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RUST Environment & Infrastructure Inc. 12 Metro Park Road Albany, NY 12205 Tel (518) 458-1313 • FAX (518) 458-2472

February 13, 1995

Mr. Barney Chan Hazardous Materials Specialist Alameda County Department of Environmental Health 1131 Harbor Bay Parkway Room 250 Alameda, California 94502

Subject:

Area 4

Former American National Can Company Facility

Oakland, California

Dear Mr. Chan:

Enclosed please find a copy of our Area 4 Remediation Activities Report for the referenced site.

If based on the information provided in this document, you agree that the impacted soil in this area has been remediated to the satisfaction of the Alameda County Department of Environmental Health, please indicate your agency's approved closure in a letter to my attention.

If you have any questions regarding this report, please contact me at 518-458-1313.

Very truly yours,

Edward W. Alusow Senior Project Manager

ESA/ajl

Enclosure

cc:

- J. Moran (ANC)
- J. Peters (ANC)
- E. Rawlings (ANC)
- J. Kessler (HSA)
- D. Bruegel (Dickinson Wright)

Edward W. almos

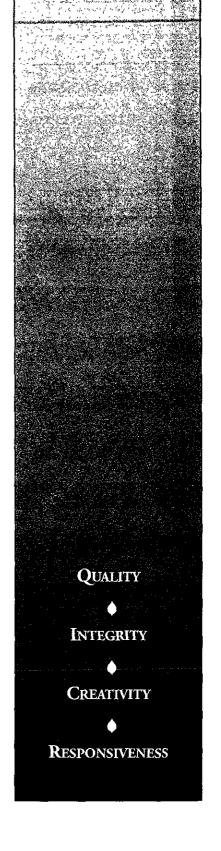
- R. Creps (PES)
- R. Arulananthum (SFBRWQCB)
- R. Williams (KMART)
- S. Arigala (SFBRWQCB)
- S. Krival (DTSC)

Remediation Activities Report Former ANC Facility - Area 4 Oakland, California

> Prepared for: American National Can Company Chicago, Illinois

Prepared by: Rust Environment & Infrastructure Albany, New York

February 1995





4

6

7

8

TABLE OF CONTENTS

1.0	INTRODUCTION1
2.0	PURPOSE, OBJECTIVES AND SCOPE OF REMEDIATION
3.0	DESCRIPTION OF REMEDIAL ACTIVITIES
4.0	POST EXCAVATION CONFIRMATION SAMPLING AND ANALYSIS4
5.0	POST EXCAVATION ANALYTICAL RESULTS5
6.0	SAMPLING AND ANALYSIS OF STOCKPILED SOIL
7.0	SAMPLING AND ANALYSIS OF EXCAVATION WATER
8.0	CONCLUSIONS8
	LIST OF FIGURES
Figure 1 2	Location Map Soil Excavation Map-Area 4
	LIST OF TABLES
Table 1	Summary of Post Excavation Soil Sampling Analytical Results-Area 4 Remedial Activities
	LIST OF APPENDICES
Appen	dix
A	Laboratory Analytical Report-Area 4 Post-Excavation Samples and Clean Fill Sand Sample
В	Laboratory Analytical Report-Area 4 Stockpiled Soil Samples
C	Laboratory Analytical Report-Area 4 Excavation Water Sample
D	Laboratory Analytical Report-Fractionation Tank Water Samples

1.0 INTRODUCTION

American National Can (ANC) retained Rust Environment & Infrastructure (RUST) to oversee soil remedial activities at the former ANC facility located at 3801 East 8th Street, Oakland, California (see Figure 1). RUST provided technical assistance and directed the excavation of impacted soils from Areas 4A and 4B within Area 4 of the site. Area 4 was previously defined in a 1991 subsurface investigation by DUNN Geoscience Corporation (DUNN). Initial remedial activities in Area 4 included the removal of underground storage tanks (USTs) and soil. Additional Area 4 remedial activities were carried out by DUNN during October and November, 1992 to remove a 500 gallon gasoline UST and a series of underground pipelines. Results from this remedial effort were reported in the March, 1993 Area 4 Remedial Activities Report by DUNN. The presence of underground utilities limited remedial efforts within Areas 4A and 4B during those previous remedial efforts. Recent site development, including the demolition of existing facility structures and the removal of all inactive/abandoned underground utilities, facilitated this additional soil remediation.

ANC retained Hazardous Remedial Services, Inc. (HRS) of San Jose, California to provide soil excavation services. The remedial activities were carried out in accordance with the Remedial Work Plan for Areas 2 and 4 (RUST; December, 1993) approved by the Alameda County Department of Environmental Health Care Services Agency (ACDEH). The remedial activities included the following:

- excavation and temporary on-site storage of impacted soil remaining after previous remediation efforts;
- management of groundwater encountered during excavation activities;
- post-excavation confirmatory sampling and analyses; and,
- sampling and analyses of stockpiled soil for subsequent off-site disposal.

2.0 PURPOSE, OBJECTIVES AND SCOPE OF REMEDIATION

Remedial measures were implemented to improve the environmental quality of the site so it can be redeveloped into a retail shopping center. The primary objectives of the remediation were to:

- eliminate or minimize potential health and environmental risks posed by impacted soils and groundwater;
- control or prevent the release of contaminants during remedial activities; and,
- provide the public with a beneficial use of the property.

To achieve these objectives, RUST excavated soil materials in Areas 4A and 4B.

Extensive soil and groundwater sampling and analysis has previously defined contaminant source areas and has adequately identified the contaminants of concern. In October and November, 1992, a gasoline UST and a portion of the impacted soils were removed during Area 4 remediation efforts. The limits of the 1992 excavation areas were restricted due to the proximity of underground utilities and building structures located within and adjacent to the former source areas. Since 1992, site development has included demolition of plant facility structures and removal of on-site utilities, thus allowing for complete removal of impacted soils within Areas 4A and 4B. Area 4A extends along the southern perimeter of the site in the vicinity of the former compound storage building. Area 4B is located adjacent to the former product pipeline, south of the former location of Building 12 (Figure 2).

3.0 DESCRIPTION OF REMEDIAL ACTIVITIES

HRS mobilized to the site on November 2, 1994. Excavation of impacted soils took place from November 3, 1994 through November 8, 1994 in Area 4A, and on November 7, 1994 in Area 4B.

As each excavation proceeded, the RUST representative monitored the soils with an HNU model PI-101 photoionization detector (PID). All soils exhibiting a PID response of greater than 10 ppm were temporarily stockpiled on-site on polyethylene sheeting. Excavation activities continued until PID readings below 10 ppm were obtained. Approximately 3000 cubic yards of impacted soil were excavated and staged (Area 4A-2550yd³; Area 4B-450yd³). Treatment and/or disposal options are currently being evaluated.

The lateral and vertical extent of both excavations is shown in Figure 2. Excavation depth was approximately 14 feet in Area 4A, extending approximately 4 feet below the water table. Six fractionation tanks were mobilized to the site and used to store groundwater and precipitation that infiltrated the open excavation. Water was pumped from the excavation via vac truck into the tanks. The water is currently being stored on-site pending disposal options. Area 4B was excavated to a total depth of approximately 6 feet. Groundwater was not encountered within the excavation.

4.0 POST EXCAVATION CONFIRMATION SAMPLING AND ANALYSIS

RUST collected 11 post excavation samples at an interval of no more than 20 feet along the excavation walls to confirm that the impacted soil had been removed to the extent necessary to reach the remedial objectives.

Fourteen post excavation soil samples (samples A4A-1 through A4A-14) were collected from the sidewalls of the Area 4A excavation (Figure 2). All samples were collected from the base of the olive-gray, silty clayey gravel unit at a depth of 8.5 feet below original surface grade. The sampling zone was within the capillary fringe which is presumed to be the zone exhibiting the highest potential for the migration of contaminants. Samples A4A-1 through A4A-10 and samples A4A-12 through A4A-14 were taken 1 foot into the sidewall. Sample A4A-11 was taken approximately 0.7 feet into the sidewall. The excavation extended to a final depth of 14 feet, approximately 4 feet below the water table surface. As a result, RUST did not collect post excavation floor samples in Area 4A. Groundwater monitoring in Area 4A will be used to demonstrate the effectiveness of the below-water table soil excavation.

In area 4B, five post excavation soil samples were collected from the sidewalls and three samples (samples A4B-3, A4B-6 and A4B-7) were collected from the excavation floor. Sample A4B-7 was collected as a floor sample since the sidewall at this location consisted of gravel back fill material from previous (October, 1992) excavation activity. The locations of the post excavation samples are shown on Figure 2.

Each sample was labeled, placed in an ice-filled cooler and transported with an accompanying chain-of-custody to Anametrix Laboratories of San Jose, California, for analysis. The samples were analyzed for BTEX (benzene, toluene, ethylbenzene, and xylene) and total petroleum hydrocarbons as gasoline (TPHg) by California Department of Health Services approved methods. The results are presented in Appendix A.

5.0 POST EXCAVATION ANALYTICAL RESULTS

The results of post excavation sample analyses are summarized on Table 1 and the laboratory reports are provided as Appendix A. For all samples analyzed, concentrations of all BTEX compounds were either not detected at the laboratory reporting limit or were detected at very low concentrations. Benzene or toluene were not detected in any of the twenty-two samples tested, at a detection limit of 5 parts per billion (ppb). Ethylbenzene was detected in only one sample (A4A-2) at a concentration of 5 ppb. Total xylenes were detected in four of the twenty-two samples tested at concentrations ranging from 6 to 20 ppb. TPH as gasoline was not detected in any sample at a laboratory reporting limit of 0.5 ppm. The data demonstrate that the excavation activities were sufficient to effectively remediate the impacted soil to the maximum extent feasible. Excavations 4A and 4B were backfilled and compacted with clean fill material from an off-site source during the period November 17, 1994 through November 23, 1994.

6.0 SAMPLING AND ANALYSIS OF STOCKPILED SOIL

Approximately 3000 cubic yards of impacted soil from Areas 4A and 4B was stockpiled on plastic sheeting. On November 14, 1994, RUST personnel collected a composite sample of the stockpiled soil to characterize the material for disposal. The sample (sample A4SS) was analyzed for volatile organics by EPA Method 8240, BTEX by EPA Method 8020, TPHg by EPA Method 8015, Total Recoverable Petroleum Hydrocarbons by Cal-DHS Standard Method 5520EF, and for Cadmium, Chromium, Lead, Nickel and Zinc by EPA Method 6010A, and for Organic Lead. The stockpiled soil from excavation activities in Area 4 was tentatively accepted for disposal in the BFI Vasco landfill facility based on the analyses described here and the analytical results presented in Appendix B.

A soil sample also was collected from the imported clean fill sand which was used to backfill the Area 4 excavations. The sample (A4A-SAND) was analyzed for BTEX and total petroleum hydrocarbons as gasoline (TPHg) by California Department of Health Services approved methods. In sample A4A-SAND, concentrations of BTEX compounds and TPHg were reported as not detected at or above the practical quantitation limit for the respective analytical method. The laboratory analytical report for this sample is included in Appendix A.

7.0 SAMPLING AND ANALYSIS OF EXCAVATION WATER

On November 10, 1994, RUST personnel collected a water sample from the excavation pit prior to excavation de-watering. The sample (A4A-PW) was analyzed for EPA Method 8240 volatile organic compounds and for 17 CAM metals by EPA method 6010. Analytical results are included in Appendix C. Total Xylene was reported at 310 ug/L. Consequently, approximately 120,000 gallons of excavation water were pumped into six fractionation tanks to de-water the excavation so that proper compaction of excavation backfill could be performed. On November 22, 1994, RUST personnel collected a water sample from each fractionation tank for waste characterization purposes. Each sample was analyzed for volatile organic compounds and for the 17 CAM metals by EPA Method 6010. Analytical results for the six tank samples, labelled A4A-BKTK1 through A4A-BKTK6, are presented in Appendix D.

8.0 CONCLUSIONS

The November, 1994 Area 4 soil excavation activities included the removal of approximately 3000 cubic yards of impacted soil. In addition, approximately 120,000 gallons of water were pumped from the excavation into portable storage tanks. The soil and water are temporarily staged and stored on-site as RUST evaluates off-site disposal options.

The laboratory analytical results from the post excavation samples collected revealed only very low ppb level concentrations of petroleum-related constituents in four of the twenty-two samples tested. These results demonstrate that the measures undertaken were successful in remediating Area 4 soils to the maximum extent feasible in accordance with the approved Remedial Work Plan for Areas 2 and 4.

TABLES

TABLE 1 AMERICAN NATIONAL CAN COMPANY OAKLAND, CALIFORNIA, FACILITY

Summary of Post Excavation Soil Sampling Analytical Results AREA 4 REMEDIAL ACTIVITIES

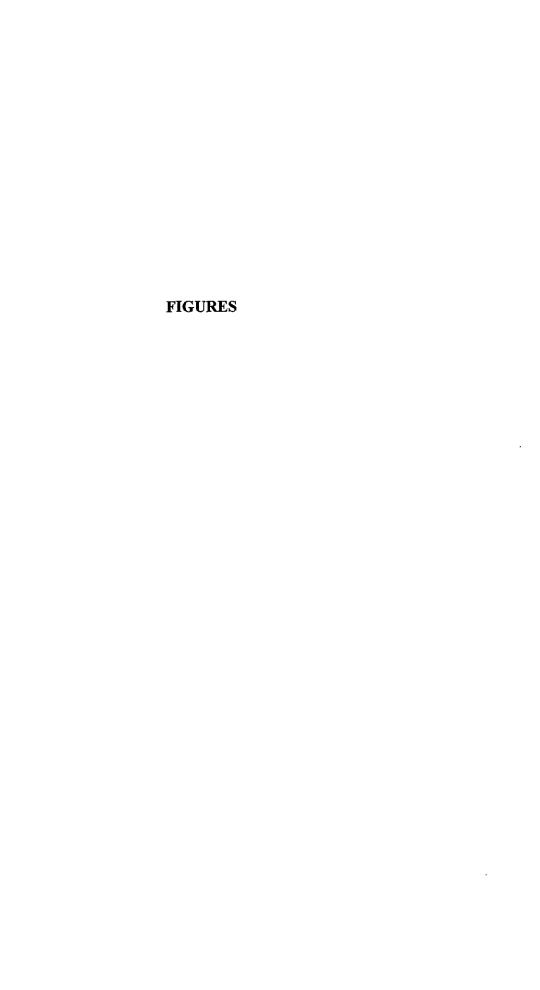
(November, 1994)

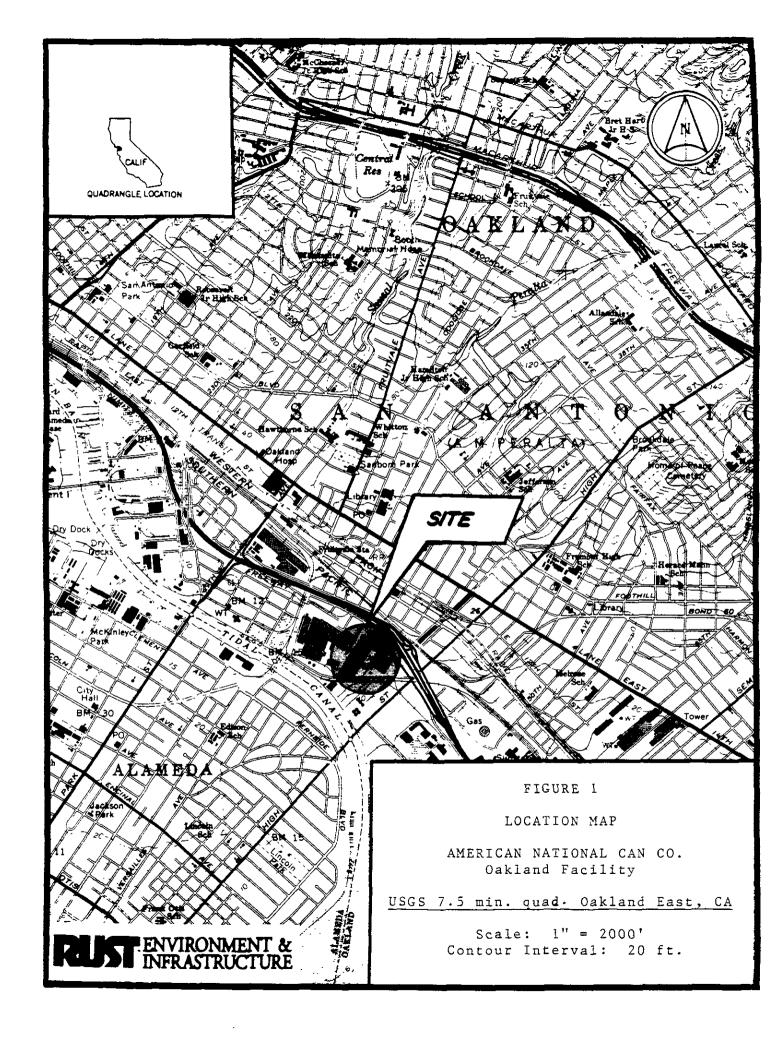
	ANALYTICAL RESULTS						
SAMPLE NUMBER	Вепгепе	Toluene	Ethylbenzene	Total Xylenes	TPH as Gasoline		
A4A-1	ND	ND	ND	0.006	ND		
A4A-2	ND	ND	0.006	0.020	ND		
A4A-3	ND	ND	ND	0.008	ND		
A4A-4	ND	ND	ND	ND	ND		
A4A-5	ND	NÐ	ND	ND	ND		
A4A-6	ND	ND	ND	ND	ND		
A4A-7	ND	ND	ND	ND	ND		
A4A-8	ND	ND	ND	ND	ND		
A4A-9	ND	ND	ND	ND	ND		
A4A-10	ND	ND	ND	ND	ND		
A4A-11	ND	ND	ND	ND	ND		
A4A-12	ND	ND	ND	ND	ND		
A4A-13	ND	ND	ND	ND	NĐ		
A4A-14	ND	ND	ND	ND	ND		
A4B-1	ND	ND	ND	ND	ND		
A4B-2	ND	ND	ND	ND	ND		
A4B-3	ND	ND	ND	ND	ND		
A4B-4	ND	ND	ND	ND	ND		
A4B-5	ND	ND	ND	ND	ND		
A4B-6	ND	ND	ND	0.009	ND		
A4B-7	ND	ND	ND	ND	ND		
A4B-8	ND	ND	ND	ND	ND		

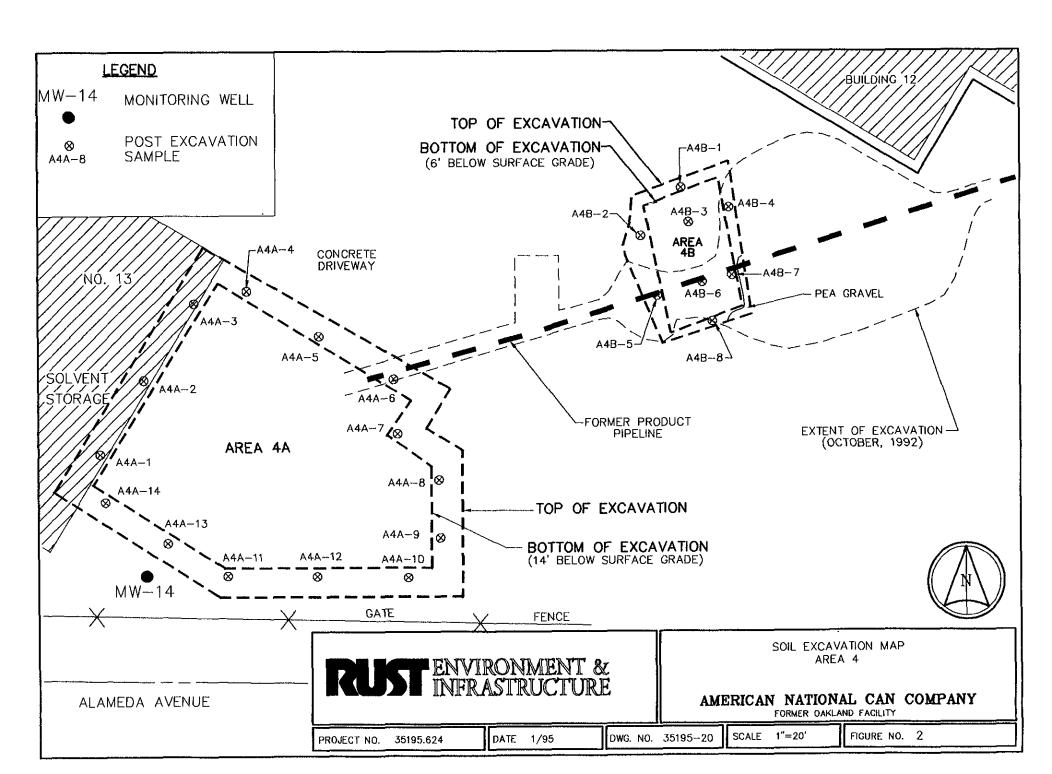
NOTES: All analytical results are expressed in mg/kg (parts per million).

Method detection limit (MDL) for benzene, toluene, ethylbenzene and total xylenes = 0.005 mg/kg

Method detection limit (MDL) for TPH as gasoline = 0.5 mg/kg







APPENDIX A

Laboratory Analytical Report-Area 4 Post-Excavation Samples and Clean Fill Sand Sample

1961 Concourse Drive Suite E San Jose, CA 95131 Tcl: 408-432-8192 Fax: 408-432-8198

MR. WALTER HOWARD

RUST ENVIRONMENT AND INFRASTRUCTURE

12 METRO PARK ROAD

Workorder # : 9411099 Date Received: 11/08/94 Project ID : 35195.624

ALBANY, NY 12205

Purchase Order: N/A

The following samples were received at Anametrix for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9411099- 1	A4A-1
9411099- 2	A4A-2
9411099- 3	A4A-3
9411099- 4	A4A-4
9411099- 5	A4A-5
9411099- 6	A4A-6
9411099- 7	A4A-7
9411099- 8	A4A-8
9411099- 9	A4A-9
9411099-10	A4A-10
9411099-11	A4A-11
9411099-12	A4A-12

This report is organized in sections according to the specific Anametrix laboratory group which performed the analysis(es) and generated the data.

The results contained within this report relate to only the sample(s) tested. Additionally, these data should be considered in their entirety and Anametrix cannot be responsible for the detachment, separation, or otherwise partial use of this report.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234.

If you have any further questions or comments on this report, please call your project manager as soon as possible. Thank you for using Incape Testing Services.

Susan Kraska Yeager

Laboratory Director

This report consists of $\frac{1}{2}$ pages.

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

MR. WALTER HOWARD

RUST ENVIRONMENT AND INFRASTRUCTURE

12 METRO PARK ROAD ALBANY, NY 12205

Workorder # : 9411099
Date Received : 11/08/94
Project ID : 35195.624
Purchase Order: N/A
Department : GC

Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9411099- 1	A4A-1	SOIL	11/08/94	TPHgBTEX
9411099- 2	A4A-2	SOIL	11/08/94	TPHgBTEX
9411099- 3	A4A-3	SOIL	11/08/94	TPHgBTEX
9411099- 4	A4A-4	SOIL	11/08/94	TPHgBTEX
9411099- 5	A4A-5	SOIL	11/08/94	TPHgBTEX
9411099- 6	A4A-6	SOIL	11/08/94	TPHgBTEX
9411099- 7	A4A-7	SOIL	11/08/94	TPHgBTEX
9411099- 8	A4A-8	SOIL	11/08/94	TPHgBTEX
9411099- 9	A4A-9	SOIL	11/08/94	TPHgBTEX
9411099-10	A4A-10	SOIL	11/08/94	TPHgBTEX
9411099-11	A4A-11	SOIL	11/08/94	TPHgBTEX
9411099-12	A4A-12	SOIL	11/08/94	TPHgBTEX

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

MR. WALTER HOWARD RUST ENVIRONMENT AND INFRASTRUCTURE 12 METRO PARK ROAD

ALBANY, NY 12205

Workorder # : 9411099
Date Received : 11/08/94
Project ID : 35195.624
Purchase Order: N/A

Purchase Order: N/A
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- All holding times have been met for the analyses reported in this section.

Department Supervisor

11/14/5 Date

Reggie Tawson 1/14/94
Chemiss Date

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

Lab Workorder : 9411099

Client Project ID: 35195.624

Matrix : SOIL

Units : mg/Kg

		Client ID				
	Method	A4A-1	A4A-2	A4A-3	A4A-4	A4A- 5
	Reporting	Lab ID				
Compound Name	Limit*	9411099-01	9411099-02	9411099-03	9411099-04	9411099-05
Benzene	0.0050	ND	ND	ND	ND	ND
Toluene	0.0050	ND	ND	ND .	ND	ND
Ethylbenzene	0.0050	ND	0.006	ND	ND	ND
Total Xylenes	0.0050	0.006	0.020	0.008	ND	ND
TPH as Gasoline	0.50	ND	ND	ND	ND	ND
Surrogate Recovery		73%	68%	84%	86%	90%
Instrument ID		HP4	HP4	HP4	HP4	HP4
Date Sampled		11/08/94	11/08/94	11/08/94	11/08/94	11/08/94
Date Analyzed		11/09/94	11/09/94	11/09/94	11/09/94	11/09/94
RLMF		1	1	1	1	1
Filename Reference		FPN09901.D	FPN09902.D	FPN09903.D	FPN09904.D	FPN09905.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 53-147%.

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

Reggie Tourson 11/14/94

Analyst Date

Supervisor

Dat

Organic Analysis Data Sheet

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

Lab Workorder : 9411099

Client Project ID: 35195.624

Matrix : SOIL

Units : mg/Kg

		Client ID				
	Method	A4A-6	A4A-7	A4A-8	A4A-9	A4A-10
1	Reporting	Lab ID				
Compound Name	Limit*	9411099-06	9411099-07	9411099-08	9411099-09	9411099-10
Benzene	0.0050	ND	ND	ND	ND	ND
Toluene	0.0050	ND	ND	ND	ND	ND
Ethylbenzene	0.0050	ND	ND	ND	ND	ND
Total Xylenes	0.0050	ND	ND	ND	ND	ND
TPH as Gasoline	0.50	ND	ND	ND	ND	ND
Surrogate Recovery	T	97%	106%	101%	105%	108%
Instrument ID		HP4	HP4	HP12	HP12	HP12
Date Sampled		11/08/94	11/08/94	11/08/94	11/08/94	11/08/94
Date Analyzed		11/09/94	11/09/94	11/10/94	11/10/94	11/10/94
RLMF		1	1	1	1	1
Filename Reference		FPN09906.D	FPN09907.D	FPN09908.D	FPN09909.D	FPN09910.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 53-147%.

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

Reggie Dauson 11/14/94

Analyst Date

Cheryl Balmer Supervisor

11/14

Dat

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

Lab Workorder : 9411099 Client Project ID: 35195.624

Matrix : SOIL Units : mg/Kg

		Client ID	Client ID	Client ID	Client ID	Client ID
	Method	A4A-11	A4A-12			
	Reporting	Lab ID	Lab ID	Lab ID	Lab ID	Lab ID
Compound Name	Limit*	9411099-11	9411099-12	Method Blank	Method Blank	
Benzene	0.0050	ND	ND	ND	ND	
Toluene	0.0050	ND	, ND	ND	ND	
Ethylbenzene	0.0050	ND	ND	ND	ND	
Total Xylenes	0.0050	ND	ND	ND	ND	
TPH as Gasoline	0.50	ND	ND	ND	ND	
Surrogate Recovery		97%	103%	100%	107%	
Instrument ID		HP12	HP12	HP4	HP12	
Date Sampled		11/08/94	11/08/94	N/A	N/A	
Date Analyzed		11/10/94	11/10/94	11/09/94	11/10/94	
RLMF		1	1	1	1	
Filename Reference		FPN09911.D	FPN09912.D	BN0901E1.D	BN1001E1.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.

: Not detected at or above the reporting limit for the analysis as performed.

TPHq : 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 53-147%.

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

Reggie Dawson 11/14/94
Analyst

Matrix Spike Report

Total Petroleum Hydrocarbons as BTEX ITS - Anametrix Laboratories - (408)432-8192

Project ID : 35195.62

Laboratory ID : 9411099-01

Sample ID : A4A-1

Analyst : AN

Matrix : SOIL

Supervisor : 65

Date Sampled: 11/08/94

Instrument ID : HP4

COMPOUND NAME	SPIKE	SAMPLE	MS	MSD	RECOVERY	RPD	RPD
	AMOUNT	RESULTS	RECOVERY	RECOVERY	LIMITS		LIMITS
Benzene	0.040	ND	83%	68%	45-139	20%	30
Toluene	0.040	ND	115%	68%	51-138	52%	30
Ethylbenzene	0.040	ND	88%	70%	48-146	22%	30
Total Xylenes	0.040	0.006	79%	61%	50-139	25%	30
Surrogate Recovery		73%	84%	64%			
Date Analyzed		11/09/94	11/09/94	11/09/94			
Multiplier		1	1	1			
Filename Reference		FPN09901.D	FMN09901.D	FNN09901.D			

^{*} Limits established by Inchcape Testing Services, Anametrix Laboratories.

Matrix Spike Report

Total Petroleum Hydrocarbons as BTEX ITS - Anametrix Laboratories - (408)432-8192

Project ID : 35195.62 Laboratory ID : 9411099-12

Sample ID : A4A-12 Analyst : 20
Matrix : SOIL Supervisor : 3

Date Sampled : 11/08/94 Instrument ID : HP12

COMPOUND NAME	SPIKE	SAMPLE	MS	MSD	RECOVERY	RPD	RPD
	AMOUNT	RESULTS	RECOVERY	RECOVERY	LIMITS		LIMITS
Benzene	0.040	ИD	103%	103%	45-139	0%	30
Toluene	0.040	ND	103%	103%	51-138	0%	30
Ethylbenzene	0.040	ND	100%	100%	48-146	0%	30
Total Xylenes	0.040	ND	103%	100%	50-139	2%	30
Surrogate Recovery		103%	90%	90%			
Date Analyzed		11/10/94	11/10/94	11/10/94			
Multiplier		1	1	1			
Filename Reference		FPN09912.D	FMN09912.D	FDN09912.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 : HP4

Analyst : NO

Matrix : SOLID

Supervisor : 0

			The second secon
COMPOUND NAME	SPIKE	LCS	RECOVERY
	AMOUNT	RECOVERY	LIMITS
Benzene	0.020	100%	52-133
Toluene	0.020	95%	57-136
Ethylbenzene	0.020	100%	56-139
Total Xylenes	0.020	95%	56-141
Surrogate Recovery		102%	53-147
Date Analyzed		11/09/94	
Multiplier		1	
Filename Reference		MNO901E1.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 Analyst : 20 Matrix : SOLID Supervisor : #

COMPOUND NAME	SPIKE	LCS	RECOVERY
	AMOUNT	RECOVERY	LIMITS
Benzene	0.020	70%	52-133
Toluene	0.020	65%	57-136
Ethylbenzene	0.020	75%	56-139
Total Xylenes	0.020	95%	56-141
Surrogate Recovery		32%	53-147
Date Analyzed		11/10/94	
Multiplier		1	
Filename Reference		MN1001E1.D	

^{*} Limits established by Inchcape Testing Services, Anametrix Laboratories.

SAMPLE RECEIVING CHECKLIST

WORKORDER NUMBER: 941/099 CLIENT PROJECT ID: 35195	,624		
COOLER			
Shipping slip (airbill, etc.) present?	YES	NO	N/A
If YES, enter carrier name and airbill #:			
Custody Seal on the outside of cooler?	YES	NO	N/A
Condition: INTACT BROKEN	···		
Temperature of sample (s) within range?	YES	МО	N/A
List temperature of cooler (s): 4°C			
SAMPLES			
Chain of custody seal present for each container?	YES	NO	N/A
Condition: INTACT BROKEN			
Samples arrived within holding time?	YES	NO	N/A
Samples in proper containers for methods requested?	YES	NO	
Condition of containers: INTACT BROKEN			
If NO, were samples transferred to proper container?	· · · · · · · · · · · · · · · · · · ·		
Were VOA containers received with zero headspace?	YES	NO	N/A
If NO, was it noted on the chain of custody?			
Were container labels complete? (ID, date, time preservative, etc.)	YES	NO	
Were samples preserved with the proper preservative?	YES	NO	N/A
If NO, was the proper preservative added at time of receipt?	···		
pH check of samples required at time of receipt?	YES	NO	,
If YES, pH checked and recorded by:			
Sufficient amount of sample received for methods requested?	YES	NO	
If NO, has the client or lab project manager been notified?			
Field blanks received with sample batch? # of Sets:	YES_	NO	(N/A)
Trip blanks received with sample batch? # of Sets:	YES	NO	(N/A)
CHAIN OF CUSTODY			
Chain of custody received with samples?	(YES)	NO	
Has it been filled out completely and in ink?	(YES)	NO	,,,,, ,
Sample ID's on chain of custody agree with container labels?	YES	NO	
Number of containers indicated on chain of custody agree with number received?	(YES)	NO	
Analysis methods clearly specified?	YES	NO	
Sampling date and time indicated?	YES	NO NO	
Proper signatures of sampler, courier, sample custodian in appropriate place? with time and date?	YES	NO	
Turnaround time? REGULAR RUSH			
Any NO response and/or any "BROKEN" that was checked must be detailed in the Corrective	e Action	For	n.
Sample Custodian: Date: 1/8/94 Project Manager: HD	Date: _	11/9	194



48 per Kilmar g.c. 11/8/94 24 Hour RUSH T.A.T.



Chain of Custody Record

WAHLER LABLES

											Cus	tody	Seal #			RU	ST E&	Cooler	†		
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1961 Concourse Drive Suite E San Jose, CA 95131 Tel: 408-432-8192 Fax: 408-432-8198

MR. WALTER HOWARD RUST ENVIRONMENT AND INFRASTRUCTURE 12 METRO PARK ROAD ALBANY, NY 12205 Workorder # : 9411215 Date Received : 11/18/94 Project ID : 35195.624

Purchase Order: N/A

The following samples were received at Anametrix for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9411215- 1	A4A-13
9411215- 2	A4A-14
9411215- 3	A4A-SAND

This report is organized in sections according to the specific Anametrix laboratory group which performed the analysis(es) and generated the data.

The results contained within this report relate to only the sample(s) tested. Additionally, these data should be considered in their entirety and Anametrix cannot be responsible for the detachment, separation, or otherwise partial use of this report.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234.

If you have any further questions or comments on this report, please call your project manager as soon as possible. Thank you for using Inchcape Testing Services.

Susan Kraska Yeager Laboratory Director

Project Manager

Date

This report consists of $\frac{0}{2}$ pages.

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

MR. WALTER HOWARD RUST ENVIRONMENT AND INFRASTRUCTURE

12 METRO PARK ROAD ALBANY, NY 12205

Workorder # : 9411215
Date Received : 11/18/94
Project ID : 35195.624
Purchase Order: N/A
Department : GC
Sub-Department: TPH

\$

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9411215- 1	A4A-13	SOIL	11/18/94	TPHgBTEX
9411215- 2	A4A-14	SOIL	11/18/94	TPHgBTEX
9411215- 3	A4A-SAND	SOIL	11/18/94	TPHgBTEX

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

MR. WALTER HOWARD
RUST ENVIRONMENT AND INFRASTRUCTURE

12 METRO PARK ROAD ALBANY, NY 12205

Workorder # : 9411215 Date Received : 11/18/94 Project ID : 35195.624

Purchase Order: N/A
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- All holding times have been met for the analyses reported in this section.

- The xylene recoveries for the matrix spike and spike duplicate on sample A4A-SAND are oustside of quality control limits due to a soil matrix effect.

Cheuf Balmen Department Supervisor

190/59 Date Chemist

ia Shar 11/30/94
Date

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GC/TPH- PAGE 2

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9411215 Matrix : SOIL Date Sampled : 11/18/94 Project Number: 35195.624 Date Released: 11/29/94

	Reporting Limit	Sample I.D.# A4A-13	Sample I.D.# A4A-14	Sample I.D.# A4A-SAND	Sample I.D.# BN2101E1	Sample I.D.# BN2202E1
COMPOUNDS	(mg/Kg)	-01	-02	-03	BLANK	BLANK
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline % Surrogate Rec		ND ND ND ND ND	ND ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND
Instrument I.1 Date Analyzed RLMF	υ.	HP21 11/21/94 1	HP21 11/22/94 1	HP21 11/22/94 1	HP21 11/21/94 1	

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

TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

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

Analyst Shor 12/01/94
Date

Supervisor Date

TOTAL VOLATILE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 5030 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Anametrix I.D.: 9411215-01

Sample I.D. : 35195.624 A4A-13
Matrix : SOIL
Date Sampled : 11/18/94
Date Analyzed : 11/21/94

Analyst : IS
Supervisor : S
Date Released : 11/29/94
Instrument ID : HP21

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COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC 8 MS (mg/Kg)	REC MS	REC S MD (mg/Kg)	REC MD	RPD	% REC LIMITS	*
GASOLINE	1.00	0	0.90	90%	0.87	87%	-3%	48-149	
P-BFB				91%		103%		53-147	

^{*} Quality control limits established by Anametrix, Inc.

TOTAL VOLATILE HYDROCARBON MATRIX SPIKE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Anametrix I.D.: 9411215-03

Sample I.D. : 35195.624 A4A-SAND
Matrix : SOIL
Date Sampled : 11/18/94
Date Analyzed : 11/22/94

Analyst : 1.5 Supervisor : ∞ Date Released : 11/29/94 Instrument I.D.: HP21

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC (mg/Kg)	REC MS (mg/Kg)	% REC MS	REC MD (mg/Kg)	% REC MD	RPD	% REC LIMITS *
BENZENE TOLUENE ETHYLBENZENE TOTAL XYLENES	0.040 0.040 0.040 0.040	0.000 0.000 0.000 0.000	0.047 0.038 0.034 0.017	118% 95% 85% 43%	0.048 0.038 0.032 0.018	120% 95% 80% 45%	2% 0% -6% 6%	45-139 51-138 48-146 50-139
p-BFB				132%		140%		53 -1 47

^{*} Quality control limits established by Anametrix, Inc.

TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE

Anametrix I.D.: MN2103E1

Matrix : SOIL
Date Sampled : N/A

Analyst : Is
Supervisor : a

Date Sampled : N/A
Date Analyzed : 11/21/94

Supervisor : ω Date Released : 11/29/94

Instrument I.D.: HP21

COMPOUND	SPIKE AMT. (mg/Kg)	REC LCS (mg/Kg)	%REC LCS	% REC LIMITS *
GASOLINE	0.50	0.44	88%	58-130
p-BFB			105%	53-147

^{*} Quality control limits established by Anametrix, Inc.

TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/PID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE
Matrix : SOIL
Date Sampled : N/A
Date Analyzed : 11/22/94 Anametrix I.D.: MN2203E1
Analyst: Is
Supervisor: Is
Date Released: 11/29/94
Instrument ID: HP21

COMPOUND	SPIKE AMT (mg/Kg)	LCS (mg/Kg)	%REC LCS	%REC LIMITS *	
BENZENE TOLUENE ETHYLBENZENE TOTAL-XYLENES	0.020 0.020 0.020 0.020	0.019 0.019 0.021 0.020	95% 95% 105% 100%	52-133 57-136 56-139 56-141	
SURROGATE			114%	53-147	

^{*} Quality control limits established by Anametrix, Inc.

SAMPLE RECEIVING CHECKLIST

WORKORDER NUMBER: 9411315 CLIENT PROJECT ID: 3519	5.624		
COOLER			
Shipping slip (airbill, etc.) present?	YES	NO	N/A)
If YES, enter carrier name and airbill #:			
Custody Seal on the outside of cooler?	YES	NO	(N/A)
Condition: INTACT BROKEN			
Temperature of sample (s) within range?	YES	NO	N/A
List temperature of cooler (s): 5°C			
SAMPLES			
Chain of custody seal present for each container?	YES	NO	(N/A)
Condition: INTACT BROKEN			
Samples arrived within holding time?	(YES)	NO	N/A
Samples in proper containers for methods requested?	(YES)	ΝO	
Condition of containers: INTACT BROKEN			
If NO, were samples transferred to proper container?			
Were VOA containers received with zero headspace?	YES	NO	(N/A)
If NO, was it noted on the chain of custody?			
Were container labels complete? (ID, date, time preservative, etc.)	YES	NO	
Were samples preserved with the proper preservative?	YES	NO	(N/A)
If NO, was the proper preservative added at time of receipt?			
pH check of samples required at time of receipt?	YES (NO	
If YES, pH checked and recorded by:			
Sufficient amount of sample received for methods requested?	(YES)	NO	
If NO, has the client or lab project manager been notified?			
Field blanks received with sample batch? # of Sets:	YES	NO	(N/A)
Trip blanks received with sample batch? # of Sets:	YES	NO	(N/A)
CHAIN OF CUSTODY	· · · · · · · · · · · · · · · · · · ·	·-	
Chain of custody received with samples?	YES	NO	
Has it been filled out completely and in ink?	YES	NO	
Sample ID's on chain of custody agree with container labels?	YES	NO	_
Number of containers indicated on chain of custody agree with number received?	YES	NO	
Analysis methods clearly specified?	(YES)	NO	
Sampling date and time indicated?	· (YES)	NO	
Proper signatures of sampler, courier, sample custodian in appropriate place? with time and da	te? (YES)	NO	
Turnaround time? REGULAR RUSH			
Any NO response and/or any "BROKEN" that was checked must be detailed in the Corre	ective Action	Fori	n.

Sample Custodian: Date: 11/18/94 Project Manager: W Date: 44

STANDARD TURN AROUND TIME



Chain of Custody Record

WAHLER LABLES

											[d	Cust	ody S	Seal #				RU	ST E	&Ι Co	oler#	· · · · ·			
Projec	et Number	Project Name/Cli	ient					[Analy	ysis l	Requ	ired								Ma	urix		
		American Na		Can				EX											San	nple T	Гурс	Sar	nple	Cont	ainer
Samp	lers: (Signature) Luthanh Bu		· · · · · · · · · · · · · · · · · · ·			Lab		FT.														25.25			
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1961 Concourse Drive San Jose, CA 95131 Tel: 408-452-8192 Fax: 408-432-8198

MR. WALTER HOWARD

RUST ENVIRONMENT AND INFRASTRUCTURE

12 METRO PARK ROAD ALBANY, NY 12205

Workorder # : 9411079
Date Received : 11/07/94
Project ID : 35195.624 Purchase Order: E-25237

The following samples were received at Anametrix for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9411079- 1	A4B-1
9411079- 2	A4B-2
9411079- 3	A4B-3
9411079- 4	A4B-4
9411079- 5	A4B-5
9411079- 6	A4B-6
9411079- 7	A4B-7
9411079- 8	A4B-8

This report is organized in sections according to the specific Anametrix laboratory group which performed the analysis(es) and generated the data.

The results contained within this report relate to only the sample(s) tested. Additionally, these data should be considered in their entirety and Anametrix cannot be responsible for the detachment, separation, or otherwise partial use of this report.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234.

If you have any further questions or comments on this report, please call your project manager as soon as possible. Thank you for using Incape Testing Services.

Susan Kraska Yeager Laboratory Director

11-16-94

This report consists of X pages.

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

MR. WALTER HOWARD RUST ENVIRONMENT AND INFRASTRUCTURE

12 METRO PARK ROAD ALBANY, NY 12205

Workorder # : 9411079
Date Received : 11/07/94
Project ID : 35195.624
Purchase Order: E-25237
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9411079- 1	A4B-1	SOIL	11/07/94	TPHgBTEX
9411079- 2	A4B-2	SOIL	11/07/94	TPHgBTEX
9411079- 3	A4B-3	SOIL	11/07/94	TPHgBTEX
9411079- 4	A4B-4	SOIL	11/07/94	TPHgBTEX
9411079- 5	A4B-5	SOIL	11/07/94	TPHgBTEX
9411079- 6	A4B-6	SOIL	11/07/94	TPHgBTEX
9411079- 7	A4B-7	SOIL	11/07/94	TPHgBTEX
9411079- 8	A4B-8	SOIL	11/07/94	TPHgBTEX

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

MR. WALTER HOWARD RUST ENVIRONMENT AND INFRASTRUCTURE

12 METRO PARK ROAD ALBANY, NY 12205

Workorder # : 9411079 Date Received: 11/07/94 Project ID : 35195.624 Purchase Order: E-25237

Department : GC Sub-Department: TPH

QA/QC SUMMARY :

- All holding times have been met for the analyses reported in this section.

Chemist Davison 1/14/94

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GC/TPH- PAGE 2

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9411079 Matrix : SOIL

Date Sampled : 11/07/94

Project Number: 35195.624 Date Released : 11/14/94

	Reporting Limit	Sample I.D.# A4B-1	Sample I.D.# A4B-2	Sample I.D.# A4B-3	Sample I.D.# A4B-4	Sample I.D.# A4B-5
COMPOUNDS	(mg/Kg)	-01	-02	-03	-04	-05
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline	0.005 0.005 0.005 0.005 0.5	ND ND ND ND	ND ND ND ND	ND ND ND ND ND	ND ND ND ND	ND ND ND ND
<pre>% Surrogate Rec Instrument I. Date Analyzed RLMF</pre>		109% HP21 11/09/94	99% HP21 11/09/94 1	106% HP21 11/09/94	97% HP21 11/09/94	88% HP21 11/09/94 1

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

TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

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

gie Dauson 11/14/94

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9411079 Project Number: 35195.624
Matrix: SOIL Date Released: 11/14/94

Date Sampled : 11/07/94

	Reporting Limit	Sample I.D.# A4B-6	Sample I.D.# A4B-7	Sample I.D.# A4B-8	Sample I.D.# BN0901E1	
COMPOUNDS	(mg/Kg)	-06	-07	-08	BLANK	
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline	0.005 0.005 0.005 0.005 0.5	ND ND ND 0.009 ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	
<pre>% Surrogate Rec Instrument I. Date Analyzed RLMF</pre>	D	109% HP21 11/09/94	110% HP21 11/09/94	87% HP21 11/09/94	97% HP21 11/09/94	ž

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

TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

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

Reggie Dawson 11/16/94

Analyst Date

Supervisor Date

TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT EPA METHOD 5030 WITH GC/FID ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE
Matrix : SOIL
Date Sampled : N/A

Anametrix I.D.: MN0901E1

Date Analyzed: 11/09/94

Analyst : RD
Supervisor : c/9
Date Released : 11/16/94
Instrument I.D.: HP21

_	AMT. mg/Kg)	LCS (mg/Kg)	LCS	LIMITS *
GASOLINE 0	.50	0.52	104%	58-130
Surrogate Recovery			116%	53-147

^{*} Quality control limits established by Anametrix, Inc.



SAMPLE RECEIVING CHECKLIST

WORKORDER NUMBER: 9411079 CLIENT	Γ PROJECT ID:	35195.624		
COOLER				
Shipping slip (airbill, etc.) present?		YES	NO	N/A
If YES, enter carrier name and airbill #:				
Custody Seal on the outside of cooler?		YES	NO	N/A
Condition: INTACT BROKEN				
Temperature of sample (s) within range?		(YES	, NO	N/A
List temperature of cooler (s): 6°C				
SAMPLES				
Chain of custody seal present for each container?		YES	NO	N/A
Condition: INTACT BROKEN				
Samples arrived within holding time?		YES	NO	N/A
Samples in proper containers for methods requested?		(FES)	NO	
Condition of containers: INTACT BROKEN				
If NO, were samples transferred to proper container?				******
Were VOA containers received with zero headspace?		YES	NO	N/A
If NO, was it noted on the chain of custody?			<u>.</u>	
Were container labels complete? (ID, date, time preservative, etc.)		YES	NO	
Were samples preserved with the proper preservative?		YES	NO	N/A
If NO, was the proper preservative added at time of receipt?			_	
pH check of samples required at time of receipt?		YES	NO)
If YES, pH checked and recorded by:				
Sufficient amount of sample received for methods requested?		(FES)	NO	
If NO, has the client or lab project manager been notified?				
Field blanks received with sample batch? # of Sets:		YES	NO	(N/A)
Trip blanks received with sample batch? # of Sets:		YES	NO	N/A)
CHAIN OF CUSTODY				
Chain of custody received with samples?		(ES)) NO	
Has it been filled out completely and in ink?		YES	NO	
Sample ID's on chain of custody agree with container labels?		(YES)	NO	
Number of containers indicated on chain of custody agree with numb	er received?	Œ	NO	
Analysis methods clearly specified?		(YES)	NO	
Sampling date and time indicated?		(YES)) NO	
Proper signatures of sampler, courier, sample custodian in appropriate	te place? with tim	e and date? YES	NO	
Turnaround time? REGULAR RUSH			<u>. </u>	
Any NO response and/or any "BROKEN" that was checked mu	ist be detailed in t	he Corrective Action	n For	m.

Sample Custodian:

Date: 11/7/94 Project Manager: 10 Date: 11/8/94

24 hour RUSH T.A.T.

9411079

27

Chain of Custody Record

WAHLER LABLES

	WAHLER	LABLES																							
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APPENDIX B

Laboratory Analytical Report-Area 4 Stockpiled Soil Samples



1961 Concourse Drive Suite E San Jose, CA 95131 Tel: 408-432-8192 Fax: 408-432-8198

MR. WALTER HOWARD RUST ENVIRONMENT AND INFRASTRUCTURE 12 METRO PARK ROAD

ALBANY, NY 12205

Workorder # : 9411161 Date Received : 11/14/94 Project ID : 35195.624

Purchase Order: N/A

The following samples were received at Anametrix for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9411161- 1	A4SS
9411161- 2	B12SS

This report is organized in sections according to the specific Anametrix laboratory group which performed the analysis(es) and generated the data.

The results contained within this report relate to only the sample(s) tested. Additionally, these data should be considered in their entirety and Anametrix cannot be responsible for the detachment, separation, or otherwise partial use of this report.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234.

If you have any further questions or comments on this report, please call your project manager as soon as possible. Thank you for using Inchcape Testing Services.

Susan Kraska Yeager Laboratory Director

Date

This report consists of 2^{1} pages.



ANAMETRIX REPORT DESCRIPTION GCMS

Organic Analysis Data Sheets (OADS)

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

Tentatively Identified Compounds (TICs)

TIC forms contain tabulated results for non-target compounds detected in SC/MS analyses. TICs must be requested at the time samples are submitted at Anametrix. TIC forms immediately follow the OADS form for each sample. If TICs are requested but not found, then TIC forms will not be included with the report.

Surrogate Recovery Summary (SRS)

SRS forms contain quality assurance data. An SRS form will be printed for each method, <u>if</u> 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 "e", and the total number of surrogates outside the limits will be listed in the column labelled "lotal 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.

Dualifiers

Anametrix uses several data qualifiers (Q) in it's 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:

- ii Indicates that the compound was analyzed for, but was not detected at or above the specified reporting limit.
- 8 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.
- \mathbf{E}_{-} = Indicates that the amount reported exceeded the linear range of the instrument calibration.
- B Indicates that the compound was detected in An Analysis performed at a secondary dilution.
- A Indicates that the tentatively identified compound is a suspected aldol condensation product. This is common in EPA Method 8270 soil analyses.

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.

PC/3374

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

MR. WALTER HOWARD

RUST ENVIRONMENT AND INFRASTRUCTURE

12 METRO PARK ROAD

ALBANY, NY 12205

Workorder # : 9411161
Date Received : 11/14/94
Project ID : 35195.624
Purchase Order: N/A
Department : GCMS
Sub-Department: GCMS

3

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9411161- 1	A4SS	SOIL	11/14/94	8240
9411161- 2	B12SS	SOIL	11/14/94	8240

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

MR. WALTER HOWARD RUST ENVIRONMENT AND INFRASTRUCTURE 12 METRO PARK ROAD

ALBANY, NY 12205

Workorder # : 9411161
Date Received : 11/14/94
Project ID : 35195.624
Purchase Order: N/A

Purchase Order: N/A
Department: GCMS
Sub-Department: GCMS

QA/QC SUMMARY :

- All holding times have been met for the analyses reported in this section.

- The value reported for acetone in sample B12SS for EPA Method 8240 is near the laboratory background level when the dilution is taken into account.

- Samples B12SS and A4SS could not be analyzed at a lower dilution by EPA Method 8240 due to the high abundance of late eluting compounds.

Visual well
Department Supervisor

1-21-94 Date

Chemist

11-21-94 Date

Project ID Sample ID : 35195.62

: A4SS Matrix : SOIL

:11/14/94

Date Sampled Date Analyzed Instrument ID :11/19/94 : MSD1 Stodple

Anametrix ID : 9411161-01

: 57 Analyst Supervisor : 34

Dilution Factor: 5 Conc. Units: ug/Kg 50.0

				
CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	500.	ND	U
75-01-4	Vinyl chloride	500.	ND	U
74-83-9	Bromomethane	500.	ND	U
75-00-3	Chloroethane	500.	ND	U
75-69-4	Trichlorofluoromethane	250.	ND	U
75-35-4	1,1-Dichloroethene	250.	ND	U
76-13-1	Trichlorotrifluoroethane	250.	ND	U
67-64-1	Acetone	1000.	ND	Ū
75-15-0	Carbon disulfide	250.	ND	Ū
75-09-2	Methylene chloride	250.	ND	U
156-60-5	Trans-1,2-dichloroethene	250.	ND	U
75-34-3	1,1-Dichloroethane	250.	ND	U ŧ
156-59-2	Cis-1,2-dichloroethene		ND	U
78-93-3	2-Butanone	1000.	ND	ט
67-66-3	Chloroform	250.	ND	U
71-55-6	1,1,1-Trichloroethane	250.	ND	U
56-23-5	Carbon tetrachloride	250.	ND	U
108-05-4	Vinyl acetate	500.	ND	Ü
71-43-2	Benzene	250.	ND	Ū
107-06-2	1,2-Dichloroethane	250.	ND	Ū
79-01-6	Trichloroethene	250.	ND	U
78-87-5	1,2-Dichloropropane	250.	ND	U
75-27-4	Bromodichloromethane	250.	ND	Ū
10061-01-5	Cis-1,3-dichloropropene		ND	Ū
108-10-1	4-Methyl-2-pentanone	500.	ND	Ŭ
108-88-3	Toluene	250.	ND	Ū
10061-02-6	Trans-1,3-dichloropropene		ND	Ū
79-00-5	1,1,2-Trichloroethane	250.	ND	Ū
127-18-4	Tetrachloroethene	250.	ND	Ū
591-78-6	2-Hexanone	500.	ND	Ū
124-48-1	Dibromochloromethane	250.	ND	Ū
108-90-7	Chlorobenzene	250.	ND	Ū
100-41-4		_	420.	/ /
1330-20-7	Ethylbenzene Xylene (Total)	250.	6600.	
100-42-5	Styrene	250.	ND	Tu
75-25-2	Bromoform	250.	ND	Ŭ
79-34-5	1,1,2,2-Tetrachloroethane		ND	Ü
541-73-1	1,3-Dichlorobenzene	250.	ND	Ū
106-46-7	1,4-Dichlorobenzene	250.	ND	Ŭ
95-50-1	1,2-Dichlorobenzene	250.	ND	Ü
70-50-1	1,2 Dichiolopenzene	- 230:	1,2	1

Project ID : 35195.62 Sample ID : B12SS Anametrix ID : 9411161-02

Analyst : FR Matrix : SOIL Supervisor

Date Sampled Date Analyzed Date Sampled :11/14/94
Date Analyzed :11/21/94
Instrument ID : MSD2 Dilution Factor: 5.0

Conc. Units : ug/Kg

1				,	
CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q	
74-87-3	Chloromethane	50.	ND	U	
75-01-4	Vinyl chloride	50.	ND	Ū	
74-83-9	Bromomethane	50.	ND	Ιΰ	
75-00-3	Chloroethane	50.	ND	υ	1
75-69-4	Trichlorofluoromethane	25.	ND	บั	1
75-35-4	1,1-Dichloroethene	25.	ND ND	Ιŭ	1
76-13-1	Trichlorotrifluoroethane	25.	ND	υ	١.
67-64-1	Acetone	100.	170.		10.
75-15-0	Carbon disulfide	25.	ND 170.	โซ	-
75-09-2	Methylene chloride	25.	ND ND	Ü	
156-60-5	Trans-1,2-dichloroethene	25.	ND ND	ŭ ;	
75-34-3	1,1-Dichloroethane	25.	ND	Ü	
156-59-2	Cis-1,2-dichloroethene_	25.	ND	U	
78-93-3	2-Butanone	100.	ND ND	υ	
67-66-3	Chloroform	25.	ND	שׁ	
71-55-6	1,1,1-Trichloroethane	25.	ND ND	ΰ	
56-23-5	Carbon totanghloride	25.	ND ND	1 -	
108-05-4	Carbon tetrachloride	50.	ND ND	U	
71-43-2	Vinyl acetate	25.		שׁ	
1	Benzene 1,2-Dichloroethane	. 45.	ND		
107-06-2	T, 2-Dichioroethane	25.	ND	Ū	
79-01-6	Trichloroethene	25.	ND	ט	
78-87-5	1,2-Dichloropropane	25.	ND	U	
75-27-4	Bromodichloromethane	25.	ND	ū	
10061-01-5	Cis-1,3-dichloropropene	25.	ND	ū	
108-10-1	4-Methyl-2-pentanone	50.	ND	U	
108-88-3	Toluene	25.	ND	U	
10061-02-6	Trans-1,3-dichloropropene	25.	ND	Ū	Ì
79-00-5	1,1,2-Trichloroethane	25.	ND	U	İ
127-18-4	Tetrachloroethene	25.	ND	ש	
591-78-6	2-Hexanone	50.	ND	U U	
124-48-1	Dibromochloromethane	25.	ND	U	
108-90-7	Chlorobenzene	25.	ND	ש	
100-41-4	Ethylbenzene Xylene (Total)	25.	ND	ש	
1330-20-7	Xylene (Total)	25.	ND	U	
100-42-5	Styrene	25.	ND	U	
75-25-2	Bromoform	25.	ND	U	1
79-34-5	1,1,2,2-Tetrachloroethane		ND	υ.	
541-73-1	1,3-Dichlorobenzene	25.	ND	U	
106-46-7	1,4-Dichlorobenzene	25.	ND	U	
95-50-1	1,2-Dichlorobenzene	25.	ND	U	
l		.		.	. [

Anametrix ID : BN1903A2 Project ID

Sample ID : A : VBLKND Analyst Supervisor Matrix
Date Sampled

: SOIL : 0/ 0/ 0 :11/19/94 : MSD1 Date Analyzed Dilution Factor : 50.0 Instrument ID Conc. Units : ug/Kg

1				
		REPORTING	AMOUNT	
CAS No.	COMPOUND NAME	LIMIT	DETECTED	Q
<u> </u>				
74-87-3	Chloromethane	500.	ND	U
75-01-4	Vinyl chloride	500.	ND	U
74-83-9	Bromomethane	500.	ND	U
75-00-3	Chloroethane	500.	ND	U
75-69-4	Trichlorofluoromethane	250.	ND	U
75-35-4	1,1-Dichloroethene	250.	ND	U
76-13-1	Trichlorotrifluoroethane	250.	ND	U
67-64-1	Acetone	1000.	ND	U
75-15-0	Carbon disulfide	250.	ND	U
75-09-2	Methylene chloride	250.	ND	U
156-60-5	Trans-1,2-dichloroethene	250.	ND	U
75-34-3	1,1-Dichloroethane	250.	ND	U
156-59-2	Cis-1,2-dichloroethene	250.	ND	Ū
78-93-3	2-Butanone	1000.	ND	Ū
67-66-3		250	ND	ϋ
71-55-6	Chloroform 1,1,1-Trichloroethane	250.	ND	Ŭ
56-23-5	Carbon tetrachloride	250.	ND	บั
1	Vinul agetate	500.	ND	บี
108-05-4	Vinyl acetate	250.	ND	Ü
71-43-2	Benzene	250.	ND	Ü
107-06-2	1,2-Dichloroethane	250.		lΰ
79-01-6	Trichloroethene	250.	ND ND	Ü
78-87-5	1,2-Dichloropropane			Ü
75-27-4	Bromodichloromethane	250.	ND	Ü
10061-01-5	Cis-1,3-dichloropropene	250.	ND	
108-10-1	4-Methyl-2-pentanone		ND	U
108-88-3	Toluene	250.	ND	U
10061-02-6	Trans-1,3-dichloropropene	250.	ND	U
79-00-5	1,1,2-Trichloroethane	∠50.	ND	U
127-18-4	Tetrachloroethene	250.	ND	U
591-78-6	2-Hexanone	500.	ND	U
124-48-1	Dibromochloromethane	250.	ND	U
108-90-7	Chlorobenzene	250.	ND	U
100-41-4	Ethylbenzene	250.	ND	U
1330-20-7	Ethylbenzene Xylene (Total)	250.	ND	U
100-42-5	Styrene	250.	ND	U
75-25-2	Bromoform	250.	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	250.	ND	U
541-73-1		250.	ND	U
106-46-7	1,3-Dichlorobenzene 1,4-Dichlorobenzene	250.	ND	Ū
95-50-1	1,2-Dichlorobenzene	250.	ND	Ū
75 50 1		233.		-
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Anametrix ID : BN2103A1

Project ID Sample ID : 57 : XP Analyst : VBLKNS : SOIL : 0/ 0/ 0 :11/21/94 : MSD2 Matrix
Date Sampled
Date Analyzed
Instrument ID Supervisor

Dilution Factor: 1.0

Conc. Units : ug/Kg

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	10.	ND ND	U
75-01-4	Vinyl chloride	10.	ND	U
74-83-9	Bromomethane	10.	ND	ַ ט
75-00-3	Chloroethane	10.	ND	U
75-69-4	Trichlorofluoromethane	5.	ND	U
75-35-4	1,1-Dichloroethene	5.	ND	U
76-13-1	Trichlorotrifluoroethane	5.	ND	U
67-64-1	Acetone	20.	13.	J
75-15-0	Carbon disulfide	5.	ND	U
75-09-2	Methylene chloride	5.	ND	U
156-60-5	Trans-1,2-dichloroethene	5.	ND	U
75-34-3	1,1-Dichloroethane	5.	ND	U ż
156-59-2	Cis-1,2-dichloroethene	5.	ND	U
78-93-3	2-Butanone	20.	ND	U
67-66-3	Chloroform	5.	ND	U
71-55 - 6	1,1,1-Trichloroethane	5.	ND	U
56-23-5	Carbon tetrachloride	5.	ND	U
108-05-4	Vinyl acetate	10.	ND	Ū
71-43-2	Benzene	5.	ND	U
107-06-2	1,2-Dichloroethane		ND	U
79-01-6	Trichloroethene	5.	ND	Ū
78 - 87-5	1,2-Dichloropropane	5.	ND	U
75-27-4	Bromodichloromethane	5.	ND	U
10061-01-5	Cis-1 3-dichloropropene		ND	U
108-10-1	Cis-1,3-dichloropropene4-Methyl-2-pentanone	10.	ND	Ū
108-88-3	Toluene	5.	ND	Ū
10061-02-6	Trans-1,3-dichloropropene	5.	ND	Ū
79-00-5	1,1,2-Trichloroethane		ND	บั
127-18-4	Tetrachloroethene	5.	ND	Ū
591-78-6	2-Hexanone	10.	ND	Ū
124-48-1	Dibromochloromethane	5.	ND	Ŭ
108-90-7	Chlorobenzene	5.	ND	Ŭ
100-41-4	Chlorobenzene Ethylbenzene		ND.	Ŭ
1330-20-7		5.	ND	Ū
	Xylene (TotaI)	5.	ND	Ü
100-42-5 75-25-2	Bromoform	5.	ND	Ü
79-34-5	1,1,2,2-Tetrachloroethane	5.	ND	Ü
541-73-1	1,1,2,2-letrachioroethane	5.	ND	Ŭ
	1,4-Dichlorobenzene	5.	ND	Ü
106-46-7	1,4-bichlorobonzono	5.	ND	lű
95-50 - 1	1,2-Dichlorobenzene	.]	""	1

SURROGATE RECOVERY SUMMARY -- EPA METHOD 8240 ANAMETRIX, INC. (408)432-8192

Project ID : 35195.62 Matrix : SOLID Anametrix ID : 9411161

Analyst : 5 Supervisor

	SAMPLE ID	SU1	SU2	SU3
1 2 3 4	VBLKND VLCSO2 A4SS	100 102 103	101 102 103	104 103 103
1 2 3 4 5 6 7 8 9 10				
9 10 11 12				
13 14 15 16				
17 18				
19 20 21 22 23 24 25				
26 27 28 29 30				
30				

QC LIMITS

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SU1 = 1,2-Dichloroethane-d4 (85-121)SU2 = Toluene-d8 (83-117) SU3 = 1,4-Bromofluorobenzene (82-116)

* Values outside of Anametrix QC limits

SURROGATE RECOVERY SUMMARY -- EPA METHOD 8240 ANAMETRIX, INC. (408)432-8192

Project ID : 35195.62 Matrix : SOLID Anametrix ID : 9411161

Analyst :5 Supervisor :5

	SAMPLE ID	SU1	SU2	SU3
1 2 3	VBLKNS VLCSO6 B12SS	106 108 109	105 108 108	104 104 103
1 2 3 4 5 6 7 8 9				
11				
12 13 14 15				
16 17 18 19				
20 21 22 23 24 25				
24 25 26 27 28 29				
28 29 30				

QC LIMITS

SU1 = 1,2-Dichloroethane-d4 SU2 = Toluene-d8 (85-121)SU2 = Toluene-d8 (83-117) SU3 = 1,4-Bromofluorobenzene (82-116)

* Values outside of Anametrix QC limits

LABORATORY CONTROL SPIKE RECOVERY FORM --- EPA METHOD 624/8240 ANAMETRIX, INC. (408)432-8192

Project/Case

Anametrix ID : MN1901A2

Matrix

: SOIL

Analyst : 5

Date Sampled

Supervisor

SDG/Batch :
Sample ID : VLCSO2

: X

Date Analyzed : 11/19/94
Instrument ID : MSD1

COMPOUND	SPIKE	SAMPLE	LCS	LCS	%REC
	ADDED	CONCENTRATION	CONCENTRATION	8	LIMITS
	(ug/Kg)	(ug/Kg)	(ug/Kg)	REC	
1,1-Dichloroethene	50	0	43	86	78-150
Benzene	50	0	49	98	85-120
Trichloroethene	50	0	47	94	64-135
Toluene	50	0	48	96	88-119
Chlorobenzene	50	0	47	94	86-116

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LABORATORY CONTROL SPIKE RECOVERY FORM --- EPA METHOD 624/8240 ANAMETRIX, INC. (408)432-8192

Project/Case

Anametrix ID : MN2101A1

Matrix

Analyst : 5

Date Sampled

: *P*b Supervisor

Date Analyzed

: 11/21/94

: SOIL

SDG/Batch :

Instrument ID : MSD2

Sample ID : VLCSO6

COMPOUND	SPIKE	SAMPLE	LCS	LCS	%REC
	ADDED	CONCENTRATION	CONCENTRATION	*	LIMITS
	(ug/Kg)	(ug/Kg)	(ug/Kg)	REC	
1,1-Dichloroethene	50	0	50	100	78-150
Benzene	50	0	53	106	85-120
Trichloroethene	50	0	47	94	64-135
Toluene	50	0	50	100	88-119
Chlorobenzene	50	0	47	94	86-116

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

MR. WALTER HOWARD RUST ENVIRONMENT AND INFRASTRUCTURE

12 METRO PARK ROAD ALBANY, NY 12205

Workorder # : 9411161 Date Received : 11/14/94 Project ID : 35195.624

Purchase Order: N/A
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9411161- 2	B12SS	SOIL	11/14/94	TPHg
9411161- 1	A4SS	SOIL	11/14/94	TPHgBTEX

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

MR. WALTER HOWARD RUST ENVIRONMENT AND INFRASTRUCTURE 12 METRO PARK ROAD ALBANY, NY 12205

Workorder # : 9411161 Date Received: 11/14/94 Project ID: 35195.624

Purchase Order: N/A Department : GC Sub-Department: TPH

QA/QC SUMMARY :

- All holding times have been met for the analyses reported in this

- The surrogate recoveries for the mineral spirits laboratory control sample and laboratory control sample duplicate are outside of quality control limits due to the presence of interfering peaks.

- The concentration reported as gasoline for sample A4SS is primarily

due to the presence of a petroleum product of narrow hydrocarbon range C8-C10, possibly mineral spirits.

Cheryl Bremen

Department Supervisor

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ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS (GASOLINE WITH BTEX) ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9411161 Matrix : SOIL

Matrix : SOLL Date Sampled : 11/14/94

Project Number: 35195.624
Date Released: 11/21/94

L'emporte sordiete

	Reporting Limit	Sample I.D.# A4SS	Sample I.D.# B12SS	BN1701E1	
COMPOUNDS	(mg/Kg)	-01	-02	BLANK	
Benzene Toluene Ethylbenzene Total Xylenes TPH as Gasoline Mineral Spirits	0.005 0.005 0.005 0.005 0.05 0.5	ND ND 0.29	3.4	ND ND ND ND ND ND	
<pre>% Surrogate Reco Instrument I.I Date Analyzed RLMF</pre>		112% HP21 11/17/94 25	119% HP21 11/17/94 2.5	104% HP21 11/17/94	<u>*</u>

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

method. PPHa - Total P

TPHg - Total Petroleum Hydrocarbons as mineral spirits and gasoline is determined by GCFID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.

RLMF - Reporting Limit Multiplication Factor.

Anametrix control limits for surrogate p-Bromofluorobenzene recovery are 53-147%.

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

Analyst Date

Cherk Balme 11/22/54
Supervisor Date

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

Sample I.D. : LAB CONTROL SAMPLE
Matrix : SOIL
Date Sampled : N/A
Date Analyzed : 11/17/94 Anametrix I.D.: MN1701E1
Analyst: IS
Supervisor: Supervisor: Supervisor: Supervisor: MN1701E1
Analyst: IS
Supervisor: Supervis

Instrument I.D.: HP21

COMPOUND	SPIKE AMT (mg/Kg)	LCS REC (mg/Kg)	% REC LCS	LCSD REC (mg/Kg)	% REC LCSD	RPD	% REC LIMITS
MINERAL SPIRITS	0.5	0.46	92%	0.45	90%	-2%	58-130
SURROGATE			159%		157%		61 -1 39

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

MR. WALTER HOWARD

RUST ENVIRONMENT AND INFRASTRUCTURE

12 METRO PARK ROAD ALBANY, NY 12205

Workorder # : 9411161
Date Received : 11/14/94
Project ID : 35195.624
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9411161- 1	A4SS	SOIL	11/14/94	5520EF

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

MR. WALTER HOWARD RUST ENVIRONMENT AND INFRASTRUCTURE

12 METRO PARK ROAD ALBANY, NY 12205

Workorder # : 9411161 Date Received : 11/14/94 Project ID : 35195.624

Purchase Order: N/A
Department : PREP
Sub-Department: PREP

QA/QC SUMMARY :

- All holding times have been met for the analyses reported in this section.

epartment Supervisor Date

743.1)++ 11/15/91

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ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES (408) 432-8192

PROJECT # : 35195.624 ANAMETRIX I.D. : 9411161

MATRIX : SOIL ANALYST : 35195.624

DATE SAMPLED : 11/14/94 SUPERVISOR : CV

DATE EXTRACTED : 11/14/94 DATE RELEASED : 11/15/94
DATE ANALYZED : 11/15/94

WORKORDER #	SAMPLE I.D.	REPORTING LIMIT (mg/Kg)	AMOUNT FOUND (mg/Kg)
9411161-01	A4SS	30	100
BN14H1W9	METHOD BLANK	30	ND ,

ND - Not detected above the reporting limit for the method.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

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

MATRIX SPIKE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES (408) 432-8192

SAMPLE I.D. : A4SSMS, MD ANAMETRIX I.D. : 9411161-01

MATRIX : SOIL ANALYST : LA

DATE SAMPLED : 11/14/94 SUPERVISOR : C/w

DATE EXTRACTED : 11/14/94 DATE RELEASED : 11/16/94

DATE ANALYZED : 11/15/94

COMPOUND	SPIKE AMT (mg/Kg)	SAMPLE CONC. (mg/Kg)	MS AMT	%REC MS	MD AMT	%REC MD	%RPD	% REC LIMITS
MOTOR OIL	300	100	430	110	380	93	12	48-114

^{*} Quality control limits established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES (408) 432-8192

SAMPLE ID : LAB CONTROL SAMPLE ANAMETRIX I.D. : MN14H1W9

MATRIX : SOIL ANALYST : 3UDATE EXTRACTED : 11/14/94 SUPERVISOR : CMCDATE ANALYZED : 11/15/94 DATE RELEASED : 11/15/94

COMPOUND	SPIKE AMT. (mg/Kg)	LCS (mg/Kg)	%REC LCS	REC LIMITS
MOTOR OIL	300	300	100	44-128

^{*} Quality control limits established by Anametrix Laboratories.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520EF, 18th edition.

ANAMETRIX REPORT DESCRIPTION INORGANICS

Analytical Data Report (ADR)

The ADR contains tabulated results for inorganic analytes. All field samples, QC samples and blanks were prepared and analyzed according to procedures in the following references:

- "Test Methods for Evaluating Solid Waste," SW-846, EPA, 3rd Edition, November 1986.
- "Methods for Chemical Analysis of Water and Wastes," EPA, 3rd Edition, 1983.
- CCR Title 22, Section 66261, Appendix II, California Waste Extraction Test.
- CCR Title 22, Section 66261, Appendix XI, Organic Lead.
- "Standard Methods for the Examination of Water and Wastewater," APHA, AWWA, WEF, 18th Edition, 1992.
- USEPA Contract Laboratory Program Statement of Work for Inorganic Analyses, ILM02.1, 1991.

Matrix Spike Report (MSR)

The MSR summarizes percent recovery and relative percent difference information for matrix spikes and matrix spike duplicates. This information is a statement of both accuracy and precision. MSRs may not be provided with all analytical reports. Anametrix control limit for MSR is 75-125% with 25% for RPD limits, except for Method 6010A, which is 80-120% with 25% RPD limits.

Laboratory Control Sample Report (LCSR)

The LCSR summarizes percent recovery information for laboratory control spikes on reagent water or soil. This information is a statement of performance for the method, i.e., the samples are properly prepared and analyzed according to the applicable methods. Anametrix control limit for LCSR is 80-120%.

Method Blank Report (MBR)

The MBR summarizes quality control information for reagents used in preparing samples. The absolute value of each analyte measured in the method blank should be below the method reporting limit for that analyte.

Post Digestion Spike Report (PDSR)

The PDSR summarizes percent recovery information for post digestion spikes. A post digestion spike is performed for a particular analyte if the matrix spike recovery is outside of established control limits. Any percent recovery for a post digestion spike outside of established limits for an analyte indicates probable matrix effects and interferences for that analyte. Anametrix control limit for PDSR is 75-125%.

Qualifiers (Q)

Anametrix uses several data qualifiers in inorganic reports. These qualifiers give additional information on the analytes reported. The following is a list of qualifiers and their meanings:

- I Sample was analyzed at the stated dilution due to spectral interferences.
- U Analyte concentration was below the method reporting limit. For matrix and post digestion spike reports, a value of "0.0" is entered for calculation of the percent recovery.
- B- Sample concentration was below the reporting limit but above the instrument detection limit. Result is entered for calculation of the percent recovery only.
- H Spike percent recovery was outside of Anametrix control limits due to interferences from relatively high concentration level of the analyte in the unspiked sample.
- L Reporting limit was increased to compensate for background absorbances or matrix interferences.

Comment Codes

In addition to qualifiers, the following codes are used in the comment section of all reports to give additional information about sample preparation methods:

- A Sample was prepared for silver based on the silver digestion method developed by the Southern California Laboratory, Department of Health Services, "Acid Digestion for Sediments, Sludges, Soils and Solid Wastes. A Proposed Alternative to EPA SW846, Method 3050." Environmental Science and Technology, 1989, 23, 898-900.
- T Spikes were prepared after extraction by the Toxicity Characteristic Leaching Procedure (TCLP).
- C Spikes were prepared after extraction by the california Waste Extraction Test (CWET) method.
- D Reported results are dissolved, not total, metals.

Reporting Conventions

Analytical values reported are gross values, i.e., <u>not</u> corrected for method blank contamination. Solid matrices are reported on a wet weight basis, unless specifically requested otherwise.

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

MR. WALTER HOWARD RUST ENVIRONMENT AND INFRASTRUCTURE

12 METRO PARK ROAD ALBANY, NY 12205

Workorder # : 9411161
Date Received : 11/14/94
Project ID : 35195.624
Purchase Order: N/A
Department : METALS

Sub-Department: METALS

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9411161- 1	A4SS	SOIL	11/14/94	6010
9411161- 1	A4SS	SOIL	11/14/94	ORG Pb

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

MR. WALTER HOWARD RUST ENVIRONMENT AND INFRASTRUCTURE

12 METRO PARK ROAD ALBANY, NY 12205

Workorder # : 9411161 Date Received : 11/14/94 Project ID : 35/195.624

Purchase Order: N/A Department : METALS Sub-Department: METALS

OA/OC SUMMARY :

- All holding times have been met for the analyses reported in this section.

- The matrix spike recoveries for sample A4SS for chromium, nickel and zinc were outside of Anametrix control limits, possibly due to the heterogenous nature of the sample. A post digestion spike was performed and results were within Anametrix control limits, indicating no

spectral interferences.
- The relative percent difference for sample A4SS and its duplicate for chromium, lead and zinc were outside of Anametrix control limits,

possibly due to the heterogenous nature of the sample.

Date

Carroll 11/23/94

INCHCAPE TESTING SERVICES ANAMETRIX LABORATORIES (408) 432-8192 DATA REPORT

Anametrix Sample ID: 9411161-01

Client Sample ID: A4SS ~

Client Project Number: 35195.624

Matrix: SOIL

Stochpile

Date Sampled: 11/14/94

Analyst:50

Supervisor: AUG

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Analyte	Prep. Method	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Cadmium	3050A	6010A	ICP1	11/14/94 [,]	11/15/94	1	mg/Kg	0.50	ND	
Chromium	3050A	6010A	ICP1	11/14/94	11/15/94	1	mg/Kg	1.0	55.2	/
Lead	3050A	6010A	ICP2	11/14/94	11/15/94	1	mg/Kg	4.0	10.9	~
Nickel	3050A	6010A	ICP1	11/14/94	11/15/94	1	mg/Kg	4.0	143	/
Zinc	3050A	6010A	ICP1	11/14/94	11/15/94	1	mg/Kg	2.0	41.8	/
Organic Lead	*	*	AA1	11/14/94	11/15/94	1	mg/Kg	0.75	ND	

COMMENTS: * Organic lead Test Method, Appendix XI, Title 22 Code of Regulations, Register 91, No. 22, page 689.

INCHCAPE TESTING SERVICES ANAMETRIX LABORATORIES (408) 432-8192

METHOD BLANK REPORT

Anametrix Sample ID: BN144SB, BN144SA

Analyst: 50

Anametrix WO #: 9411161 Client Project Number: 35195.624 Supervisor: ***

Matrix: SOIL

Analyte	Prep. Method	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Cadmium	3050A	6010A	ICP1	11/14/94	11/15/94	1	mg/Kg	0.50	ND	
Chromium	3050A	6010A	ICP1	11/14/94	11/15/94	1	mg/Kg	1.0	ND	
Lead	3050A	6010A	ICP2	11/14/94	11/15/94	1	mg/Kg	4.0	ND	
Nickel	3050A	6010A	ICP1	11/14/94	11/15/94	1	mg/Kg	4.0	ND	
Zinc	3050A	6010A	ICP1	11/14/94	11/15/94	1	mg/Kg	2.0	ND	
Organic Lead	*	*	AA1	11/14/94	11/15/94	1	mg/Kg	0.75	ND	

* Organic lead Test Method, Appendix XI, Title 22 Code of Regulations, Register 91, No. 22, page 689. COMMENTS:

INCHCAPE TESTING SERVICES ANAMETRIX LABORATORIES (408) 432-8192 SAMPLE DUPLICATE REPORT

Anametrix Sample ID: 9411161-01D

Client Sample ID: A4SS Client Project Number: 35195.624

Matrix: SOIL

Analyst: 54
Supervisor: ****

Analyte	Prep. Method	Analyt. Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Sample Conc.	Sample Duplicate Conc.	RPD	Q
Cadmium	3050A	6010A	ICP1	11/14/94	11/15/94	1	mg/Kg	ND	ND	N/A	
Chromium	3050A	6010A	ICP1	11/14/94	11/15/94	1	mg/Kg	55.2	90.8	48.8	
Lead	3050A	6010A	ICP2	11/14/94	11/15/94	1	mg/Kg	10.9	6.6	49.1	
Nickel	3050A	6010A	ICP1	11/14/94	11/15/94	1	mg/Kg	143	149	4.1	
Zinc	3050A	6010A	ICP1	11/14/94	11/15/94	1	mg/Kg	41.8	33.9	20.9	

COMMENTS:

Inorganics - Page 5

INCHCAPE TESTING SERVICES ANAMETRIX LABORATORIES (408) 432-8192 MATRIX SPIKE REPORT

Anametrix. Sample ID: 9411161-01MS,MD

Client Sample ID: A4SS

Client Proj. Number: 35195.624

Matrix: SOIL

Analyst: 50 Supervisor: 2005

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Analyte	Analyt. Method	Instr.	Date Prepared	Date Analyzed	Units	Spike Amount	Sample Conc.	Matrix Spike Conc.	% Rec.	Matrix Sp. Dup. Conc.	% Rec.	RPD	Q
Cadmium	6010A	ICP1	11/14/94	11/15/94	mg/Kg	5.0	0.0	4.0	80.0	4.2	84.0	4.9	U
Chromium	6010A	ICP1	11/14/94	11/15/94	mg/Kg	20.0	55.2	101	229	98.1	215	2.9	1
Lead	6010A	ICP2	11/14/94	11/15/94	mg/Kg	50.0	10.9	48.7	75.6	50.3	78.8	3.2	
Nickel	6010A	ICP1	11/14/94	11/15/94	mg/Kg	50.0	143	218	150	233	180	6.7	
Zinc	6010A	ICP1	11/14/94	11/15/94	mg/Kg	50.0	41.8	80.4	77.2	84.7	85.8	5.2	
Organic Lead	*	AA1	11/14/94	11/15/94	mg/Kg	11.0	0.C	11.0	100	10.6	96.4	3.7	U

COMMENTS: * Organic lead Test Method, Appendix XI, Title 22 Code of Regulations, Register 91, No. 22, page 689.

INCHCAPE TESTING SERVICES ANAMETRIX LABORATORIES (408) 432-8192

POST DIGESTION SPIKE REPORT

Anametrix Sample ID: 9411161PDS

Client Sample ID: A4SS

Client Project Number: 35195.624

Matrix: SOIL

Analyst: 🕮

Analyte	Analyt. Method	Instr. ID	Date Prepared	Date Analyzed	D.F.	Units	Spike Amount	Sample Conc.	PDS Conc.	% Rec.	Q
Chromium	6010A	ICP1	11/15/94	11/15/94	1	mg/Kg	110	55.1	150	86.3	
Nickel	6010A	ICP1	11/15/94	11/15/94	1	mg/Kg	300	143	394	83.7	
Zinc	6010A	ICP1	11/15/94	11/15/94	1	mg/Kg	80.0	41.8	105	79.0	

COMMENTS:

INCHCAPE TESTING SERVICES ANAMETRIX LABORATORIES (408) 432-8192

LABORATORY CONTROL SAMPLE REPORT

Lab. Control Sample ID: LN144SB, LN144SA

Anametrix WO #: 9411161 Client Project Number: 35195.624

Matrix: SOIL

Analyst: Supervisor:

Analyte	Prep. Method	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Spike Amount	LCS Results	% Recovery	Q
Cadmium	3050A	6010A	ICP1	11/14/94	11/15/94	1	mg/Kg	5.0	4.1	82.0	
Chromium	3050A	6010A	ICP1	11/14/94	11/15/94	1	mg/Kg	20.0	16.4	82.0	
Lead	3050A	6010A	ICP2	11/14/94	11/15/94	1	mg/Kg	50.0	45.4	90.8	
Nickel	3050A	6010A	ICP1	11/14/94	11/15/94	1	mg/Kg	50.0	41.9	83.8	
Zinc	3050A	6010A	ICP1	11/14/94	11/15/94	1	mg/Kg	50.0	40.0	80.0	
Organic Lead	*	*	AA1	11/14/94	11/15/94	1	mg/Kg	11.0	11.2	102	

COMMENTS: * Organic lead Test Method, Appendix XI, Title 22 Code of Regulations, Register 91, No. 22, page 689.

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SAMPLE RECEIVING CHECKLIST

WORKORDER NUMBER: 94/1/6/ CI	LIENT PROJECT ID:	<i>35195</i> .	624		
COOLER			•		
Shipping slip (airbill, etc.) present?			YES	NO	N/A
If YES, enter carrier name and airbill #:					
Custody Seal on the outside of cooler?			YES	NO	NIA
Condition: INTACT BROKEN					
Temperature of sample (s) within range?			YES	NO	N/A
List temperature of cooler (s): 5°C					
SAMPLES					
Chain of custody seal present for each container?	## ## T T T T T T T T T T T T T T T T T		YES	NO (N/A
Condition: INTACT BROKEN					
Samples arrived within holding time?	<u> </u>		YES	NO	N/A
Samples in proper containers for methods requested?			YES	МО	
Condition of containers: INTACT BROKEN					
If NO, were samples transferred to proper container?					
Were VOA containers received with zero headspace?			YES	NO	N/A
If NO, was it noted on the chain of custody?		18811			
Were container labels complete? (ID, date, time preservative, e	tc.)		(YES)	NO	
Were samples preserved with the proper preservative?			YES	NO	N/A
If NO, was the proper preservative added at time of receipt?					
pH check of samples required at time of receipt?			YES (NO	t
If YES, pH checked and recorded by:					
Sufficient amount of sample received for methods requested?			YES	NO	
If NO, has the client or lab project manager been notified?					
Field blanks received with sample batch? # of Sets:			YES	NO	N/A
Trip blanks received with sample batch? # of Sets:			YES	NO	(N/A)
CHAIN OF CUSTODY					···-
Chain of custody received with samples?			YES	NO	
Has it been filled out completely and in ink?		· · · · · · · · · · · · · · · · · · ·	YES	NO	
Sample ID's on chain of custody agree with container labels?			YES	NO	
Number of containers indicated on chain of custody agree with	number received?		YES	NO	
Analysis methods clearly specified?	······································		YES	NO	
Sampling date and time indicated?			YES	NO	
Proper signatures of sampler, courier, sample custodian in appr	opriate place? with tim	e and date?	YES	NO	. <u> </u>
Turnaround time? REGULAR RUSH	44.4.				
Any NO response and/or any "BROKEN" that was check					,
Sample Custodian: Date: 11/14/94	Project Manager: _	KD	Date: _	1/15	/gy

BENCHSHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES (408) 432-8192

Date Extracted: 11/14/94

Date Analyzed: 11/15/94

Analyst: 11/15/94

Batch No HSN14W91

				T'			~
Workorder #	Sample I.D.#	Amount Extracted (grams)	Final Weight (grams)	Initial Weight (grams)	Weight of Residue (grams)	Total Oil & Grease (ppm)	
9411161-01	A4SS	30	10.8736	10.8706	0.0030	100	
BN14H1W9	METHOD BLANK	30	10.7712	10.7708	0.0004	ND	!
MN14H1W9	LCS	30	10.9898	10.9807	0.0091	300	
9411161-01	A4SSMS	30	10.9350	10.9222	0.0128	430	
9411161-01	A4SSMD	30	10.8544	10.8431	0.0113	380	

amount recovered

amount recovered - amount in original sample

% REC OF MS = ——* 100 110

amount spiked

amount recovered - amount in original sample

% REC OF MD = * 100 93

amount spiked

RPD OF MS & MD = 12

APPROVED BY: 31 1415/91

DATE STARTED:		BATCH:		HSV14W91]		M	ETH	DD 552	0EF	Mod	<u>ifie</u>	<u>d(Cil</u>	and	Gre	ase	as Hydrocar	bons in Soil)
94116[-0] N 7449pla Y Ar		DATE STARTED:		11/14/94					inch	cape	Testi	ng S	Service	es, Ar	name	trix (408)432-8192	
94116[-0] N 7449pla Y Ar			RE-EXTRACT?		1.D match with chain		add 60g Na2SO4 lot # \$147c7	1.0ml motor oil spk. 9.0 mg/ml #	100 ml 1:1 Acetone lot # <u>HCでん: 4</u> & Ch2Cl2 lot # <u>リロ 2</u> 3/シ	sonicate 3 x 3 min.	3.0g silica gel clean-up lot # (-3 5 3 √ O	filter w/#50 filter paper			conc. to dryness w/N2			notes/comments
941161-01 N 94445018 Y Ar Ak		9411161-01	7		-		AV					11L	_	Δĸ	 	N.C.	Brown great	
941161 - ms. 01 N ALSS Y AV AR AV AR AV AR AV AR AV AR AV SAV SAV I BUYTHING SCS Y AV AR AR AR AR AR AR AR AR AR AV SAV SAV I LET MAINTHING SCS Y AV AR AR AR AR AR AR AR AR AS AV VEILLE SCOTT	2	9411061-01	7		У	Ar				AL						ŊĽ	Buck yrense	
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9411061-03 N 94445SCS Y AR					-	<u> </u>												
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Date/Time Completed: APPROVAL:							17.4	17/14	1.7.4	, 21-4	.714	7.4			•	144	# /v	

Date/Time Completed:

Z 21

11/14/94

APPROVAL:

743/24 Wister

METHOD 5520EF Modified(Oil and Grease as Hydrocarbons in Soil) Inchcape Testing Services, Anametrix (408) 432-8192 BATCH: HSW)4W91 11/14/44 DATE EXTRACTED: ANALYST: AK/82 11/15/94 DATE ANALYZED: Initial Weight: Weight of Oil & Grease Final Weight: Weight Residue (g) (mg/Kg) (g) Extracted (g): (g) CLIENT I.D.: ANAMETRIX I.D.: <30 10.7708 0.0004 30cx 10.T112 BUILHIWA BLANK 0.0091 300 10. 9898 10.9807 2 45 MUHHIMA 100 10.8706 13.8736 00030 1455 9411161-01 150 10.9085 10,9640 0.0045 941106501 9444581A 10,8689 0.0014 47 10.8703 V SBIB 0.0000 10,8937 430 10.8937 -03 **↓** \$\$£\$ 430 10,9222 0.0128 10.9350 9411161-01ms AUSS 10,8431 320 00113 1455 112 8544 - 0/ms= 100 LCS: **CALCULATIONS:** $0\&Gmg/Kg \neq wt. of residue(g) \times 1000mg$.03Kg x 1g 110 MS: MSD: % Rec. LCS = amount recovered(mg/Kg) x 100 300mg/Kg APPROVAL: 21+3 W.+ 11/5/44 % Rec. MS/MSD = amount recovered(mg/Kg) - amount in sample(mg/Kg) x 100 300mg/Kg



Inchcape Testing Services Anametrix Laboratories

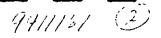
1961 Concourse Drive Suite E San Jose, CA 95151 Tel: 408-452-8192 Fax: 408-452-8196

CORRECTIVE ACTION FORM

	ORGANIC PREP LAB	
HOD:5520EF	BATCH: LISNIMINI WORKORDERS: GYIII	61
RIX: SOIL	ANALYST: AK 94110	
	SDG:	
	holding time was missed.	
Samples affe		
Samples arte	tet.	
Corrective Act	in a	
	ervices or Project Manager notified:	
Sample	extracted out of hold time bydays.	
	s resampling.	
-	i tesamping.	2
Other:		
(VERIFICATION:
* ^~		
	sample was received for the analysis.	
Samples affor	cted:	
-		
Corrective Ac	ion	
Corrective Ac	s extracted as is, volumes are noted on the extra	action sheet.
	ervices or Project Manager notified:	
	CIVICES OF FIGIECT IVIALIANCE HOLLIFES.	
Other:		
		VERIFICATION:
In marks at a set	sample was received for a MS/MSD or MS/I	
Samples aff	cted:	
Corrective Ac		
	ed a LCS and LCSD.	
Other:		
<u> </u>		VERIFICATION:
		VERIFICATION:

Samples affected:	
Corrective Action	
Client services or Project Manager notified:	
Other:	
	····
	VERIFICATION
The extract would not concentrate to the standard final volume.	· · · · · · · · · · · · · · · · · · ·
Extracts affected:	
Corrective Action	
The adjusted final volumes are noted on the extraction sheet.	
Other:	
	`
	VERIFICATION
Other, explain:	
Corrective Action: nou required	
Corrective Action:	
Corrective Action: nou required	
Corrective Action: non require a	
Corrective Action: www.ce.quired	
Corrective Action:	
Sor Approval: 243 Det Date: 11/15/5-1	VERIFICATION

48 hr T.A.T.



Chain of Custody Record

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ampl	ers: (Signature)						Lab		e pertraka	r-TPH	ار الاسع	Chini	11,	ן קיני	בוני	9.	9,	ध-राष्ट्र हरूर						STANKE			
tem No.	Sample De (Field ID N	scription	Date	Time	Grab	Comp.	Sample Number	Container Number	1.0	40P	14	FUE	23	(A)	3	9 0	28	17			1,05			la	ž .		\perp
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Send Lab Results To: WALTER HOWARD Remarks: RUST E & I Buysins						Remarks: fax copy of hesults to Rich Burginski - RUST Pals acts 415/968-						.ha- -5 3 (֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֡֓֓֓֓֓֡֓֓֡֓֡	Theck	ample	very s deli	ivere	d in per	on				eiving	Notes	:: //^		
12 Metro Park Road						Expr	ess Airbill	No.:] С] м		on car	rrier		Į	Tem	p. of	Seal Ir Shipp onditi	ing Co	N/A ntainer: 5°C			

RUST ENVIRONMENT & INFRASTRUCTURE

Eday (20) 1/19/14 Repolichant B. 94/1/6/ (2) 12:15 2.

Chain of Custody Record

WAHLER LABLES Custody Seal # RUST E&I Cooler# Analysis Required Matrix Project Number Project Name/Client 35195.624 American National Can Sample Container Sample Type Samplers: (Signature) Calard Bur --Lab Sample Description Sample | Container Item Time (Field ID Number) Date Number Number No. 11-14-94 9:10 A4 55 11-14-94 9:20 B1255 4 5 6 8 10 11 12 13 14 15 16 17 18 19 20 Disposed of by: (Signature) Date/Time Date/Time ///4/94 //:37 Received by: (Signature) Items: Relinquished by: (Signature) Received by: (Signature) . [Laboratory] septime DeCarli Disposed of by: (Signature) Date/Fime Relinquished by: (Signature) Date/Time Items: Remarks: fax cory of besults to Richard Check Delivery Method:

Burginski - Rust Polis alto 415/968-5365 Framples delivered in person Laboratory Receiving Notes: Send Lab Results To: WALTER HOW ARD RUST EXI 12 Metro Park Road Custody Seal Intact? Common carrier Temp. of Shipping Container: 5% Albany, NY. ☐ Mail Federal Express Airbill No.: 12205 Sample Condition: Lab:

APPENDIX C

Laboratory Analytical Report-Area 4 Excavation Water Sample

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1961 Concourse Drive Suite E San Jose, CA 95131 Tel: 408-432-8192 Fax: 408-452-8198

MR. WALTER HOWARD RUST ENVIRONMENT AND INFRASTRUCTURE 12 METRO PARK ROAD ALBANY, NY 12205

Workorder # : 9411124 Date Received: 11/10/94 Project ID : 35195.624

Purchase Order: N/A

The following samples were received at Anametrix for analysis :

ANAMETRIX ID	CLIENT SAMPLE ID
9411124- 1	A4A-PW

This report is organized in sections according to the specific Anametrix laboratory group which performed the analysis(es) and generated the data.

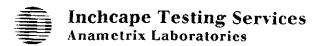
The results contained within this report relate to only the sample(s) tested. Additionally, these data should be considered in their entirety and Anametrix cannot be responsible for the detachment, separation, or otherwise partial use of this report.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234.

If you have any further questions or comments on this report, please call your project manager as soon as possible. Thank you for using Incape Testing Services.

Laboratory Director

This report consists of _



ANAMETRIX REPORT DESCRIPTION GCMS

Organic Analysis Data Sheets (OADS)

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

Tentatively Identified Compounds (TICs)

TIC forms contain tabulated results for non-target compounds detected in SC/MS analyses. TICs must be requested at the time samples are submitted at Anametrix. TIC forms immediately follow the OADS form for each sample. If TICs are requested but not found, then TIC forms will not be included with the report.

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 "e", 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 it's 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:

- g 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 amount reported exceeded the linear range of the instrument calibration.
- D Indicates that the compound was detected in an analysis performed at a secondary dilution.
- A Indicates that the tentatively identified compound is a suspected aldol condensation product. This
 is common in EPA Method 8270 soil analyses.

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.

PC/2374

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

MR. WALTER HOWARD RUST ENVIRONMENT AND INFRASTRUCTURE

12 METRO PARK ROAD ALBANY, NY 12205

Workorder # : 9411124
Date Received : 11/10/94
Project ID : 35195.624
Purchase Order: N/A
Department : GCMS

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Sub-Department: GCMS

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9411124- 1	A4A-PW	WATER	11/10/94	8240

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

MR. WALTER HOWARD RUST ENVIRONMENT AND INFRASTRUCTURE

12 METRO PARK ROAD ALBANY, NY 12205

Workorder # : 9411124
Date Received : 11/10/94
Project ID : 35195.624
Purchase Order: N/A

Department : GCMS Sub-Department: GCMS

QA/QC SUMMARY :

- No QA/QC problems for EPA Method 8240.

Department Supervisor

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ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8240 ANAMETRIX, INC. (408)432-8192

Project ID Sample ID : 9411124-01 Anametrix ID : 35195.62

: 74 : A4A-PW Analyst Supervisor Matrix : WATER 30

Date Sampled Date Analyzed Instrument ID :11/10/94 :11/10/94 : MSD1 Dilution Factor: 2.0

Conc. Units : ug/L

1				+ I
CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	20.	ND	ט
75-01-4	Vinyl chloride	20.	ND	U
74-83-9	Bromomethane	20.	ND	ן ט
75-00-3	Chloroethane	20.	ND	ן ט
75-69-4	Trichlorofluoromethane	10.	ND	ן טן
75-35-4	1,1-Dichloroethene	10.	ND	ן ט ן
76-13-1	Trichlorotrifluoroethane	10.	ND	U
67-64-1	Acetone	40.	ND	ן ט
75-15-0	Carbon disulfide	10.	ND	Ū
75-09-2	Methylene chloride	10.	ND	Ū
156-60-5	Trans-1,2-dichloroethene	10.	ND	ĺΰ
75-34-3	1,1-Dichloroethane	10.	ND	Ū
156-59-2	Cis-1,2-dichloroethene	10.	ND	Ŭ .
78-93-3	2-Butanone	40.	ND	U -
67-66-3	Chloroform	10.	ND	Ū
71-55-6	1,1,1-Trichloroethane	10.	ND	Ιŭ
56-23-5	Carbon tetrachloride	10.	ND	บี
108-05-4	Vinyl acetate	20.	ND	ן ט
71-43-2	Benzene	10.	ND	lΰ
107-06-2	1,2-Dichloroethane	10.	ND	l u
79-01-6	Trichloroethene	10.	ND ND	Ü
78-87 - 5		10.	ND	Ü
1	1,2-Dichloropropane Bromodichloromethane	10.	ND ND	Ü
75-27-4				1 1
10061-01-5	Cis-1,3-dichloropropene	10. 20.	ND	Ŭ
108-10-1	4-Methyl-2-pentanone		ND	U
108-88-3	Toluene	10.	ND	U
10061-02-6	Trans-1,3-dichloropropene	10.	ND	ĮŪ
79-00-5	1,1,2-Trichloroethane	10.	ND	ן "י
127-18-4	Tetrachloroethene	10.	ND	n
591-78-6	2-Hexanone	20.	ND	U
124-48-1	Dibromochloromethane	10.	ND	U
108-90-7	Chlorobenzene	10.	ND	U
100-41-4	Ethylbenzene	10.	ND \	U
1330-20-7	Xylene (Total)	10.	(310.	
100-42-5	Styrene	10.	ND /	ן ט
75~25-2	Bromoform	10.	ND	U
79-34 - 5	1,1,2,2-Tetrachloroethane	10.	ND	U
541-73-1	1,3-Dichlorobenzene	10.	ND	U
106-46-7	1,4-Dichlorobenzene	10.	ND	[U]
95-50-1	1,2-Dichlorobenzene	10.	ND	U
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ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8240 ANAMETRIX, INC. (408)432-8192

Anametrix ID : BN1002A2

Project ID Sample ID Analyst Supervisor : VBLKKP : WATER Matrix

Date Sampled : 0/ 0/ 0
Date Analyzed :11/10/94
Instrument ID : MSD1 Dilution Factor : Conc. Units : ug/L 1.0

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	10.	ND	U
75-01-4	Vinyl chloride	10.	ND	Ū
74-83-9	Bromomethane	10.	ND	Ū
75-00-3	Chloroethane	10.	ND	Ŭ
75-69-4	Trichlorofluoromethane	5.	ND	Ū
75-35-4	1,1-Dichloroethene	- Š.	ND	Ū
76-13-1	Trichlorotrifluoroethane	- š.	ND	Ιΰ
67-64-1	Acetone	20.	ND	Ιΰ
75-15-0	Carbon disulfide	5.	ND	υ
75-09-2	Methylene chloride	5.	ND	Ŭ
156-60-5	Trans-1,2-dichloroethene	-\ š.	ND	Ū
75-34-3	1,1-Dichloroethane	- 5 .	ND	Ū !
156-59-2	Cis-1,2-dichloroethene	- š.	ND	บ
78-93-3	2-Butanone	20.	ND	Ū
67-66-3	Chloroform	- 5.	ND	บ
71-55-6	1,1,1-Trichloroethane	5.	ND	Ū
56-23-5	Carbon tetrachloride	5.	ND	ϋ
108-05-4	Vinyl acetate	10.	ND	υ
71-43-2	Benzene	5.	ND	Ŭ
107-06-2	1,2-Dichloroethane	5.	ND	Ŭ
79-01-6	Trichloroethene	5.	ND	U
78-87-5	1,2-Dichloropropane	- Š.	ND	Ū
75-27-4	Bromodichloromethane	5.	ND	Ū
10061-01-5	Cis-1,3-dichloropropene	5.	ND	Ū
108-10-1	4-Methyl-2-pentanone	10.	ND	Ū
108-88-3	Toluene	-\ 5.	ND	Ū
10061-02-6	Trans-1,3-dichloropropene	5.	ND	Ŭ
79-00-5	1,1,2-Trichloroethane	5.	ND	Ū
127-18-4	Tetrachloroethene	5.	ND	ϋ
591-78-6	2-Hexanone	10.	ND	บั
124-48-1	Dibromochloromethane	- Š.	ND	Ū
108-90-7		5.	ND	Ū
100-41-4	Chlorobenzene	- Š.	ND	Ū
1330-20-7	Xylene (Total)	5.	ND	υ
100-42-5	Styrene (10td1)	- 5.	ND	Ŭ
75-25-2	Bromoform	5.	ND ND	บั
79-34-5	1,1,2,2-Tetrachloroethane	5.	ND	Ū
541-73-1	1,1,2,2-letrachloroethane	- 5.	ND ND	Ü
106-46-7	1 4-Dighlorohenzene	5.	ND ND	บี
	1,4-Dichlorobenzene	5.		1 -
95-50-1	1,2-Dichlorobenzene) <u> </u>	ND	U

SURROGATE RECOVERY SUMMARY -- EPA METHOD 8240 ANAMETRIX, INC. (408)432-8192

Project ID : 35195.62 Matrix : LIQUID Anametrix ID: 9411124

Analyst : TM Supervisor : W

	SAMPLE ID	SU1	SU2	SU3
123456789	VBLKKP VLCSOF A4A-PW	95 100 101	100 102 100	98 104 101
4 5				
6				
9 10				
11 12				
10 11 12 13 14 15				
16 17 18				
19 20				
21 22				
23 24 25				
26 27				
28 29 30				

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			OC LIMITS
			~~~~~
SU1	=	1,2-Dichloroethane-d4	(75-113)
SU2	=	Toluene-d8	(83 <del>-</del> 110)
SU3	=	1,4-Bromofluorobenzene	(82-114)

* Values outside of Anametrix QC limits

### LABORATORY CONTROL SPIKE RECOVERY FORM --- EPA METHOD 624/8240 ANAMETRIX, INC. (408)432-8192

Anametrix ID : MN1002A2.D Project/Case

Analyst :TM : WATER Matrix Supervisor SDG/Batch . **Y**f Date Sampled

Date Analyzed :10 Nov 94 3:56 pm :

Sample ID : VLCSOF @ 50ug/ Instrument ID : MSD1

COMPOUND	SPIKE	SAMPLE	LCS	LCS	%REC
	ADDED	CONCENTRATION	CONCENTRATION	ૠ	LIMITS
	(ug/L)	(ug/L)	(ug/L)	REC	
1,1-Dichloroethene	50	0	53	105	72-145
Benzene	50	0	56	113	83-125
Trichloroethene	50	0	55	110	61-140
Toluene	50	0	55	110	82-123
Chlorobenzene	50	o	55	111	82-125
				_	

# ANAMETRIX REPORT DESCRIPTION INORGANICS

#### Analytical Data Report (ADR)

The ADR contains tabulated results for inorganic analytes. All field samples, QC samples and blanks were prepared and analyzed according to procedures in the following references:

- "Test Methods for Evaluating Solid Waste," SW-846, EPA, 3rd Edition, November 1986.
- "Methods for Chemical Analysis of Water and Wastes," EPA, 3rd Edition, 1983.
- CCR Title 22, Section 66261, Appendix II, California Waste Extraction Test.
- CCR Title 22, Section 66261, Appendix XI, Organic Lead.
- "Standard Methods for the Examination of Water and Wastewater," APHA, AWWA, WEF, 18th Edition, 1992.
- USEPA Contract Laboratory Program Statement of Work for Inorganic Analyses, ILM02.1, 1991.

#### Matrix Spike Report (MSR)

The MSR summarizes percent recovery and relative percent difference information for matrix spikes and matrix spike duplicates. This information is a statement of both accuracy and precision. MSRs may not be provided with all analytical reports. Anametrix control limit for MSR is 75-125% with 25% for RPD limits, except for Method 6010A, which is 80-120% with 25% RPD limits.

#### Laboratory Control Sample Report (LCSR)

The LCSR summarizes percent recovery information for laboratory control spikes on reagent water or soil. This information is a statement of performance for the method, i.e., the samples are properly prepared and analyzed according to the applicable methods. Anametrix control limit for LCSR is 80-120%.

#### Method Blank Report (MBR)

The MBR summarizes quality control information for reagents used in preparing samples. The absolute value of each analyte measured in the method blank should be below the method reporting limit for that analyte.

#### Post Digestion Spike Report (PDSR)

The PDSR summarizes percent recovery information for post digestion spikes. A post digestion spike is performed for a particular analyte if the matrix spike recovery is outside of established control limits. Any percent recovery for a post digestion spike outside of established limits for an analyte indicates probable matrix effects and interferences for that analyte. Anametrix control limit for PDSR is 75-125%.

#### Qualifiers (Q)

Anametrix uses several data qualifiers in inorganic reports. These qualifiers give additional information on the analytes reported. The following is a list of qualifiers and their meanings:

- I Sample was analyzed at the stated dilution due to spectral interferences.
- U Analyte concentration was below the method reporting limit. For matrix and post digestion spike reports, a value of "0.0" is entered for calculation of the percent recovery.
- B- Sample concentration was below the reporting limit but above the instrument detection limit. Result is entered for calculation of the percent recovery only.
- H Spike percent recovery was outside of Anametrix control limits due to interferences from relatively high concentration level of the analyte in the unspiked sample.
- L Reporting limit was increased to compensate for background absorbances or matrix interferences.

#### Comment Codes

In addition to qualifiers, the following codes are used in the comment section of all reports to give additional information about sample preparation methods:

- A Sample was prepared for silver based on the silver digestion method developed by the Southern California Laboratory, Department of Health Services, "Acid Digestion for Sediments, Sludges, Soils and Solid Wastes. A Proposed Alternative to EPA SW846, Method 3050." Environmental Science and Technology, 1989, 23, 898-900.
- T Spikes were prepared after extraction by the Toxicity Characteristic Leaching Procedure (TCLP)
- C Spikes were prepared after extraction by the California Waste Extraction Test (CWET) method.
- D Reported results are dissolved, not total, metals.

#### Reporting Conventions

Analytical values reported are gross values, i.e., not corrected for method blank contamination. Solid matrices are reported on a wet weight basis, unless specifically requested otherwise.

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

MR. WALTER HOWARD

RUST ENVIRONMENT AND INFRASTRUCTURE

12 METRO PARK ROAD

ALBANY, NY 12205

Workorder # : 9411124
Date Received : 11/10/94
Project ID : 35195.624
Purchase Order: N/A

Department : METALS

Sub-Department: METALS

#### SAMPLE INFORMATION:

ANAMETRIX CLIENT SAMPLE ID SAMPLE ID		MATRIX	DATE SAMPLED	METHOD
9411124- 1	A4A-PW	WATER	11/10/94	T 22-MET

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

MR. WALTER HOWARD RUST ENVIRONMENT AND INFRASTRUCTURE

12 METRO PARK ROAD

ALBANY, NY 12205

Workorder # : 9411124
Date Received : 11/10/94
Project ID : 35195.624
Purchase Order: N/A

Department : METALS Sub-Department: METALS

#### QA/QC SUMMARY :

- All holding times have been met for the analyses reported in this section.

INORGANICS - PAGE 2

# INCHCAPE TESTING SERVICES ANAMETRIX LABORATORIES (408) 432-8192 DATA REPORT

Anametrix Sample ID: 9411124-01 Client Sample ID: A4A-PW Client Project Number: 35195.624

Matrix: WATER

Date Sampled: 11/10/94
Analyst: C
Supervisor: MV

Analyte	Prep. Method	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	60.0	ND	
Arsenic	3010A	6010A	ICP2	11/10/94	11/10/94	1	ug/L	10.0	ND	
Barium	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	100	ND	
Beryllium	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	5.0	ND	
Cadmium	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	5.0	ND	
Chromium	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	10.0	19.5	
Cobalt	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	50.0	ND	T
Copper	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	25.0	58.3	
Lead	3010A	6010A	ICP2	11/10/94	11/10/94	1	ug/L	3.0	19.6	
Mercury	7470	7470	HGA1	11/10/94	11/11/94	1	ug/L	0.20	ND	
Molybdenum	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	10.0	ND	
Nickel	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	40.0	27.6	
Selenium	3010A	6010A	ICP2	11/10/94	11/10/94	1	ug/L	5.0	ND	1
Silver	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	10.0	ND	
Thallium	3010A	6010A	ICP2	11/10/94	11/10/94	1	ug/L	10.0	ND	
Vanadium	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	50.0	ND	
Zinc	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	20.0	104	

COMMENTS:

# INCHCAPE TESTING SERVICES ANAMETRIX LABORATORIES (408) 432-8192 METHOD BLANK REPORT

Anametrix Sample ID: BN104WA, BN104WB, BN104WF

Anametrix WO #: 9411124 Client Project Number: 35195.624

Matrix: WATER

Analyst:	54
Supervisor:	W

Analyte	Prep. Method	Analytical Method	Instr.	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	60.0	ND	
Arsenic	3010A	6010A	ICP2	11/10/94	11/10/94	1	ug/L	10.0	ND	
Barium	3010A	6010A	ICP1	11/10/94	11/11/94	1_	ug/L	100	ND	
Beryllium	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	5.0	ND	
Cadmium	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	5.0	ND	
Chromium	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	10.0	ND	
Cobalt	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	50.0	ND	
Copper	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	25.0	ND	
Lead	3010A	6010A	ICP2	11/10/94	11/10/94	1	ug/L	3.0	ND	
Mercury	7470	7470	HGA1	11/10/94	11/11/94	1	ug/L	0.20	ND:	
Molybdenum	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	10.0	ND	
Nickel	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	40.0	ND	
Selenium	3010A	6010A	ICP2	11/10/94	11/10/94	1	ug/L	5.0	ND	
Silver	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	10.0	ND	
Thallium	3010A	6010A	ICP2	11/10/94	11/10/94	1	ug/L	10.0	ND	
Vanadium	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	50.0	ND	
Zinc	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	20.0	ND	L

COMMENTS:

# INCHCAPE TESTING SERVICES ANAMETRIX LABORATORIES (408) 432-8192 SAMPLE DUPLICATE REPORT

Anametrix Sample ID: 9411124-01D Client Sample ID: A4A-PW

Client Project Number: 35195.624

Matrix: WATER

Analyst: Sc Supervisor: W

Analyte	Prep. Method	Analyt. Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Sample Conc.	Sample Duplicate Conc.	RPD	Q
Silver	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	ND	ND	N/A	

COMMENTS:

3

# INCHCAPE TESTING SERVICES ANAMETRIX LABORATORIES (408) 432-8192 MATRIX SPIKE REPORT

Anametrix. Sample ID: 9411124-01MS,MD

Client Sample ID: A4A-PW

Client Proj. Number: 35195.624

Matrix: WATER

Analyst: C Supervisor: W

3

Analyte	Analyt. Method	Instr. I.D.	Date Prepared	Date Analyzed	Units	Spike Amount	Sample Conc.	Matrix Spike Conc.	% Rec.	Matrix Sp. Dup. Conc.	% Rec.	RPD	Q
Silver	6010A	ICP1	11/10/94	11/11/94	ug/L	50.0	0.0	49.4	98.8	48.7	97.4	1.4	U

COMMENTS:

### INCHCAPE TESTING SERVICES ANAMETRIX LABORATORIES (408) 432-8192

### LABORATORY CONTROL SAMPLE REPORT

Lab. Control Sample ID: LN104WA, LN104WB, LN104WF

Anametrix WO #: 9411124

Analyst: 5c Supervisor: Mk

Client Project Number: 35195.624
Matrix: WATER

Anaiyte	Prep. Method	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Spike Amount	LCS Results	% Recovery	Q
Antimony	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	500	452	90.4	
Arsenic	3010A	6010A	ICP2	11/10/94	11/10/94	1	ug/L	100	102	102	
Barium	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	2000	2070	104	
Beryllium	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	50.0	50.0	100	
Cadmium	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	50.0	47.3	94.6	
Chromium	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	200	190	95.0	
Cobalt	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	500	489	97.8	
Copper	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	250	236	94.4	
Lead	3010A	6010A	ICP2	11/10/94	11/10/94	1	ug/L	500	495	99.0	
Mercury	7470	7470	HGA1	11/10/94	11/11/94	1	ug/L	1.0	0.96	96.0	
Molybdenum	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	2000	2010	101	
Nickel	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/Ĺ	500	481	96.2	
Selenium	3010A	6010A	ICP2	11/10/94	11/10/94	1	ug/L	50.0	46.8	93.6	
Silver	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	50.0	47.4	94.8	
Thallium	3010A	6010A	ICP2	11/10/94	11/10/94	1	ug/L	100	101	101	
Vanadium	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	500	460	92.0	
Zinc	3010A	6010A	ICP1	11/10/94	11/11/94	1	ug/L	500	480	96.0	

COMMENTS:



# SAMPLE RECEIVING CHECKLIST

WORKORDER NUMBER: 9411124 C	CLIENT PROJECT ID: _	35195.674	' <u> </u>	
COOLER				
Shipping slip (airbill, etc.) present?		YES	NO	N/A
If YES, enter carrier name and airbill #:				
Custody Seal on the outside of cooler?		YES	NO	(N/A)
Condition: INTACT BROKEN				
Temperature of sample (s) within range?		YES	NO	) N/A
List temperature of cooler (s): 10°C				
SAMPLES				
Chain of custody seal present for each container?		YES	NO	(N/A
Condition: INTACT BROKEN				
Samples arrived within holding time?		YES	NO	N/A
Samples in proper containers for methods requested?	-	YES	NO	
Condition of containers: INTACT BROKEN				
If NO, were samples transferred to proper container?				
Were VOA containers received with zero headspace?		YES	NO	N/A
If NO, was it noted on the chain of custody?				<u></u>
Were container labels complete? (ID, date, time preservative,	etc.)	YES	NO	
Were samples preserved with the proper preservative?		YES	NO	N/A
If NO, was the proper preservative added at time of receipt?				
pH check of samples required at time of receipt?		YES	NO	
If YES, pH checked and recorded by: Rd			·	
Sufficient amount of sample received for methods requested?		YES	NO	
If NO, has the client or lab project manager been notified?			·	
Field blanks received with sample batch? # of Sets:		YES	NO	N/A
Trip blanks received with sample batch? # of Sets:		YES	NO	(N/A
CHAIN OF CUSTODY			- <u></u>	- <u>-</u>
Chain of custody received with samples?		YES	NO	
Has it been filled out completely and in ink?		YES	NO	
Sample ID's on chain of custody agree with container labels?		YES	NO	
Number of containers indicated on chain of custody agree wit	h number received?	YES	) NO	
Analysis methods clearly specified?		YES	NO	
Sampling date and time indicated?		YES	NO	
Proper signatures of sampler, courier, sample custodian in app	propriate place? with time	and date? (YES)	NO	
Turnaround time? REGULAR RUSH Any NO response and/or any "BROKEN" that was chec				

____ Date: 11/10/94 Project Manager: WR Date: ii/10/94

Sample Custodian:



24 hour T.A.T.

9411124



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Pink Copy - Client

F514/Earth.Sci

# APPENDIX D

Laboratory Analytical Report-Fractionation Tank Water Samples

1961 Concourse Drive Suite E San Jose, CA 95131 Tel: 408-432-8192 Fax: 408-432-8198

MR. WALTER HOWARD

RUST ENVIRONMENT AND INFRASTRUCTURE

12 METRO PARK ROAD ALBANY, NY 12205

Workorder # : 9411239 Date Received: 11/22/94 Project ID : 35195.624

Purchase Order: N/A

The following samples were received at Anametrix for analysis:

ANAMETRIX ID	CLIENT SAMPLE ID
9411239- 1	A4A-BKT1
9411239- 2	A4A-BKT2
9411239- 3	A4A-BKT3
9411239- 4	A4A-BKT4
9411239- 5	A4A-BKT5
9411239- 6	A4A-BKT6
9411239- 7	T. BLANK

This report is organized in sections according to the specific Anametrix laboratory group which performed the analysis(es) and generated the data.

The results contained within this report relate to only the sample(s) tested. Additionally, these data should be considered in their entirety and Anametrix cannot be responsible for the detachment, separation, or otherwise partial use of this report.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234.

If you have any further questions or comments on this report, please call your project manager as soon as possible. Thank you for using Inchcape Testing Services.

Susan Kraska Yeager Laboratory Director

This report consists of  $\cancel{19}$  pages.



# ANAMETRIX REPORT DESCRIPTION GCMS

# Organic Analysis Data Sheets (OADS)

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

# Tentatively Identified Compounds (TICs)

TIC forms contain tabulated results for non-target compounds detected in \$C/MS analyses. TICs must be requested at the time samples are submitted at Anametrix. TIC forms immediately follow the OADS form for each sample. If TICs are requested but not found, then TIC forms will not be included with the report.

# 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 date. 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 it's 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:

- y 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 amount reported exceeded the linear range of the instrument calibration.
- D Indicates that the compound was detected in An Analysis performed at a secondary dilution.
- A Indicates that the tentatively identified compound is a suspected aldol condensation product. This
  is common in EPA Method 8270 soil analyses.

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.

FC/3274

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

MR. WALTER HOWARD RUST ENVIRONMENT AND INFRASTRUCTURE

12 METRO PARK ROAD ALBANY, NY 12205

Workorder # : 9411239
Date Received : 11/22/94
Project ID : 35195.624
Purchase Order: N/A

Purchase Order: N/A
Department : GCMS
Sub-Department: GCMS

## SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9411239- 1	A4A-BKT1	WATER	11/22/94	8240
9411239- 2	A4A-BKT2	WATER	11/22/94	8240
9411239- 3	A4A-BKT3	WATER	11/22/94	8240
9411239- 4	A4A-BKT4	WATER	11/22/94	8240
9411239- 5	A4A-BKT5	WATER	11/22/94	8240
9411239- 6	A4A-BKT6	WATER	11/22/94	8240
9411239- 7	T. BLANK	WATER	11/22/94	8240

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

MR. WALTER HOWARD RUST ENVIRONMENT AND INFRASTRUCTURE 12 METRO PARK ROAD ALBANY, NY 12205

Workorder # : 9411239 Date Received: 11/22/94 Project ID: 35195.624

Purchase Order: N/A Department : GCMS Sub-Department: GCMS

## QA/QC SUMMARY :

- All holding times have been met for the analyses reported in this section.

- No QA/QC problems for EPA Method 8240 analysis.

David L. Scherk Department Supervisor

Project ID Sample ID : 35195.62 : A4A-BKT1

Matrix : WATER

:11/22/94 :11/25/94 : MSD1 Date Sampled Date Analyzed Instrument ID

9411239-01 Anametrix ID

Analyst Supervisor : 06)

Dilution Factor: 20.0

: ug/L Conc. Units

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	200.	ND	บ
75-01-4	Vinyl chloride	200.	ND	U
74-83-9	Bromomethane	200.	ND	U
75-00-3	Chloroethane	200.	ND	U
75-69-4	Trichlorofluoromethane	100.	ND	U
75-35-4	1.1-Dichloroethene	100.	ND	U
76-13-1	Trichlorotrifluoroethane	100.	ND	U
67-64 <del>-</del> 1	Acetone	400.	ND	U
75-15-0	Carbon disulfide	100.	ND	Ŭ
75-09-2	Methylene chloride	100.	ND	U
156-60-5	Trans-1,2-dichloroethene	100.	ND	U
75 <b>-</b> 34-3	1.1-Dichloroethane	100.	ИD	U ,
156-59-2	Cis-1,2-dichloroethene	100.	ND	U 🛊
78-93-3	2-Butanone	400.	ND	U,
67-66-3	Chloroform	100.	ND	U .
71-55-6	1,1,1-Trichloroethane	100.	ND	U
56-23-5	Carbon tetrachloride	100.	ND	U
108-05-4	Vinyl acetate	200.	ND	U
71-43-2	Benzene	100.	ND	U
107-06-2	1,2-Dichloroethane	100.	ND	U
79-01-6	Trichloroethene	100.	ND	U
78 <b>-</b> 87 <b>-</b> 5	1,2-Dichloropropane	100.	ND	U
75-27-4	Bromodichloromethane	100.	ND	U
.0061-01-5	Cis-1,3-dichloropropene	100.	ND	U
108-10-1	4-Methyl-2-pentanone	200.	ND	U
108 <b>-</b> 88-3	Toluene	100.	ND	ប
.0061-02-6	Trans-1,3-dichloropropene	100.	ND	U
79-00-5	1,1,2-Trichloroethane	100.	ND	U
127-18-4	Tetrachloroethene	100.	ND	U
591-78-6	2-Hexanone	200.	ND	U
124-48-1	Dibromochloromethane	100.	ND	U
108-90-7	Chlorobenzene	100.	ND	Ü
100-41-4		100.	/730.	Y
1330-20-7	Xylene (Total)	100.	(6100.	y
100-42-5	Styrene	100.	ND	<b>1</b> U
75-25-2	Bromoform	100.	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	100.	ND	U
541-73-1	1,3-Dichlorobenzene	100.	ND	U
106-46-7	1,4-Dichlorobenzene	100.	ND	U
95-50-1	1,2-Dichlorobenzene	100.	ND	U

Anametrix ID : 9411239-02 Project ID : 35195.62

Analyst : M Sample ID : A4A-BKT2 : pcs Matrix : WATER Supervisor

:11/22/94 :11/25/94 : MSD1 Date Sampled Date Analyzed Dilution Factor : Conc. Units : ug,

: ug/L Instrument ID

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74 <b>-</b> 87-3	Chloromethane	200.	ИD	U
75-01-4	Vinyl chloride	200.	ND	U
74-83-9	Bromomethane	200.	ND	U
75-00-3	Chloroethane	200.	ND	U
75-69-4	Trichlorofluoromethane	100.	ND	U
75-35 <b>-</b> 4	1,1-Dichloroethene	100.	ND	Ŭ
76-13-1	Trichlorotrifluoroethane	100.	ND	U
67-64-1	Acetone	400.	ND	ŭ
75-15-0	Carbon disulfide	100.	ND	U
75-09-2	Methylene chloride	100.	ND	U
156-60-5	Trans-1,2-dichloroethene	100.	ИD	U j
75 <b>-</b> 34-3	1,1-Dichloroethane	100.	ND	Ü
156 <b>-</b> 59-2	Cis-1,2-dichloroethene	100.	ND	10
78-93-3	2-Butanone	լ 4-00.	ND	U )
67-66-3	Chloroform	100.	ND	Ŭ
71-55-6	1,1,1-Trichloroethane	100.	ND	ŭ
56-23 <b>-</b> 5	carbon tetrachioride	100.	ND	Ū
108-05-4	Vinyl acetate	200.	ND	U
71-43-2	Benzene	100.	ND	U
107-06-2	1,2-Dichloroethane	100.	ND	Ŭ
79-01-6	Trichloroethene	100.	ND	Ü
78-87-5	1,2-Dichloropropane	100.	ND	U
75-27-4	Bromodichloromethane	100.	ND	l ti
10061-01-5	Cis-1,3-dichloropropene	100.	ND	Ü
108-10-1	4-Methyl-2-pentanone	200.	ND	1 -
108-88-3	Toluene	100.	ND	U
10061-02-6	Trans-1,3-dichloropropene	100.	ND	U
79-00-5	1,1,2-Trichloroethane	100.	ND	บ็
127-18-4	Tetrachloroethene	100.	ND	Ü
591-78-6	2-Hexanone	200.	ND	Ü
124-48-1	Dibromochloromethane	100.	ND	Ü
108-90-7	Chlorobenzene	100.	ND 1100.	$V_{\alpha}$
100-41-4	Ethylbenzene Xylene (Total)	100.	6700.	1)
1330-20-7	Xylene (Total)	100.		łu
100-42-5			ND	บี
75-25-2	Bromoform	100.	ND	Ü
79-34-5	1,1,2,2-Tetrachloroethane	100.	ND	Ü
541-73-1	1,3-Dichlorobenzene	100.	ND	บ็
106-46-7 95-50-1	1,4-Dichlorobenzene 1,2-Dichlorobenzene	100. 100.	ND ND	บ

Anametrix ID : 9411239-03 Project ID : 35195.62 Sample ID : A4A-BKT3 : DP

Analyst Matrix : WATER Supervisor :015

Date Sampled :11/22/94
Date Analyzed :11/25/94
Instrument ID : MSD1 Dilution Factor : 12 Conc. Units : ug/L

74-87-3	CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-01-4	74-87-3	Chloromethane	1000.	ND ND	U
74-83-9		Vinvl chloride			
75-00-3		Bromomethane	_ L	ND	
75-69-4			1000.	ND	U
75-35-4			- t		
Trichlorotrifluoroethane			500.	ND	U
Acetone		Trichlorotrifluoroethane	_ !		Ū
T5-15-0	_				
75-09-2			_		
156-60-5		Methylene chloride		1	_
T5-34-3		Trans-1 2-dichloroethene		,	
156-59-2		1 1-Dichloroethane	_	,	II L
78-93-3         2-Butanone         2000.         ND         U           67-66-3         Chloroform         500.         ND         U           71-55-6         1,1,1-Trichloroethane         500.         ND         U           108-05-4         Vinyl acetate         1000.         ND         U           107-06-2         1,2-Dichloroethane         500.         ND         U           107-06-2         1,2-Dichloroethane         500.         ND         U           79-01-6         Trichloroethane         500.         ND         U           78-87-5         1,2-Dichloropropane         500.         ND         U           75-27-4         Bromodichloromethane         500.         ND         U           1061-01-5         Cis-1,3-dichloropropene         500.         ND         U           108-88-3         Toluene         500.         ND         U           79-00-5         1,1,2-Trichloroethane         500.         ND         U           127-18-4         Tetrachloroethane         500.         ND         U           591-78-6         2-Hexanone         500.         ND         U           100-41-4         Ethylbenzene         500.		Cis-1 2-dichloroethere		,	
Chloroform   Sou. ND   U   T1-55-6   T1,1,1-Trichloroethane   Sou. ND   U   T1-55-6   Carbon tetrachloride   Sou. ND   U   T1-43-2   Benzene   Sou. ND   U   T2-51-6   Trichloroethane   Sou. ND   U   T3-27-4   Bromodichloromethane   Sou. ND   U   T5-27-4   Bromodichloromethane   Sou. ND   U   T5-27-4   Bromodichloromethane   Sou. ND   U   U   T6-10-1   T0-10-1   T0-10-10-1   T0-10-1   T0-10-10-1   T0-10-10-10-1   T0-10-10-1   T0-10-10-10-1   T0-10-10-10-1   T0-10-10-10-1   T0-10-10-10-1   T0-10-10-10-1   T0-10-10-10-1   T0-10-10-10-1   T0-10-10-10-10-1   T0-10-10-10-10-1   T0-10-10-10-10-1   T0-10-10-10-10-1   T0-10-10-10-10-1   T0-10-10-10-10-1   T0-10-10-10-10-10-1   T0-10-10-10-10-10-1   T0-10-10-10-10-10-1   T0-10-10-10-10-10-1   T0-10-10-10-10-10-1   T0-10-10-10-10-10-1   T0-10-10-10-10-10-1   T0-10-10-10-10-10-10-1   T0-10-10-10-10-10-10-10-10-10-10-10-10-10			- 2000		1 -
T1-55-6			_		
Carbon tetrachloride	· -	1 1 1 mrichloroothano	- 500.		
108-05-4	. — •	Carbon totraghleride	- 500.		
71-43-2	<del>-</del>	Wine a cotate	1000	-	
107-06-2       1,2-Dichloroethane       500.       ND       U         79-01-6       Trichloroethene       500.       ND       U         78-87-5       1,2-Dichloropropane       500.       ND       U         75-27-4       Bromodichloromethane       500.       ND       U         10061-01-5       Cis-1,3-dichloropropene       500.       ND       U         108-10-1       4-Methyl-2-pentanone       1000.       ND       U         108-88-3       Toluene       500.       ND       U         10061-02-6       Trans-1,3-dichloropropene       500.       ND       U         79-00-5       1,1,2-Trichloroethane       500.       ND       U         127-18-4       Tetrachloroethene       500.       ND       U         591-78-6       2-Hexanone       1000.       ND       U         124-48-1       Dibromochloromethane       500.       ND       U         100-41-4       Ethylbenzene       500.       ND       U         1330-20-7       Xylene (Total)       500.       ND       U         79-34-5       1,1,2,2-Tetrachloroethane       500.       ND       U         79-34-5       1,1,2,1-Tetrac					
79-01-6         Trichloroethene         500.         ND         U           78-87-5         1,2-Dichloropropane         500.         ND         U           75-27-4         Bromodichloromethane         500.         ND         U           10061-01-5         Cis-1,3-dichloropropene         500.         ND         U           108-10-1         4-Methyl-2-pentanone         1000.         ND         U           108-88-3         Toluene         500.         ND         U           79-00-5         Trans-1,3-dichloropropene         500.         ND         U           79-00-5         1,1,2-Trichloroethane         500.         ND         U           127-18-4         Tetrachloroethene         500.         ND         U           591-78-6         2-Hexanone         1000.         ND         U           108-90-7         Chlorobenzene         500.         ND         U           100-41-4         Ethylbenzene         500.         ND         U           1330-20-7         Xylene (Total)         500.         ND         U           79-34-5         Bromoform         500.         ND         U           79-34-5         1,1,2,2-Tetrachloroethane			1		1 -
78-87-5       1,2-Dichloropropane       500.       ND       U         75-27-4       Bromodichloromethane       500.       ND       U         10061-01-5       Cis-1,3-dichloropropene       500.       ND       U         108-10-1       4-Methyl-2-pentanone       1000.       ND       U         108-88-3       Toluene       500.       ND       U         10061-02-6       Trans-1,3-dichloropropene       500.       ND       U         79-00-5       1,1,2-Trichloroethane       500.       ND       U         127-18-4       Tetrachloroethane       500.       ND       U         591-78-6       2-Hexanone       1000.       ND       U         108-90-7       Chlorobenzene       500.       ND       U         100-41-4       Ethylbenzene       500.       ND       U         1330-20-7       Xylene (Total)       500.       ND       U         75-25-2       Bromoform       500.       ND       U         79-34-5       1,1,2,2-Tetrachloroethane       500.       ND       U         541-73-1       1,3-Dichlorobenzene       500.       ND       U         106-46-7       1,4-Dichlorobenzene	<b></b>	1,2-Dichioroethane	500.	1	, –
75-27-4			_ 1	1	
10061-01-5       Cis-1,3-dichloropropene       500.       ND       U         108-10-1       4-Methyl-2-pentanone       1000.       ND       U         108-88-3       Toluene       500.       ND       U         1061-02-6       Trans-1,3-dichloropropene       500.       ND       U         79-00-5       1,1,2-Trichloroethane       500.       ND       U         127-18-4       Tetrachloroethene       500.       ND       U         591-78-6       2-Hexanone       1000.       ND       U         108-90-7       Chlorobenzene       500.       ND       U         100-41-4       Ethylbenzene       500.       ND       U         1330-20-7       Xylene (Total)       500.       ND       U         100-42-5       Styrene       500.       ND       U         79-34-5       1,1,2,2-Tetrachloroethane       500.       ND       U         541-73-1       1,3-Dichlorobenzene       500.       ND       U         106-46-7       1,4-Dichlorobenzene       500.       ND       U				1	
108-10-1       4-Methyl-2-pentanone       1000.       ND       U         108-88-3       Toluene       500.       ND       U         10061-02-6       Trans-1,3-dichloropropene       500.       ND       U         79-00-5       1,1,2-Trichloroethane       500.       ND       U         127-18-4       Tetrachloroethene       500.       ND       U         591-78-6       2-Hexanone       1000.       ND       U         108-90-7       Chlorobenzene       500.       ND       U         100-41-4       Ethylbenzene       500.       ND       U         1330-20-7       Xylene (Total)       500.       ND       U         100-42-5       Styrene       500.       ND       U         79-34-5       1,1,2,2-Tetrachloroethane       500.       ND       U         541-73-1       1,3-Dichlorobenzene       500.       ND       U         106-46-7       1,4-Dichlorobenzene       500.       ND       U		Bromodichioromethane			
108-88-3       Toluene       500.       ND       U         10061-02-6       Trans-1,3-dichloropropene       500.       ND       U         79-00-5       1,1,2-Trichloroethane       500.       ND       U         127-18-4       Tetrachloroethene       500.       ND       U         591-78-6       2-Hexanone       1000.       ND       U         124-48-1       Dibromochloromethane       500.       ND       U         108-90-7       Chlorobenzene       500.       ND       U         100-41-4       Ethylbenzene       500.       ND       U         1330-20-7       Xylene (Total)       500.       ND       U         100-42-5       Styrene       500.       ND       U         79-34-5       1,1,2,2-Tetrachloroethane       500.       ND       U         541-73-1       1,3-Dichlorobenzene       500.       ND       U         106-46-7       1,4-Dichlorobenzene       500.       ND       U		Cis-1,3-dichioropropene	_ 500.		
10061-02-6       Trans-1,3-dichloropropene       500.       ND       U         79-00-5       1,1,2-Trichloroethane       500.       ND       U         127-18-4       Tetrachloroethene       500.       ND       U         591-78-6       2-Hexanone       1000.       ND       U         124-48-1       Dibromochloromethane       500.       ND       U         108-90-7       Chlorobenzene       500.       ND       U         1330-20-7       Xylene (Total)       500.       3900.       17000.         100-42-5       Styrene       500.       ND       U         79-34-5       1,1,2,2-Tetrachloroethane       500.       ND       U         541-73-1       1,3-Dichlorobenzene       500.       ND       U         106-46-7       1,4-Dichlorobenzene       500.       ND       U			<b>= I</b>		
79-00-5       1,1,2-Trichloroethane       500.       ND       U         127-18-4       Tetrachloroethane       500.       ND       U         591-78-6       2-Hexanone       1000.       ND       U         124-48-1       Dibromochloromethane       500.       ND       U         108-90-7       Chlorobenzene       500.       ND       U         1330-20-7       Xylene (Total)       500.       3900.       17000.         100-42-5       Styrene       500.       ND       U         75-25-2       Bromoform       500.       ND       U         79-34-5       1,1,2,2-Tetrachloroethane       500.       ND       U         541-73-1       1,3-Dichlorobenzene       500.       ND       U         106-46-7       1,4-Dichlorobenzene       500.       ND       U	• • •	Toluene			
127-18-4       Tetrachloroethene       500.       ND       U         591-78-6       2-Hexanone       1000.       ND       U         124-48-1       Dibromochloromethane       500.       ND       U         108-90-7       Chlorobenzene       500.       ND       U         100-41-4       Ethylbenzene       500.       3900.       17000.         1330-20-7       Xylene (Total)       500.       ND       U         75-25-2       Bromoform       500.       ND       U         79-34-5       1,1,2,2-Tetrachloroethane       500.       ND       U         541-73-1       1,3-Dichlorobenzene       500.       ND       U         106-46-7       1,4-Dichlorobenzene       500.       ND       U		Trans-1,3-dichloropropene	500.		
591-78-6       2-Hexanone       1000.       ND       U         124-48-1       Dibromochloromethane       500.       ND       U         108-90-7       Chlorobenzene       500.       ND       U         100-41-4       Ethylbenzene       500.       3900.       17000.         1330-20-7       Xylene (Total)       500.       ND       U         100-42-5       Styrene       500.       ND       U         75-25-2       Bromoform       500.       ND       U         79-34-5       1,1,2,2-Tetrachloroethane       500.       ND       U         541-73-1       1,3-Dichlorobenzene       500.       ND       U         106-46-7       1,4-Dichlorobenzene       500.       ND       U		1,1,2-Trichloroethane	500.		
124-48-1       Dibromochloromethane       500.       ND       U         108-90-7       Chlorobenzene       500.       ND       U         100-41-4       Ethylbenzene       500.       3900.       17000.         1330-20-7       Xylene (Total)       500.       ND       U         100-42-5       Styrene       500.       ND       U         75-25-2       Bromoform       500.       ND       U         79-34-5       1,1,2,2-Tetrachloroethane       500.       ND       U         541-73-1       1,3-Dichlorobenzene       500.       ND       U         106-46-7       1,4-Dichlorobenzene       500.       ND       U				1	
108-90-7       Chlorobenzene       500.       ND       0         100-41-4       Ethylbenzene       500.       3900.       17000.         1330-20-7       Xylene (Total)       500.       ND       U         100-42-5       Styrene       500.       ND       U         79-34-5       1,1,2,2-Tetrachloroethane       500.       ND       U         541-73-1       1,3-Dichlorobenzene       500.       ND       U         106-46-7       1,4-Dichlorobenzene       500.       ND       U	591-78-6	2-Hexanone	1000.		1
108-90-7       Chlorobenzene       500.       ND       0         100-41-4       Ethylbenzene       500.       3900.       17000.         1330-20-7       Xylene (Total)       500.       ND       U         100-42-5       Styrene       500.       ND       U         79-34-5       1,1,2,2-Tetrachloroethane       500.       ND       U         541-73-1       1,3-Dichlorobenzene       500.       ND       U         106-46-7       1,4-Dichlorobenzene       500.       ND       U	124-48-1	Dibromochloromethane	500.		
100-41-4       Ethylbenzene       3900.         1330-20-7       Xylene (Total)       500.       17000.         100-42-5       Styrene       500.       ND       U         75-25-2       Bromoform       500.       ND       U         79-34-5       1,1,2,2-Tetrachloroethane       500.       ND       U         541-73-1       1,3-Dichlorobenzene       500.       ND       U         106-46-7       1,4-Dichlorobenzene       500.       ND       U	108-90 <del>-</del> 7	Chiorobenzene	500.		$1_{\Omega}$
100-42-5       Styrene       500.       ND       U         75-25-2       Bromoform       500.       ND       U         79-34-5       1,1,2,2-Tetrachloroethane       500.       ND       U         541-73-1       1,3-Dichlorobenzene       500.       ND       U         106-46-7       1,4-Dichlorobenzene       500.       ND       U	100-41-4	Ethylbenzene	500.		1
100-42-5       Styrene       500.       ND       U         75-25-2       Bromoform       500.       ND       U         79-34-5       1,1,2,2-Tetrachloroethane       500.       ND       U         541-73-1       1,3-Dichlorobenzene       500.       ND       U         106-46-7       1,4-Dichlorobenzene       500.       ND       U	1330-20-7	Xylene (Total)	500.		<i>X</i>
75-25-2 Bromoform 500. ND U 79-34-5 1,1,2,2-Tetrachloroethane 500. ND U 541-73-1 1,3-Dichlorobenzene 500. ND U 106-46-7 1,4-Dichlorobenzene 500. ND U	100-42-5	Styrene	_{ 500.		
541-73-1 1,3-Dichlorobenzene 500. ND U 106-46-7 1,4-Dichlorobenzene 500. ND U	75-25-2	Bromoform		1	1 -
541-73-1 1,3-Dichlorobenzene 500. ND U 106-46-7 1,4-Dichlorobenzene 500. ND U	79-34-5	1,1,2,2-Tetrachloroethane	500.	ND	1 ~
106-46-7	541-73-1	1,3-Dichlorobenzene		ND	1
	106-46-7		500.	ND	1 -
95-50-1 1,2-Dichlorobenzene 500. ND U	-		500.	ND	Ü

Anametrix ID : 9411239-04 Analyst : Dr : 35195.62

Project ID Sample ID Analyst : A4A-BKT4 Supervisor : 065 Matrix : WATER

:11/22/94 :11/25/94 : MSD1 Date Sampled Date Analyzed Dilution Factor : 100.0 Conc. Units : ug/L

Instrument ID

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	1000.	ND	ប
75-01-4	Vinyl chloride	1000.	ND	U
74-83-9	Bromomethane	1000.	ND	U
75-00-3	Chloroethane	1000.	ND	U
75-69-4	Trichlorofluoromethane	500.	ND	U
75-35 <b>-</b> 4	1,1-Dichloroethene	500.	ND	Ū
76-13 <b>-</b> 1	Trichlorotrifluoroethane	500.	ND	U
67-64-1	Acetone	2000.	ND	U
75-15-0	Carbon disulfide	500.	ND	U
75-09-2	Methylene chloride	500.	ND	U
156-60-5	Trans-1,2-dichloroethene	500.	ND	U į
75-34 <b>-</b> 3	1,1-Dichloroethane	500.	ND	U
156-59-2	Cis-1,2-dichloroethene	500.	ND	U 🧯
78-93-3	2-Butanone	2000.	ND	Ü .
67-66-3	Chloroform	500.	ND	U
71-55-6	1,1,1-Trichloroethane	500.	ND	U
56-23-5	Carbon tetrachloride	500.	ND	U
108-05-4	Vinyl acetate	1000.	ND	U
71-43-2	Benzene	500.	ND	ַ
107-06-2	1,2-Dichloroethane	500.	ND	U
79-01-6	Trichloroethene	500.	ND	U
78 <b>-</b> 87-5	1,2-Dichloropropane	500.	ND	U
75-27 <b>-</b> 4	Bromodichloromethane	500.	ND	U
.0061-01-5	Cis-1,3-dichloropropene	500.	ND	U
108-10-1	4-Methyl-2-pentanone	1000.	ND	U
108-88-3	Toluene	500.	ND	Ū
.0061-02-6	Trans-1,3-dichloropropene	500.	ND	U
79 <b>-</b> 00-5	1,1,2-Trichloroethane	500.	ND	บ
127-18-4	Tetrachloroethene	500.	ND	U
591 <del>-</del> 78-6	2-Hexanone	1000.	ND	U
124-48-1	Dibromochloromethane	500.	ND	U
108-90-7	Chlorobenzene	500.	NØ -	ſΩ
100-41-4	Ethylbenzene	500.	/ 3900.	1)
1330-20-7	Xylene (Total)	500.	(18000.	X
100-42-5	Styrene	500.	NVQ.	U
75-25-2	Bromoform	500.	ND	U
79-34 <b>-</b> 5	1,1,2,2-Tetrachloroethane		ND	U
541-73-1	1,3-Dichlorobenzene	500.	ND	U
106-46-7	1,4-Dichlorobenzene	500.	ND	U
95-50-1	1,2-Dichlorobenzene	500.	ND	ΙU

Anametrix ID : 9411239-05 Analyst : DP : 35195.62

Project ID Sample ID : A4A-BKT5 Matrix : WATER Supervisor : 015

Date Sampled :11/22/94
Date Analyzed :11/25/94
Instrument ID : MSD1

Dilution Factor : Conc. Units : ug, : ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	200.	MD	บ
75-01-4	Vinyl chloride	200.	ND	Ū
74-83-9	Bromomethane	200.	ND	U
75-00-3	Chloroethane	200.	ND	U
75-69-4	Trichlorofluoromethane	100.	ND	U
75-35-4	1,1-Dichloroethene	100.	ND	U
76 <b>-</b> 13 <b>-</b> 1	Trichlorotrifluoroethane	100.	ND	U
67-64-1	Acetone	400.	ND	U
75-15-0	Carbon disulfide	100.	ND	U
75-09-2	Methylene chloride	100.	ND	ប
156-60-5	Trans-1,2-dichloroethene	100.	ND	n '
75-34-3	1,1-Dichloroethane	100.	ND	U
156-59-2	Cis-1,2-dichloroethene	100.	ND	U
78-93-3	2-Butanone	400.	ND	U '
67-66-3	Chloroform	100.	ND	U
71-55-6	1,1,1-Trichloroethane	100.	ND	U
56-23-5	Carbon tetrachloride	100.	ND	U
108-05-4	Vinyl acetate	200.	ND	U
71-43-2	Benzene	100.	ND	U
107-06-2	1,2-Dichloroethane	100.	ND	U
79-01-6	Trichloroethene	100.	ND	Ü
78-87-5	1,2-Dichloropropane	100.	ND	Ü
75-27-4	Bromodichloromethane	100.	ND ND	บ
0061-01-5	Cis-1,3-dichloropropene	200.	_	Ü
108-10-1	4-Methyl-2-pentanone		ND	บ
108-88-3	Toluene	100.	ND	Ü
0061-02-6 79-00-5	Trans-1,3-dichloropropene	100.	ND	Ü
127-18-4	1,1,2-Trichloroethane	100.	ND ND	Ü
591-78-6	2-Hexanone	200.	ND ND	บ็
124-48-1	Dibromochloromethane	100.	ND ND	Ū
108-90-7	Chlorobonzono	100.	ND ND	บี
100-41-4	Chlorobenzene Ethylbenzene	100.	ND -	Ū
1330-20-7	Yulana (Total)	100.	(2500.	0
100-42-5	Xylene (Total) Styrene	100.	ND 2300.	U
75-25-2	Bromoform	100.	ND	Ü
79-34-5	1,1,2,2-Tetrachloroethane	100.	ND	Ü
541-73-1	1,3-Dichlorobenzene	100.	ND ND	Ŭ
106-46-7	1,4-Dichlorobenzene	100.	ND	บั
95-50-1	1,2-Dichlorobenzene	100.	ND	บั

Anametrix ID : 9411239-06 Analyst : 1

Project ID : 35195.62
Sample ID : A4A-BKT6 Supervisor : 0 -5

Matrix : WATER
Date Sampled :11/22/94
Date Analyzed :11/25/94
Instrument ID : MSD1

Dilution Factor : Conc. Units : ug/L 20.0

75-01-4 74-83-9 75-00-3 75-69-4 75-35-4 76-13-1 67-64-1 75-15-0 75-09-2 156-60-5 75-34-3 156-59-2 78-93-3 67-66-3 71-55-6 56-23-5 108-05-4 71-43-2 107-06-2 79-01-6 78-87-5	COMPOUND NAME  Chloromethane Vinyl chloride Bromomethane Chloroethane Frichlorofluoromethane 1,1-Dichloroethene Frichlorotrifluoroethane	200. 200. 200. 200. 200. 100.	AMOUNT DETECTED ND ND ND ND	Q U
75-01-4 74-83-9 75-00-3 75-69-4 75-35-4 76-13-1 67-64-1 75-15-0 75-09-2 156-60-5 75-34-3 156-59-2 78-93-3 67-66-3 71-55-6 56-23-5 108-05-4 71-43-2 107-06-2 79-01-6 78-87-5	Vinyl chloride	200. 200. 200.	ND ND	
75-01-4 74-83-9 75-00-3 75-69-4 75-35-4 76-13-1 67-64-1 75-15-0 75-09-2 156-60-5 75-34-3 156-59-2 78-93-3 67-66-3 71-55-6 56-23-5 108-05-4 71-43-2 107-06-2 79-01-6 78-87-5	Vinyl chloride	200. 200. 200.	ND ND	
74-83-9 75-00-3 75-69-4 75-35-4 76-13-1 67-64-1 75-15-0 75-09-2 156-60-5 75-34-3 156-59-2 78-93-3 67-66-3 71-55-6 56-23-5 108-05-4 71-43-2 107-06-2 79-01-6 78-87-5	Bromomethane Chloroethane Frichlorofluoromethane 1,1-Dichloroethene	200. 200.	ND	
75-00-3 75-69-4 75-35-4 76-13-1 67-64-1 75-15-0 75-09-2 156-60-5 75-34-3 156-59-2 78-93-3 67-66-3 71-55-6 56-23-5 108-05-4 71-43-2 107-06-2 79-01-6 78-87-5	Chloroethane Prichlorofluoromethane	200.		Ū
75-69-4 75-35-4 76-13-1 67-64-1 75-15-0 75-09-2 156-60-5 75-34-3 156-59-2 78-93-3 67-66-3 71-55-6 56-23-5 108-05-4 71-43-2 107-06-2 79-01-6 78-87-5	1,1-Dichloroethene	100	ND	ΰ
75-35-4 76-13-1 67-64-1 75-15-0 75-09-2 156-60-5 75-34-3 156-59-2 78-93-3 67-66-3 71-55-6 56-23-5 108-05-4 71-43-2 107-06-2 79-01-6 78-87-5	1,1-Dichloroethene	TOO .	ND	U
76-13-1 67-64-1 75-15-0 75-09-2 156-60-5 75-34-3 156-59-2 78-93-3 67-66-3 71-55-6 56-23-5 108-05-4 71-43-2 107-06-2 79-01-6 78-87-5	Frichlorotrifluoroethane	100.	ND	ប
67-64-1 75-15-0 75-09-2 156-60-5 75-34-3 156-59-2 78-93-3 67-66-3 71-55-6 56-23-5 108-05-4 71-43-2 107-06-2 79-01-6 78-87-5		100.	ND	ប
75-15-0 75-09-2 156-60-5 75-34-3 156-59-2 78-93-3 67-66-3 71-55-6 56-23-5 108-05-4 71-43-2 107-06-2 79-01-6 78-87-5	Acetone	400.	ND	U
156-60-5 75-34-3 156-59-2 78-93-3 67-66-3 71-55-6 56-23-5 108-05-4 71-43-2 107-06-2 79-01-6 78-87-5	Carbon disulfide	100.	ND	U
156-60-5 75-34-3 156-59-2 78-93-3 67-66-3 71-55-6 56-23-5 108-05-4 71-43-2 107-06-2 79-01-6 78-87-5	Methylene chloride	100.	ND	U
75-34-3 156-59-2 78-93-3 67-66-3 71-55-6 56-23-5 108-05-4 71-43-2 107-06-2 79-01-6 78-87-5	Frans-1,2-dichloroethene	100.	ND	U
78-93-3 67-66-3 71-55-6 56-23-5 108-05-4 71-43-2 107-06-2 79-01-6 78-87-5	1.1-Dichloroethane	100.	ND	U
78-93-3 67-66-3 71-55-6 56-23-5 108-05-4 71-43-2 107-06-2 79-01-6 78-87-5	Cis-1,2-dichloroethene	100.	ND	
71-55-6 56-23-5 108-05-4 71-43-2 107-06-2 79-01-6 78-87-5	2-Butanone	400.	ND	U '
56-23-5 108-05-4 71-43-2 107-06-2 79-01-6 78-87-5	Chloroform	100.	ND	U ·
56-23-5 108-05-4 71-43-2 107-06-2 79-01-6 78-87-5	1,1,1-Trichloroethane	100.	ND	U
108-05-4 71-43-2 107-06-2 79-01-6 78-87-5	Carbon tetrachloride	100.	ND	U
71-43-2 107-06-2 79-01-6 78-87-5	Vinyl acetate	200.	ND	U
79-01-6 78-87-5	Renzene	100.	ND	U
79-01-6 ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	1,2-Dichloroethane	100.	ND	U
78-87-5	Trichloroethene	100.	ND	U
75-27-4	1,2-Dichloropropane	100.	ND	U
/3-2/-4   1	Bromodichloromethane	100.	ND	U
10061-01-5	Cis-1,3-dichloropropene	100.	ND	U
108-10-1	4-Methyl-2-pentanone	200.	ND	U
108-88-3	Toluene	100.	ND	U
10061-02-6	Trans-1,3-dichloropropene	100.	ND	U
79-00-5	1,1,2-Trichloroethane	100.	ND	U
127-18-4	Tetrachloroethene	100.	ND	Ū
591-78-6	2-Hexanone	200.	ND	U
124-48-1	2-Hexanone Dibromochloromethane	100.	ND	U
108-90-7	Chlorobenzene	100.	ND	U
100-41-4	Ethylbenzene	100.	ND	U
1330-20-7	Ethylbenzene Xylene (Total)	100.	(2500.)	4
100-42-5	Styrene	100.	ND	U
75-25-2	Bromoform	100.	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	100.	ND	U
541-73-1	1,3-Dichlorobenzene	100.	ИD	U
106-46-7	1,4-Dichlorobenzene	100.	ND	U
95-50-1	1,2-Dichlorobenzene	100.	ND	U

Project ID : 35195.62
Sample ID : T. BLANK
Matrix : WATER
Date Sampled :11/22/94
Date Analyzed :11/25/94
Instrument ID : MSD1

Anametrix ID : 9411239-07 Analyst :  $\mathcal{U}$ 

Analyst Supervisor : 005

Dilution Factor : Conc. Units : ug/L 1.0

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	10.	ND	U
75-01-4	Vinyl chloride	10.	ND	U
74-83-9	Bromomethane	10.	ND	U
75-00-3	Chloroethane	10.	ND	∖ט
75-69-4	Trichlorofluoromethane	5.	ND	ט
75-35-4	1,1-Dichloroethene	5.	ND	Ū
76-13-1	Trichlorotrifluoroethane	⁻ 5.	ND	U
67-64-1	Acetone	20.	ND	υ.
75-15-0	Carbon disulfide	5.	ND	טו
75-09-2	Methylene chloride	- 5.	ND	ט
156-60-5	Trans-1,2-dichloroethene	5.	ND	υ.
75-34-3	1,1-Dichloroethane	5.	ND	77
156-59-2	Cis-1,2-dichloroethene	5.	DИD	[[] k
78-93-3	2-Butanone	20.	ND	Ŭ '
67-66-3	Chloroform	-  ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	ND	Ü
71-55-6	1,1,1-Trichloroethane		ND	Ū
56-23-5	Carbon tetrachloride	- š.	ND	ΙŬ
108-05-4	Vinyl acetate	10.	ND	ĺΰ
71-43-2	Benzene	- 5.	ND	Ŭ
107-06-2	1,2-Dichloroethane	-\ 5.	ND	ŭ
79-01-6	Trichloroethene	- 5.	ND	Ü
78-87 <b>-</b> 5	1,2-Dichloropropane	5.	ND	ΙŬ
75-27-4	Bromodichloromethane	-\ 5.	ND	Ŭ
10061-01-5	Cis-1,3-dichloropropene	5.	ND	Ŭ
Į.	4-Methyl-2-pentanone	10.	ND	Ü
108-10-1	Toluene Toluene	- 5.	ND	Ü
108-88-3	Trans-1,3-dichloropropene	- 5.	ND	บั
10061-02-6	1 1 2 - Wright except hand		ND	ΰ
79-00-5	1,1,2-Trichloroethane Tetrachloroethene	- 5.	ND	บี
127-18-4		- 10:	ND	Ū
591-78-6	2-Hexanone	- 5:	ND	Ü
124-48-1	Dibromochloromethane	-\ 5.	ND ND	Ü
108-90-7	Chlorobenzene	- 5.	ND ND	บ็
100-41-4	Ethylbenzene	- 5.		ชื่
1330-20-7	Xylene (Total)	- 5:	ND	U
100-42-5	Styrene		ND	บ็
75-25-2	Bromoform	5.	ND	
79-34-5	1,1,2,2-Tetrachloroethane	5.	ND	U
541-73-1	1,3-Dichlorobenzene	5.	ND	U
106-46-7	1,4-Dichlorobenzene	5.	ND	U
95-50-1	1,2-Dichlorobenzene	<u> </u>	ND	U

Project ID Sample ID Matrix Date Sampled Date Analyzed Instrument ID

VBLKOL WATER 11/25/94 : MSD1

: BN2502A2 : W Anametrix ID Analyst

Supervisor : D-5

Dilution Factor : Conc. Units : ug/L 1.0

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	10.	ND	บ
75-01-4	Vinyl chloride	10.	ND	U
74-83-9	Bromomethane	10.	ND	U
75-00-3	Chloroethane	10.	ND	U
75-69-4	Trichlorofluoromethane	5.	ND	U
75-35-4	1,1-Dichloroethene	5.	ИD	U
76-13-1	Trichlorotrifluoroethane	5.	ND	U
67-64-1	Acetone	20.	ND	U
75-15-0	Carbon disulfide	ή 5.	ND ·	U
75-09-2	Methylene chloride	[†]   5.	ND	U
156-60-5	Trans-1,2-dichloroethene	5.	ND	U
75-34-3	1.1-Dichloroethane	5.	ND	
156-59-2	Cis-1,2-dichloroethene	5.	ND	U
78-93-3	2-Butanone	20.	ND	U -
67-66-3	Chloroform	5.	ND	U
71-55-6	1,1,1-Trichloroethane	5.	ND	U
56-23-5	Carbon tetrachloride	⁻ ) 5.	ND	U
108-05-4	Vinyl acetate	10.	ND	U
71-43-2	Benzene	5.	ИD	U
107-06-2	1,2-Dichloroethane		ND	Ū
79-01-6	Trichloroethene	·  5.	ND	U
78-87-5	1,2-Dichloropropane	5.	ND	Ū
75-27 <b>-</b> 4	Bromodichloromethane	5.	ND	Ū
.0061-01-5	Cis-1,3-dichloropropene	5.	ND	Ū
108-10-1	4-Methyl-2-pentanone	10.	ND	Ū
108-10-1	Toluene	5.	ND	Ū
0061-02-6	Trans-1 3-dichloropropens		ND	ΰ
79-00-5	Trans-1,3-dichloropropene	5.	ND	Ŭ
127-18-4	Tetrachloroethene	- 5.	ND	υ
— <del></del>	2-Hexanone	10.	ND	υ
591-78-6	Dibromochloromethane		ND	Ιŭ
124-48-1	Chlerchengene	5.	ND	Ŭ
108-90-7	Chlorobenzene Ethylbenzene	- 5.	ND	υ
100-41-4	Ethylbenzene Xylene (TotaI)	5.	ND	Ü
1330-20-7	Aylene (Total)	5.	ND ND	Ü
100-42-5	Scyrene	- 5.	ND	บ็
75-25-2	Bromoform	- 5.		Ü
79-34-5	1,1,2,2-Tetrachloroethane		ND	Ü
541-73-1	1,3-Dichlorobenzene	5.	ND	Ü
106-46-7	1,4-Dichlorobenzene	5.	ND	II O
95-50-1	1,2-Dichlorobenzene	5.	ND	Įυ

### SURROGATE RECOVERY SUMMARY -- EPA METHOD 8240 ANAMETRIX, INC. (408)432-8192

Anametrix ID : 9411239 Analyst : M

Project ID : 35195.62 Matrix : LIQUID Analyst Supervisor : 35

	SAMPLE ID	SU1	SU2	SU3
12345678901234567	VBLKOL VLCSPC A4A-BKT3 T. BLANK A4A-BKT1 A4A-BKT2 A4A-BKT4 A4A-BKT6 A4A-BKT5	SU1 95 95 95 95 95 96 95 95	SU2  103 102 102 103 104 102 101 103	SU3  101 100 98 100 99 97 100 98 98
18 19				
20 21 22				
23 24 25				
25 26 27				
28				
29 30				

QC LIMITS SU1 = 1,2-Dichloroethane-d4 SU2 = Toluene-d8 (75-113)SU2 = Toluene-d8 (83-110) SU3 = 1,4-Bromofluorobenzene (82-114)

* Values outside of Anametrix QC limits

## LABORATORY CONTROL SPIKE RECOVERY FORM --- EPA METHOD 624/8240 ANAMETRIX, INC. (408)432-8192

Project/Case Anametrix ID : MN2501A2.D

Analyst : M Matrix : WATER Date Sampled

Date Analyzed : 25 Nov 94 1:09 pm

Supervisor : (N)
SDG/Batch :
Sample ID : VLCSPC @ 50ug/ Instrument ID : MSD1

COMPOUND	SPIKE	SAMPLE	LCS	LCS	%REC
	ADDED	CONCENTRATION	CONCENTRATION	8	LIMITS
	(ug/L)	(ug/L)	(ug/L)	REC	
1,1-Dichloroethene	50	0	45	91	72-145
Benzene	50	0	51	101	83-125
Trichloroethene	. 50	0	48	96	61-140
Toluene	50	0	49	98	82-123
Chlorobenzene	50	0	48	95	82-125
					<u> </u>

# ANAMETRIX REPORT DESCRIPTION INORGANICS

#### Analytical Data Report (ADR)

The ADR contains tabulated results for inorganic analytes. All field samples, QC samples and blanks were prepared and analyzed according to procedures in the following references:

- "Test Methods for Evaluating Solid Waste," SW-846, EPA, 3rd Edition, November 1986.
- "Methods for Chemical Analysis of Water and Wastes," EPA, 3rd Edition, 1983.
- CCR Title 22, Section 66261, Appendix II, California Waste Extraction Test.
- CCR Title 22, Section 66261, Appendix XI, Organic Lead.
- "Standard Methods for the Examination of Water and Wastewater," APHA, AWWA, WEF, 18th Edition, 1992.
- USEPA Contract Laboratory Program Statement of Work for Inorganic Analyses, ILM02.1, 1991.

### Matrix Spike Report (MSR)

The MSR summarizes percent recovery and relative percent difference information for matrix spikes and matrix spike duplicates. This information is a statement of both accuracy and precision. MSRs may not be provided with all analytical reports. Anametrix control limit for MSR is 75-125% with 25% for RPD limits, except for Method 6010A, which is 80-120% with 25% RPD limits.

#### Laboratory Control Sample Report (LCSR)

The LCSR summarizes percent recovery information for laboratory control spikes on reagent water or soil. This information is a statement of performance for the method, i.e., the samples are properly prepared and analyzed according to the applicable methods. Anametrix control limit for LCSR is 80-120%.

#### Method Blank Report (MBR)

The MBR summarizes quality control information for reagents used in preparing samples. The absolute value of each analyte measured in the method blank should be below the method reporting limit for that analyte.

#### Post Digestion Spike Report (PDSR)

The PDSR summarizes percent recovery information for post digestion spikes. A post digestion spike is performed for a particular analyte if the matrix spike recovery is outside of established control limits. Any percent recovery for a post digestion spike outside of established limits for an analyte indicates probable matrix effects and interferences for that analyte. Anametrix control limit for PDSR is 75-125%.

#### Qualifiers (Q)

Anametrix uses several data qualifiers in inorganic reports. These qualifiers give additional information on the analytes reported. The following is a list of qualifiers and their meanings:

- I Sample was analyzed at the stated dilution due to spectral interferences.
- U Analyte concentration was below the method reporting limit. For matrix and post digestion spike reports, a value of "0.0" is entered for calculation of the percent recovery.
- B- Sample concentration was below the reporting limit but above the instrument detection limit. Result is entered for calculation of the percent recovery only.
- H Spike percent recovery was outside of Anametrix control limits due to interferences from relatively high concentration level of the analyte in the unspiked sample.
- L Reporting limit was increased to compensate for background absorbances or matrix interferences.

#### Comment Codes

In addition to qualifiers, the following codes are used in the comment section of all reports to give additional information about sample preparation methods:

- A- Sample was prepared for silver based on the silver digestion method developed by the Southern California Laboratory, Department of Health Services, "Acid Digestion for Sediments, Sludges, Soils and Solid Wastes. A Proposed Alternative to EPA SW846, Method 3050." Environmental Science and Technology, 1989, 23, 898-900.
- T Spikes were prepared after extraction by the Toxicity Characteristic Leaching Procedure (TCLP).
- C Spikes were prepared after extraction by the alifornia Waste Extraction Test (CWET) method.
- D Reported results are dissolved, not total, metals

#### Reporting Conventions

Analytical values reported are gross values, i.e., <u>not</u> corrected for method blank contamination. Solid matrices are reported on a wet weight basis, unless specifically requested otherwise.

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

MR. WALTER HOWARD RUST ENVIRONMENT AND INFRASTRUCTURE

12 METRO PARK ROAD ALBANY, NY 12205

Workorder # : 9411239
Date Received : 11/22/94
Project ID : 35195.624
Purchase Order: N/A
Department : METALS

Sub-Department: METALS

## SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9411239- 1	A4A-BKT1	WATER	11/22/94	T 22-MET
9411239- 2	A4A-BKT2	WATER	11/22/94	T 22-MET
9411239- 3	A4A-BKT3	WATER	11/22/94	T 22-MET
9411239- 4	A4A-BKT4	WATER	11/22/94	T 22-MET
9411239- 5	A4A-BKT5	WATER	11/22/94	T 22-MET
9411239- 6	A4A-BKT6	WATER	11/22/94	T 22-MET

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

MR. WALTER HOWARD RUST ENVIRONMENT AND INFRASTRUCTURE 12 METRO PARK ROAD

ALBANY, NY 12205

Workorder # : 9411239
Date Received : 11/22/94
Project ID : 35195.624
Purchase Order: N/A

Purchase Order: N/A
Department : METALS
Sub-Department: METALS

### QA/QC SUMMARY :

- All holding times have been met for the analyses reported in this section.

Wavey Comm 1/29/94
Department Supervisor Date

Stephen Carvell 11/25/5.
Chemist Date

INORGANICS - PAGE 2

Anametrix Sample ID: 9411239-01 Client Sample ID: A4A-BKT1 Client Project Number: 35195.624

Matrix: WATER

Date Sampled: 11/22/94

Analyst: 50

Supervisor: W

Analyte	Prep. Method	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	60.0	ND	
Arsenic	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	1
Barium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	100	ND	
Beryllium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	5.0	ND	
Cadmium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	5.0	ND	
Chromium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	1
Cobalt	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	50.0	ND	
Соррег	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	25.0	29.9	
Lead	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	3.0	7.8	
Mercury	7470	7470	HGA1	11/23/94	11/29/94	1	ug/L	0.20	ND	
Molybdenum	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	T
Nickel	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	40.0	ND	
Selenium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	5.0	ND	
Silver	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Thallium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Vanadium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	50.0	ND	
Zinc	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	20.0	125	

Anametrix Sample ID: 9411239-02 Client Sample ID: A4A-BKT2 Client Project Number: 35195.624

Matrix: WATER

Date Sampled: 11/22/94 Analyst: - Supervisor: W

Analyte	Prep. Method	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Ø
Antimony	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	60.0	ND	
Arsenic	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Barium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	100	159	
Beryllium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	5.0	ND	
Cadmium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	5.0	ND	
Chromium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Cobalt	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	50.0	ND	
Соррег	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	25.0	35.8	
Lead	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	3.0	16.4	
Mercury	7470	7470	HGA1	11/23/94	11/29/94	1	ug/L	0.20	ΝĎ	
Molybdenum	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	10.4	
Nickel	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	40.0	ND	
Selenium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	5.0	ND	
Silver	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Thailium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Vanadium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	50.0	ND	
Zinc	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	20.0	116	

Anametrix Sample ID: 9411239-03 Client Sample ID: A4A-BKT3 Client Project Number: 35195.624

Matrix: WATER

Date Sampled: 11/22/94

Analyst: x

Supervisor: WN

Analyte	Prep. Method	Analytical Method	instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	60.0	ND	
Arsenic	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Barium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	100	ND	
Beryllium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	5.0	ND	
Cadmium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	5.0	ND	$\Box$
Chromium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	$\square$
Cobalt	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	50.0	ND	
Copper	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	25.0	ND	
Lead	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	3.0	4.0	
Mercury	7470	7470	HGA1	11/23/94	11/29/94	1	ug/L	0.20	ND	
Molybdenum	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Nickel	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	40.0	ND	
Selenium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	5.0	ND	
Silver	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Thallium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Vanadium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	50.0	ND	
Zinc	3010A	6010A	ICP2	11/23/94	11/23/94	_1	ug/L	20.0	63.9	

Anametrix Sample ID: 9411239-04 Client Sample ID: A4A-BKT4 Client Project Number: 35195.624

Matrix: WATER

Date Sampled: 11/22/94

Analyst:

Supervisor: WW

Analyte	Prep. Method	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	60.0	ND	
Arsenic	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Barium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	100	ND	
Beryllium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	5.0	ND	
Cadmium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	5.0	ND	
Chromium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Cobalt	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	50.0	ND	
Copper	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	25.0	ND	
Lead	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	3.0	6.8	
Mercury	7470	7470	HGA1	11/23/94	11/29/94	1	ug/L	0.20	ND_	
Molybdenum	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ΝĎ	
Nickel	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	40.0	ND	
Selenium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	5.0	, ND	
Silver	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Thallium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Vanadium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	50.0	ND	
Zinc	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	20.0	82.9	

Anametrix Sample ID: 9411239-05 Client Sample ID: A4A-BKT5

Client Project Number: 35195.624 Matrix: WATER

Date Sampled: 11/22/94

Analyst: 🖍

Supervisor: W

Analyte	Prep. Method	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	60.0	ND	
Arsenic	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Barium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	100	ND	
Beryllium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	5.0	ND	
Cadmium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	5.0	ND	
Chromium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	11.2	
Cobalt	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	50.0	ND	
Соррег	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	25.0	32.7	
Lead	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	3.0	12,9	<u> </u>
Mercury	7470	7470	HGA1	11/23/94	11/29/94	1	ug/L	0.20	ND	
Molybdenum	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Nickel	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	40.0	ND	
Selenium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	5.0	ND	
Silver	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	<u> </u>
Thallium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Vanadium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	50.0	ND	_
Zinc	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	20.0	108	

Anametrix Sample ID: 9411239-06 Client Sample ID: A4A-BKT6 Client Project Number: 35195.624

Matrix: WATER

Date Sampled: 11/22/94
Analyst: 5 C

Supervisor: W

Analyte	Prep. Method	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	60.0	ND	
Arsenic	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Barium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	100	МD	
Beryllium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	5.0	ND	
Cadmium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	5.0	ND	
Chromium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Cobalt	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	50.0	ДИ	
Copper	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	25.0	27.8	
Lead	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	3.0	10.9	
Mercury	7470	7470	HGA1	11/23/94	11/29/94	1	ug/L	0.20	QN	
Molybdenum	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Nickel	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	40.0	ND	
Selenium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	5.0	ND	
Silver	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Thallium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Vanadium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	50.0	ND	
Zinc	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	20.0	73.4	

Anametrix Sample ID: BN234WB, BN234WC, BN234WA

Analyst:50 Supervisor: W

Anametrix WO #: 9411239 Client Project Number: 35195.624

Matrix: WATER

Analyte	Prep. Method	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	60.0	ND	
Arsenic	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Barium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	100	ND	
Beryllium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	5.0	ND	
Cadmium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	5.0	ND	
Chromium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Cobalt	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	50.0	ND	
Copper	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	25.0	ИD	
Lead	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	3.0	ND	
Mercury	7470	7470	HGA1	11/23/94	11/29/94	1	ug/L	0.20	NE	
Molybdenum	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Nickel	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	40.0	ND	
Selenium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	5.0	ND	
Silver	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Thallium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.0	ND	
Vanadium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	50.0	ND	
Zinc	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	20.0	ND	

Anametrix Sample ID: 9411239-02D Client Sample ID: A4A-BKT2

Client Project Number: 35195.624

Matrix: WATER

Analyst: Supervisor: W

Analyte	Prep. Method	Analyt. Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Sample Conc.	Sample Duplicate Conc.	RPD	Q
Antimony	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	ND	ND	N/A	
Arsenic	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	ND	ND	N/A	
Barium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	159	ND	N/A	
Beryllium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	ND	ND	N/A	
Cadmium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	ND	ND	N/A	
Chromium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	ND	ND	N/A	
Cobalt	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	ND	ND	N/A	
Copper	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	35.8	ND	N/A	
Lead	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	16.4	10.0	8.5	
Mercury	7470	7470	HGA1	11/23/94	11/29/94	1	ug/L	ND	ND	N/A	
Molybdenum	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	10.4	ND	Ñ/A	
Nickel	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	ND	ND	N/A	
Selenium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	ND	ND	N/A	
Silver	3010A	6010A	ICP2	11/23/94	11/23/94	1_	ug/L	ND	ND	N/A	
Thallium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	ND	ND	N/A	
Vanadium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	ND	ND	N/A	
Zinc	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	116	123	5.9	

Anametrix. Sample ID: 9411239-01MS,MD

Client Sample ID: A4A-BKT1 Client Proj. Number: 35195.624

Matrix: WATER

Analysta C Supervisor: W

Analyte	Analyt. Method	Instr.	Date Prepared	Date Analyzed	Units	Spike Amount	Sample Conc.	Matrix Spike Conc.	% Rec.	Matrix Sp. Dup. Conc.	% Rec.	RPD	Q
Antimony	6010A	ICP2	11/23/94	11/23/94	ug/L	500	0.0	444	88.8	451	90.2	1.6	U
Arsenic	6010A	ICP2	11/23/94	11/23/94	ug/L	100	0.0	93.6	93.6	92.0	92.0	1.7	U
Barium	6010A	ICP2	11/23/94	11/23/94	ug/L	2000	0.0	1790	89.5	1760	88.0	1.7	U
Beryllium	6010A	ICP2	11/23/94	11/23/94	ug/L	50.0	0.0	48.7	97.4	47.8	95.6	1.9	U
Cadmium	6010A	ICP2	11/23/94	11/23/94	ug/L	50.0	0.0	51.3	103	50.1	100	2.4	U
Chromium	6010A	ICP2	11/23/94	11/23/94	ug/L	200	0.0	194	97.0	191	95.5	1.6	U
Cobalt	6010A	ICP2	11/23/94	11/23/94	ug/L	500	0.0	473	94.6	464	92.8	1.9	U
Copper	6010A	ICP2	11/23/94	11/23/94	ug/L	250	29.9	258	91.2	263	93.2 1		
Lead	6010A	ICP2	11/23/94	11/23/94	ug/L	50.0	7.8	52.8	90.0	52.6	89.6	0.4	<u> </u>
Mercury	7470	HGA1	11/23/94	11/29/94	ug/L	1.0	0.0	1.0	100	1.0	100	0.0	U
Molybdenum	6010A	ICP2	11/23/94	11/23/94	ug/L	2000	0.0	1830	91.5	1800	90.0	1.7	U
Nickel	6010A	ICP2	11/23/94	11/23/94	ug/L	500	0.0	483	96.6	473	94.6	2.1	U
Selenium	6010A	ICP2	11/23/94	11/23/94	ug/L	50.0	0.0	48.1	96.2	46.8	93.6	2.7	U
Silver	6010A	ICP2	11/23/94	11/23/94	ug/L	50.0	0.0	53.5	107	52.6	105	1.7	U
Thallium	6010A	ICP2	11/23/94	11/23/94	ug/L	100	0.0	92.1	92.1	90.4	90.4	1.9	U
Vanadium	6010A	ICP2	11/23/94	11/23/94	ug/L	500	0.0	469	93.8	461	92.2	1.7	U
Zinc	6010A	ICP2	11/23/94	11/23/94	ug/L	500	125	566	88.2	570	89.0	0.7	

## INCHCAPE TESTING SERVICES ANAMETRIX LABORATORIES (408) 432-8192

# LABORATORY CONTROL SAMPLE REPORT

Lab. Control Sample ID: LN234WB, LN234WC, LN234WA

Anametrix WO #: 9411239 Client Project Number: 35195.624

Matrix: WATER

ےک:Analyst Supervisor: M

Analyte	Prep. Method	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Spike Amount	LCS Results	% Recovery	Q
Antimony	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	500	495	99.0	
Arsenic	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	100	94.7	94.7	
Barium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	2000	1850	92.5	
Beryllium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	50.0	51.5	103	
Cadmium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	50.0	52.0	104	
Chromium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	200	207	104	
Cobait	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	500	517	103	
Copper	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	250	254	~	
Lead	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	50.0	49.9	99.8	
Mercury	7470	7470	HGA1	11/23/94	11/29/94	1	ug/L	1.0	0.92	92.0	
Molybdenum	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	2000	1990	99.5	]
Nickel	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	500	517	103	
Selenium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	50.0	48.7	97.4	
Silver	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	50.0	52.0	104	
Thallium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	100	99.9	99.9	
Vanadium	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	500	508	102	
Zinc	3010A	6010A	ICP2	11/23/94	11/23/94	1	ug/L	500	532	106	

Project Manager: Tw Date 11/22/94

# SAMPLE RECEIVING CHECKLIST

WORKORDER NUMBER: 9411239	CLIENT PROJECT ID: _	35195.62	4	
COOLER				
Shipping slip (airbill, etc.) present?		YES	NO (	N/A)
If YES, enter carrier name and airbill #:				
Custody Seal on the outside of cooler?		YES	NO	(N/A)
Condition: INTACT BROKEN				
Temperature of sample (s) within range?		YES	NO	N/A
List temperature of cooler (s): 10°C				
SAMPLES				
Chain of custody seal present for each container?		YES	NO	(N/A)
Condition: INTACT BROKEN				
Samples arrived within holding time?		(YES)	ŅO	N/A
Samples in proper containers for methods requested?		(YES)	ŅΟ	
Condition of containers: INTACT BROKI	EN		-	
If NO, were samples transferred to proper container?	_			
Were VOA containers received with zero headspace?		YES	NO	N/A
If NO, was it noted on the chain of custody?				
Were container labels complete? (ID, date, time preservativ	e, etc.)	(YES)	NO	
Were samples preserved with the proper preservative?		YES	NO	N/A
If NO, was the proper preservative added at time of receip	t?			
pH check of samples required at time of receipt?		YES	NO	
If YES, pH checked and recorded by: 744				
Sufficient amount of sample received for methods requested	1?	YES	NO	
If NO, has the client or lab project manager been notified?				
Field blanks received with sample batch? # of Sets:		YES	NO	N/A
Trip blanks received with sample batch? # of Sets:		YES	NO	N/A
CHADIOE CHETODY				
Chair of custody marind with complex?		(VEC)	NO	
Chain of custody received with samples?		(YES) (YES)	NO	
Has it been filled out completely and in ink?	<u> </u>	(YES)	NO	
Sample ID's on chain of custody agree with container labels		YES	NO	
Number of containers indicated on chain of custody agree v	vitti ituliibei received:	(YES)	NO	
Analysis methods clearly specified?		(TES)	NO	
Sampling date and time indicated?	unpropriete place? with time		NO	
Proper signatures of sampler, courier, sample custodian in a Turnaround time? REGULAR RUSH	ippropriate piace: with time	and date: (1ES	140	
Turnaround time? REGULAR RUSH Any NO response and/or any "BROKEN" that was ch	ecked must be detailed in the	Corrective Action	For	 n.
with 140 technic and of any discussive may an	conce must be detailed in the			

Sample Custodian: Date: 11/23/94



48 or 72 hour (which ever you can do) 9. Turn-around-Time for Roults



Chain of Custody Record

WAHLER LABLES

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