured on 28 May 1997, and an interpretation of the groundwater flow direction (as indicated by contours), is presented in Figure 2. The groundwater elevation data suggests a hydraulic gradient of 0.0135 foot per foot (ft/ft) (approximately 71.3 feet per mile [ft/mi]) for the 28 May 1997 sampling event.

Groundwater samples were collected from New Genico's two on-site and one off-site monitoring wells following measurement of groundwater levels and purging of approximately four to five casing volumes of water from MW2 and MW3. Well MW1 was purged of approximately five gallons until the well was dry. The groundwater sample from MW1 was collected following recharge of the well to approximately 80% of its original water level. Measurements of pH, temperature, and specific conductivity were taken during the purging of the wells, and the data was recorded on groundwater collection logs (Appendix A). Groundwater sampling was conducted using procedures developed by ATC that are in general accordance with RWQCB guidelines. A summary of the field procedures used to monitor and sample groundwater are presented in Appendix B. The purged groundwater was placed into labeled 55-gallon drums for temporary storage on-site, pending proper disposal.

A sterile teflon bailer was used to purge and sample groundwater and to allow for observations of sheen or floating product in the well. No floating product or sheen was observed in any of the wells sampled this quarter. Odors from purged wells MW1 through MW3 were documented on groundwater collection logs. Groundwater samples were transferred from the bailer to laboratory provided containers appropriate for the respective analyses to be performed, labeled for identification purposes, and stored on ice in an insulated chest for delivery to the laboratory for analysis.

LABORATORY ANALYSIS

Groundwater samples collected during the second quarter 1997 of groundwater sampling were transported to American Environmental Network, a State-certified hazardous waste laboratory, for analysis using chain-of-custody procedures. Samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) in general accordance with Environmental Protection Agency (EPA) Method 8015 (modified); for benzene, toluene, ethyl benzene, and xylenes (BTEX) and methyl tert butyl ether (MtBE) in general accordance with EPA Method 8020, and for TPH as motor oil (TPHmo) in general accordance with EPA Method 8015 (modified). Samples were analyzed on a seven-day "turnaround" time by the laboratory. Laboratory results are summarized in Table 2, and laboratory report forms have been included as Appendix C.

Laboratory analysis of groundwater samples indicated TPHg concentrations ranging from 80 micrograms per liter ($\mu\text{g/L}$) to 6,600 $\mu\text{g/L}$ in MW3 and MW1, respectively. Benzene concentrations were reported above reporting limits in groundwater samples collected from MW1 and MW2 at 1,100 $\mu\text{g/L}$ and 170 $\mu\text{g/L}$, respectively. Benzene was not reported above reporting limits in MW3. Toluene was reported in MW1 and MW2 at concentrations of 100 $\mu\text{g/L}$ and 35 $\mu\text{g/L}$, respectively. Ethylbenzene was reported above reporting limits in all three wells and concentrations ranged from 0.60 $\mu\text{g/L}$ (MW3) to 290 $\mu\text{g/L}$ (MW1). Xylenes were reported in MW1 and MW2 at concentrations of 340 $\mu\text{g/L}$ and 67 $\mu\text{g/L}$, respectively. Toluene and xylenes were below reporting limits in MW3.

Analysis by EPA Method 8020 indicated that MtBE was present above reporting limits in MW1 and MW2 at concentrations of 130 $\mu\text{g/L}$ and 150 $\mu\text{g/L}$, respectively. MtBE was not present above the reporting limit for MW3.

TPHd concentrations ranged from 130 $\mu\text{g/L}$ (MW2) to 2,000 $\mu\text{g/L}$ (MW1). Concentrations of TPHmo were reported above the laboratory reporting limit in the groundwater samples collected from MW1 and MW2 at 600 $\mu\text{g/L}$ and 200 $\mu\text{g/L}$, respectively. TPHmo was reported below the reporting limit in MW3.

DISCUSSION

Water levels in each of the three monitoring wells have decreased since last quarter. The hydraulic gradient for the 28 May 1997 sampling event is estimated to be 0.0135 ft/ft (approximately 71.3 ft/mi) with groundwater flow direction predominantly to the south when using depth to groundwater measurements collected by Gary Rogers Ph.D., ATC Associates Inc., and Kier & Wright's TOC elevations.

The following analytical trends have occurred since the last quarterly sampling event; TPHg concentrations have increased in monitoring well MW1 and have decreased in MW2 and MW3; benzene concentrations have increased in MW1 and MW2 and remain unchanged in MW3; MtBE concentrations increased in MW1 and MW2; TPHd concentrations have remained unchanged in MW1 and increased in MW2; and TPHmo concentrations increased in MW1 and MW2.

Monitoring well MW3 was below reporting limits in all constituents except for low concentrations of TPH-g and ethylbenzene.

-none made!
The judgments, conclusions, and recommendations described in this report pertain to the conditions judged to be present or applicable at the time the work was performed. The future conditions may differ from those described herein and this report is not intended for use in future evaluations of the site unless an update is conducted by a consultant familiar with environmental assessments and/or subsurface investigations. Use of this report is provided to Mr. Ruben Hausauer solely for his exclusive use and shall be subject to the terms and conditions in the applicable contract between Mr. Ruben Hausauer and ATC. Any third party use of this report shall also be subject to the terms and conditions governing the work in the contract between Mr. Ruben Hausauer and ATC. Any unauthorized release or misuse of this report shall be without risk or liability to ATC.

Certain information contained in this report may have been rightfully provided to ATC by third parties or other outside sources. ATC does not make any warranties or representations, whether expressed or implied, regarding the accuracy of such information, and shall not be held accountable or responsible in the event that any such inaccuracies are present.

CONCLUSIONS

Based on the information presented in this report, current regulatory guidelines, and the judgment of ATC, the following conclusions are presented:

- The hydraulic gradient on-site, as interpreted by water elevations based on groundwater level measurements on 28 May 1997, is estimated to be 0.0135 ft/ft (approximately 71.3 ft/mi). Groundwater flows in a southerly direction in the immediate vicinity of the site when using groundwater elevation data from both sites and the recent Kier & Wright surveying data for both sites.
- TPHg concentrations in monitoring wells MW2 and MW3 have decreased from the previous sampling on 25 February 1997; concentrations in MW1 have increased.
- Benzene concentrations have increased in MW1 and MW2 and remained below reporting limits in MW3 since the previous sampling event.
- Toluene concentrations have decreased in MW1, remained unchanged in MW2, and remained below method detection limits in MW3 since last quarter. Ethyl benzene concentrations have decreased in all three monitoring wells since the previous sampling event. Xylene concentrations have increased in MW1, decreased in MW2, and remained below reporting limits in MW3.
- Concentrations of MtBE were not present above reporting limits in MW3. Reported MtBE concentrations increased in MW1 and MW2 since last quarter. However, re-analysis of samples reported to contain MtBE by EPA Method 8020 analysis was performed by EPA Method 8260 last quarter to confirm the presence of MtBE. MtBE was not reported by the EPA Method 8260 analysis, indicating the 8020 analysis yielded a false positive. It is likely this quarter's reported MtBE "hits" are likewise false positives.
- TPHd concentrations have remained unchanged in MW1 and increased in MW2 since the previous sampling event. TPHd concentrations were below reporting limits in MW3.
- Analyses performed for monitoring well MW3 were below reporting limits for all constituents except for low concentrations of TPH-g and ethylbenzene.
- TPHmo concentrations increased in MW1 and MW2 and were below reporting limits in MW3 during the current sampling event.

RECOMMENDATIONS

Based on the data and conclusions presented in this report, and the judgment by ATC, the following recommendations are presented for your consideration:

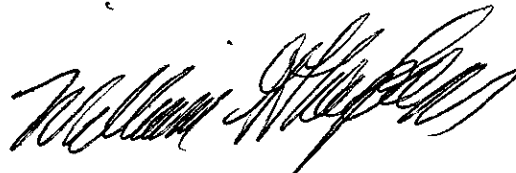
- Continue quarterly groundwater monitoring as required by the ACDEH and the RWQCB.

It continues to be a pleasure working with you on this project. If you have any questions regarding this report, please feel free to contact either of us at your convenience at (408) 474-0280.

Very truly yours,
ATC ASSOCIATES INC.

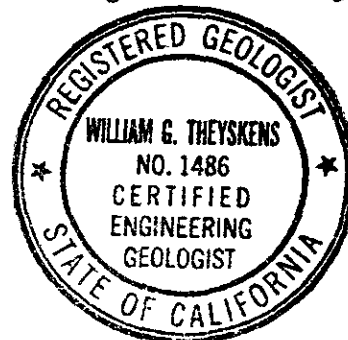


KATHLEEN NEVA
Staff Geologist



WILLIAM G. THEYSKENS, CEG 1486, CHG 245
Environmental/Geological Services Program Manager

cc: Mr. Ruben Hausauer

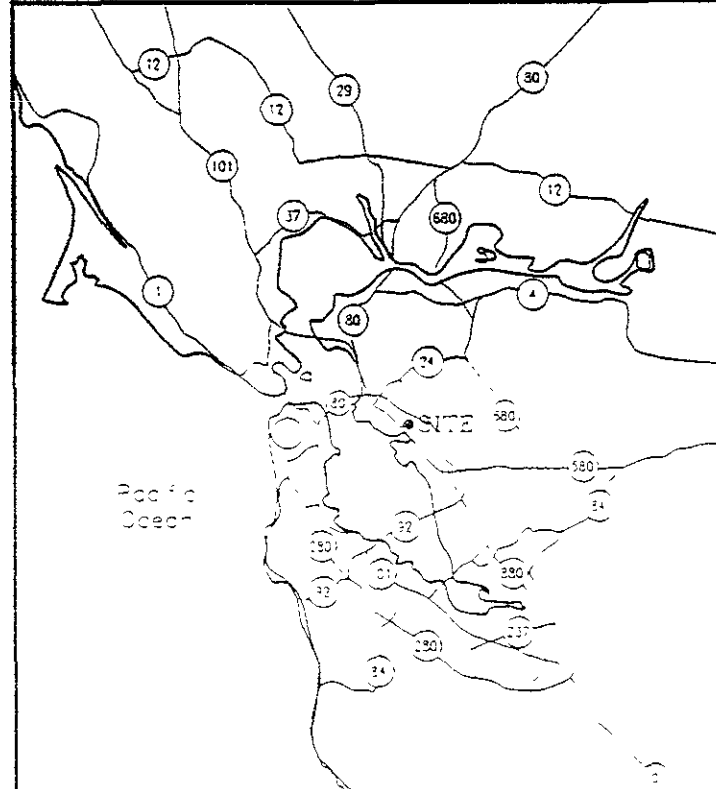
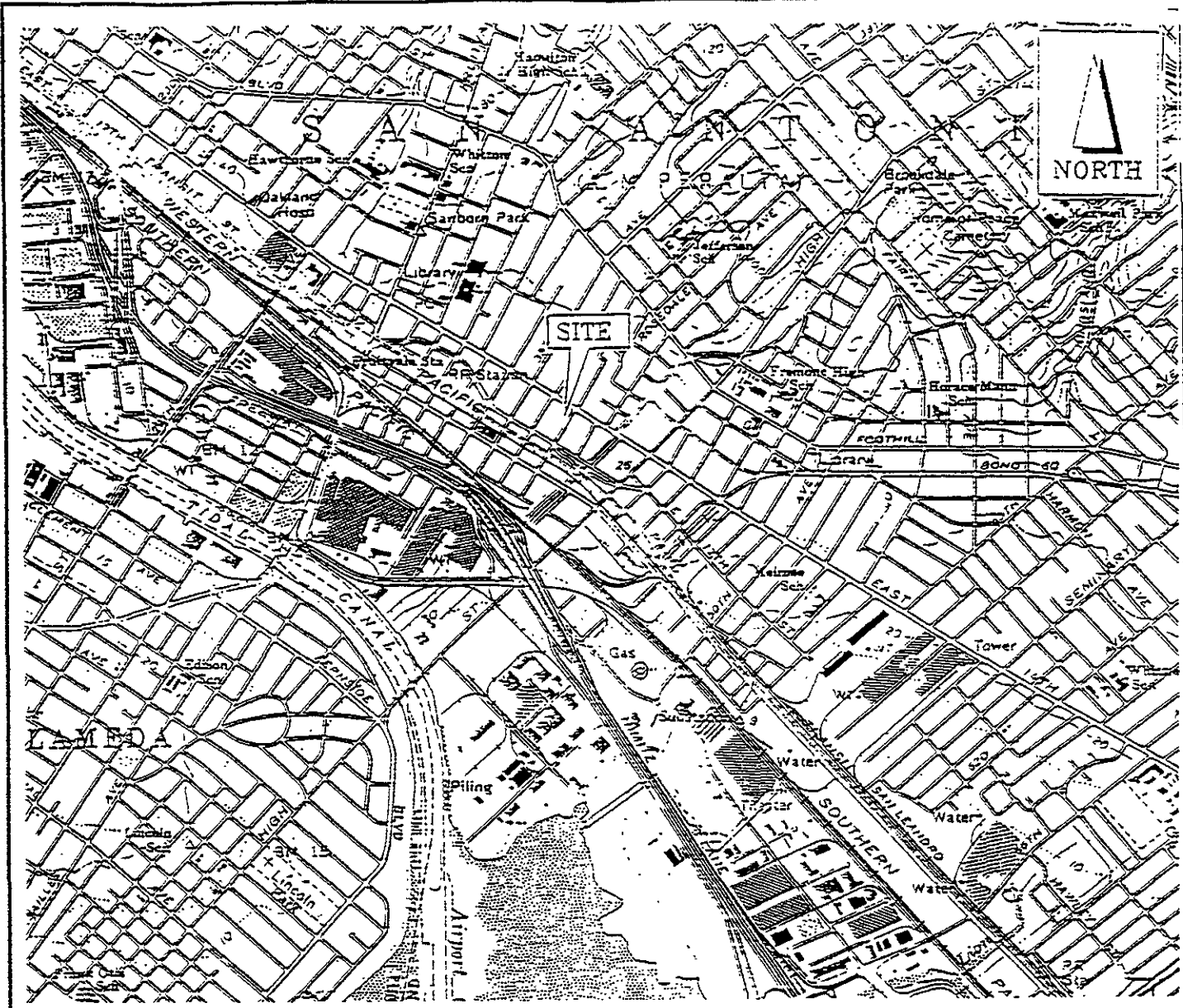


REFERENCES

ATC Associates Inc., 1996, Soil and Groundwater Investigation at 3927 East 14th Street, Oakland, California: Dated 19 September 1996.

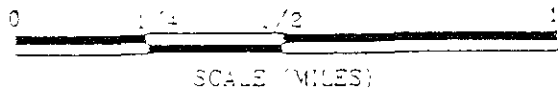
Kier & Wright Civil Engineers & Surveyors, correspondence dated 22 August 1996.

FIGURES



Notes:

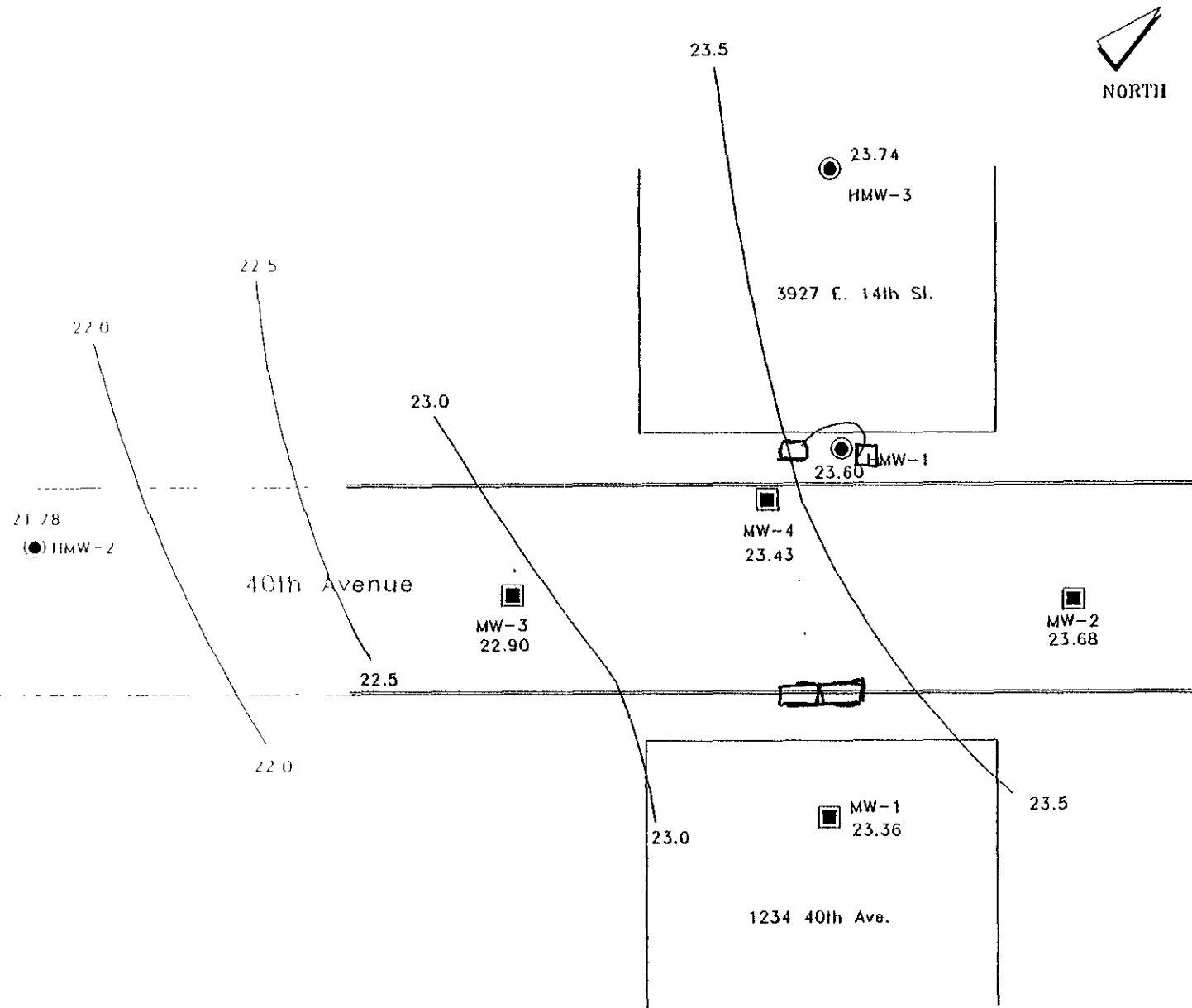
- 1) All locations and dimensions are approximate.
- 2) Base map from USGS Oakland East (1961) Quadrangle, 7.5 Minute Series Topographic, Photorevised in 1980.



ATC ASSOCIATES INC
 Environmental, Geotechnical and Materials Professionals

SITE LOCATION MAP
 3927 E. 14TH STREET
 OAKLAND, CALIFORNIA

PROJECT NO. 61137 0002 : FIGURE 1

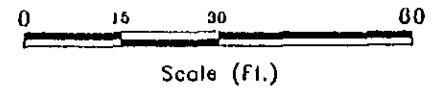


EXPLANATION

- Groundwater elevation (28 May 1997)
- 23.74 Groundwater Monitoring Well HMW-3 (3927 E. 14th St.)
- Groundwater Monitoring Well (1234 40th Ave.) MW-1
- Groundwater elevation contours, 28 May 1997
Kier & Wright elevation surveyed 22 August 1996

Notes:

1. Base Map developed from survey map provided by Kier & Wright



VATC ASSOCIATES INC.
ENVIRONMENTAL, GEOTECHNICAL AND MATERIALS PROFESSIONALS

GROUNDWATER FLOW MAP
 3927 E. 14th Street
 Oakland, California

TABLES

**Table 1a. Historical Groundwater Gauging Results, New Genico Site,
3927 East 147th Street, Oakland, California, 28 May 1997**

Monitoring Well	Sampling Date	Top of Casing Elevation (msl)	Depth to Water (ft)	Groundwater Elevation (msl)
MW1	8/22/96	31.25	8.01	23.24
	2/25/97		5.95	<u>25.30</u>
	5/28/97		7.65	23.60
MW2	8/22/96	29.43	8.71	20.72
	2/25/97		6.00	<u>23.43</u>
	5/28/97		7.65	21.78
MW3	8/22/96	31.48	8.10	23.38
	2/25/97		6.00	<u>25.48</u>
	5/28/97		7.74	23.74

MSL - Mean Sea Level

**Table 1b. 2nd Quarter Groundwater Gauging Results, Motor Partners Site,
3927 East 147th Street, Oakland, California, 28 May 1997**

Monitoring Well	Top of Casing Elevation (msl)	Depth to Water (ft)	Groundwater Elevation (msl)
MW1	31.44	8.08	23.36
MW2	31.06	7.38	23.68
MW3	30.43	7.53	22.90
MW4	30.37	6.94	23.43

MSL - Mean Sea Level

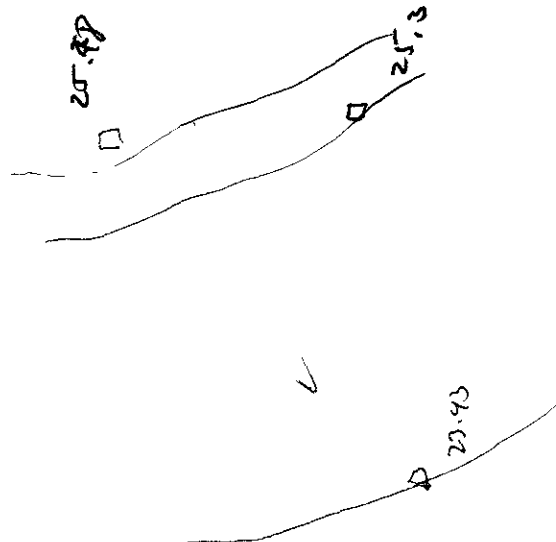


Table 2. Groundwater Analytical Results, 3927 East 147th Street, Oakland, California, 28 May 1997

Monitoring Well	Sampling Date	Concentrations							
		TPH _g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TPH _d (µg/L)	TPH _{mo} (µg/L)
MW1	8/22/96	7,400	1,200	170	530	490	NS	ND	ND
	2/25/97	5,400	760	110	260	260	ND	2,000	ND
	5/28/97	6,600	1,100	100	290	340	130	2,000	600
MW2	8/22/96	6,300	170	57	370	120	NS	7,400*	2,100*
	2/25/97	8,400	150	35	280	70	ND ¹	90	ND
	5/28/97	6,000	170	35	170	67	150	130	200
MW3	8/22/96	1,300	3	6	8	12	NS	ND	ND
	2/25/97	150	ND	ND	ND	ND	ND	70	ND
	5/28/97	80	ND	ND	0.60	ND	ND	ND	ND

ND Not detectable in concentrations greater than the method detection limit.

NS Not sampled

* Laboratory notes that the concentration for diesel is estimated, due to overlapping fuel patterns Hydrocarbons reported as motor oil does not match the pattern of the motor oil standard.

ND¹ Result using EPA Method 8260 to confirm analytical result.

APPENDIX A
GROUNDWATER COLLECTION LOGS

WATER SAMPLE FIELD DATA SHEET

PROJECT NO: 61137.0002

SAMPLE ID: HMLW-1

PURGED BY: Jamal/Hus

CLIENT NAME: HAUSAUER

SAMPLED BY: Jamal

LOCATION: OAKLAND

TYPE: Ground Water Surface Water Treatment Effluent Other

CASING DIAMETER (inches): 2 3 4 4.5 6 Other

CASING ELEVATION (feet/MSL): <u> </u>	VOLUME IN CASING (gal.): <u>1.93</u>
DEPTH TO WATER (feet): <u>7.65</u>	CALCULATED PURGE (gal.): <u>8</u>
DEPTH OF WELL (feet): <u>19.49</u>	ACTUAL PURGE VOL (gal.): <u>5 gal</u> <i>(WELL WENT DRY)</i>

DATE PURGED: 5/28/97 Start (2400 Hr) End (2400 Hr)

DATE SAMPLED: 5/28/97 Start (2400 Hr) End (2400 Hr)

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, X-DUP-1):

TIME (2400 Hr)	VOLUME (gal)	pH (units)	FIELD MEASUREMENTS				TURBIDITY (visual)
			E.C. (µmhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR (visual)		
<u>10:25</u>	<u>0</u>	<u>7.8</u>	<u>7.58 x 10⁻³</u>	<u>74.4</u>	<u>Cloudy</u>	<u>MOD</u>	
<u> </u>	<u>2</u>	<u>7.8</u>	<u>.81 x 10⁻³</u>	<u>70.6</u>	<u>Cloudy</u>	<u>light</u>	
<u> </u>	<u>4</u>	<u>7.7</u>	<u>.81 x 10⁻³</u>	<u>70.4</u>	<u>clear</u>	<u>trace</u>	
<u> </u>	<u>6</u>	<u> </u>	<u> </u>	<u> </u>	<i>(WELL WENT DRY @ 5 gal)</i>		
<u> </u>	<u>8</u>	<u> </u>	<u> </u>	<u> </u>			

shouldnt these be 10 + 3 ?

D. O. (ppm): COLOR, COBALT (0 - 100):
 ODOR: yes TURBIDITY, NTU (0 - 200):

PURGING EQUIPMENT

2" Bladder Pump Bailor (Teflon®)

Centrifugal Pump Bailor (PVC)

Submersible Pump Bailor (Stainless Steel)

Well Wizard™ Dedicated

Other:

SAMPLING EQUIPMENT

2" Bladder Pump Bailor (Teflon®) *PVC*

DOL Sampler Bailor (Stainless Steel)

Dipper Submersible Pump

Well Wizard™ Dedicated

Other:

WELL INTEGRITY good LOCK #

REMARKS: SAMPLED WHEN DTW = 7.91'

WATER SAMPLE FIELD DATA SHEET

PROJECT NO: 61137.0002 SAMPLE ID: 4M41-2
 PURGED BY: Jamal/Lars CLIENT NAME: HAUSAUER
 SAMPLED BY: Jamal LOCATION: BAKELAND

TYPE: Ground Water Surface Water _____ Treatment Effluent _____ Other _____
 CASING DIAMETER (inches): 2 3 _____ 4 _____ 4.5 _____ 6 _____ Other _____

CASING ELEVATION (feet/MSL): VOLUME IN CASING (gal.): 1.65
 DEPTH TO WATER (feet): 7.65 CALCULATED PURGE (gal.): 6.5
 DEPTH OF WELL (feet): 17.78 ACTUAL PURGE VOL (gal.): 7

DATE PURGED: 5/28/97 Start (2400 Hr) End (2400 Hr)
 DATE SAMPLED: 5/28/97 Start (2400 Hr) End (2400 Hr)

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, X-DUP-1): _____

FIELD MEASUREMENTS						
TIME (2400 Hr)	VOLUME (gal.)	pH (units)	E.C. ($\mu\text{mhos/cm@ } 25^{\circ}\text{C}$)	TEMPERATURE ($^{\circ}\text{F}$)	COLOR (visual)	TURBIDITY (visual)
<u>10:40</u>	<u>0</u>	<u>7.8</u>	<u>$.50 \times 10^{-3}$</u>	<u>70.5</u>	<u>Cloudy</u>	<u>Light</u>
_____	<u>3</u>	<u>7.9</u>	<u>$.50 \times 10^{-3}$</u>	<u>70.1</u>	<u>clear</u>	<u>TRACE</u>
_____	<u>4</u>	<u>7.8</u>	<u>$.49 \times 10^{-3}$</u>	<u>69.6</u>	<u>clear</u>	<u>TRACE</u>
_____	<u>5</u>	<u>7.8</u>	<u>$.55 \times 10^{-3}$</u>	<u>69.4</u>	<u>clear</u>	<u>TRACE</u>
_____	<u>6</u>	<u>7.8</u>	<u>$.48 \times 10^{-3}$</u>	<u>69.4</u>	<u>clear</u>	<u>TRACE</u>

D. O. (ppm): _____ COLOR, COBALT (0 - 100): _____
 ODOR: YES TURBIDITY, NTU (0 - 200): _____

Clear
 Cloudy
 Yellow
 Brown
 Heavy
 Moderate
 Light
 Trace

PURGING EQUIPMENT

2" Bladder Pump Bailor (Teflon®)
 Centrifugal Pump Bailor (PVC)
 Submersible Pump Bailor (Stainless Steel)
 Well Wizard™ Dedicated
 Other: _____

SAMPLING EQUIPMENT

2" Bladder Pump Bailor (Teflon®) PVC
 DDL Sampler Bailor (Stainless Steel)
 Dipper Submersible Pump
 Well Wizard™ Dedicated
 Other: _____

WELL INTEGRITY: good LOCK # _____

REMARKS: SAMPLED WITHIN DTW = 7.6'

SIGNATURE: Jamal Page 1 of 1

APPENDIX B

SUMMARY OF FIELD PROCEDURES

SUMMARY OF FIELD PROCEDURES

The procedures that were used to conduct groundwater monitoring are as follows:

Groundwater Monitoring

- o Measurements of depth to groundwater were made from the designated locations on the top of the casings of all wells within as short a time span as feasible, and prior to the initiation of other monitoring activities.
- o A disposable, dedicated bailer was used to purge and obtain a sample of groundwater from the uppermost portion of the well to allow for observations of a sheen or floating product.
- o Each well was purged a minimum of four to five casing volumes of water, to the extent feasible. Water temperature, pH, specific conductivity, and dissolved oxygen of extracted groundwater were measured. Purging was generally continued until successive measurements of these parameters stabilized to the extent that water being purged was judged similar to the water bearing formation, or until the well was purged dry.
- o Following the purging of a minimum of four to five casing volumes of water, or recovery to 80% of the original groundwater level if the well was purged dry, groundwater samples were collected within each of the monitoring wells;
- o Water samples and one trip blank for each 10 samples collected or for each day of sampling, were placed into laboratory-provided containers appropriate for the respective analyses to be performed, labeled, and stored on ice in an insulated chest pending delivery to the laboratory for analysis.
- o Chain-of-Custody procedures were used to document sample handling and transport from the time of sample collection to delivery within 24 hours of sampling to a State-certified hazardous waste laboratory for analysis.
- o Purge water recovered from the monitoring wells was stored on-site in labeled 55-gallon drums. (Disposal of the purgewater in accordance with current regulatory guidelines, based on the laboratory results, is the responsibility of the client).

APPENDIX C

LABORATORY ANALYTICAL RESULTS

American Environmental Network

Certificate of Analysis

DOHS Certification: 1172

AIHA Accreditation: 11134

PAGE 1

ATC ENVIRONMENTAL INC.
2380C QUME DR.
SAN JOSE, CA 95131

REPORT DATE: 06/10/97

DATE(S) SAMPLED: 05/28/97

DATE RECEIVED: 05/28/97

ATTN: BILL THEYSKENS
CLIENT PROJ. ID: 61137.0002
CLIENT PROJ. NAME: HAUSAVER

AEN WORK ORDER: 9705339

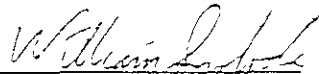
PROJECT SUMMARY:

On May 28, 1997, this laboratory received 3 water sample(s).

Client requested sample(s) be analyzed for chemical parameters. Results of analysis are summarized on the following page(s). Please see quality control report for a summary of QC data pertaining to this project.

Samples will be stored for 30 days after completion of analysis, then disposed of in accordance with State and Federal regulations. Samples may be archived by prior arrangement.

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


Larry Klein
Laboratory Director

ATC ENVIRONMENTAL INC.

SAMPLE ID: HMW-1
 AEN LAB NO: 9705339-01
 AEN WORK ORDER: 9705339
 CLIENT PROJ. ID: 61137.0002

DATE SAMPLED: 05/28/97
 DATE RECEIVED: 05/28/97
 REPORT DATE: 06/10/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	1,100 *	5	ug/L	06/05/97
Toluene	108-88-3	100 *	5	ug/L	06/05/97
Ethylbenzene	100-41-4	290 *	5	ug/L	06/05/97
Xylenes, Total	1330-20-7	340 *	20	ug/L	06/05/97
Purgeable HCs as Gasoline	5030/GCFID	6.6 *	0.5	mg/L	06/05/97
Methyl t-Butyl Ether	1634-04-4	130 *	50	ug/L	06/05/97
#Extraction for TPH	EPA 3510	-		Extrn Date	05/29/97
TPH as Diesel	GC-FID	2.0 *	0.05	mg/L	06/02/97
TPH as Oil	GC-FID	0.6 *	0.2	mg/L	06/02/97

RLs elevated for gas/BTEX/MTBE due to high levels of target compounds. Sample run dilute. MTBE included in gasoline result.

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

ATC ENVIRONMENTAL INC.

SAMPLE ID: HMW-2
 AEN LAB NO: 9705339-02
 AEN WORK ORDER: 9705339
 CLIENT PROJ. ID: 61137.0002

DATE SAMPLED: 05/28/97
 DATE RECEIVED: 05/28/97
 REPORT DATE: 06/10/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	170 *	5 ug/L		06/04/97
Toluene	108-88-3	35 *	5 ug/L		06/04/97
Ethylbenzene	100-41-4	170 *	5 ug/L		06/04/97
Xylenes, Total	1330-20-7	67 *	20 ug/L		06/04/97
Purgeable HCs as Gasoline	5030/GCFID	6.0 *	0.5 mg/L		06/04/97
Methyl t-Butyl Ether	1634-04-4	150 *	50 ug/L		06/04/97
#Extraction for TPH	EPA 3510	-		Extrn Date	05/29/97
TPH as Diesel	GC-FID	0.13 *	0.05 mg/L		06/02/97
TPH as Oil	GC-FID	ND	0.2 mg/L		06/02/97

RLs elevated for gas/BTEX/MTBE due to high levels of target compounds. Sample run dilute. MTBE included in gasoline result.

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

ATC ENVIRONMENTAL INC.

SAMPLE ID: HMW-3
 AEN LAB NO: 9705339-03
 AEN WORK ORDER: 9705339
 CLIENT PROJ. ID: 61137.0002

DATE SAMPLED: 05/28/97
 DATE RECEIVED: 05/28/97
 REPORT DATE: 06/10/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	ND	0.5	ug/L	06/05/97
Toluene	108-88-3	ND	0.5	ug/L	06/05/97
Ethylbenzene	100-41-4	0.6 *	0.5	ug/L	06/05/97
Xylenes, Total	1330-20-7	ND	2	ug/L	06/05/97
Purgeable HCs as Gasoline	5030/GCFID	0.08 *	0.05	mg/L	06/05/97
Methyl t-Butyl Ether	1634-04-4	ND	5	ug/L	06/05/97
#Extraction for TPH	EPA 3510	-		Extrn Date	05/29/97
TPH as Diesel	GC-FID	ND	0.05	mg/L	06/02/97
TPH as Oil	GC-FID	ND	0.2	mg/L	06/02/97

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

AEN (CALIFORNIA)
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9705339

CLIENT PROJECT ID: 61137.0002

Quality Control Summary

Laboratory control sample recovery for EPA 3510 GCFID (TPH extractables) was outside laboratory control limits. Recoveries for matrix spike and matrix spike duplicate were both within established limits and sample results are reported without further qualification.

All other laboratory quality control parameters were found to be within established limits.

Definitions

Laboratory Control Sample (LCS)/Method Spike(s): Control samples of known composition. LCS and Method Spike data are used to validate batch analytical results.

Matrix Spike(s): Aliquot of a sample (aqueous or solid) with added quantities of specific compounds and subjected to the entire analytical procedure. Matrix spike and matrix spike duplicate QC data are advisory.

Method Blank: An analytical control consisting of all reagents, internal standards, and surrogate standards carried through the entire analytical process. Used to monitor laboratory background and reagent contamination.

Not Detected (ND): Not detected at or above the reporting limit.

Relative Percent Difference (RPD): An indication of method precision based on duplicate analysis.

Reporting Limit (RL): The lowest concentration routinely determined during laboratory operations. The RL is generally 1 to 10 times the Method Detection Limit (MDL). Reporting limits are matrix, method, and analyte dependent and take into account any dilutions performed as part of the analysis.

Surrogates: Organic compounds which are similar to analytes of interest in chemical behavior, but are not found in environmental samples. Surrogates are added to all blanks, calibration and check standards, samples, and spiked samples. Surrogate recovery is monitored as an indication of acceptable sample preparation and instrumental performance.

0: Surrogates diluted out.

#: Indicates result outside of established laboratory QC limits.

QUALITY CONTROL DATA

METHOD: EPA 3510 GCFID

AEN JOB NO: 9705339
 DATE EXTRACTED: 05/29/97
 INSTRUMENT: C
 MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery n-Pentacosane
06/02/97	HMW-1	01	122
06/02/97	HMW-2	02	95
06/02/97	HMW-3	03	100
QC Limits:			65-125

DATE EXTRACTED: 05/29/97
 DATE ANALYZED: 05/30/97
 SAMPLE SPIKED: 9705102-06
 INSTRUMENT: C

Matrix Spike Recovery Summary

Analyte	Spike Added (mg/L)	Percent Recovery	RPD	QC Limits	
				Percent Recovery	RPD
Diesel	1.00	68	2	60-110	15

Daily method blanks for all associated analytical runs showed no contamination at or above the reporting limit.

QUALITY CONTROL DATA

METHOD: EPA 8020. 5030 GCFID

AEN JOB NO: 9705339
 INSTRUMENT: H
 MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery Fluorobenzene
06/05/97	HMW-1	01	106
06/04/97	HMW-2	02	93
06/05/97	HMW-3	03	101
QC Limits:			70-130

DATE ANALYZED: 06/04/97
 SAMPLE SPIKED: 9706339-03
 INSTRUMENT: H

Matrix Spike Recovery Summary

Analyte	Spike Added (ug/L)	Percent Recovery	RPD	QC Limits	
				Percent Recovery	RPD
Benzene	16.7	100	2	85-109	17
Toluene	59.3	98	1	87-111	16
Hydrocarbons as Gasoline	500	106	1	66-117	19

Daily method blanks for all associated analytical runs showed no contamination at or above the reporting limit.

*** END OF REPORT ***

ATC ENVIRONMENTAL INC.

Chain of Custody

9705339

2380 Gume Drive, Suite C
 San Jose, CA 95131
 Tel: (408) 474-0280
 Fax: (408) 434-6662

Project Name Hau Souer - 3927 E. 14th St., Oakland										TPH as gas/BTEX, EPA 815M	TPH as diesel, EPA 8015M	VOCs, EPA 8010	VOCs, EPA 8240	VOCs, EPA 8020	VOCs, EPA 8010/8020	SVOCs, EPA 8270	TRPH, SM 5520F	TOG, SM 5520B	Title 22 Metals, EPA	PP (13) Metals, EPA	Pesticides Only, EPA 8080	TPH in/diesel (8015M)	Turn Around Time	
Project Number 61137.0002																								Standard 5 to 10 Business Days <input checked="" type="checkbox"/>
ATC Environmental Inc. Contact Bill Theyskens																								
Laboratory Name AEN																								
Sample Number	Location	Date	Time	Matrix			Preservative	No. of Containers	Type of Containers	TPH as gas/BTEX, EPA 815M	TPH as diesel, EPA 8015M	VOCs, EPA 8010	VOCs, EPA 8240	VOCs, EPA 8020	VOCs, EPA 8010/8020	SVOCs, EPA 8270	TRPH, SM 5520F	TOG, SM 5520B	Title 22 Metals, EPA	PP (13) Metals, EPA	Pesticides Only, EPA 8080	TPH in/diesel (8015M)	Remarks	
				Soil	Water	Other																		
HMW-1	111W-1	5/28/97	10:45		X		HCl	2	VOAS	X														
HMW-1	111W-1	↓	10:45		X		-	1	1 liter amber	X														
HMW-2	111W-2		10:30		X		HCl	2	VOAS	X														
HMW-2	111W-2		10:30		X		-	1	1 liter amber	X														
HMW-3	111W-3		11:00		X		HCl	2	VOAS	X														
HMW-3	111W-3		11:00		X		-	1	1 liter amber	X														
Relinquished by sampler Susan Wachler			Date	5/28/97	Time	2:30	Received by William J. [Signature]																	
Relinquished by William J. [Signature]			Date	5/28/97	Time	3:45	Received by Rich Belmont			5-28-97	15:45													
Relinquished by Rich Belmont			Date	5-28-97	Time	16:50	Received by laboratory Teresa [Signature]			Date	5/28/97	Time	16:50											