AGI
TECHNOLOGIES

Quarterly Groundwater Monitoring
19984 Meekland Avenue
Hayward, California

September 19, 1994

Prepared for :

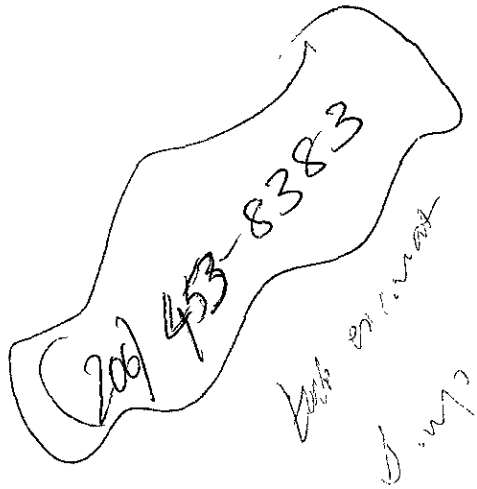
Mr. Jerry Harbert
20150 Rancho Bella Vista
Saratoga, California 95070

AGI Project No. 15,833.002.04

AGI TECHNOLOGIES

A Report Prepared For

Mr. Jerry Harbert
20150 Rancho Bella Vista
Saratoga, California 95070



QUARTERLY GROUNDWATER MONITORING
19984 MEEKLAND AVENUE
HAYWARD, CALIFORNIA

AGI Project No. 15,833.002.04

by

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September 19, 1994

AGI TECHNOLOGIES

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INTRODUCTION

GENERAL

This Report describes the actions conducted during quarterly groundwater monitoring performed by AGI Technologies (AGI), on behalf of Mr. Jerry Harbert (Formerly Harbert Transportation), at the site located at 19984 Meekland Avenue in Hayward, California. Our scope of services consisted of purging and sampling ten groundwater monitoring wells; monitoring groundwater levels within the monitoring wells; analyzing groundwater samples for petroleum hydrocarbons, chlorinated solvents, and DDT (one sample); determining the direction of groundwater flow; and reporting the results.

BACKGROUND

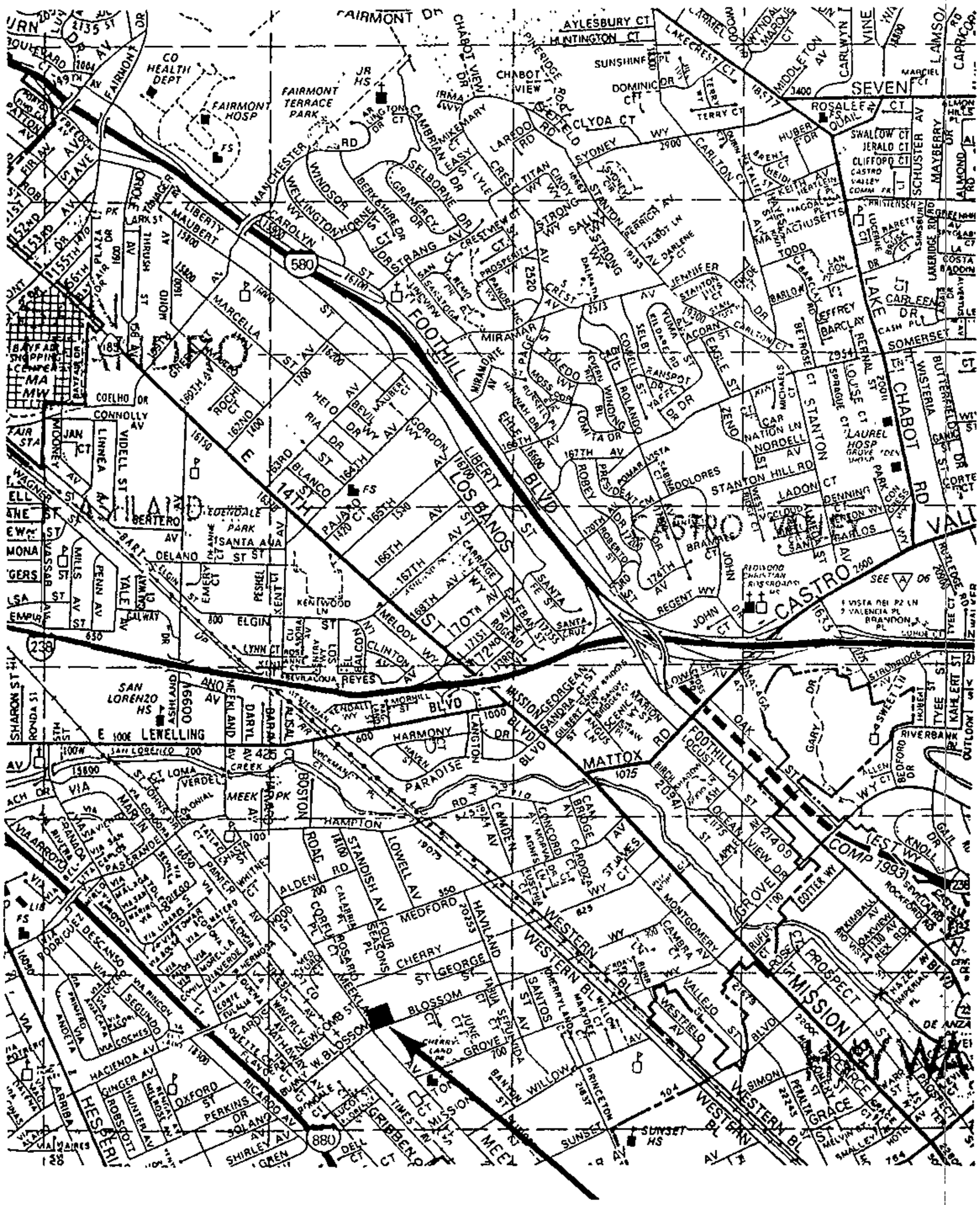
Site Setting

The site was owned by Mr. Jerry Harbert and is currently unoccupied. The relatively level site is located at the northeast corner of Meekland Avenue and Blossom Way, in an unincorporated area of Alameda County, near the City of Hayward, as shown on Figure 1, Vicinity Map, and Figure 2, Site Plan. The site is fenced on all sides, and no above ground structures are present. The site surface is paved with concrete and asphaltic concrete, except where previous excavations were performed to remove tanks and associated piping.

Land use in the area includes residential and commercial properties. The site is surrounded by single-family homes and multi-family complexes. The site is bounded by residential property to the east and north, Blossom Way to the south, and Meekland Avenue to the west. Commercial businesses located at the other three corners of the Meekland/Blossom intersection include a liquor store, an auto repair shop, and a strip center including a grocery store, hair salon, and comics/trading shop. Both the liquor store and auto repair shop sites were previously occupied by gas stations. We understand that fuel tanks have been removed from both locations.

Geological Setting

The site is underlain by fine grained alluvial fan and flood plain deposits derived from the Diablo Range located approximately two miles to the east. Three to four feet of fill overlies native soils at the site. The fill consists of clayey and sandy gravel. Underlying native deposits consist of silty clay to clayey silt, with minor sand and gravel. Thin (three to four inches) lenses of silty sand and gravel were encountered during installation of 10 on-site and



Site

0 4260
Scale in Feet

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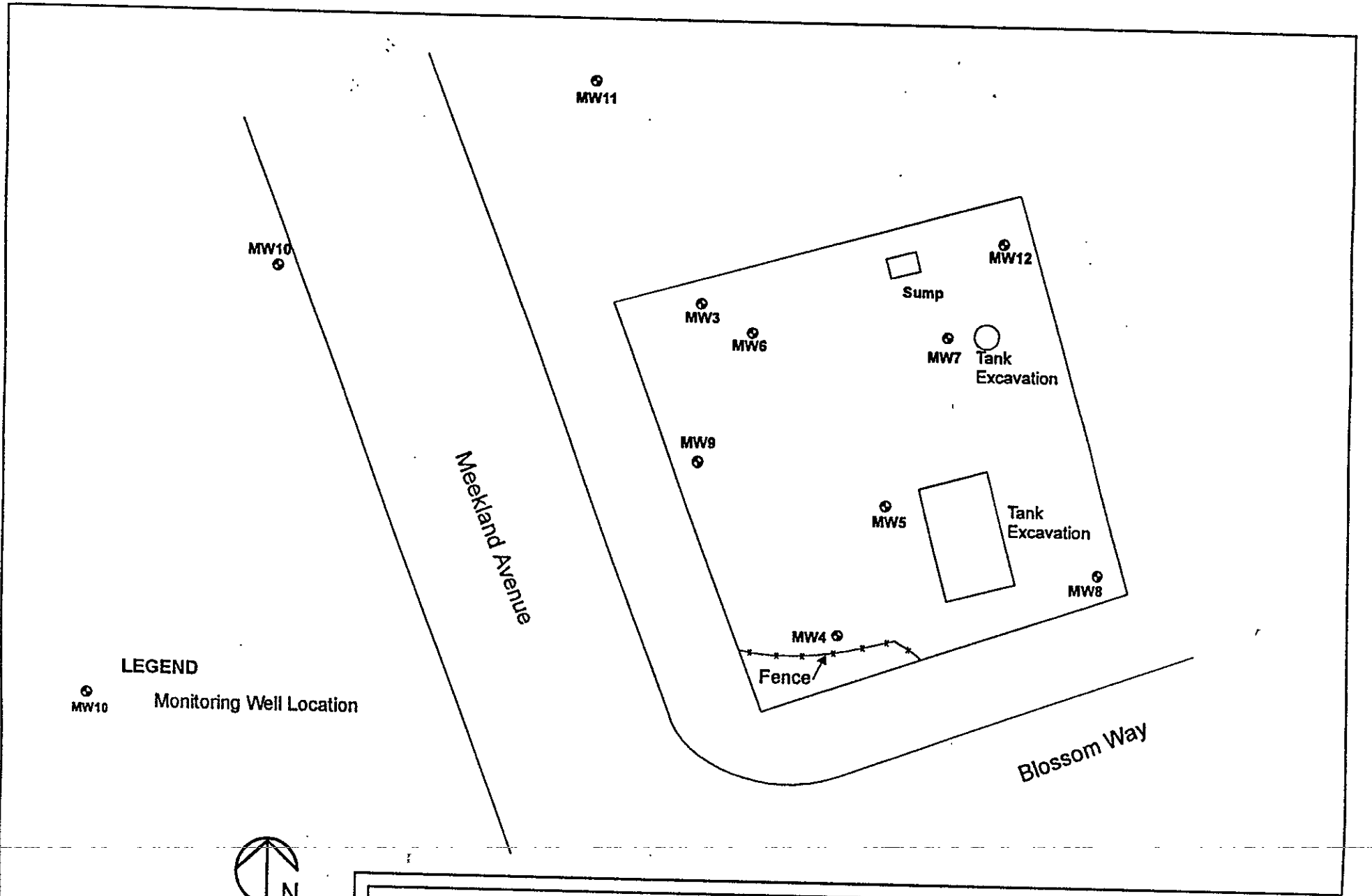
Vicinity Map

Harbert/Meekland Avenue
Hayward, California

FIGURE
1

PROJECT NO.	DRAWN	DATE	APPROVED	REVISED	DATE
15,833.002.04	SES	15 August 94	DTH		



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Site Plan

Harbert/Meekland Avenue
Hayward, California

FIGURE 2

PROJECT NO.	DRAWN	DATE	APPROVED	REVISED	DATE
833002sp.cdr	15,833.002	SES	18 August 94		

2 off-site groundwater monitoring wells. Currently, there are eight on-site groundwater monitoring wells, MW1 and MW2 were abandoned by others during previous work conducted at the site. The clay and silt deposits reportedly extend to approximately 45 feet below the ground surface (bgs), which was the maximum depth explored. The deposits were reported to be homogeneous with regard to hydrologic considerations. There are currently eight on-site and two off-site groundwater monitoring wells that were installed during previous investigations. The groundwater gradient direction at the site has historically been reported to be to the northwest, at a depth of approximately 28 feet bgs.

Historical Use

During the 1940's and 1950's, the subject site operated as a family owned service station. Later, Harbert Transportation purchased the site and operated it as a vehicle fueling and maintenance facility. Durham Transportation used the site for vehicle parking from 1986 to 1989. In August 1989, three (one 4,000-gallon, one 5,000-gallon, and one 6,000-gallon) gasoline underground storage tanks (USTs), and one 500-gallon waste oil UST were removed from the site.

Previous Assessments

Previous site assessment results indicate that petroleum hydrocarbons as gasoline, and gasoline constituents benzene, ethlybenzene, toluene, and total xylenes (BETX) have been detected in soil samples collected from 12 to 28 feet bgs in the area of the three former USTs. A soil vapor survey of the site indicated gasoline and BETX were present from 20 to 28 feet bgs throughout most of the site. Analyses of groundwater samples from the on-site and off-site wells indicate the presence of gasoline, BETX, and low levels of halogenated volatile organic compounds (VOCs). The lateral extent of impacted groundwater was not been delineated during the previous assessments.

PURPOSE AND SCOPE OF SERVICES

The purpose of our work was to perform groundwater monitoring of the eight on-site and two off-site monitoring wells. Our specific scope of services include the following tasks:

- Collecting groundwater elevations from all ten monitoring wells.
- Purging each monitoring well prior to sampling.
- Collecting and submitting groundwater samples for chemical testing.
- Surveying the top of casing at each monitoring well.
- Evaluating the hydrogeologic and chemical data generated during field activities.
- Preparing this report.

GROUNDWATER MONITORING

Elevation Survey

On August 11, 1994, AGI performed a level survey to determine the top of well casing elevations of the existing wells (using an assumed elevation of 100 feet above Mean Sea Level for a selected datum, located at the top of casing of monitoring well MW3 located at the northwest corner of the site, figure 2). Groundwater elevation data are presented in Table 1. Based upon the data, the groundwater flow gradient across the site is to the northwest. Figure 3, Gradient Map, indicates the gradient direction at the site, based upon current data.

Monitoring and Sample Collection

On July 28 and 29, 1994, AGI measured the depth to groundwater beneath the top of casing of the 10 existing wells, to an accuracy of 0.01 feet, and checked for the presence of free petroleum product (FP). No FP was encountered during this monitoring event. Depth to groundwater ranged from 25.81 to 27.54 feet bgs. Measurements were used to calculate the minimum purge volume for each well, and to calculate groundwater elevations shown on Figure 3. Based upon these calculations, we identified a slightly anomalous low groundwater elevation at MW5. Historical groundwater elevation data collected by others indicate previous high and low anomalous conditions have occurred. The effects of the current anomalous elevation on-site groundwater are not shown on Figure 3. However, even considering the anomaly at MW5 the general direction of groundwater flow remains to the northwest.

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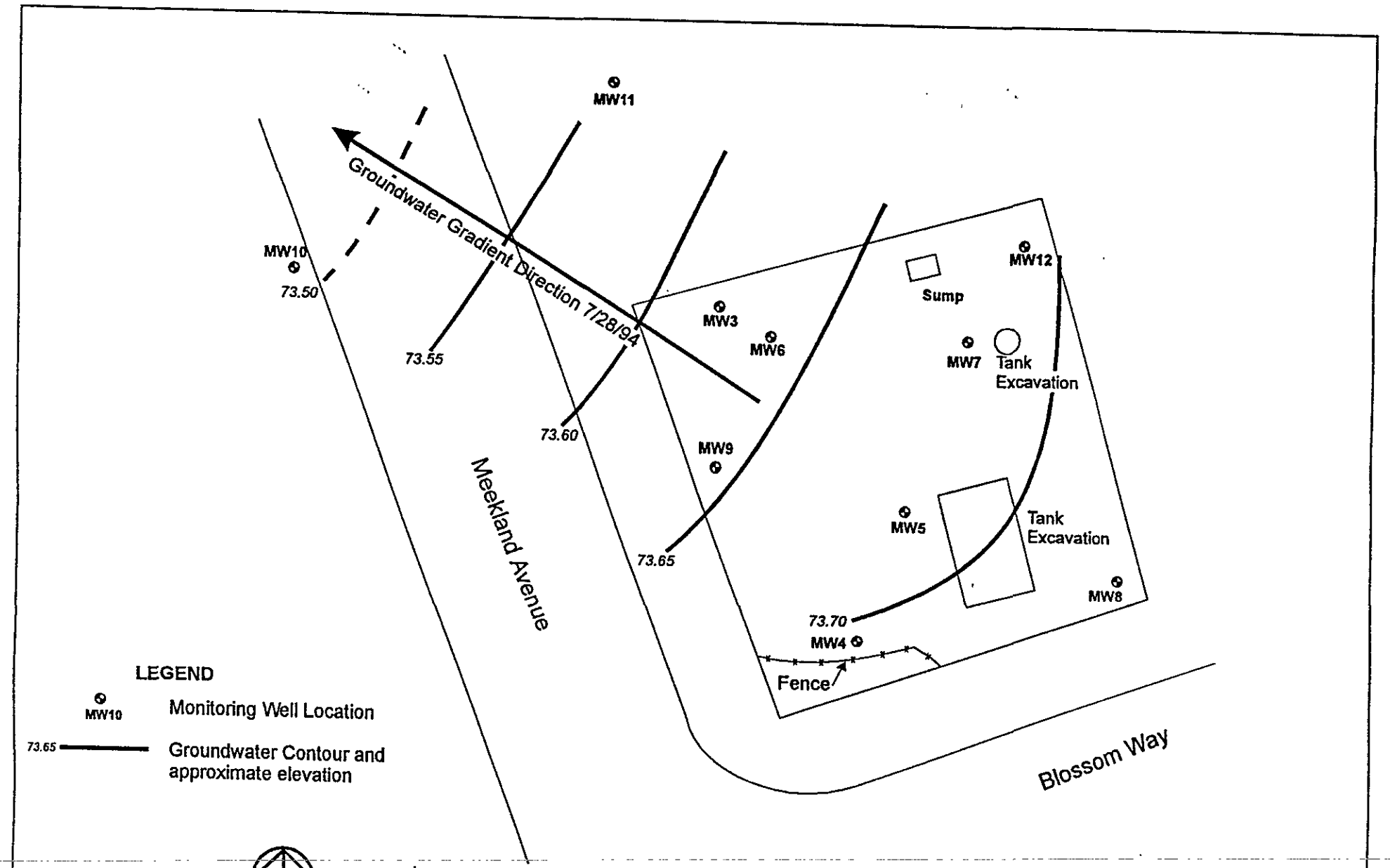
Table 1
Groundwater Elevation Monitoring Data
19984 Meekland Avenue
Hayward, California

Monitoring Well ID	Date Monitored	Groundwater Elevation Monitoring Data			
		Field Measurement Data			
		Depth to Water (feet)	Reference	Reference Elevation (feet above benchmark*)	Groundwater Elevation (feet)
MW3	07/28/94	26.37	TOC	100.00	73.63
MW4	07/28/94	26.54	TOC	100.27	73.73
MW5	07/28/94	27.00	TOC	100.59	73.59
MW6	07/28/94	26.94	TOC	100.57	73.63
MW7	07/28/94	27.54	TOC	101.22	73.68
MW8	07/28/94	26.97	TOC	100.72	73.75
MW9	07/28/94	26.12	TOC	99.77	73.65
MW10	07/28/94	25.81	TOC	99.29	73.48
MW11	07/28/94	26.19	TOC	99.75	73.56
MW12	07/28/94	27.34	TOC	101.03	73.69

Notes:

* - On-site benchmark (survey mark at top of casing of MW3) with assumed elevation of 100 feet above Mean Sea Level.
TOC - Top of monitoring well casing (at survey mark).



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Contour Map

Harbert/Meekland Avenue
Hayward, California

FIGURE 3

833002sp.cdr	PROJECT NO. 15,833.002	DRAWN SES	DATE 18 August 94	APPROVED DTH	REVISED	DATE

AGI purged the wells using clean, polyethylene bailer until the pH, temperature, and specific conductance of the purged water stabilized. At least three well volumes of water were removed from each well during purging. After purging, we collected groundwater samples from each of the wells using new, clean disposable polyethylene bailers. Groundwater sampling procedures are presented in Appendix A.

Sample Handling

The samples were placed in the appropriate containers for the analytical tests performed. All samples were labeled, sealed, and placed on "blue ice" in a cooler, and kept cool until delivery to the analytical laboratory. Sample handling was documented using Chain-of-Custody records. Copies of Chain-of-Custody records are included in Appendix C.

CHEMICAL ANALYSIS

Analytical Methods

The samples were submitted to Anametrix Laboratories, a California State-certified analytical laboratory, located in San Jose, California. The samples were analyzed for total petroleum hydrocarbons as diesel (TPH-D) and gasoline (TPH-G) using a modified EPA Method 8015; benzene, ethylbenzene, toluene, and total xylenes (BETX) using EPA Method 8020; and chlorinated solvents/halogenated volatile organic compounds (HVOCs) using EPA Method 8010. Samples collected from MW7 were also analyzed for dichlorodiphenyltrichloroethane (DDT) using EPA Method 8080.

Analytical Results

Table 2 presents a summary of analytical results. Results of TPH-D analyses indicate the presence of diesel-range petroleum hydrocarbons in samples collected from all wells except MW4 at concentrations ranging from 0.078 to 2.20 mg/l. However, the laboratory noted the detections of petroleum hydrocarbons in the diesel range, for all samples except MW12, were primarily due to discrete peaks not indicative of diesel fuel, the presence of a lighter petroleum product in the C6-C12 hydrocarbon range (possibly gasoline), or a combination of both.

Results of TPH-G and BETX analyses indicate the presence of gasoline-range petroleum hydrocarbons in samples collected from all wells except MW8 at concentrations ranging from 0.120 to 30.0 mg/l, with BETX components present in the samples with detected TPH-G.

Results of HVOC analyses indicate the presence of 1,2-dichloroethane (DCA) in samples collected from six wells (MW3, MW5, MW6, MW7, MW9, and MW10) at concentrations ranging from 0.0027 to 0.110 milligrams per liter (mg/l). Tetrachloroethene (PCE) was detected in samples from MW7 at 0.0006 mg/l.

Results of DDT analysis for the sample collected from MW7 indicate none was present. AGI's Quality Assurance Report is presented in Appendix B and a copy of the analytical report is presented in Appendix C.

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Table 2
Summary of Chemical Analyses - Groundwater
19984 Meekland Avenue
Hayward, California

Sample ID	Date Sampled	EPA METHOD							
		8015 MODIFIED		8020				8010	8080
		TPH-D (mg/l)	TPH-G (mg/l)	B (mg/l)	E (mg/l)	T (mg/l)	X (mg/l)	HVOCs (mg/l)	DDT (mg/l)
MW3	07/28/94	0.970*	7.70	1.80	0.810	<0.0005	0.600	0.022-DCA	NA
MW4	07/28/94	<0.05	0.120	0.0079	0.0007	0.0011	<0.0005	<0.0005	NA
MW5	07/29/94	2.20*	30.0	9.30	1.10	1.80	2.30	0.110 - DCA	NA
MW6	07/29/94	2.10**	15.0	3.10	1.10	0.071	2.00	0.037 - DCA	NA
MW7	07/29/94	0.530***	2.60	0.470	0.220	<0.0005	0.310	0.0027 - DCA 0.0006 - PCE	<0.0001
MW8	07/28/94	0.078*	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NA
MW9	07/28/94	1.30***	6.00	0.090	0.170	0.027	0.370	0.026 - DCA	NA
MW10	07/28/94	2.00***	6.70	0.099	0.180	0.057	0.430	0.013 - DCA	NA
MW11	07/28/94	0.150*	0.450	0.0062	0.020	0.0011	0.0066	<0.0005	NA
MW12	07/28/94	0.160	0.240	0.0019	0.012	<0.0005	0.0058	<0.0005	NA
Laboratory Reporting Limit		0.05	0.05	0.0005	0.0005	0.0005	0.0005	0.0005	0.0001

Notes:
TPH-D - Total petroleum hydrocarbons quantified as diesel fuel.
TPH-G - Total petroleum hydrocarbons quantified as gasoline.
B - Benzene.
E - Ethylbenzene.
T - Toluene.
X - Total xylenes (o, p, and m isomers).
HVOCs - Halogenated volatile organic compounds.
DCA - 1,2-dichloroethane.
PCE - Tetrachloroethene.
DDT - Dichlorodiphenyltrichloroethane.
NA - Not analyzed.
* - Hydrocarbons quantified as diesel are primarily due to discrete peaks not indicative of diesel fuel.
** - Hydrocarbons quantified as diesel are primarily due to the presence of a lighter petroleum product (C6-C12), possibly gasoline.
*** - Hydrocarbons quantified as diesel are due to the presence of lighter petroleum product (C6-C12) and discrete peaks not indicative of diesel fuel.

CONCLUSIONS AND RECOMMENDATIONS

Results of groundwater level monitoring indicate the depth to groundwater at the site is approximately 26 feet bgs, and the gradient direction is to the northwest. This gradient direction is consistent with previous monitoring results indicating a general northwest direction. The anomalous low elevation at MW5 may be due to differential groundwater flow characteristics, or other unknown factors affecting groundwater at this location. There is currently insufficient data to determine the cause of the low elevation at MW5.

Results of sample analyses indicate the presence of gasoline range hydrocarbons and BETX in all wells except MW8 (the upgradient well), located in the southeast corner of the site. These results indicate the source of on-site contamination is likely the removed USTs. The data also indicate the site as a source for off-site contamination particularly at MW10. The former gas/service stations at the northwest and southwest corners of the Meekland/Blossom intersection may also have contributed to the off-site contamination present. However, there is insufficient data to determine if these former stations have contributed to the contamination. The presence of hydrocarbons in samples collected from the downgradient wells (MW10 and MW11) indicates the extent of contamination from all sources has not been delineated.

Diesel range hydrocarbons were identified in samples collected from nine of the wells. However, with the exception of MW12, the diesel range hydrocarbons reported are attributed to other compounds, possibly including gasoline. Diesel range hydrocarbons were also reported in samples collected from MW8, but are primarily due to discrete peaks not indicative of diesel. The discrete peaks may indicate the presence of an upgradient source of diesel range hydrocarbons.

Results of HVOC analyses indicate the presence of 1,2-dichloroethane (DCA) in samples collected from six wells (MW3, MW5, MW6, MW7, MW9, and MW10) at concentrations ranging from 0.0027 to 0.110 milligrams per liter (mg/l). Tetrachloroethene (PCE) was detected in samples from MW7 at 0.0006 mg/l. The California Maximum Contaminant level is 0.0005 mg/l for DCA and 0.005 for PCE.

No DDT was detected in the sample collect from MW7. Given that no DDT was detected during the current or previous groundwater monitoring events, we recommend that discontinuing DDT analysis of samples collected during subsequent monitoring events.

AGI is currently preparing a work plan to delineate off-site contamination potentially originating from the site.

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DISTRIBUTION

3 Copies	Mr. Jerry R. Harbert 20150 Rancho Bella Vista Saratoga, California 95070
3 Copies	Durham Transportation, Inc. 9171 Capital of Texas Highway North Travis Building, Suite 200 Austin, Texas 78759 Attention: Mr. David Delamontte
1 Copies	Alameda County Health Care Services Agency UST Local Oversight Program 80 Swan Way, Room 200 Oakland, California 94621 Attention: Ms. Julliet Shin

Quality Assurance/Technical Review

by:

William P. Henry

William P. Henry, P.E.
Principal Engineer

DOC:A(Durham):\15833q1.WP5

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APPENDIX A

GROUNDWATER MONITORING PROCEDURES

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APPENDIX A

GROUNDWATER MONITORING PROCEDURES

INTRODUCTION

The following sections describe procedures which are followed during quarterly groundwater monitoring at the site. Site-specific variations may be implemented, with the approval of the project manager, based upon site conditions, client or regulatory agency requirements, or other factors, provided the quality of data collected is not in any way reduced.

GROUNDWATER MONITORING PROCEDURES

Elevation Survey

Following well installation, the top of each well casing was surveyed using an on-site benchmark with an assumed elevation of 100.00 feet. Depth to groundwater from the survey mark at the casing top was measured in each well on June 30, 1994.

Water Level Measurements

Prior to sampling, the depth to groundwater was measured in each monitoring well. Measurements were taken from at the highest point on the top of each well casing and obtained to the nearest hundredth of a foot using an electronic water level meter. Water level measurements were recorded on a separate field sampling record for each well. The total depth of each well was also measured to the nearest one-half foot and recorded on the field sampling record. These measurements used to calculate the minimum purge volume for each well and to prepare the groundwater contour map.

Groundwater Sampling Procedures

Following collection of water level measurement data, each well was purged of a minimum three well casing volumes of water prior to sample collection. During purging, the pH, temperature, and specific conductance of the pump discharge is monitored using a calibrated electronic monitoring device. The well was considered fully purged when the pH, temperature, and specific conductance of the purge water stabilized, or when the well is pumped dry (low-yield wells only). Immediately following purging of each well, samples were collected using a two-inch or four-inch bailer constructed of polyethylene.. The samples were collected using a pre-cleaned new disposable bailers constructed of polyethylene

Samples were collected in appropriate EPA-approved containers based upon the analyses

required. Samples most sensitive to field conditions are collected first, followed by less sensitive samples (in descending order). Following collection, each sample was placed on "Blue Ice" in a chilled cooler prior for transport to the laboratory for analysis.

Following sample collection, all non-disposable sampling equipment was using the following decontamination procedure:

Step 1: Rinse and preclean in potable water.
Step 2: Wash in solution of laboratory-grade nonphosphate-based soap and potable water.
Step 3: Dip rinse in potable water.
Step 4: Rinse with distilled water.

All solutions were renewed between sampling. Scrub brushes and nylon scrubbers were used during all steps. All equipment was air dried, when possible, and held in clean plastic bags between sampling.

Quality Assurance

The following steps were taken, as appropriate, groundwater sampling to assure the quality of samples collected and field data recorded:

- Based upon review of the most recent historical analytical data from each well, a monitoring sequence was determined in order to prevent potential cross-contamination of the monitoring wells. The sequence was determined by the level of contamination in each well, and progressed from least contaminated to most contaminated (MW8 to MW5).

- To assure the accuracy of field parameter measurements, calibration of the pH and specific conductance monitoring devices was performed each day prior to commencing sampling activities. A single-point calibration was used to verify proper function of the specific conductance meter, and a three-point calibration was used to ensure proper pH meter operation. No calibration of the electronic thermometer was required for proper use during groundwater sampling.

- The parameters pH, specific conductance, and temperature were monitored from the purged water. The stabilization variance limits employed during monitoring for these parameters are 0.1 pH units, 10% specific conductance, and one (1) degree Fahrenheit. Readings were taken following removal of one well casing volume and each successive well casing volume.

- A bottom emptying device was used to limit the loss of volatile organic compounds. After the sample was collected, volatile organic analysis (VOA) vials were checked for the presence of headspace. Samples with headspace were emptied and a replacement sample were collected. Each sample was labeled and placed in a chilled cooler for transport to the laboratory.

- Chain-of-custody documentation accompanied all samples collected and submitted

to the laboratory. The original chain-of-custody document remained with the samples until analyzed, and a copy of each is retained in AGI's files. The chain-of-custody indicates the sample identification number as shown on the sample label, number of sample containers, analyses required, date and time of collection, sampler's initials, and the relinquishing and receiving signatures of persons in control of sample handling following collection until delivery to the laboratory.

- Following each day of sampling, field notes and the sampling record were reviewed to ensure the completeness and accuracy of documentation of sampling activities. Review included verification of sample identification numbers, purge volumes, field monitoring parameter stability, and chain-of-custody documentation. Special notations regarding outside factors, such as wind direction, ambient temperature, and fugitive odors, which may affect sample integrity.

- Results of analytical testing were reviewed for accuracy and any anomalies that occur, based upon historical data. The review includes evaluation of results in conjunction with recorded field data and chain-of-custody documentation, comparing current and historical data, and validation of data using chromatograms and associated QA/QC procedures and results supplied by the laboratory.

Containment and Disposal of Purge Water

Purge water removed from the wells during groundwater sampling are contained in 55-gallon DOT-rated drums for later treatment or disposal following receipt of analytical results.

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APPENDIX B

QUALITY ASSURANCE REPORT

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QUALITY ASSURANCE REPORT

PROJECT AND SAMPLE INFORMATION

Project Name:	Durham Transportation
Project No.:	15,833.002
Lab Name:	Inchape Testing Service, Anametrix Laboratories (ITS) - San Jose, CA
Lab Number:	9407279
Sample No.:	MW3, MW4, MW5, MW6, MW7, MW8, MW9, MW10, MW11, MW12
Matrix:	Water

QUALITY ASSURANCE SUMMARY

All data are of known quality and acceptable for use.

ANALYTICAL METHODS

Parameter	Technique	Method
Halogenated Volatile Organics (HVOCs)	GC/HALL	EPA 8010
BETX	GC/PID	EPA 8020
Organochlorine Pesticides/PCBs	GC/ECD	EPA 8080
TPH-Gasoline[b]	GC/FID	DOHS LUFT Manual[a]
TPH-Diesel[c]	GC/FID	DOHS LUFT Manual

a - Leaking Underground Fuel Tank Manual, California Department of Health Services.
b - Total petroleum hydrocarbons as gasoline.
c - Total petroleum hydrocarbons as diesel.

TIMELINESS

Parameter	Date Sampled	Date Extracted	Date Analyzed	Time Until Extraction	Time Until Analysis
HVOCs	07/28/94	NA	08/03/94	NA	6 (14)
BETX	07/28/94	NA	08/05/94	NA	8 (14)
Pesticides/PCBs[d]	07/28/94	08/01/94	08/06/94	4 (7)	5 (40)
TPH-Gasoline	07/28/94	NA	08/05/94	NA	8 (14)
TPH-Diesel	07/28/94	08/01/94	08/04/94	4 (14)	7 (40)

d - Analyzed for sample MW7 only.
NA - Not applicable.
( ) - Numbers in parentheses indicate recommended holding times in days.

QUALITY ASSURANCE REPORT

PROJECT AND SAMPLE INFORMATION

Project Name:	Durham Transportation
Project No.:	15,833.002
Lab Name:	Inchape Testing Service, Anametrix Laboratories (ITS) - San Jose, CA
Lab Number:	9407279
Sample No.:	MW3, MW4, MW5, MW6, MW7, MW8, MW9, MW10, MW11, MW12

TIMELINESS (Continued)

Earliest date of sample collection and latest date of sample analysis used to determine holding time compliance.

All samples were extracted and analyzed within recommended holding times.

FUEL HYDROCARBON CHROMATOGRAMS

TPH-Gasoline: Gasoline range TPH were detected in samples MW3, MW4, MW5, MW6, MW7, MW9, MW10, MW11, and MW12; these detections are consistent with sample chromatograms.

TPH-Diesel: Diesel range TPH were detected in samples MW3, MW5, MW6, MW7, MW8, MW9, MW10, MW11, and MW12. Detections in samples MW3, MW5, MW8, MW11, and MW12 are primarily due to presence of discrete peaks not indicative of TPH-diesel; a lighter petroleum product, possibly gasoline, may be causing the diesel-range detections in samples MW7, MW9, and MW10.

FIELD QUALITY CONTROL SAMPLES

Field Blank:	None collected.
Field Duplicates:	None collected.
Rinsate:	None collected.
Trip Blank:	None collected.

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QUALITY ASSURANCE REPORT

PROJECT AND SAMPLE INFORMATION

Project Name:	Durham Transportation
Project No.:	15,833.002
Lab Name:	Inchape Testing Service, Anametrix Laboratories (ITS) - San Jose, CA
Lab Number:	9407279
Sample No.:	MW3, MW4, MW5, MW6, MW7, MW8, MW9, MW10, MW11, MW12

LAB QUALITY CONTROL SAMPLES

Method Blank: No analytes were detected at or above their method reporting limits (MRLs) by the following methods:

EPA 8020
EPA 8080
TPH-Gasoline
TPH-Diesel

EPA 8010: Methylene chloride was detected in one method blank (VBLKB2) at 1.1 µg/L and was not detected in any associated samples; sample results are considered not affected by the blank detection.

Matrix Spikes: Matrix spike and matrix spike duplicate percent recoveries and relative percent differences (RPDs) are within ITS's control limit criteria for EPA 8010.

Duplicates: Duplicate sample analyses were not performed for any methods documented in this report.

Blank Spikes: Blank spike sample analyses were not performed for any methods documented in this report.

Lab Control Sample: Laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) percent recoveries and RPDs are within ITS's control limit criteria for EPA 8020 and TPH-Gasoline. LCS percent recoveries are within ITS's control limit criteria for EPA 8010.

EPA 8080: Percent recoveries of some LCS and LCSD compounds exceeded ITS's upper control limits, indicating associated sample results may bias high. However, analytes were not detected at or above their MRLs in the sample (MW7); results are considered acceptable.

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QUALITY ASSURANCE REPORT

PROJECT AND SAMPLE INFORMATION

Project Name:	Durham Transportation
Project No.:	15,833.002
Lab Name:	Inchape Testing Service, Anametrix Laboratories (ITS) - San Jose, CA
Lab Number:	9407279
Sample No.:	MW3, MW4, MW5, MW6, MW7, MW8, MW9, MW10, MW11, MW12

Surrogates: All surrogate spike percent recoveries are within ITS's control limit criteria for the following methods:

EPA 8010
EPA 8020
EPA 8080
TPH-Gasoline
TPH-Diesel

SIGNATURES

Prepared by Brigita Lini Date 08/22/1994

Checked by Katherine Bourbonais Date 8/22/94

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APPENDIX C

ANALYTICAL REPORTS

AGI TECHNOLOGIES

APPENDIX C

ANALYTICAL REPORTS

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. DAN HENNINGER
APPLIED GEOTECHNOLOGY - OAKLAND
827 BROADWAY, SUITE 210
OAKLAND, CA 94607

Workorder # : 9407279
Date Received : 07/29/94
Project ID : 15833.002
Purchase Order: N/A
Department : GC
Sub-Department: VOA

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9407279- 1	MW3	WATER	07/28/94	8010
9407279- 2	MW4	WATER	07/28/94	8010
9407279- 3	MW5	WATER	07/29/94	8010
9407279- 4	MW6	WATER	07/29/94	8010
9407279- 5	MW7	WATER	07/29/94	8010
9407279- 6	MW8	WATER	07/28/94	8010
9407279- 7	MW9	WATER	07/28/94	8010
9407279- 8	MW10	WATER	07/28/94	8010
9407279- 9	MW11	WATER	07/28/94	8010
9407279-10	MW12	WATER	07/28/94	8010

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. DAN HENNINGER
APPLIED GEOTECHNOLOGY - OAKLAND
827 BROADWAY, SUITE 210
OAKLAND, CA 94607

Workorder # : 9407279
Date Received : 07/29/94
Project ID : 15833.002
Purchase Order: N/A
Department : GC
Sub-Department: VOA

QA/QC SUMMARY :

- The amount of methylene chloride reported in blank BG0302I1 is within normal laboratory background levels.

Taghi Memarzadeh 8/3/94
Department Supervisor Date

Kamel G. Kamel 813194
Chemist Date

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
ANAMETRIX, INC. (408)432-8192

Project ID	: 15833.00	Anametrix ID	: 9407279-01
Sample ID	: MW3	Analyst	: KK
Matrix	: WATER	Supervisor	: TM
Date Sampled	: 7/28/94		
Date Analyzed	: 8/ 2/94	Dilution Factor	: 1.0
Instrument ID	: HP24	Conc. Units	: ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8	Dichlorodifluoromethane	1.0	ND	U
74-87-3	Chloromethane	1.0	ND	U
75-01-4	Vinyl chloride	.50	ND	U
74-83-9	Bromomethane	.50	ND	U
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50	ND	U
76-13-1	Trichlorotrifluoroethane	.50	ND	U
75-35-4	1,1-Dichloroethene	.50	ND	U
75-09-2	Methylene chloride	1.0	ND	U
156-60-5	trans-1,2-Dichloroethene	.50	ND	U
75-34-3	1,1-Dichloroethane	.50	ND	U
156-59-2	cis-1,2-Dichloroethene	.50	ND	U
67-66-3	Chloroform	.50	ND	U
71-55-6	1,1,1-Trichloroethane	.50	ND	U
56-23-5	Carbon tetrachloride	.50	ND	U
107-06-2	1,2-Dichloroethane	.50	22.	
79-01-6	Trichloroethene	.50	ND	U
78-87-5	1,2-Dichloropropane	.50	ND	U
75-27-4	Bromodichloromethane	.50	ND	U
110-75-8	2-Chloroethylvinylether	1.0	ND	U
10061-01-5	cis-1,3-Dichloropropene	.50	ND	U
10061-02-6	trans-1,3-Dichloropropene	.50	ND	U
79-00-5	1,1,2-Trichloroethane	.50	ND	U
127-18-4	Tetrachloroethene	.50	ND	U
124-48-1	Dibromochloromethane	.50	ND	U
108-90-7	Chlorobenzene	.50	ND	U
75-25-2	Bromoform	.50	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	.50	ND	U
541-73-1	1,3-Dichlorobenzene	.50	ND	U
106-46-7	1,4-Dichlorobenzene	.50	ND	U
95-50-1	1,2-Dichlorobenzene	.50	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
ANAMETRIX, INC. (408)432-8192

Project ID	: 15833.00	Anametrix ID	: 9407279-02
Sample ID	: MW4	Analyst	:
Matrix	: WATER	Supervisor	: TM KK
Date Sampled	: 7/28/94		
Date Analyzed	: 8/ 2/94	Dilution Factor	: 1.0
Instrument ID	: HP24	Conc. Units	: ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8	Dichlorodifluoromethane	1.0	ND	U
74-87-3	Chloromethane	1.0	ND	U
75-01-4	Vinyl chloride	.50	ND	U
74-83-9	Bromomethane	.50	ND	U
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50	ND	U
76-13-1	Trichlorotrifluoroethane	.50	ND	U
75-35-4	1,1-Dichloroethene	.50	ND	U
75-09-2	Methylene chloride	1.0	ND	U
156-60-5	trans-1,2-Dichloroethene	.50	ND	U
75-34-3	1,1-Dichloroethane	.50	ND	U
156-59-2	cis-1,2-Dichloroethene	.50	ND	U
67-66-3	Chloroform	.50	ND	U
71-55-6	1,1,1-Trichloroethane	.50	ND	U
56-23-5	Carbon tetrachloride	.50	ND	U
107-06-2	1,2-Dichloroethane	.50	ND	U
79-01-6	Trichloroethene	.50	ND	U
78-87-5	1,2-Dichloropropane	.50	ND	U
75-27-4	Bromodichloromethane	.50	ND	U
110-75-8	2-Chloroethylvinylether	1.0	ND	U
10061-01-5	cis-1,3-Dichloropropene	.50	ND	U
10061-02-6	trans-1,3-Dichloropropene	.50	ND	U
79-00-5	1,1,2-Trichloroethane	.50	ND	U
127-18-4	Tetrachloroethene	.50	ND	U
124-48-1	Dibromochloromethane	.50	ND	U
108-90-7	Chlorobenzene	.50	ND	U
75-25-2	Bromoform	.50	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	.50	ND	U
541-73-1	1,3-Dichlorobenzene	.50	ND	U
106-46-7	1,4-Dichlorobenzene	.50	ND	U
95-50-1	1,2-Dichlorobenzene	.50	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
ANAMETRIX, INC. (408)432-8192

Project ID	: 15833.00	Anametrix ID	: 9407279-03
Sample ID	: MW5	Analyst	: KK
Matrix	: WATER	Supervisor	: TM
Date Sampled	: 7/29/94		
Date Analyzed	: 8/ 3/94	Dilution Factor	: 5.0
Instrument ID	: HP24	Conc. Units	: ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8	Dichlorodifluoromethane	5.0	ND	U
74-87-3	Chloromethane	5.0	ND	U
75-01-4	Vinyl chloride	2.5	ND	U
74-83-9	Bromomethane	2.5	ND	U
75-00-3	Chloroethane	2.5	ND	U
75-69-4	Trichlorofluoromethane	2.5	ND	U
76-13-1	Trichlorotrifluoroethane	2.5	ND	U
75-35-4	1,1-Dichloroethene	2.5	ND	U
75-09-2	Methylene chloride	5.0	ND	U
156-60-5	trans-1,2-Dichloroethene	2.5	ND	U
75-34-3	1,1-Dichloroethane	2.5	ND	U
156-59-2	cis-1,2-Dichloroethene	2.5	ND	U
67-66-3	Chloroform	2.5	ND	U
71-55-6	1,1,1-Trichloroethane	2.5	ND	U
56-23-5	Carbon tetrachloride	2.5	ND	U
107-06-2	1,2-Dichloroethane	2.5	110.	
79-01-6	Trichloroethene	2.5	ND	U
78-87-5	1,2-Dichloropropane	2.5	ND	U
75-27-4	Bromodichloromethane	2.5	ND	U
110-75-8	2-Chloroethylvinylether	5.0	ND	U
10061-01-5	cis-1,3-Dichloropropene	2.5	ND	U
10061-02-6	trans-1,3-Dichloropropene	2.5	ND	U
79-00-5	1,1,2-Trichloroethane	2.5	ND	U
127-18-4	Tetrachloroethene	2.5	ND	U
124-48-1	Dibromochloromethane	2.5	ND	U
108-90-7	Chlorobenzene	2.5	ND	U
75-25-2	Bromoform	2.5	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	2.5	ND	U
541-73-1	1,3-Dichlorobenzene	2.5	ND	U
106-46-7	1,4-Dichlorobenzene	2.5	ND	U
95-50-1	1,2-Dichlorobenzene	2.5	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
ANAMETRIX, INC. (408)432-8192

Project ID	: 15833.00	Anametrix ID	: 9407279-04
Sample ID	: MW6	Analyst	: KK
Matrix	: WATER	Supervisor	: TM
Date Sampled	: 7/29/94		
Date Analyzed	: 8/ 2/94	Dilution Factor	: 1.0
Instrument ID	: HP24	Conc. Units	: ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8	Dichlorodifluoromethane	1.0	ND	U
74-87-3	Chloromethane	1.0	ND	U
75-01-4	Vinyl chloride	.50	ND	U
74-83-9	Bromomethane	.50	ND	U
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50	ND	U
76-13-1	Trichlorotrifluoroethane	.50	ND	U
75-35-4	1,1-Dichloroethene	.50	ND	U
75-09-2	Methylene chloride	1.0	ND	U
156-60-5	trans-1,2-Dichloroethene	.50	ND	U
75-34-3	1,1-Dichloroethane	.50	ND	U
156-59-2	cis-1,2-Dichloroethene	.50	ND	U
67-66-3	Chloroform	.50	ND	U
71-55-6	1,1,1-Trichloroethane	.50	ND	U
56-23-5	Carbon tetrachloride	.50	ND	U
107-06-2	1,2-Dichloroethane	.50	37.	
79-01-6	Trichloroethene	.50	ND	U
78-87-5	1,2-Dichloropropane	.50	ND	U
75-27-4	Bromodichloromethane	.50	ND	U
110-75-8	2-Chloroethylvinylether	1.0	ND	U
10061-01-5	cis-1,3-Dichloropropene	.50	ND	U
10061-02-6	trans-1,3-Dichloropropene	.50	ND	U
79-00-5	1,1,2-Trichloroethane	.50	ND	U
127-18-4	Tetrachloroethene	.50	ND	U
124-48-1	Dibromochloromethane	.50	ND	U
108-90-7	Chlorobenzene	.50	ND	U
75-25-2	Bromoform	.50	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	.50	ND	U
541-73-1	1,3-Dichlorobenzene	.50	ND	U
106-46-7	1,4-Dichlorobenzene	.50	ND	U
95-50-1	1,2-Dichlorobenzene	.50	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
ANAMETRIX, INC. (408)432-8192

Project ID	: 15833.00	Anametrix ID	: 9407279-05
Sample ID	: MW7	Analyst	: KK
Matrix	: WATER	Supervisor	: TM
Date Sampled	: 7/29/94		
Date Analyzed	: 8/ 2/94	Dilution Factor	: 1.0
Instrument ID	: HP24	Conc. Units	: ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8	Dichlorodifluoromethane	1.0	ND	U
74-87-3	Chloromethane	1.0	ND	U
75-01-4	Vinyl chloride	.50	ND	U
74-83-9	Bromomethane	.50	ND	U
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50	ND	U
76-13-1	Trichlorotrifluoroethane	.50	ND	U
75-35-4	1,1-Dichloroethene	.50	ND	U
75-09-2	Methylene chloride	1.0	ND	U
156-60-5	trans-1,2-Dichloroethene	.50	ND	U
75-34-3	1,1-Dichloroethane	.50	ND	U
156-59-2	cis-1,2-Dichloroethene	.50	ND	U
67-66-3	Chloroform	.50	ND	U
71-55-6	1,1,1-Trichloroethane	.50	ND	U
56-23-5	Carbon tetrachloride	.50	ND	U
107-06-2	1,2-Dichloroethane	.50	2.7	
79-01-6	Trichloroethene	.50	ND	U
78-87-5	1,2-Dichloropropane	.50	ND	U
75-27-4	Bromodichloromethane	.50	ND	U
110-75-8	2-Chloroethylvinylether	1.0	ND	U
10061-01-5	cis-1,3-Dichloropropene	.50	ND	U
10061-02-6	trans-1,3-Dichloropropene	.50	ND	U
79-00-5	1,1,2-Trichloroethane	.50	ND	U
127-18-4	Tetrachloroethene	.50	.60	
124-48-1	Dibromochloromethane	.50	ND	U
108-90-7	Chlorobenzene	.50	ND	U
75-25-2	Bromoform	.50	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	.50	ND	U
541-73-1	1,3-Dichlorobenzene	.50	ND	U
106-46-7	1,4-Dichlorobenzene	.50	ND	U
95-50-1	1,2-Dichlorobenzene	.50	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
ANAMETRIX, INC. (408)432-8192

Project ID	: 15833.00	Anametrix ID	: 9407279-06
Sample ID	: MW8	Analyst	: KL
Matrix	: WATER	Supervisor	: TM
Date Sampled	: 7/28/94		
Date Analyzed	: 8/ 2/94	Dilution Factor	: 1.0
Instrument ID	: HP24	Conc. Units	: ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8	Dichlorodifluoromethane	1.0	ND	U
74-87-3	Chloromethane	1.0	ND	U
75-01-4	Vinyl chloride	.50	ND	U
74-83-9	Bromomethane	.50	ND	U
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50	ND	U
76-13-1	Trichlorotrifluoroethane	.50	ND	U
75-35-4	1,1-Dichloroethene	.50	ND	U
75-09-2	Methylene chloride	1.0	ND	U
156-60-5	trans-1,2-Dichloroethene	.50	ND	U
75-34-3	1,1-Dichloroethane	.50	ND	U
156-59-2	cis-1,2-Dichloroethene	.50	ND	U
67-66-3	Chloroform	.50	ND	U
71-55-6	1,1,1-Trichloroethane	.50	ND	U
56-23-5	Carbon tetrachloride	.50	ND	U
107-06-2	1,2-Dichloroethane	.50	ND	U
79-01-6	Trichloroethene	.50	ND	U
78-87-5	1,2-Dichloropropane	.50	ND	U
75-27-4	Bromodichloromethane	.50	ND	U
110-75-8	2-Chloroethylvinylether	1.0	ND	U
10061-01-5	cis-1,3-Dichloropropene	.50	ND	U
10061-02-6	trans-1,3-Dichloropropene	.50	ND	U
79-00-5	1,1,2-Trichloroethane	.50	ND	U
127-18-4	Tetrachloroethene	.50	ND	U
124-48-1	Dibromochloromethane	.50	ND	U
108-90-7	Chlorobenzene	.50	ND	U
75-25-2	Bromoform	.50	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	.50	ND	U
541-73-1	1,3-Dichlorobenzene	.50	ND	U
106-46-7	1,4-Dichlorobenzene	.50	ND	U
95-50-1	1,2-Dichlorobenzene	.50	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
ANAMETRIX, INC. (408)432-8192

Project ID	: 15833.00	Anametrix ID	: 9407279-07
Sample ID	: MW9	Analyst	: kk
Matrix	: WATER	Supervisor	: TM
Date Sampled	: 7/28/94		
Date Analyzed	: 8/ 2/94	Dilution Factor	: 1.0
Instrument ID	: HP24	Conc. Units	: ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8	Dichlorodifluoromethane	1.0	ND	U
74-87-3	Chloromethane	1.0	ND	U
75-01-4	Vinyl chloride	.50	ND	U
74-83-9	Bromomethane	.50	ND	U
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50	ND	U
76-13-1	Trichlorotrifluoroethane	.50	ND	U
75-35-4	1,1-Dichloroethene	.50	ND	U
75-09-2	Methylene chloride	1.0	ND	U
156-60-5	trans-1,2-Dichloroethene	.50	ND	U
75-34-3	1,1-Dichloroethane	.50	ND	U
156-59-2	cis-1,2-Dichloroethene	.50	ND	U
67-66-3	Chloroform	.50	ND	U
71-55-6	1,1,1-Trichloroethane	.50	ND	U
56-23-5	Carbon tetrachloride	.50	ND	U
107-06-2	1,2-Dichloroethane	.50	26.	
79-01-6	Trichloroethene	.50	ND	U
78-87-5	1,2-Dichloropropane	.50	ND	U
75-27-4	Bromodichloromethane	.50	ND	U
110-75-8	2-Chloroethylvinylether	1.0	ND	U
10061-01-5	cis-1,3-Dichloropropene	.50	ND	U
10061-02-6	trans-1,3-Dichloropropene	.50	ND	U
79-00-5	1,1,2-Trichloroethane	.50	ND	U
127-18-4	Tetrachloroethene	.50	ND	U
124-48-1	Dibromochloromethane	.50	ND	U
108-90-7	Chlorobenzene	.50	ND	U
75-25-2	Bromoform	.50	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	.50	ND	U
541-73-1	1,3-Dichlorobenzene	.50	ND	U
106-46-7	1,4-Dichlorobenzene	.50	ND	U
95-50-1	1,2-Dichlorobenzene	.50	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
ANAMETRIX, INC. (408)432-8192

Project ID	: 15833.00	Anametrix ID	: 9407279-08
Sample ID	: MW10	Analyst	: KK
Matrix	: WATER	Supervisor	: TM
Date Sampled	: 7/28/94		
Date Analyzed	: 8/ 3/94	Dilution Factor	: 1.0
Instrument ID	: HP24	Conc. Units	: ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8	Dichlorodifluoromethane	1.0	ND	U
74-87-3	Chloromethane	1.0	ND	U
75-01-4	Vinyl chloride	.50	ND	U
74-83-9	Bromomethane	.50	ND	U
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50	ND	U
76-13-1	Trichlorotrifluoroethane	.50	ND	U
75-35-4	1,1-Dichloroethene	.50	ND	U
75-09-2	Methylene chloride	1.0	ND	U
156-60-5	trans-1,2-Dichloroethene	.50	ND	U
75-34-3	1,1-Dichloroethane	.50	ND	U
156-59-2	cis-1,2-Dichloroethene	.50	ND	U
67-66-3	Chloroform	.50	ND	U
71-55-6	1,1,1-Trichloroethane	.50	ND	U
56-23-5	Carbon tetrachloride	.50	ND	U
107-06-2	1,2-Dichloroethane	.50	13.	
79-01-6	Trichloroethene	.50	ND	U
78-87-5	1,2-Dichloropropane	.50	ND	U
75-27-4	Bromodichloromethane	.50	ND	U
110-75-8	2-Chloroethylvinylether	1.0	ND	U
10061-01-5	cis-1,3-Dichloropropene	.50	ND	U
10061-02-6	trans-1,3-Dichloropropene	.50	ND	U
79-00-5	1,1,2-Trichloroethane	.50	ND	U
127-18-4	Tetrachloroethene	.50	ND	U
124-48-1	Dibromochloromethane	.50	ND	U
108-90-7	Chlorobenzene	.50	ND	U
75-25-2	Bromoform	.50	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	.50	ND	U
541-73-1	1,3-Dichlorobenzene	.50	ND	U
106-46-7	1,4-Dichlorobenzene	.50	ND	U
95-50-1	1,2-Dichlorobenzene	.50	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
ANAMETRIX, INC. (408)432-8192

Project ID	: 15833.00	Anametrix ID	: 9407279-09
Sample ID	: MW11	Analyst	: KK
Matrix	: WATER	Supervisor	: TM
Date Sampled	: 7/28/94		
Date Analyzed	: 8/ 3/94	Dilution Factor	: 1.0
Instrument ID	: HP24	Conc. Units	: ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8	Dichlorodifluoromethane	1.0	ND	U
74-87-3	Chloromethane	1.0	ND	U
75-01-4	Vinyl chloride	.50	ND	U
74-83-9	Bromomethane	.50	ND	U
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50	ND	U
76-13-1	Trichlorotrifluoroethane	.50	ND	U
75-35-4	1,1-Dichloroethene	.50	ND	U
75-09-2	Methylene chloride	1.0	ND	U
156-60-5	trans-1,2-Dichloroethene	.50	ND	U
75-34-3	1,1-Dichloroethane	.50	ND	U
156-59-2	cis-1,2-Dichloroethene	.50	ND	U
67-66-3	Chloroform	.50	ND	U
71-55-6	1,1,1-Trichloroethane	.50	ND	U
56-23-5	Carbon tetrachloride	.50	ND	U
107-06-2	1,2-Dichloroethane	.50	ND	U
79-01-6	Trichloroethene	.50	ND	U
78-87-5	1,2-Dichloropropane	.50	ND	U
75-27-4	Bromodichloromethane	.50	ND	U
110-75-8	2-Chloroethylvinylether	1.0	ND	U
10061-01-5	cis-1,3-Dichloropropene	.50	ND	U
10061-02-6	trans-1,3-Dichloropropene	.50	ND	U
79-00-5	1,1,2-Trichloroethane	.50	ND	U
127-18-4	Tetrachloroethene	.50	ND	U
124-48-1	Dibromochloromethane	.50	ND	U
108-90-7	Chlorobenzene	.50	ND	U
75-25-2	Bromoform	.50	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	.50	ND	U
541-73-1	1,3-Dichlorobenzene	.50	ND	U
106-46-7	1,4-Dichlorobenzene	.50	ND	U
95-50-1	1,2-Dichlorobenzene	.50	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
ANAMETRIX, INC. (408)432-8192

Project ID	: 15833.00	Anametrix ID	: 9407279-10
Sample ID	: MW12	Analyst	: kk
Matrix	: WATER	Supervisor	: TM
Date Sampled	: 7/28/94		
Date Analyzed	: 8/ 3/94	Dilution Factor	: 1.0
Instrument ID	: HP24	Conc. Units	: ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8	Dichlorodifluoromethane	1.0	ND	U
74-87-3	Chloromethane	1.0	ND	U
75-01-4	Vinyl chloride	.50	ND	U
74-83-9	Bromomethane	.50	ND	U
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50	ND	U
76-13-1	Trichlorotrifluoroethane	.50	ND	U
75-35-4	1,1-Dichloroethene	.50	ND	U
75-09-2	Methylene chloride	1.0	ND	U
156-60-5	trans-1,2-Dichloroethene	.50	ND	U
75-34-3	1,1-Dichloroethane	.50	ND	U
156-59-2	cis-1,2-Dichloroethene	.50	ND	U
67-66-3	Chloroform	.50	ND	U
71-55-6	1,1,1-Trichloroethane	.50	ND	U
56-23-5	Carbon tetrachloride	.50	ND	U
107-06-2	1,2-Dichloroethane	.50	ND	U
79-01-6	Trichloroethene	.50	ND	U
78-87-5	1,2-Dichloropropane	.50	ND	U
75-27-4	Bromodichloromethane	.50	ND	U
110-75-8	2-Chloroethylvinylether	1.0	ND	U
10061-01-5	cis-1,3-Dichloropropene	.50	ND	U
10061-02-6	trans-1,3-Dichloropropene	.50	ND	U
79-00-5	1,1,2-Trichloroethane	.50	ND	U
127-18-4	Tetrachloroethene	.50	ND	U
124-48-1	Dibromochloromethane	.50	ND	U
108-90-7	Chlorobenzene	.50	ND	U
75-25-2	Bromoform	.50	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	.50	ND	U
541-73-1	1,3-Dichlorobenzene	.50	ND	U
106-46-7	1,4-Dichlorobenzene	.50	ND	U
95-50-1	1,2-Dichlorobenzene	.50	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
ANAMETRIX, INC. (408)432-8192

Project ID	: 15833.	Anametrix ID	: BG0104I1
Sample ID	: VBLKB1	Analyst	:
Matrix	: WATER	Supervisor	: TM KK
Date Sampled	: 0/ 0/ 0		
Date Analyzed	: 8/ 2/94	Dilution Factor	: 1.0
Instrument ID	: HP24	Conc. Units	: ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8	Dichlorodifluoromethane	1.0	ND	U
74-87-3	Chloromethane	1.0	ND	U
75-01-4	Vinyl chloride	.50	ND	U
74-83-9	Bromomethane	.50	ND	U
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50	ND	U
76-13-1	Trichlorotrifluoroethane	.50	ND	U
75-35-4	1,1-Dichloroethene	.50	ND	U
75-09-2	Methylene chloride	1.0	ND	U
156-60-5	trans-1,2-Dichloroethene	.50	ND	U
75-34-3	1,1-Dichloroethane	.50	ND	U
156-59-2	cis-1,2-Dichloroethene	.50	ND	U
67-66-3	Chloroform	.50	ND	U
71-55-6	1,1,1-Trichloroethane	.50	ND	U
56-23-5	Carbon tetrachloride	.50	ND	U
107-06-2	1,2-Dichloroethane	.50	ND	U
79-01-6	Trichloroethene	.50	ND	U
78-87-5	1,2-Dichloropropane	.50	ND	U
75-27-4	Bromodichloromethane	.50	ND	U
110-75-8	2-Chloroethylvinylether	1.0	ND	U
10061-01-5	cis-1,3-Dichloropropene	.50	ND	U
10061-02-6	trans-1,3-Dichloropropene	.50	ND	U
79-00-5	1,1,2-Trichloroethane	.50	ND	U
127-18-4	Tetrachloroethene	.50	ND	U
124-48-1	Dibromochloromethane	.50	ND	U
108-90-7	Chlorobenzene	.50	ND	U
75-25-2	Bromoform	.50	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	.50	ND	U
541-73-1	1,3-Dichlorobenzene	.50	ND	U
106-46-7	1,4-Dichlorobenzene	.50	ND	U
95-50-1	1,2-Dichlorobenzene	.50	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010
ANAMETRIX, INC. (408)432-8192

Project ID	: 15833.	Anametrix ID	: BG0302I1
Sample ID	: VBLKB2	Analyst	:
Matrix	: WATER	Supervisor	: TM KL
Date Sampled	: 0/ 0/ 0		
Date Analyzed	: 8/ 3/94	Dilution Factor	: 1.0
Instrument ID	: HP24	Conc. Units	: ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8	Dichlorodifluoromethane	1.0	ND	U
74-87-3	Chloromethane	1.0	ND	U
75-01-4	Vinyl chloride	.50	ND	U
74-83-9	Bromomethane	.50	ND	U
75-00-3	Chloroethane	.50	ND	U
75-69-4	Trichlorofluoromethane	.50	ND	U
76-13-1	Trichlorotrifluoroethane	.50	ND	U
75-35-4	1,1-Dichloroethene	.50	ND	U
75-09-2	Methylene chloride	1.0	1.1	
156-60-5	trans-1,2-Dichloroethene	.50	ND	U
75-34-3	1,1-Dichloroethane	.50	ND	U
156-59-2	cis-1,2-Dichloroethene	.50	ND	U
67-66-3	Chloroform	.50	ND	U
71-55-6	1,1,1-Trichloroethane	.50	ND	U
56-23-5	Carbon tetrachloride	.50	ND	U
107-06-2	1,2-Dichloroethane	.50	ND	U
79-01-6	Trichloroethene	.50	ND	U
78-87-5	1,2-Dichloropropane	.50	ND	U
75-27-4	Bromodichloromethane	.50	ND	U
110-75-8	2-Chloroethylvinylether	1.0	ND	U
10061-01-5	cis-1,3-Dichloropropene	.50	ND	U
10061-02-6	trans-1,3-Dichloropropene	.50	ND	U
79-00-5	1,1,2-Trichloroethane	.50	ND	U
127-18-4	Tetrachloroethene	.50	ND	U
124-48-1	Dibromochloromethane	.50	ND	U
108-90-7	Chlorobenzene	.50	ND	U
75-25-2	Bromoform	.50	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	.50	ND	U
541-73-1	1,3-Dichlorobenzene	.50	ND	U
106-46-7	1,4-Dichlorobenzene	.50	ND	U
95-50-1	1,2-Dichlorobenzene	.50	ND	U

SURROGATE RECOVERY SUMMARY -- EPA METHOD 8010
ANAMETRIX, INC. (408)432-8192

Project ID : 15833
Matrix : LIQUID

Anametrix ID : 9407279
Analyst :
Supervisor : TM KL

	SAMPLE ID	SU1	SU2	SU3
1	VBLKB1	80	84	85
2	MW3	70	91	96
3	MW4	72	87	90
4	MW6	73	91	97
5	MW7	73	91	96
6	MW8	74	91	93
7	MW8 MS	93	97	100
8	MW8 MSD	94	97	98
9	MW9	75	90	95
10	VBLKB2	78	82	83
11	MW5	81	89	95
12	MW10	72	91	97
13	MW11	74	89	98
14	MW12	76	96	102
15	MW11 MS	94	100	106
16	MW11 MSD	79	98	104
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

	QC LIMITS
SU1 = Bromochloromethane	(56- 99)
SU2 = 1-Chloro-2-fluorobenze	(73-110)
SU3 = 2-Bromochlorobenzene	(65-108)

* Values outside of Anametrix QC limits

MATRIX SPIKE RECOVERY FORM -- EPA METHOD 8010
ANAMETRIX, INC. (408)432-8192

Project ID : 15833.00
Sample ID : MW8
Matrix : WATER
Date Sampled : 7/28/94
Date Analyzed : 8/ 2/94
Instrument ID : HP24

Anametrix ID : 9407279-06
Analyst : KK
Supervisor : TM

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	%REC LIMITS
Trichlorotrifluoroethan	10.0	.0	7.5	75	42-111
1,1-Dichloroethene	10.0	.0	8.4	84	47-128
trans-1,2-Dichloroethen	10.0	.0	9.2	92	63-110
1,1-Dichloroethane	10.0	.0	9.8	98	72-128
cis-1,2-Dichloroethene	10.0	.0	9.9	99	62-126
1,1,1-Trichloroethane	10.0	.0	10.2	102	65-128
Trichloroethene	10.0	.0	10.7	107	64-115
Tetrachloroethene	10.0	.0	9.4	94	64-111
Chlorobenzene	10.0	.0	10.0	100	75-124
1,3-Dichlorobenzene	10.0	.0	10.4	104	68-119
1,4-Dichlorobenzene	10.0	.0	10.6	106	72-125
1,2-Dichlorobenzene	10.0	.0	10.7	107	70-131

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	RPD LIMITS	%REC LIMITS
Trichlorotrifluoroethan	10.0	7.5	75	1	25	42-111
1,1-Dichloroethene	10.0	8.5	85	1	25	47-128
trans-1,2-Dichloroethen	10.0	9.4	94	1	25	63-110
1,1-Dichloroethane	10.0	10.0	100	2	25	72-128
cis-1,2-Dichloroethene	10.0	9.2	92	7	25	62-126
1,1,1-Trichloroethane	10.0	10.5	105	3	25	65-128
Trichloroethene	10.0	10.9	109	2	25	64-115
Tetrachloroethene	10.0	9.6	96	2	25	64-111
Chlorobenzene	10.0	10.1	101	1	25	75-124
1,3-Dichlorobenzene	10.0	10.5	105	0	25	68-119
1,4-Dichlorobenzene	10.0	10.8	108	2	25	72-125
1,2-Dichlorobenzene	10.0	11.0	110	3	25	70-131

* Value is outside of Anametrix QC limits

RPD: 0 out of 12 outside limits
Spike Recovery: 0 out of 24 outside limits

MATRIX SPIKE RECOVERY FORM -- EPA METHOD 8010
ANAMETRIX, INC. (408)432-8192

Project ID : 15833.00
Sample ID : MW11
Matrix : WATER
Date Sampled : 7/28/94
Date Analyzed : 8/ 3/94
Instrument ID : HP24

Anametrix ID : 9407279-09
Analyst : KK
Supervisor : TM

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	%REC LIMITS
Trichlorotrifluoroethan	10.0	.0	8.0	80	42-111
1,1-Dichloroethene	10.0	.0	9.5	95	47-128
trans-1,2-Dichloroethen	10.0	.0	9.9	99	63-110
1,1-Dichloroethane	10.0	.0	10.4	104	72-128
cis-1,2-Dichloroethene	10.0	.0	9.3	93	62-126
1,1,1-Trichloroethane	10.0	.0	10.0	100	65-128
Trichloroethene	10.0	.0	11.0	110	64-115
Tetrachloroethene	10.0	.0	9.4	94	64-111
Chlorobenzene	10.0	.0	9.7	97	75-124
1,3-Dichlorobenzene	10.0	.0	10.0	100	68-119
1,4-Dichlorobenzene	10.0	.0	10.3	103	72-125
1,2-Dichlorobenzene	10.0	.0	10.5	105	70-131

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	RPD LIMITS	%REC LIMITS
Trichlorotrifluoroethan	10.0	7.9	79	2	25	42-111
1,1-Dichloroethene	10.0	9.4	94	1	25	47-128
trans-1,2-Dichloroethen	10.0	9.8	98	1	25	63-110
1,1-Dichloroethane	10.0	10.3	103	1	25	72-128
cis-1,2-Dichloroethene	10.0	9.2	92	1	25	62-126
1,1,1-Trichloroethane	10.0	8.5	85	16	25	65-128
Trichloroethene	10.0	10.7	107	3	25	64-115
Tetrachloroethene	10.0	9.4	94	0	25	64-111
Chlorobenzene	10.0	9.6	96	1	25	75-124
1,3-Dichlorobenzene	10.0	9.9	99	1	25	68-119
1,4-Dichlorobenzene	10.0	10.3	103	1	25	72-125
1,2-Dichlorobenzene	10.0	10.7	107	1	25	70-131

* Value is outside of Anametrix QC limits

RPD: 0 out of 12 outside limits
Spike Recovery: 0 out of 24 outside limits

LABORATORY CONTROL SAMPLE
EPA METHOD 601/8010
ANAMETRIX, INC. (408)432-8192

Sample I.D.	: LABORATORY CONTROL SAMPLE	Anametrix I.D.	: MG0101I1
Matrix	: WATER	Analyst	: TM KK
SDG/Batch	: 07279	Supervisor	:
Date analyzed	: 08/01/94	Instrument I.D.	: HP24

COMPOUND	SPIKE AMOUNT (ug/L)	AMOUNT RECOVERED (ug/L)	PERCENT RECOVERY	%RECOVERY LIMITS
Trichlorotrifluoroethane	10	7.3	73%	65 - 116
1,1-Dichloroethene	10	8.2	82%	64 - 125
trans-1,2-Dichloroethene	10	8.9	89%	77 - 113
1,1-Dichloroethane	10	9.7	97%	85 - 129
cis-1,2-Dichloroethene	10	9.9	99%	78 - 130
1,1,1-Trichloroethane	10	9.9	99%	83 - 125
Trichloroethene	10	10.3	103%	76 - 124
Tetrachloroethene	10	8.8	88%	80 - 118
Chlorobenzene	10	10.1	101%	81 - 130
1,3-Dichlorobenzene	10	10.6	106%	82 - 115
1,4-Dichlorobenzene	10	10.7	107%	85 - 122
1,2-Dichlorobenzene	10	10.8	108%	86 - 122

* Limits based on data generated by Anametrix, Inc., December, 1993.

LABORATORY CONTROL SAMPLE
EPA METHOD 601/8010
ANAMETRIX, INC. (408)432-8192

Sample I.D. : LABORATORY CONTROL SAMPLE
Matrix : WATER
SDG/Batch : 07279
Date analyzed : 08/03/94

Anametrix I.D. : MG0301I1
Analyst : KL
Supervisor : TM
Instrument I.D. : HP24

COMPOUND	SPIKE AMOUNT (ug/L)	AMOUNT RECOVERED (ug/L)	PERCENT RECOVERY	%RECOVERY LIMITS
Trichlorotrifluoroethane	10	8.3	83%	65 - 116
1,1-Dichloroethene	10	9.5	95%	64 - 125
trans-1,2-Dichloroethene	10	9.9	99%	77 - 113
1,1-Dichloroethane	10	10.4	104%	85 - 129
cis-1,2-Dichloroethene	10	10.7	107%	78 - 130
1,1,1-Trichloroethane	10	10.9	109%	83 - 125
Trichloroethene	10	10.8	108%	76 - 124
Tetrachloroethene	10	9.5	95%	80 - 118
Chlorobenzene	10	10.3	103%	81 - 130
1,3-Dichlorobenzene	10	11.0	110%	82 - 115
1,4-Dichlorobenzene	10	11.2	112%	85 - 122
1,2-Dichlorobenzene	10	11.4	114%	86 - 122

* Limits based on data generated by Anametrix, Inc., December, 1993.

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. DAN HENNINGER
APPLIED GEOTECHNOLOGY - OAKLAND
827 BROADWAY, SUITE 210
OAKLAND, CA 94607

Workorder # : 9407279
Date Received : 07/29/94
Project ID : 15833.002
Purchase Order: N/A
Department : GC
Sub-Department: PEST

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9407279- 5	MW7	WATER	07/29/94	8080

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. DAN HENNINGER
APPLIED GEOTECHNOLOGY - OAKLAND
827 BROADWAY, SUITE 210
OAKLAND, CA 94607

Workorder # : 9407279
Date Received : 07/29/94
Project ID : 15833.002
Purchase Order: N/A
Department : GC
Sub-Department: PEST

QA/QC SUMMARY :

-Some of the compounds in LCS,LCSD were out of Anametrix control limit. LCS and LCSD were re-extracted and the recoveries were again outside of control limits. Both sets of data have been reported.

M. Hosseini 8/15/94
Department Supervisor Date

Chemist 8/15/94
Date

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8080
ANAMETRIX, INC. (408)432-8192

Project ID	: 15833.00	Anametrix ID	: 9407279-05
Sample ID	: MW7R	Analyst	: FK
Matrix	: WATER	Supervisor	:
Date Sampled	: 7/29/94		
Date Extracted	: 8/ 9/94		
Amount Extracted	: 1000.0 mL		
Date Analyzed	: 8/12/94	Dilution Factor	: 1.0
Instrument ID	: HP22	Conc. Units	: ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
319-84-6	alpha-BHC	.05	ND	U
319-85-7	beta-BHC	.05	ND	U
319-86-8	delta-BHC	.05	ND	U
58-89-9	gamma-BHC	.05	ND	U
76-44-8	Heptachlor	.05	ND	U
309-00-2	Aldrin	.05	ND	U
1024-57-3	Heptachlor Epoxide	.05	ND	U
959-98-8	Endosulfan I	.05	ND	U
60-57-1	Dieldrin	.10	ND	U
72-55-9	4,4'-DDE	.10	ND	U
72-20-8	Endrin	.10	ND	U
33213-65-9	Endosulfan II	.10	ND	U
72-54-8	4,4'-DDD	.10	ND	U
1031-07-8	Endosulfan Sulfate	.10	ND	U
50-29-3	4,4'-DDT	.10	ND	U
72-43-5	Methoxychlor	.50	ND	U
53494-70-5	Endrin Ketone	.10	ND	U
8001-35-2	Toxaphene	5.0	ND	U
12674-11-2	Aroclor-1016	1.0	ND	U
11104-28-2	Aroclor-1221	2.0	ND	U
11141-16-5	Aroclor-1232	1.0	ND	U
53469-21-9	Aroclor-1242	1.0	ND	U
12672-29-6	Aroclor-1248	1.0	ND	U
11097-69-1	Aroclor-1254	1.0	ND	U
11096-82-5	Aroclor-1260	1.0	ND	U
7421-93-4	Endrin Aldehyde	.10	ND	U
57-74-9	Technical Chlordane	1.0	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8080
ANAMETRIX, INC. (408)432-8192

Project ID	: 15833.00	Anametrix ID	: 9407279-05
Sample ID	: MW7	Analyst	: FK
Matrix	: WATER	Supervisor	:
Date Sampled	: 7/29/94		
Date Extracted	: 8/ 1/94		
Amount Extracted	: 1000.0 mL		
Date Analyzed	: 8/ 6/94	Dilution Factor	: 1.0
Instrument ID	: HP22	Conc. Units	: ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
319-84-6	alpha-BHC	.05	ND	U
319-85-7	beta-BHC	.05	ND	U
319-86-8	delta-BHC	.05	ND	U
58-89-9	gamma-BHC	.05	ND	U
76-44-8	Heptachlor	.05	ND	U
309-00-2	Aldrin	.05	ND	U
1024-57-3	Heptachlor Epoxide	.05	ND	U
959-98-8	Endosulfan I	.05	ND	U
60-57-1	Dieldrin	.10	ND	U
72-55-9	4,4'-DDE	.10	ND	U
72-20-8	Endrin	.10	ND	U
33213-65-9	Endosulfan II	.10	ND	U
72-54-8	4,4'-DDD	.10	ND	U
1031-07-8	Endosulfan Sulfate	.10	ND	U
50-29-3	4,4'-DDT	.10	ND	U
72-43-5	Methoxychlor	.50	ND	U
53494-70-5	Endrin Ketone	.10	ND	U
8001-35-2	Toxaphene	5.0	ND	U
12674-11-2	Aroclor-1016	1.0	ND	U
11104-28-2	Aroclor-1221	2.0	ND	U
11141-16-5	Aroclor-1232	1.0	ND	U
53469-21-9	Aroclor-1242	1.0	ND	U
12672-29-6	Aroclor-1248	1.0	ND	U
11097-69-1	Aroclor-1254	1.0	ND	U
11096-82-5	Aroclor-1260	1.0	ND	U
7421-93-4	Endrin Aldehyde	.10	ND	U
57-74-9	Technical Chlordane	1.0	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8080
ANAMETRIX, INC. (408)432-8192

Project ID	: 15833.	Anametrix ID	: BG0911P1
Sample ID	: BLANK	Analyst	:
Matrix	: WATER	Supervisor	:
Date Sampled	: 0/ 0/ 0		
Date Extracted	: 8/ 9/94		
Amount Extracted	: 1000.0 mL		
Date Analyzed	: 8/12/94	Dilution Factor	: 1.0
Instrument ID	: HP22	Conc. Units	: ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
319-84-6	alpha-BHC	.05	ND	U
319-85-7	beta-BHC	.05	ND	U
319-86-8	delta-BHC	.05	ND	U
58-89-9	gamma-BHC	.05	ND	U
76-44-8	Heptachlor	.05	ND	U
309-00-2	Aldrin	.05	ND	U
1024-57-3	Heptachlor Epoxide	.05	ND	U
959-98-8	Endosulfan I	.05	ND	U
60-57-1	Dieldrin	.10	ND	U
72-55-9	4,4'-DDE	.10	ND	U
72-20-8	Endrin	.10	ND	U
33213-65-9	Endosulfan II	.10	ND	U
72-54-8	4,4'-DDD	.10	ND	U
1031-07-8	Endosulfan Sulfate	.10	ND	U
50-29-3	4,4'-DDT	.10	ND	U
72-43-5	Methoxychlor	.50	ND	U
53494-70-5	Endrin Ketone	.10	ND	U
8001-35-2	Toxaphene	5.0	ND	U
12674-11-2	Aroclor-1016	1.0	ND	U
11104-28-2	Aroclor-1221	2.0	ND	U
11141-16-5	Aroclor-1232	1.0	ND	U
53469-21-9	Aroclor-1242	1.0	ND	U
12672-29-6	Aroclor-1248	1.0	ND	U
11097-69-1	Aroclor-1254	1.0	ND	U
11096-82-5	Aroclor-1260	1.0	ND	U
7421-93-4	Endrin Aldehyde	.10	ND	U
57-74-9	Technical Chlordane	1.0	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8080
ANAMETRIX, INC. (408)432-8192

Project ID	: 15833.	Anametrix ID	: BG0111P1
Sample ID	: BLANK	Analyst	: FR
Matrix	: WATER	Supervisor	:
Date Sampled	: 0/ 0/ 0		
Date Extracted	: 8/ 1/94		
Amount Extracted	: 1000.0 mL		
Date Analyzed	: 8/ 6/94	Dilution Factor	: 1.0
Instrument ID	: HP22	Conc. Units	: ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
319-84-6	alpha-BHC	.05	ND	U
319-85-7	beta-BHC	.05	ND	U
319-86-8	delta-BHC	.05	ND	U
58-89-9	gamma-BHC	.05	ND	U
76-44-8	Heptachlor	.05	ND	U
309-00-2	Aldrin	.05	ND	U
1024-57-3	Heptachlor Epoxide	.05	ND	U
959-98-8	Endosulfan I	.05	ND	U
60-57-1	Dieldrin	.10	ND	U
72-55-9	4,4'-DDE	.10	ND	U
72-20-8	Endrin	.10	ND	U
33213-65-9	Endosulfan II	.10	ND	U
72-54-8	4,4'-DDD	.10	ND	U
1031-07-8	Endosulfan Sulfate	.10	ND	U
50-29-3	4,4'-DDT	.10	ND	U
72-43-5	Methoxychlor	.50	ND	U
53494-70-5	Endrin Ketone	.10	ND	U
8001-35-2	Toxaphene	5.0	ND	U
12674-11-2	Aroclor-1016	1.0	ND	U
11104-28-2	Aroclor-1221	2.0	ND	U
11141-16-5	Aroclor-1232	1.0	ND	U
53469-21-9	Aroclor-1242	1.0	ND	U
12672-29-6	Aroclor-1248	1.0	ND	U
11097-69-1	Aroclor-1254	1.0	ND	U
11096-82-5	Aroclor-1260	1.0	ND	U
7421-93-4	Endrin Aldehyde	.10	ND	U
57-74-9	Technical Chlordane	1.0	ND	U

SURROGATE RECOVERY SUMMARY -- EPA METHOD 8080
ANAMETRIX, INC. (408)432-8192

Project ID : 15833.00
Matrix : LIQUID

Anametrix ID : 9407279
Analyst : FR
Supervisor : [illegible]

	SAMPLE ID	SU1	SU2	SU3	SU4	SU5	SU6
1	MW7R	93	110				
2	BLANK	113	93				
3	LCS	115	93				
4	LCSD	124	97				
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

	QC LIMITS
SU1 = Decachlorobiphenyl	(33-126)
SU2 = Tetrachloro-m-xylene	(30-130)

* Values outside of Anametrix QC limits

SURROGATE RECOVERY SUMMARY -- EPA METHOD 8080
ANAMETRIX, INC. (408)432-8192

Project ID : 15833.00
Matrix : LIQUID

Anametrix ID : 9407279
Analyst : FK
Supervisor : DL

	SAMPLE ID	SU1	SU2	SU3	SU4	SU5	SU6
1	BLANK	67	84				
2	LCS	75	85				
3	LCSD	70	90				
4	MW7	62	104				
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

	QC LIMITS
SU1 = Decachlorobiphenyl	(33-126)
SU2 = Tetrachloro-m-xylene	(30-130)

* Values outside of Anametrix QC limits

LABORATORY CONTROL SPIKE RECOVERY FORM -- EPA METHOD 8080
ANAMETRIX, INC. (408) 432-8192

Project ID	: 158333.002	Anametrix ID	: M/NG09111P1
Sample ID	: LCS/LCSD	Analyst	:
Matrix	: WATER	Supervisor	:
Date Sampled	: NA	Volume ext.	: 1000 mL
Date Extracted	: 8/9/94	pH	: N/A
Date Analyzed	: 8/12/94	Final Vol.	: 10000 ul
Instrument ID	: HP22	Inj. Vol.	: 1 ul
Dilution	: NONE		

LCS COMPOUND NAME	AMOUNT ADDED (ug/L)	AMOUNT FOUND (ug/L)	PERCENT RECOVERY	RECOVERY LIMITS
gamma-BHC	.50	.63	126	47-120
Heptachlor	.50	.54	108	44-125
Aldrin	.50	.61	122	41-125
Dieldrin	1.0	1.20	120	53-133
Endrin	1.0	1.40	140	51-134
4,4'-DDT	1.0	1.20	120	49-134
LCSD COMPOUND NAME	AMOUNT ADDED (ug/L)	AMOUNT FOUND (ug/L)	PERCENT RECOVERY	RECOVERY LIMITS
gamma-BHC	.50	.60	120	47-120
Heptachlor	.50	.50	100	44-125
Aldrin	.50	.60	120	41-125
Dieldrin	1.00	1.40	140	53-133
Endrin	1.00	1.40	140	51-134
4,4'-DDT	1.00	1.20	120	49-134

COMPOUND NAME	RPD	RPD LIMITS
gamma-BHC	3	25
Heptachlor	5	25
Aldrin	1	25
Dieldrin	11	25
Endrin	0	25
4,4'-DDT	0	25

AGI TECHNOLOGIES

ALCO HAZMAT
94 SEP 21 PM 4:50

TRANSMITTAL

To: Mr. Jerry R. Harbert
20150 Rancho Bella Vista
Saratoga, CA 95070

Date: September 19, 1994

Attention:

Project: Groundwater Monitoring

Number: 15,833.002.04

Subject: Quarterly Groundwater Report

Quantity	Date	Description
3	9/19/94	Quarterly Groundwater Report

For Your:

☐ Distribution ☒ Use ☐ Records ☐ Review ☐ Approval ☐ Information

Remarks:

From: Dan Henninger

Via: First Class Mail

c.c. Mr. David Delamontte, Durham Transportation
Ms. Julliet Shin, Alameda Co. Health Care Services Agency

☐ 300 120th Avenue N.E., Bldg. 4
Bellevue, WA 98005
(206) 453-8383
FAX (206) 646-9523

☐ 541 N.E. 20th, Suite 103
Portland, OR 97232
(503) 232-1800
FAX (503) 232-9272

☒ 827 Broadway, Suite 210
Oakland, CA 94607
(510) 238-4599
FAX (510) 238-4590

☐ 3206 50th St. Ct. N.W., #109
Gig Harbor, WA 98335
(206) 851-5562
FAX (206) 858-6007

LABORATORY CONTROL SPIKE RECOVERY FORM -- EPA METHOD 8080
ANAMETRIX, INC. (408) 432-8192

Project ID	: 158333.002	Anametrix ID	: M/NG0111P1
Sample ID	: LCS/LCSD	Analyst	: FK
Matrix	: WATER	Supervisor	:
Date Sampled	: NA	Volume ext.	: 1000 mL
Date Extracted	: 8/1/94	pH	: N/A
Date Analyzed	: 8/5/94	Final Vol.	: 10000 ul
Instrument ID	: HP22	Inj. Vol.	: 1 ul
Dilution	: NONE		

LCS COMPOUND NAME	AMOUNT ADDED (ug/L)	AMOUNT FOUND (ug/L)	PERCENT RECOVERY	RECOVERY LIMITS
gamma-BHC	.50	.60	120	47-120
Heptachlor	.50	.53	106	44-125
Aldrin	.50	.52	104	41-125
Dieldrin	1.0	1.10	110	53-133
Endrin	1.0	1.10	110	51-134
4,4'-DDT	1.0	1.50	150	49-134
LCSD COMPOUND NAME	AMOUNT ADDED (ug/L)	AMOUNT FOUND (ug/L)	PERCENT RECOVERY	RECOVERY LIMITS
gamma-BHC	.50	.65	130	47-120
Heptachlor	.50	.58	116	44-125
Aldrin	.50	.56	112	41-125
Dieldrin	1.00	1.20	120	53-133
Endrin	1.00	1.20	120	51-134
4,4'-DDT	1.00	1.60	160	49-134

COMPOUND NAME	RPD	RPD LIMITS
gamma-BHC	5	25
Heptachlor	6	25
Aldrin	5	25
Dieldrin	6	25
Endrin	6	25
4,4'-DDT	4	25

Organic Analysis Data Sheet
Total Petroleum Hydrocarbons as Gasoline with BTEX
ITS - Anametrix Laboratories - (408)432-8192

Lab Workorder : 9407279
Matrix : WATER

Client Project ID : 15833.002
Units : ug/L

Compound Name	Method Reporting Limit*	Client ID MW3 Lab ID 9407279-01	Client ID MW4 Lab ID 9407279-02	Client ID MW5 Lab ID 9407279-03	Client ID MW6 Lab ID 9407279-04	Client ID MW7 Lab ID 9407279-05
Benzene	0.50	1800	7.9	9300	3100	470
Toluene	0.50	ND	1.1	1800	71	ND
Ethylbenzene	0.50	810	0.70	1100	1100	220
Total Xylenes	0.50	600	ND	2300	2000	310
TPH as Gasoline	50	7700	120	30000	15000	2600
Surrogate Recovery		107%	99%	106%	105%	106%
Instrument ID		HP12	HP12	HP12	HP12	HP12
Date Sampled		07/28/94	07/28/94	07/29/94	07/29/94	07/29/94
Date Analyzed		08/02/94	08/02/94	08/02/94	08/02/94	08/02/94
RLMF		50	1	250	100	25
Filename Reference		FPL27901.D	FPL27902.D	FPL27903.D	FPL27904.D	FPL27905.D

* The Method Reporting Limit must be multiplied by the Reporting Limit Multiplication Factor (RLMF) to achieve the compound's reporting limit in the analysis.

ND : Not detected at or above the reporting limit for the analysis as performed.
TPHg : Determined by GC/FID following sample purge & trap by EPA Method 5030.
BTEX : Determined by modified EPA Method 8020 following sample purge & trap by EPA Method 5030.

Lab Control Limits for surrogate compound p-Bromofluorobenzene are 61-139%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Lucia Shaw 8/8/94
Analyst Date

Cheryl Balmes 8/8/94
Supervisor Date

Issued on 8/8/94 @ 7:29 AM

Organic Analysis Data Sheet
Total Petroleum Hydrocarbons as Gasoline with BTEX
ITS - Anametrix Laboratories - (408)432-8192

Lab Workorder : 9407279
Matrix : WATER

Client Project ID : 15833.002
Units : ug/L

Compound Name	Method Reporting Limit*	Client ID MW8 Lab ID 9407279-06	Client ID MW9 Lab ID 9407279-07	Client ID MW10 Lab ID 9407279-08	Client ID MW11 Lab ID 9407279-09	Client ID MW12 Lab ID 9407279-10
Benzene	0.50	ND	90	99	6.2	1.9
Toluene	0.50	ND	27	57	1.1	ND
Ethylbenzene	0.50	ND	170	180	20	12
Total Xylenes	0.50	ND	370	430	6.6	5.8
TPH as Gasoline	50	ND	6000	6700	450	240
Surrogate Recovery		98%	99%	98%	112%	109%
Instrument ID		HP12	HP12	HP12	HP12	HP12
Date Sampled		07/28/94	07/28/94	07/28/94	07/28/94	07/28/94
Date Analyzed		08/02/94	08/05/94	08/04/94	08/02/94	08/02/94
RLMF		1	25	50	1	1
Filename Reference		FPL27906.D	FTL27907.D	FTL27908.D	FPL27909.D	FPL27910.D

* The Method Reporting Limit must be multiplied by the Reporting Limit Multiplication Factor (RLMF) to achieve the compound's reporting limit in the analysis.

ND : Not detected at or above the reporting limit for the analysis as performed.
TPHg : Determined by GC/FID following sample purge & trap by EPA Method 5030.
BTEX : Determined by modified EPA Method 8020 following sample purge & trap by EPA Method 5030.

Lab Control Limits for surrogate compound p-Bromofluorobenzene are 61-139%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Lucca Shen 8/8/94
Analyst Date

Cheryl Balmer 8/8/94
Supervisor Date

Issued on 8/8/94 @ 7:38 AM

Organic Analysis Data Sheet
Total Petroleum Hydrocarbons as Gasoline with BTEX
ITS - Anametrix Laboratories - (408)432-8192

Lab Workorder : 9407279
Matrix : WATER

Client Project ID : 15833.002
Units : ug/L

Compound Name	Method Reporting Limit*	Client ID	Client ID	Client ID	Client ID	Client ID
		Lab ID	Lab ID	Lab ID	Lab ID	Lab ID
		METHOD BLANK	METHOD BLANK	METHOD BLANK	METHOD BLANK	METHOD BLANK
Benzene	0.50	ND	ND	ND	ND	ND
Toluene	0.50	ND	ND	ND	ND	ND
Ethylbenzene	0.50	ND	ND	ND	ND	ND
Total Xylenes	0.50	ND	ND	ND	ND	ND
TPH as Gasoline	50	ND	ND	ND	ND	ND
Surrogate Recovery		97%	97%	99%	92%	96%
Instrument ID		HP12	HP12	HP12	HP12	HP12
Date Sampled		N/A	N/A	N/A	N/A	N/A
Date Analyzed		08/02/94	08/02/94	08/03/94	08/04/94	08/05/94
RLMF		1	1	1	1	1
Filename Reference		BG0201E1.D	BG0202E1.D	BG0203E1.D	BG0401E1.D	BG0501E1.D

* The Method Reporting Limit must be multiplied by the Reporting Limit Multiplication Factor (RLMF) to achieve the compound's reporting limit in the analysis.

ND : Not detected at or above the reporting limit for the analysis as performed.
TPHg : Determined by GC/FID following sample purge & trap by EPA Method 5030.
BTEX : Determined by modified EPA Method 8020 following sample purge & trap by EPA Method 5030.

Lab Control Limits for surrogate compound p-Bromofluorobenzene are 61-139%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Lucia Shor 8/8/94
Analyst Date

Cheryl Baeman 8/8/94
Supervisor Date

Issued on 8/8/94 @ 7:51 AM

Matrix Spike Report
Total Petroleum Hydrocarbons as Gasoline
ITS - Anametrix Laboratories - (408)432-8192

Project ID : 15833
Sample ID : MW4
Matrix : WATER
Date Sampled : 07/28/94

Laboratory ID : 9407279-02
Analyst : IS
Supervisor : CS
Instrument ID : HP12
Units : ug/L

COMPOUND NAME	SPIKE AMOUNT	SAMPLE RESULTS	MS RECOVERY	MSD RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS
Gasoline	500	120	86%	88%	50-139	-2%	30
Surrogate Recovery		99%	97%	97%			
Date Analyzed		08/02/94	08/02/94	08/02/94			
Multiplier		1	1	1			
Filename Reference		FPL27902.D	FML27902.D	FDL27902.D			

* Limits established by Inchcape Testing Services, Anametrix Laboratories.

Laboratory Control Spike Report
Total Petroleum Hydrocarbons as Gasoline
ITS - Anametrix Laboratories - (408)432-8192

Instrument ID : HP12
Matrix : LIQUID

Analyst : IS
Supervisor : CM
Units : ug/L

COMPOUND NAME	SPIKE AMOUNT	LCS RECOVERY	RECOVERY LIMITS
Gasoline	500	98%	56-141
Surrogate Recovery		109%	61-139
Date Analyzed		08/02/94	
Multiplier		1	
Filename Reference		MG0201E1.D	

* Limits established by Inchcape Testing Services, Anametrix Laboratories.

Laboratory Control Spike Report
Total Petroleum Hydrocarbons as BTEX
ITS - Anametrix Laboratories - (408)432-8192

Instrument ID : HP12
Matrix : LIQUID

Analyst : IS
Supervisor : CS
Units : ug/L

COMPOUND NAME	SPIKE AMOUNT	LCS RECOVERY	RECOVERY LIMITS
Benzene	20	100%	52-133
Toluene	20	105%	57-136
Ethylbenzene	20	115%	56-139
Total Xylenes	20	105%	56-141
Surrogate Recovery		106%	61-139
Date Analyzed		08/03/94	
Multiplier		1	
Filename Reference		MG0301E1.D	

* Limits established by Inchcape Testing Services, Anametrix Laboratories.

Laboratory Control Spike Report
Total Petroleum Hydrocarbons as BTEX
ITS - Anametrix Laboratories - (408)432-8192

Instrument ID : HP12
Matrix : LIQUID

Analyst : IS
Supervisor : [illegible]
Units : ug/L

COMPOUND NAME	SPIKE AMOUNT	LCS RECOVERY	RECOVERY LIMITS
Benzene	20	110%	52-133
Toluene	20	115%	57-136
Ethylbenzene	20	125%	56-139
Total Xylenes	20	115%	56-141
Surrogate Recovery		113%	61-139
Date Analyzed		08/04/94	
Multiplier		1	
Filename Reference		MG0401E1.D	

* Limits established by Inchcape Testing Services, Anametrix Laboratories.

Laboratory Control Spike Report
Total Petroleum Hydrocarbons as BTEX
ITS - Anametrix Laboratories - (408)432-8192

Instrument ID : HP12
Matrix : LIQUID

Analyst : IS
Supervisor : [illegible]
Units : ug/L

COMPOUND NAME	SPIKE AMOUNT	LCS RECOVERY	RECOVERY LIMITS
Benzene	20	95%	52-133
Toluene	20	100%	57-136
Ethylbenzene	20	110%	56-139
Total Xylenes	20	100%	56-141
Surrogate Recovery		100%	61-139
Date Analyzed		08/05/94	
Multiplier		1	
Filename Reference		MG0501E1.D	

* Limits established by Inchcape Testing Services, Anametrix Laboratories.

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. DAN HENNINGER
APPLIED GEOTECHNOLOGY - OAKLAND
827 BROADWAY, SUITE 210
OAKLAND, CA 94607

Workorder # : 9407279
Date Received : 07/29/94
Project ID : 15833.002
Purchase Order: N/A
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9407279- 1	MW3	WATER	07/28/94	TPHd
9407279- 2	MW4	WATER	07/28/94	TPHd
9407279- 3	MW5	WATER	07/29/94	TPHd
9407279- 4	MW6	WATER	07/29/94	TPHd
9407279- 5	MW7	WATER	07/29/94	TPHd
9407279- 6	MW8	WATER	07/28/94	TPHd
9407279- 7	MW9	WATER	07/28/94	TPHd
9407279- 8	MW10	WATER	07/28/94	TPHd
9407279- 9	MW11	WATER	07/28/94	TPHd
9407279-10	MW12	WATER	07/28/94	TPHd
9407279- 1	MW3	WATER	07/28/94	TPHgBTEX
9407279- 2	MW4	WATER	07/28/94	TPHgBTEX
9407279- 3	MW5	WATER	07/29/94	TPHgBTEX
9407279- 4	MW6	WATER	07/29/94	TPHgBTEX
9407279- 5	MW7	WATER	07/29/94	TPHgBTEX
9407279- 6	MW8	WATER	07/28/94	TPHgBTEX
9407279- 7	MW9	WATER	07/28/94	TPHgBTEX
9407279- 8	MW10	WATER	07/28/94	TPHgBTEX
9407279- 9	MW11	WATER	07/28/94	TPHgBTEX
9407279-10	MW12	WATER	07/28/94	TPHgBTEX

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. DAN HENNINGER
APPLIED GEOTECHNOLOGY - OAKLAND
827 BROADWAY, SUITE 210
OAKLAND, CA 94607

Workorder # : 9407279
Date Received : 07/29/94
Project ID : 15833.002
Purchase Order: N/A
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- The concentrations reported as diesel for samples MW3, MW5, MW8, MW11 and MW12 are primarily due to the presence of discrete peaks not indicative of diesel fuel.
- The concentration reported as diesel for sample MW6 is primarily due to the presence of a lighter petroleum product of hydrocarbon range C6-C12, possibly gasoline.
- The concentrations reported as diesel for samples MW7, MW9 and MW10 are due to the presence of a combination of discrete peaks not indicative of diesel fuel and a lighter petroleum product of hydrocarbon range C6-C12, possibly gasoline.

Cheryl Balmer 8/15/94
Department Supervisor Date

Peggie Dawson 8/15/94
Chemist Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL
ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9407279
Matrix : WATER
Date Sampled : 07/28-29/94
Date Extracted: 08/01/94

Project Number : 15833.002
Date Released : 08/04/94
Instrument I.D.: HP19

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (ug/L)	Amount Found (ug/L)	Surrogate %Rec
9407279-01	MW3	08/03/94	50	970	90%
9407279-02	MW4	08/03/94	50	ND	90%
9407279-03	MW5	08/03/94	50	2200	92%
9407279-04	MW6	08/03/94	50	2100	90%
9407279-05	MW7	08/03/94	50	530	88%
9407279-06	MW8	08/03/94	50	78	93%
9407279-07	MW9	08/03/94	50	1300	94%
9407279-08	MW10	08/03/94	50	2000	91%
9407279-09	MW11	08/03/94	50	150	85%
9407279-10	MW12	08/03/94	50	160	90%
BG0111F9	METHOD BLANK	08/02/94	50	ND	86%

Note : Reporting limit is obtained by multiplying the dilution factor times 50 ug/L.
The surrogate recovery limits for o-terphenyl are 47-114%.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as C10-C28 is determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Teresa Shor 8/8/94
Analyst Date

Cheryl Balmer 8/8/94
Supervisor Date

TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT
EPA METHOD 3510 WITH GC/FID
ANAMETRIX, INC. (408) 432-8192

Sample I.D.	: LAB CONTROL SAMPLE	Anametrix I.D.	: MG0111F9
Matrix	: WATER	Analyst	: IS
Date Sampled	: N/A	Supervisor	: CA
Date Extracted	: 08/01/94	Date Released	: 08/08/94
Date Analyzed	: 08/02/94	Instrument I.D.	: HP19

COMPOUND	SPIKE AMT (ug/L)	LCS REC (ug/L)	% REC LCS	LCSD REC (ug/L)	% REC LCSD	RPD	% REC LIMITS
DIESEL	1250	810	65%	800	64%	-1%	38-96
SURROGATE			71%		73%		47-114

* Quality control limits established by Anametrix, Inc.

ANAMETRIX REPORT DESCRIPTION
GC

Organic Analysis Data Sheets (OADS)

OADS forms contain tabulated results for target compounds. The OADS are grouped by method and, within each method, organized sequentially in order of increasing Anametrix ID number.

Surrogate Recovery Summary (SRS)

SRS forms contain quality assurance data. An SRS form will be printed for each method, if the method requires surrogate compounds. They will list surrogate percent recoveries for all samples and any method blanks. Any surrogate recovery outside the established limits will be flagged with an "*", and the total number of surrogates outside the limits will be listed in the column labelled "Total Out".

Matrix Spike Recovery Form (MSR)

MSR forms contain quality assurance data. They summarize percent recovery and relative percent difference information for matrix spikes and matrix spike duplicates. This information is a statement of both accuracy and precision. Any percent recovery or relative percent difference outside established limits will be flagged with an "*", and the total number outside the limits will be listed at the bottom of the page. Not all reports will contain an MSR form.

Qualifiers

Anametrix uses several data qualifiers (Q) in its report forms. These qualifiers give additional information on the compounds reported. They should help a data reviewer to verify the integrity of the analytical results. The following is a list of qualifiers and their meanings:

- U - Indicates that the compound was analyzed for, but was not detected at or above the specified reporting limit.
- B - Indicates that the compound was detected in the associated method blank.
- J - Indicates that the compound was detected at an amount below the specified reporting limit. Consequently, the amount should be considered an approximate value. Tentatively identified compounds will always have a "J" qualifier because they are not included in the instrument calibration.
- E - Indicates that the reported amount exceeded the linear range of the instrument calibration.
- D - Indicates that the compound was detected in an analysis performed at a secondary dilution.

Absence of a qualifier indicates that the compound was detected at a concentration at or above the specified reporting limit.

REPORTING CONVENTIONS

- Due to a size limitation in our data processing step, only the first eight (8) characters of your project ID and sample ID will be printed on the report forms. However, the report cover letter and report summary pages display up to twenty (20) characters of your project and sample IDs.
- Amounts reported are gross values, i.e., not corrected for method blank contamination.

#3249

9407279 (18) (16) 10144

Applied Geotechnology Inc.
Geotechnical Engineering
Geology & Hydrogeology

CHAIN-OF

Date 7/29/94 Page 1 of 2

PROJECT INFORMATION

Project Manager: DAN HENNINGER
Project Name: DURHAN TRANSPORTATION
Project Number: 158 33.002
Site Location: HAYWARD, CA Sampled By: JA/PL

DISPOSAL INFORMATION

☐ Lab Disposal (return if not indicated)
Disposal Method: _____
Disposed by: _____ Disposal Date: _____

QC INFORMATION (check one)

☐SW-846 ☐CLP ☐Screening ☐AGI Std. ☐Special

Laboratory Number:

ANALYSIS REQUEST

	SAMPLE ID	DATE	TIME	MATRIX	LAB ID	PETROLEUM HYDROCARBONS: TPH-ID State:	TPH-G State:	TPH-D State:	TPH Special Instructions	418.1 State:	8015M	ORGANIC COMPOUNDS: 8010 Halogenated VOCs	8020 Aromatic VOCs	8020M - BETX only	8240 GCMS Volatiles	8270 GCMS Semivol.	8310 HPLC PAHs	8040 Phenols	DWS - Volatiles and Semivol.	PESTS/PCB's: 8080 OC Pest/PCBs	8080M PCBs only	8140 OP Pesticides	8150 OC Herbicides	DWS - Herb/pest	METALS: Selected metals: list	Total Lead (Wa)	Organic Lead (Ca)	TCL Metals (23)	Priority Poll. Metals (13)	DWS - Metals	MFSP - Metals (Wa)	LEACHING TESTS: TCLP - Volatiles (ZHE)	TCLP - Semivolatiles	TCLP - Pesticides	TCLP - Metals	OTHER				NUMBER OF CONTAINERS
①	MW-3	7/28/94	15:45	WATER			X	X				X		X						X																				6
②	MW4	7/28/94	15:40																																					6
③	MW5	7/29/94	12:25																																					6
④	MW6	7/29/94	12:15																																					6
⑤	MW7	7/29/94	14:20																																					6
⑥	MW8	7/28/94	15:00																																					6
⑦	MW9	7/28/94	15:20																																					6
⑧	MW10	7/28/94	14:50	▼																																				6

LAB INFORMATION

Lab Name: ANAMETRIX
Lab Address: CONCOURSE DR
SAN JOSE CA
Via: PICKUP BY ANAMETRIX
Turn Around Time: ☒Standard ☐24 hr. ☐48 hr. ☐72 hr. ☐1 wk.

SAMPLE RECEIPT

Total Number of Containers: 66
Chain of Custody Seals: Y/N/NA
Intact?: Y/N/NA
Received in Good Condition/Cold:

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH DATA

Special Instructions:

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: Paul R Lohman Time: 15:20	Signature: Benny S. Carrizosa Time: 1620	Signature: Time
Printed Name: PAUL R LOHMAN Date: 7/29/94	Printed Name: BENNY S. CARRIZOSA Date: 7/29/94	Printed Name: Date
Company: AGI TECHNOLOGY	Company: ANAMETRIX	Company
RECEIVED BY: 1.	**RECEIVED BY: 2.**	**RECEIVED BY: 3.**
Signature: Benny S. Carrizosa Time: 1530	Signature: Brandy C. Talon Time: 1620	Signature: Time
Printed Name: BENNY S. CARRIZOSA Date: 7/29/94	Printed Name: Brandy C. Talon Date: 7/29/94	Printed Name: Date
Company: ANAMETRIX	Company: ITS Anametrix	Company:

DISTRIBUTION: White, Canary to Analytical Laboratory; Pink to AGI Project Files; Gold to AGI Disposal Files

9407279 (18) (16) 10/44

CHAIN-OF-CUSTODY

Applied Geotechnology Inc.
Geotechnical Engineering
Geology & Hydrogeology

Date 7/29/94 Page 2 of 2

PROJECT INFORMATION

Project Manager: DAN HENNINGER
Project Name: DURHAM TRANSPORTATION
Project Number: 153 33.002
Site Location: HAYWARD, CA Sampled By: IA/PL

DISPOSAL INFORMATION

☐ Lab Disposal (return if not indicated)

Disposal Method: ______
Disposed by: ______ Disposal Date: ______

QC INFORMATION (check one)

☐ SW-846 ☐ CLP ☐ Screening ☐ AGI Std. ☐ Special

Laboratory Number:

ANALYSIS REQUEST

	SAMPLE ID	DATE	TIME	MATRIX	LAB ID	PETROLEUM HYDROCARBONS: TPH-ID State:	TPH-G State:	TPH-D State:	TPH Special Instructions	418.1 State:	8015M	ORGANIC COMPOUNDS: 8010 Halogenated VOCs	8020 Aromatic VOCs	8020M - BETX only	8240 GCMS Volatiles	8270 GCMS Semivol.	8310 HPLC PAHs	8040 Phenols	DWS - Volatiles and Semivol.	PESTS/PCB's: 8080 OC Pest/PCBs	8080M PCBs only	8140 OP Pesticides	8150 OC Herbicides	DWS - Herb/pest	METALS: Selected metals: list	Total Lead (Wa)	Organic Lead (Ca)	TCL Metals (23)	Priority Poll. Metals (13)	DWS - Metals	MFSP - Metals (Wa)	LEACHING TESTS: TCLP - Volatiles (ZHE)	TCLP - Semivolatiles	TCLP - Pesticides	TCLP - Metals	OTHER				NUMBER OF CONTAINERS
(9)	MW10B	7/28/94	16:15	WATER			X	X				X		X																										8
(10)	MW12	7/28/94	16:25	WATER			X	X				X		X																										8

LAB INFORMATION		SAMPLE RECEIPT	
Lab Name: ANAMETRIX		Total Number of Containers:	16
Lab Address: CONCOURSE DR SAN JOSE CA		Chain of Custody Seals: Y/N/NA	
		Intact?: Y/N/NA	
Via: PICKUP BY ANAMETRIX		Received in Good Condition/Cold:	

Turn Around Time: ☒ Standard ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 1 wk.

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH DATA

Special Instructions:

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: [signature] Time: 15:30	Signature: [signature] Time: 1620	Signature Time.
Printed Name: PAUL R LOHMAN Date: 7/29/94	Printed Name: BENNY S. CARRIZOSA Date: 7/29/94	Printed Name. Date:
Company: AGI TECHNOLOGY	Company: ANAMETRIX	Company:

RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY: 3.
Signature: [signature] Time: 1530	Signature: [signature] Time: 1620	Signature: Time
Printed Name: BENNY S. CARRIZOSA Date: 7/29/94	Printed Name: Brandy C. Falon Date: 7/29/94	Printed Name. Date
Company: ANAMETRIX	Company: ITS Anametrix	Company:

AGI OFFICES: Bellevue: (206) 453-8383 Tacoma: (206) 383-4380
Portland: (503) 222-2820 Pleasanton: (415) 460-5495

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