RUST ENVIRONMENT & INFRASTRUCTURE

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

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)
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

QUALITY
♦
INTEGRITY
♦
CREATIVITY
♦
RESPONSIVENESS

RUST ENVIRONMENT & INFRASTRUCTURE

♻

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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-2550yd^3; Area 4B-450yd^3). 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)

SAMPLE NUMBER	ANALYTICAL RESULTS				
	Benzene	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	ND	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	ND
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

FIGURES

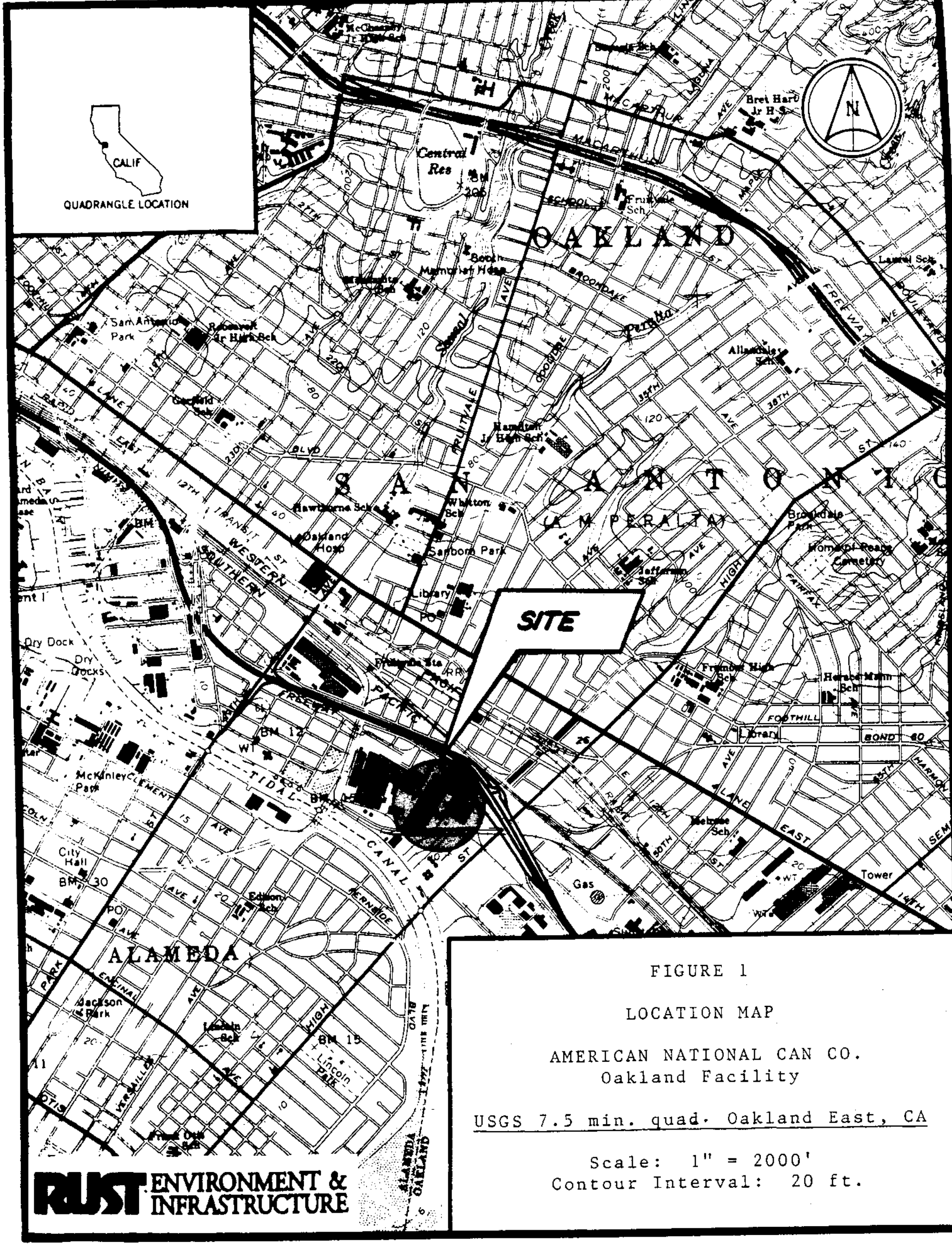


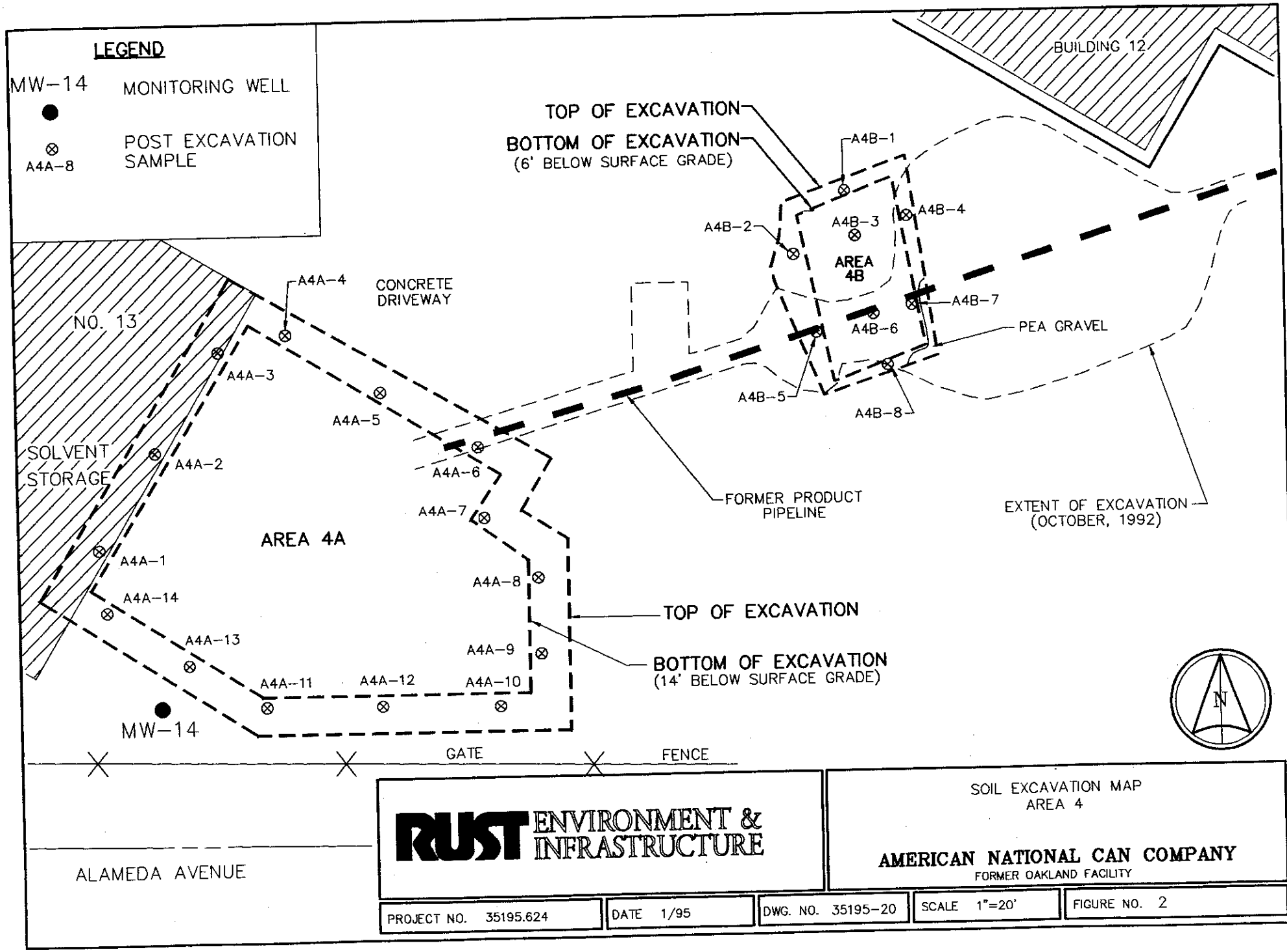
FIGURE 1

LOCATION MAP

AMERICAN NATIONAL CAN CO.
Oakland Facility

USGS 7.5 min. quad. Oakland East, CA

Scale: 1" = 2000'
Contour Interval: 20 ft.


LEGEND
MW-14
MONITORING WELL
A4A-8
POST EXCAVATION SAMPLE
BUILDING 12
TOP OF EXCAVATION
BOTTOM OF EXCAVATION
(6' BELOW SURFACE GRADE)
A4B-1
A4B-2
A4B-3
A4B-4
AREA 4B
A4B-5
A4B-6
A4B-7
A4B-8
PEA GRAVEL
A4A-4
CONCRETE DRIVEWAY
NO. 13
A4A-3
A4A-5
A4A-6
A4A-7
A4A-2
SOLVENT STORAGE
AREA 4A
A4A-1
A4A-14
A4A-13
A4A-8
A4A-9
A4A-11
A4A-12
A4A-10
MW-14
FORMER PRODUCT PIPELINE
EXTENT OF EXCAVATION (OCTOBER, 1992)
TOP OF EXCAVATION
BOTTOM OF EXCAVATION
(14' BELOW SURFACE GRADE)
N
GATE
FENCE
ALAMEDA AVENUE
RUST ENVIRONMENT & INFRASTRUCTURE
SOIL EXCAVATION MAP
AREA 4
AMERICAN NATIONAL CAN COMPANY
FORMER OAKLAND FACILITY
PROJECT NO. 35195.624
DATE 1/95
DWG. NO. 35195-20
SCALE 1"=20'
FIGURE NO. 2

APPENDIX A

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

Inchcape Testing Services
Anametrix Laboratories

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

Todd Stringer for
Susan Kraska Yeager
Laboratory Director

11-15-94
Date

Kilna Desai
Project Manager

This report consists of 12 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
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

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

Cheryl Balmer 11/14/94
Department Supervisor Date

Reggie Dawson 11/14/94
Chemist Date

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

Lab Workorder : 9411099
Matrix : SOIL

Client Project ID : 35195.624
Units : mg/Kg

Compound Name	Method Reporting Limit*	Client ID A4A-1 Lab ID 9411099-01	Client ID A4A-2 Lab ID 9411099-02	Client ID A4A-3 Lab ID 9411099-03	Client ID A4A-4 Lab ID 9411099-04	Client ID A4A-5 Lab ID 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 Davison 11/14/94
Analyst Date

Cheryl Balmer 11/14/94
Supervisor Date

Issued on 11/14/94 @ 01:15 PM

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

Compound Name	Method Reporting Limit*	Client ID A4A-6 Lab ID 9411099-06	Client ID A4A-7 Lab ID 9411099-07	Client ID A4A-8 Lab ID 9411099-08	Client ID A4A-9 Lab ID 9411099-09	Client ID A4A-10 Lab ID 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		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 Dawson 11/14/94
Analyst Date

Cheryl Balmer 11/14/94
Supervisor 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

Compound Name	Method Reporting Limit*	Client ID A4A-11 Lab ID 9411099-11	Client ID A4A-12 Lab ID 9411099-12	Client ID Lab ID Method Blank	Client ID Lab ID Method Blank	Client ID Lab ID
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.

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 Dawson 11/14/94
Analyst Date

Cheryl Barbour 11/14/94
Supervisor Date

Issued on 11/14/94 @ 09:46 AM

Matrix Spike Report

Total Petroleum Hydrocarbons as BTEX

ITS - Anametrix Laboratories - (408)432-8192

Project ID : 35195.62
Sample ID : A4A-1
Matrix : SOIL
Date Sampled : 11/08/94

Laboratory ID : 9411099-01
Analyst : ARS
Supervisor : [illegible]
Instrument ID : HP4
Units : mg/Kg

COMPOUND NAME	SPIKE AMOUNT	SAMPLE RESULTS	MS RECOVERY	MSD RECOVERY	RECOVERY LIMITS	RPD	RPD 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
Sample ID : A4A-12
Matrix : SOIL
Date Sampled : 11/08/94

Laboratory ID : 9411099-12
Analyst : RD
Supervisor : A
Instrument ID : HP12
Units : mg/Kg

COMPOUND NAME	SPIKE AMOUNT	SAMPLE RESULTS	MS RECOVERY	MSD RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS
Benzene	0.040	ND	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
Matrix : SOLID

Analyst : RD
Supervisor : [illegible]
Units : mg/Kg

COMPOUND NAME	SPIKE AMOUNT	LCS RECOVERY	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		MN0901E1.D	

* Limits established by Inchcape Testing Services, Anametrix Laboratories.

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

Instrument ID : HP12
Matrix : SOLID

Analyst : RD
Supervisor : M
Units : mg/Kg

COMPOUND NAME	SPIKE AMOUNT	LCS RECOVERY	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.

Inchcape Testing Services
Anametrix Laboratories

SAMPLE RECEIVING CHECKLIST

WORKORDER NUMBER: 9411099 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)	NO	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
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 Action Form.

Sample Custodian: J. D. Date: 11/8/94 Project Manager: KD Date: 11/9/94

4599

48 per Richard z. 11/8/94
~~24~~ Hour RUSH T.A.T. 9411099 (2) 16:15

RUST ENVIRONMENT & INFRASTRUCTURE

WAHLER LABLES

Chain of Custody Record

Custody Seal #	RUST E&I Cooler #

Project Number	Project Name/Client
35195.624	American National CAN

Samplers: (Signature) Richard Buzinski

Item No.	Sample Description (Field ID Number)	Date	Time	Grab	Comp.	Lab Sample Number	Container Number	Analysis Required: LUFT TPH-G/BTEX	Matrix: Sample Type: Soil	Matrix: Sample Container: 6" brass liner
1	A4A-1	11-8-94	1:44					X	✓	1
2	A4A-2	↑	1:47					X	✓	1
3	A4A-3		1:52					X	✓	1
4	A4A-4		1:56					X	✓	1
5	A4A-5		1:59					X	✓	1
6	A4A-6		2:04					X	✓	1
7	A4A-7		2:08					X	✓	1
8	A4A-8		2:13					X	✓	1
9	A4A-9		2:15					X	✓	1
10	A4A-10		2.19					X	✓	1
11	A4A-11	↓	2.25					X	✓	1
12	A4A-12	11-8-94	2:31					X	✓	1
13										
14										
15										
16										
17										
18										
19										
20										

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Disposed of by: (Signature)	Items:	Date/Time
Richard Buzinski	11/8/94 15:25				
Relinquished by: (Signature)	Date/Time	Received by: (Signature) [Laboratory] Brandy Falcon	Disposed of by: (Signature)	Items:	Date/Time

Send Lab Results To: Walter Howard
RUST E&I
12 Metro Park Road
Albany, N.Y. 12205

Remarks: Fax copy of results to Richard Buzinski - Rust, Palo Alto; 415/968-5365
Give Verbals to Buzinski within 24 HRS.
Federal Express Airbill No.:
Lab:

Check Delivery Method:
- [x] Samples delivered in person
- [ ] Common carrier
- [ ] Mail

Laboratory Receiving Notes:
Custody Seal Intact? N/A
Temp. of Shipping Container: 4°C
Sample Condition: Good

Rev. 4/93 White Copy – Lab Yellow Copy – File Pink Copy – Client F514/Earth.Sci

Inchcape Testing Services
Anametrix Laboratories

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.

Corinne Ryan for
Susan Kraska Yeager
Laboratory Director

12/01/94
Date

Jane Wakida
Project Manager

This report consists of 10 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.

Cheryl Balmer 11/30/94
Department Supervisor Date

Chemist 11/30/94 Date

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

COMPOUNDS	Reporting Limit (mg/Kg)	Sample I.D.# A4A-13 -01	Sample I.D.# A4A-14 -02	Sample I.D.# A4A-SAND -03	Sample I.D.# BN2101E1 BLANK	Sample I.D.# BN2202E1 BLANK
Benzene	0.005	ND	ND	ND	ND	ND
Toluene	0.005	ND	ND	ND	ND	ND
Ethylbenzene	0.005	ND	ND	ND	ND	ND
Total Xylenes	0.005	ND	ND	ND	ND	ND
TPH as Gasoline	0.5	ND	ND	ND	ND	ND
% Surrogate Recovery		94%	105%	140%	104%	108%
Instrument I.D.		HP21	HP21	HP21	HP21	HP21
Date Analyzed		11/21/94	11/22/94	11/22/94	11/21/94	11/22/94
RLMF		1	1	1	1	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.

Irma Shea 12/01/94
Analyst Date

Cheryl Baeza 12/1/94
Supervisor Date

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

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

Anametrix I.D. : 9411215-01
Analyst : IS
Supervisor : [illegible]
Date Released : 11/29/94
Instrument ID : 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 *
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

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

Anametrix I.D. : 9411215-03
Analyst : TJ
Supervisor : CO
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	0.040	0.000	0.047	118%	0.048	120%	2%	45-139
TOLUENE	0.040	0.000	0.038	95%	0.038	95%	0%	51-138
ETHYLBENZENE	0.040	0.000	0.034	85%	0.032	80%	-6%	48-146
TOTAL XYLENES	0.040	0.000	0.017	43%	0.018	45%	6%	50-139
p-BFB				132%		140%		53-147

* 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
Matrix : SOIL
Date Sampled : N/A
Date Analyzed : 11/21/94

Anametrix I.D. : MN2103E1
Analyst : Is
Supervisor : cw
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 : GS
Date Released : 11/29/94
Instrument ID : HP21

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

* Quality control limits established by Anametrix, Inc.

Inchcape Testing Services
Anametrix Laboratories

SAMPLE RECEIVING CHECKLIST

WORKORDER NUMBER: 9411215 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)	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)	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
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 Action Form.

Sample Custodian: [signature] Date: 11/18/94 Project Manager: [signature] Date: 11/21/94

9411215

RUST ENVIRONMENT & INFRASTRUCTURE

STANDARD TURN AROUND TIME (2)

Chain of Custody Record

WAHLER LABLES

Custody Seal #	RUST E&I Cooler #

Project Number	Project Name/Client
35195.624	American National Can

Samplers: (Signature) Richard Burzynski

Item No.	Sample Description (Field ID Number)	Date	Time	Grab	Comp.	Lab Sample Number	Container Number	Analysis Required: LUFT TPH-G/BTEX	Matrix: Sample Type: Soil	Matrix: Sample Container: 5" brass liners
1	A4A-13	11-18-94	9:30					X	✓	1
2	A4A-14	11-18-94	10:50					X	✓	1
3	A4A-SAND	11-18-94	1:00					X	✓	1
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Disposed of by: (Signature)	Items:	Date/Time
Richard Burzynski	11/18/94 1550				
Relinquished by: (Signature)	Date/Time	Received by: (Signature) [Laboratory] Brandy Crafton	Disposed of by: (Signature)	Items:	Date/Time

Send Lab Results To: Walter Howard
RUST E&I
12 Metro Park Road
Albany, N.Y. 12205

Remarks: Fax copy of results to Richard Burzynski – RUST, Palo Alto; 415/968-5365

Federal Express Airbill No.:
Lab:

Check Delivery Method:
- [x] Samples delivered in person
- [ ] Common carrier
- [ ] Mail

Laboratory Receiving Notes:
Custody Seal Intact? N/A
Temp. of Shipping Container: 5°C
Sample Condition: Good

Rev. 4/93 White Copy – Lab Yellow Copy – File Pink Copy – Client F514/Earth.Sci

Inchcape Testing Services
Anametrix Laboratories

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 # : 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.

Todd Springer for
Susan Kraska Yeager
Laboratory Director

11-16-94
Date

Kilma Desai
Project Manager

This report consists of 8 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.

Cheryl Balmer 11/11/94
Department Supervisor Date

Reggie Davison 11/14/94
Chemist Date

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

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

Reggie Dawson 11/14/94
Analyst Date

Cheryl Balmer 11/14/94
Supervisor Date

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

COMPOUNDS	Reporting Limit (mg/Kg)	Sample I.D.# A4B-6 -06	Sample I.D.# A4B-7 -07	Sample I.D.# A4B-8 -08	Sample I.D.# BN0901E1 BLANK	
Benzene	0.005	ND	ND	ND	ND	
Toluene	0.005	ND	ND	ND	ND	
Ethylbenzene	0.005	ND	ND	ND	ND	
Total Xylenes	0.005	0.009	ND	ND	ND	
TPH as Gasoline	0.5	ND	ND	ND	ND	
% Surrogate Recovery		109%	110%	87%	97%	
Instrument I.D.		HP21	HP21	HP21	HP21	
Date Analyzed		11/09/94	11/09/94	11/09/94	11/09/94	
RLMF		1	1	1	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.

Reggie Dawson 11/16/94
Analyst Date

Supervisor 11/16/94
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
Date Analyzed : 11/09/94

Anametrix I.D. : MN0901E1
Analyst : RD
Supervisor : [illegible]
Date Released : 11/16/94
Instrument I.D.: HP21

COMPOUND	SPIKE AMT. (mg/Kg)	REC LCS (mg/Kg)	%REC LCS	% REC LIMITS *
GASOLINE	0.50	0.52	104%	58-130
Surrogate Recovery			116%	53-147

* Quality control limits established by Anametrix, Inc.

Inchcape Testing Services
Anametrix Laboratories

SAMPLE RECEIVING CHECKLIST

WORKORDER NUMBER: 9411079 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)	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?	(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
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 Action Form.

Sample Custodian: [signature] Date: 11/7/94 Project Manager: KD Date: 11/8/94

RUST ENVIRONMENT & INFRASTRUCTURE

24 hour RUSH T.A.T. 9411079 (27)

Chain of Custody Record

WAHLER LABELS

Custody Seal #	RUST E&I Cooler #

Project Number	Project Name/Client
35195.624	American National Can

Samplers: (Signature) Richard Burzinski

Item No.	Sample Description (Field ID Number)	Date	Time	Grab	Comp.	Lab Sample Number	Container Number	Analysis Required: LUFT TPH-G/BTEX	Matrix: Sample Type: Soil	Matrix: Sample Container: 40 ml vial
1	A4B-1	11-7-94	2:20					X	✓	1
2	A4B-2	↑	2:30					X	✓	1
3	A4B-3		2:34					X	✓	1
4	A4B-4		2:40					X	✓	1
5	A4B-5		2:47					X	✓	1
6	A4B-6		2:52					X	✓	1
7	A4B-7	↓	2:56					X	✓	1
8	A4B-8	11-7-94	3:00					X	✓	1
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Disposed of by: (Signature)	Items:	Date/Time
Richard Burzinski	11-7-94 16:15				
Relinquished by: (Signature)	Date/Time	Received by: (Signature) [Laboratory]	Disposed of by: (Signature)	Items:	Date/Time
		Brandy A. Falcon			

Send Lab Results To: WALTER HOWARD
RUST E&I
12 Metro Park Road
Albany, NY. 12205

Remarks: Fax copy of results to Richard Burzinski - RUST, Palo Alto. 415/968-5365
Give verbals to Burzinski within 24 hrs.
Federal Express Airbill No.:
Lab:

Check Delivery Method:
- ☑ Samples delivered in person
- ☐ Common carrier
- ☐ Mail

Laboratory Receiving Notes:
Custody Seal Intact? N/A
Temp. of Shipping Container: 6°C
Sample Condition: Good

APPENDIX B

Laboratory Analytical Report-Area 4 Stockpiled Soil Samples

Inchcape Testing Services
Anametrix Laboratories

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.

Corinne Phan for
Susan Kraska Yeager
Laboratory Director

11/23/94
Date

Cristina V. Raytcheva
Project Manager

This report consists of 37. pages.

ANAMETRIX REPORT DESCRIPTION
GCMS

Organic Analysis Data Sheets (OADS)

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

Tentatively Identified Compounds (TICs)

TIC forms contain tabulated results for non-target compounds detected in GC/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 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:

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

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

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
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.

Denise Powell 11-21-94
Department Supervisor Date

Chemist 11-21-94
Chemist Date

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

Project ID : 35195.62
Sample ID : A4SS
Matrix : SOIL
Date Sampled :11/14/94
Date Analyzed :11/19/94
Instrument ID : MSD1

Stockpile

Anametrix ID : 9411161-01
Analyst : SC
Supervisor : BP

Dilution Factor : 50.0
Conc. Units : ug/Kg

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	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	U
78-93-3	2-Butanone	1000.	ND	U
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	U
71-43-2	Benzene	250.	ND	U
107-06-2	1,2-Dichloroethane	250.	ND	U
79-01-6	Trichloroethene	250.	ND	U
78-87-5	1,2-Dichloropropane	250.	ND	U
75-27-4	Bromodichloromethane	250.	ND	U
10061-01-5	Cis-1,3-dichloropropene	250.	ND	U
108-10-1	4-Methyl-2-pentanone	500.	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	250.	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.	420.	
1330-20-7	Xylene (Total)	250.	6600.	
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	1,3-Dichlorobenzene	250.	ND	U
106-46-7	1,4-Dichlorobenzene	250.	ND	U
95-50-1	1,2-Dichlorobenzene	250.	ND	U

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

Project ID : 35195.62
Sample ID : B12SS
Matrix : SOIL
Date Sampled :11/14/94
Date Analyzed :11/21/94
Instrument ID : MSD2

Anametrix ID : 9411161-02
Analyst : [illegible]
Supervisor : [illegible]

Dilution Factor : 5.0
Conc. Units : ug/Kg

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	50.	ND	U
75-01-4	Vinyl chloride	50.	ND	U
74-83-9	Bromomethane	50.	ND	U
75-00-3	Chloroethane	50.	ND	U
75-69-4	Trichlorofluoromethane	25.	ND	U
75-35-4	1,1-Dichloroethene	25.	ND	U
76-13-1	Trichlorotrifluoroethane	25.	ND	U
67-64-1	Acetone	100.	170.	B
75-15-0	Carbon disulfide	25.	ND	U
75-09-2	Methylene chloride	25.	ND	U
156-60-5	Trans-1,2-dichloroethene	25.	ND	U
75-34-3	1,1-Dichloroethane	25.	ND	U
156-59-2	Cis-1,2-dichloroethene	25.	ND	U
78-93-3	2-Butanone	100.	ND	U
67-66-3	Chloroform	25.	ND	U
71-55-6	1,1,1-Trichloroethane	25.	ND	U
56-23-5	Carbon tetrachloride	25.	ND	U
108-05-4	Vinyl acetate	50.	ND	U
71-43-2	Benzene	25.	ND	U
107-06-2	1,2-Dichloroethane	25.	ND	U
79-01-6	Trichloroethene	25.	ND	U
78-87-5	1,2-Dichloropropane	25.	ND	U
75-27-4	Bromodichloromethane	25.	ND	U
10061-01-5	Cis-1,3-dichloropropene	25.	ND	U
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	U
79-00-5	1,1,2-Trichloroethane	25.	ND	U
127-18-4	Tetrachloroethene	25.	ND	U
591-78-6	2-Hexanone	50.	ND	U
124-48-1	Dibromochloromethane	25.	ND	U
108-90-7	Chlorobenzene	25.	ND	U
100-41-4	Ethylbenzene	25.	ND	U
1330-20-7	Xylene (Total)	25.	ND	U
100-42-5	Styrene	25.	ND	U
75-25-2	Bromoform	25.	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	25.	ND	U
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

Calc ?

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

Project ID :
Sample ID : VBLKND
Matrix : SOIL
Date Sampled : 0/ 0/ 0
Date Analyzed :11/19/94
Instrument ID : MSD1

Anametrix ID : BN1903A2
Analyst : SK
Supervisor : DP

Dilution Factor : 50.0
Conc. Units : ug/Kg

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	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	U
78-93-3	2-Butanone	1000.	ND	U
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	U
71-43-2	Benzene	250.	ND	U
107-06-2	1,2-Dichloroethane	250.	ND	U
79-01-6	Trichloroethene	250.	ND	U
78-87-5	1,2-Dichloropropane	250.	ND	U
75-27-4	Bromodichloromethane	250.	ND	U
10061-01-5	Cis-1,3-dichloropropene	250.	ND	U
108-10-1	4-Methyl-2-pentanone	500.	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	250.	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	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	1,3-Dichlorobenzene	250.	ND	U
106-46-7	1,4-Dichlorobenzene	250.	ND	U
95-50-1	1,2-Dichlorobenzene	250.	ND	U

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

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

Anametrix ID : BN2103A1
Analyst : SC
Supervisor : DP

Dilution Factor : 1.0
Conc. Units : ug/Kg

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	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
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.	ND	U
107-06-2	1,2-Dichloroethane	5.	ND	U
79-01-6	Trichloroethene	5.	ND	U
78-87-5	1,2-Dichloropropane	5.	ND	U
75-27-4	Bromodichloromethane	5.	ND	U
10061-01-5	Cis-1,3-dichloropropene	5.	ND	U
108-10-1	4-Methyl-2-pentanone	10.	ND	U
108-88-3	Toluene	5.	ND	U
10061-02-6	Trans-1,3-dichloropropene	5.	ND	U
79-00-5	1,1,2-Trichloroethane	5.	ND	U
127-18-4	Tetrachloroethene	5.	ND	U
591-78-6	2-Hexanone	10.	ND	U
124-48-1	Dibromochloromethane	5.	ND	U
108-90-7	Chlorobenzene	5.	ND	U
100-41-4	Ethylbenzene	5.	ND	U
1330-20-7	Xylene (Total)	5.	ND	U
100-42-5	Styrene	5.	ND	U
75-25-2	Bromoform	5.	ND	U
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	5.	ND	U

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

Project ID : 35195.62
Matrix : SOLID

Anametrix ID : 9411161
Analyst : SR
Supervisor : M

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

	QC LIMITS
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 : SV
Supervisor : DP

	SAMPLE ID	SU1	SU2	SU3
1	VBLKNS	106	105	104
2	VLCSO6	108	108	104
3	B12SS	109	108	103
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

	QC LIMITS
SU1 = 1,2-Dichloroethane-d4	(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	: SC
Date Sampled	:	Supervisor	: DK
Date Analyzed	: 11/19/94	SDG/Batch	:
Instrument ID	: MSD1	Sample ID	: VLCSO2

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	%REC LIMITS
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

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

Project/Case	:	Anametrix ID	: MN2101A1
Matrix	: SOIL	Analyst	: SK
Date Sampled	:	Supervisor	: DP
Date Analyzed	: 11/21/94	SDG/Batch	:
Instrument ID	: MSD2	Sample ID	: VLCSO6

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	%REC LIMITS
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 section.
- 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 Baemer 11/22/94
Department Supervisor Date

Chemist 11/22/94
Chemist Date

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

Anametrix W.O.: 9411161
Matrix : SOIL
Date Sampled : 11/14/94

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

√ compare surrogate

COMPOUNDS	Reporting Limit (mg/Kg)	Sample I.D.# A4SS -01	Sample I.D.# B12SS -02	Sample I.D.# BN1701E1 BLANK
Benzene	0.005	ND	-	ND
Toluene	0.005	ND	-	ND
Ethylbenzene	0.005	0.29	-	ND
Total Xylenes	0.005	7.1	-	ND
TPH as Gasoline	0.5	80	-	ND
Mineral Spirits	0.5	-	3.4	ND
% Surrogate Recovery		112%	119%	104%
Instrument I.D.		HP21	HP21	HP21
Date Analyzed		11/17/94	11/17/94	11/17/94
RLMF		25	2.5	1

ND - Not detected at or above the practical quantitation limit for the method.
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 11/22/94 Date

Supervisor 11/20/94 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 : CJ
Date Released : 11/21/94
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%		61-139

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.

Department Supervisor 11/15/94 Date

Chemist 11/15/94 Date

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	: BLJ
DATE SAMPLED	: 11/14/94	SUPERVISOR	: CW
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
MATRIX : SOIL
DATE SAMPLED : 11/14/94
DATE EXTRACTED : 11/14/94
DATE ANALYZED : 11/15/94

ANAMETRIX I.D. : 9411161-01
ANALYST : ws
SUPERVISOR : CW
DATE RELEASED : 11/16/94

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	: BL
DATE EXTRACTED	: 11/14/94	SUPERVISOR	: CM
DATE 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 : 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.
- 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.

Department Supervisor 11/23/94 Date

Chemist 11/23/94 Date

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

Anametrix Sample ID: **9411161-01**
Client Sample ID: **A4SS** ← stockpile
Client Project Number: **35195.624**
Matrix: **SOIL**

Date Sampled: **11/14/94**
Analyst: SL
Supervisor: MM

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**
Anametrix WO #: **9411161**
Client Project Number: **35195.624**
Matrix: **SOIL**

Analyst: SC
Supervisor: [illegible]

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	

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

SAMPLE DUPLICATE REPORT

Anametrix Sample ID: **9411161-01D**
Client Sample ID: **A4SS**
Client Project Number: **35195.624**
Matrix: **SOIL**

Analyst: SC
Supervisor: mbt

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:

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: SC
Supervisor: WDT

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
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**	
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	0.0	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: SC
Supervisor: MWT

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: SC
Supervisor: WCM

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.

Inchcape Testing Services
Anametrix Laboratories

SAMPLE RECEIVING CHECKLIST

WORKORDER NUMBER: 9411161 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)	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)	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
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 Action Form.

Sample Custodian: J.D. Date: 11/14/94 Project Manager: KD Date: 11/15/94

BENCHSHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

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

Date Extracted : 11/14/94
Date Analyzed : 11/15/94

Analyst : JC/BL
Batch No HSN14W91

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

$$\%\ \text{REC OF LC} = \frac{\text{amount recovered}}{\text{amount spiked}} * 100 = 100$$

$$\%\ \text{REC OF MS} = \frac{\text{amount recovered - amount in original sample}}{\text{amount spiked}} * 100 \quad 110$$

$$\%\ \text{REC OF MD} = \frac{\text{amount recovered - amount in original sample}}{\text{amount spiked}} * 100 \quad 93$$

RPD OF MS & MD = 12

APPROVED BY: BL 11/15/94

BATCH: HSN14W91

DATE STARTED: 11/14/94

METHOD 5520EF Modified(Oil and Grease as Hydrocarbons in Soil)

Inchcape Testing Services, Anametrix (408)432-8192

	ANAMETRIX I.D.:	RE-EXTRACT?	CLIENT I.D.:	I.D match with chain	30g soil +/- 0.1g	add 60g Na2SO4 lot # SA1207	1.0ml motor oil spk. 9.0 mg/ml # 6696	100 ml 1:1 Acetone lot # HC9K14 & Ch2Cl2 lot # U1A782	sonicate 3 x 3 min.	3.0g silica gel clean-up lot # 635340	filter w/#50 filter paper	conc. to ~2ml (circle 1) In K-D or Erlenmeyer	transfer extract to pre-weighed tubes	conc. to dryness w/N2	store in dessicator	residue appearance	notes/comments
2	9411161-01	N	A455	Y	AK	AK		AK	AK	AK	AK	AK	AK	DS	AK	Brown grease	
21	9411061-01	N	9444SB1A	Y	AK	AK		AK	AK	AK	AK	AK	AK	DS	AK	Black grease	
	-02	N	↓ 1B	Y	AK	AK		AK	AK	AK	AK	AK	AK	DS	AK	Lt. Brown oil	
	9411161-MS-01	N	A455	Y	AK	AK	AK	AK	AK	AK	AK	AK	AK	DS	AK	Black grease	
	-MSD-01	N	A455	Y	AK	AK	AK	AK	AK	AK	AK	AK	AK	DS	AK	↓	
	BN14H1W9		BLANK			30		AK	AK	AK	AK	AK	AK	DS	AK	White	
	MN14H1W9		LCS			30	AK	AK	AK	AK	AK	AK	AK	DS	AK	Yellow oil	
	9411061-03	N	9444SSCS	Y	AK	AK		AK	AK	AK	AK	AK	AK	DS	AK	V. light Brown mineral	
			DATE:	11/14	11/14	11/14	11/14	11/14	11/14	11/14	11/14	11/14	11/14	11/14	11/14	11/14	

Date/Time Completed: 11/14/94

APPROVAL: RHB / JH 11/15/94

METHOD 5520EF Modified(Oil and Grease as Hydrocarbons in Soil)

Inchcape Testing Services, Anametrix (408) 432-8192

DATE EXTRACTED: 11/14/94 BATCH: #SN14W91

DATE ANALYZED: 11/15/94 ANALYST: AK/RD

ANAMETRIX I.D.:	CLIENT I.D.:	Weight Extracted (g):	Final Weight: (g)	Initial Weight: (g)	Weight of Residue (g)	Oil & Grease (mg/Kg)
BN14H1W9	BLANK	30g	10.7712	10.7708	0.0004	<30
MW14H1W9	LCS		10.9898	10.9807	0.0091	300
9411161-01	A455		10.8736	10.8706	0.0030	100
9411061-01	9444SB1A		10.9085	10.9040	0.0045	150
-02	SB1B		10.8703	10.8689	0.0014	47
-03	SB2B		10.8937	10.8937	0.0000	<30
9411161-01ms	A455		10.9350	10.9222	0.0128	430
-01msd	A455		10.8544	10.8431	0.0113	380

LCS: 100

MS: 110

MSD: 93 RPD: 12 %

APPROVAL: RLT 11/15/94

CALCULATIONS:

O&Gmg/Kg = wt. of residue(g) x 1000mg / .03Kg x 1g

% Rec. LCS = amount recovered(mg/Kg) x 100 / 300mg/Kg

% 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 95131
Tel: 408-432-8192
Fax: 408-432-8198

CORRECTIVE ACTION FORM

ORGANIC PREP LAB

METHOD: 5520EF BATCH: 4SN141591 WORKORDERS: 9411161

MATRIX: SOIL ANALYST: AK 9411061

DATE: 11/14/94 SDG:

___ **The sample holding time was missed.**

Samples affected: _____

Corrective Action

___ Client services or Project Manager notified: _____

___ Samples extracted out of hold time by _____ days.

___ Client is resampling.

___ Other: _____

VERIFICATION:

___ **Insufficient sample was received for the analysis.**

Samples affected: _____

Corrective Action

___ Samples extracted as is, volumes are noted on the extraction sheet.

___ Client services or Project Manager notified: _____

___ Other: _____

VERIFICATION:

___ **Insufficient sample was received for a MS/MSD or MS/DUP.**

Samples affected: _____

Corrective Action

___ Extracted a LCS and LCSD.

___ Other: _____

VERIFICATION:

____ **The sample or extract was lost, explain:** _____

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: none required

_____

_____

_____

_____

_____

_____

_____

_____

VERIFICATION:

Supervisor Approval: RGB DH **Date:** 11/15/91

QA/QC Approval: _____ **Date:** _____

44… 9411161 (2)

RUST ENVIRONMENT & INFRASTRUCTURE

48 hr T.A.T.

Chain of Custody Record

WAHLER LABLES

Custody Seal #	RUST E&I Cooler #

Project Number	Project Name/Client
35195.624	American National Can

Samplers: (Signature) [signature]

Item No.	Sample Description (Field ID Number)	Date	Time	Grab	Comp.	Lab Sample Number	Container Number	Total Petroleum Oil & Grease-LUFT (5520EF)	LUFT-TPHG/BTEX	TTLC Cadmium	TTLC Chromium	Organic Lead-LUFT	TTLC Zinc	TTLC Nickle	TTLC Lead	EPA 8240	LUFT [illegible]	Matrix – Sample Type: soil	Matrix – Sample Container: 6" stainless steel liners
1	A4SS	11-14-94	9:10					X	X	X	X	X	X	X	X	X		✓	2
2	B12SS	11-14-94	9:20													X	X	✓	2
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Disposed of by: (Signature)	Items:	Date/Time
[signature]	11/14/94 11:37				
Relinquished by: (Signature)	Date/Time	Received by: (Signature) [Laboratory] Josephine DeCarli	Disposed of by: (Signature)	Items:	Date/Time

Send Lab Results To: WALTER HOWARD
RUST E&I
12 Metro Park Road
Albany, NY. 12205

Remarks: fax copy of results to Richard Buzinski – RUST Palo alto 415/968-5365

Federal Express Airbill No.:
Lab:

Check Delivery Method:
- [x] Samples delivered in person
- [ ] Common carrier
- [ ] Mail

Laboratory Receiving Notes:

Custody Seal Intact? N/A

Temp. of Shipping Container: 5°C

Sample Condition:

White Copy – Lab   Yellow Copy – File   Pink Copy – Client

Rev. 4/93   F514/Earth.Sci

4458

5 day (TAT) 11/15/94 per Richard B. 9411161 (2) 12:15

RUST ENVIRONMENT & INFRASTRUCTURE

48 hr T. A. T.

Chain of Custody Record

WAHLER LABLES

Custody Seal #	RUST E&I Cooler #

Project Number	Project Name/Client
35195.624	American National Can

Samplers: (Signature) Richard Burzinski

Item No.	Sample Description (Field ID Number)	Date	Time	Grab	Comp.	Lab Sample Number	Container Number	Total Petroleum Oil & Grease-LUFT (5520EF)	LUFT-TPHG/BTEX	TTLC Cadmium	TTLC Chromium	Organic Lead-LUFT	TTLC Zinc	TTLC Nickle	TTLC Lead	EPA 8240	LUFT Mineral Spirits	Matrix – Sample Type: soil	Matrix – Sample Container: 6" stainless steel liners
(1)	A4SS	11-14-94	9:10					X	X	X	X	X	X	X	X	X		✓	2
(2)	B12SS	11-14-94	9:20													X	X	✓	2
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
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15																			
16																			
17																			
18																			
19																			
20																			

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Disposed of by: (Signature)	Items:	Date/Time
Richard Burzinski	11/14/94 11:37				
Relinquished by: (Signature)	Date/Time	Received by: (Signature) [Laboratory] Josephine DeCarli	Disposed of by: (Signature)	Items:	Date/Time

Send Lab Results To: WALTER HOWARD
RUST E&I
12 Metro Park Road
Albany, NY. 12205

Remarks: fax copy of results to Richard Burzinski – RUST Palo alto 415/968-5365

Federal Express Airbill No.:
Lab:

Check Delivery Method:
- [x] Samples delivered in person
- [ ] Common carrier
- [ ] Mail

Laboratory Receiving Notes:
Custody Seal Intact? N/A
Temp. of Shipping Container: 5°C
Sample Condition:

APPENDIX C

Laboratory Analytical Report-Area 4 Excavation Water Sample

Inchcape Testing Services
Anametrix Laboratories

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 # : 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.

Todd Seringer for
Susan Kraska Yeager
Laboratory Director

11-15-94
Date

Kilma Desai
Project Manager

This report consists of 18 pages.

ANAMETRIX REPORT DESCRIPTION
GCMS

Organic Analysis Data Sheets (OADS)

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

Tentatively Identified Compounds (TICs)

TIC forms contain tabulated results for non-target compounds detected in GC/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 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:

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

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

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.

Denise Powell 11-11-94
Department Supervisor Date

Taghi Memarzadeh 11/11/94
Chemist Date

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

Project ID : 35195.62
Sample ID : A4A-PW
Matrix : WATER
Date Sampled :11/10/94
Date Analyzed :11/10/94
Instrument ID : MSD1

Anametrix ID : 9411124-01
Analyst : TK
Supervisor : bp

Dilution Factor : 2.0
Conc. Units : ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	20.	ND	U
75-01-4	Vinyl chloride	20.	ND	U
74-83-9	Bromomethane	20.	ND	U
75-00-3	Chloroethane	20.	ND	U
75-69-4	Trichlorofluoromethane	10.	ND	U
75-35-4	1,1-Dichloroethene	10.	ND	U
76-13-1	Trichlorotrifluoroethane	10.	ND	U
67-64-1	Acetone	40.	ND	U
75-15-0	Carbon disulfide	10.	ND	U
75-09-2	Methylene chloride	10.	ND	U
156-60-5	Trans-1,2-dichloroethene	10.	ND	U
75-34-3	1,1-Dichloroethane	10.	ND	U
156-59-2	Cis-1,2-dichloroethene	10.	ND	U
78-93-3	2-Butanone	40.	ND	U
67-66-3	Chloroform	10.	ND	U
71-55-6	1,1,1-Trichloroethane	10.	ND	U
56-23-5	Carbon tetrachloride	10.	ND	U
108-05-4	Vinyl acetate	20.	ND	U
71-43-2	Benzene	10.	ND	U
107-06-2	1,2-Dichloroethane	10.	ND	U
79-01-6	Trichloroethene	10.	ND	U
78-87-5	1,2-Dichloropropane	10.	ND	U
75-27-4	Bromodichloromethane	10.	ND	U
10061-01-5	Cis-1,3-dichloropropene	10.	ND	U
108-10-1	4-Methyl-2-pentanone	20.	ND	U
108-88-3	Toluene	10.	ND	U
10061-02-6	Trans-1,3-dichloropropene	10.	ND	U
79-00-5	1,1,2-Trichloroethane	10.	ND	U
127-18-4	Tetrachloroethene	10.	ND	U
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	U
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

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

Project ID :
Sample ID : VBLKKP
Matrix : WATER
Date Sampled : 0/ 0/ 0
Date Analyzed :11/10/94
Instrument ID : MSD1

Anametrix ID : BN1002A2
Analyst : TM
Supervisor : MP

Dilution Factor : 1.0
Conc. Units : ug/L

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	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.	ND	U
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
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.	ND	U
107-06-2	1,2-Dichloroethane	5.	ND	U
79-01-6	Trichloroethene	5.	ND	U
78-87-5	1,2-Dichloropropane	5.	ND	U
75-27-4	Bromodichloromethane	5.	ND	U
10061-01-5	Cis-1,3-dichloropropene	5.	ND	U
108-10-1	4-Methyl-2-pentanone	10.	ND	U
108-88-3	Toluene	5.	ND	U
10061-02-6	Trans-1,3-dichloropropene	5.	ND	U
79-00-5	1,1,2-Trichloroethane	5.	ND	U
127-18-4	Tetrachloroethene	5.	ND	U
591-78-6	2-Hexanone	10.	ND	U
124-48-1	Dibromochloromethane	5.	ND	U
108-90-7	Chlorobenzene	5.	ND	U
100-41-4	Ethylbenzene	5.	ND	U
1330-20-7	Xylene (Total)	5.	ND	U
100-42-5	Styrene	5.	ND	U
75-25-2	Bromoform	5.	ND	U
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	5.	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 : MP

	SAMPLE ID	SU1	SU2	SU3
1	VBLKKP	95	100	98
2	VLCSOF	100	102	104
3	A4A-PW	101	100	101
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

	QC LIMITS
SU1 = 1,2-Dichloroethane-d4	(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	: MN1002A2.D
Matrix	: WATER	Analyst	: TM
Date Sampled	:	Supervisor	: DP
Date Analyzed	: 10 Nov 94 3:56 pm	SDG/Batch	:
Instrument ID	: MSD1	Sample ID	: VLCSOF @ 50ug/

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	%REC LIMITS
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	0	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., <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 # : 9411124
Date Received : 11/10/94
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
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.

Department Supervisor 11/14/94 Date

Chemist 11/14/94 Date

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: SC
Supervisor: MN

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**	
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**	
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: SY
Supervisor: MN

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	**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**	

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: MW

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:

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: MW

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**
Client Project Number: **35195.624**
Matrix: **WATER**

Analyst: SC
Supervisor: MK

Analyte	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/L	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:

Inchcape Testing Services
Anametrix Laboratories

SAMPLE RECEIVING CHECKLIST

WORKORDER NUMBER: 9411124 CLIENT PROJECT ID: 35195.624

COOLER

Shipping slip (airbill, etc.) present? If YES, enter carrier name and airbill # : _____	YES	NO	(N/A)
Custody Seal on the outside of cooler? Condition: INTACT ____ BROKEN ____	YES	NO	(N/A)
Temperature of sample (s) within range? List temperature of cooler (s): 10°C	YES	(NO)	N/A

SAMPLES

Chain of custody seal present for each container? Condition: INTACT ____ BROKEN ____	YES	NO	(N/A)
Samples arrived within holding time?	(YES)	NO	N/A
Samples in proper containers for methods requested? Condition of containers: INTACT ✓ BROKEN ____ If NO, were samples transferred to proper container? ____	(YES)	NO	
Were VOA containers received with zero headspace? If NO, was it noted on the chain of custody? ____	(YES)	NO	N/A
Were container labels complete? (ID, date, time preservative, etc.)	(YES)	NO	
Were samples preserved with the proper preservative? If NO, was the proper preservative added at time of receipt? ____	(YES)	NO	N/A
pH check of samples required at time of receipt? If YES, pH checked and recorded by: BGF	(YES)	NO	
Sufficient amount of sample received for methods requested? If NO, has the client or lab project manager been notified? ____	(YES)	NO	
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 date?	(YES)	NO
Turnaround time? REGULAR ____ RUSH ✓		

Any NO response and/or any "BROKEN" that was checked must be detailed in the Corrective Action Form.

Sample Custodian: BGF Date: 11/10/94 Project Manager: CWR Date: 11/10/94

4429

(16) (10/5)

RUST ENVIRONMENT & INFRASTRUCTURE 24 Hour T.A.T. 9411124

WAHLER LABS

Chain of Custody Record

Custody Seal #	RUST E&I Cooler #

Project Number: 35195.624

Project Name/Client: American National Can

Samplers: (Signature)

Item No.	Sample Description (Field ID Number)	Date	Time	Grab	Comp.	Lab Sample Number	Container Number	Analysis Required: EPA 8240	Analysis Required: CAM 17 metals	Matrix – Sample Type: water	Matrix – Sample Container: 500 ml plastic	Matrix – Sample Container: 40 ml VOA
1	A4A-PW	11/10/94	11:20					X	X	✓	1	3
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Disposed of by: (Signature)	Items:	Date/Time
Richard Burzinski	11/10/94 12:24				
Relinquished by: (Signature)	Date/Time	Received by: (Signature) [Laboratory] Josephine DeCarli	Disposed of by: (Signature)	Items:	Date/Time

Send Lab Results To: WALTER HOWARD
RUST E & I
12 Metro Park Road
Albany, NY. 12205

Remarks: fax copy of results to Richard Burzinski - RUST, Palo Alto. 415/968-5365
Give verbals to Burzinski within 24 hrs.
Federal Express Airbill No.:
Lab:

Check Delivery Method:
- [x] Samples delivered in person
- [ ] Common carrier
- [ ] Mail

Laboratory Receiving Notes:
Custody Seal Intact? N/A
Temp. of Shipping Container: 10°C
Sample Condition: Good

Rev. 4/93 White Copy – Lab Yellow Copy – File Pink Copy – Client F514/Earth.Sci

APPENDIX D

Laboratory Analytical Report-Fractionation Tank Water Samples

Inchcape Testing Services
Anametrix Laboratories

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.

Todd Gringer for
Susan Kraska Yeager
Laboratory Director

11-29-94
Date

Cristina V. Rayburn
Project Manager

This report consists of 29 pages.

ANAMETRIX REPORT DESCRIPTION
GCMS

Organic Analysis Data Sheets (OADS)

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

Tentatively Identified Compounds (TICs)

TIC forms contain tabulated results for non-target compounds detected in GC/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 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:

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

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

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. Schwarz 11/28/94
Department Supervisor Date

Denise Powell 11-28-94
Chemist Date

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

Project ID : 35195.62
Sample ID : A4A-BKT1
Matrix : WATER
Date Sampled :11/22/94
Date Analyzed :11/25/94
Instrument ID : MSD1

Anametrix ID : 9411239-01
Analyst : DP
Supervisor : DC

Dilution Factor : 20.0
Conc. Units : ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	200.	ND	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
75-35-4	1,1-Dichloroethene	100.	ND	U
76-13-1	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	U
156-60-5	Trans-1,2-dichloroethene	100.	ND	U
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	U
78-87-5	1,2-Dichloropropane	100.	ND	U
75-27-4	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	U
591-78-6	2-Hexanone	200.	ND	U
124-48-1	Dibromochloromethane	100.	ND	U
108-90-7	Chlorobenzene	100.	ND	U
100-41-4	Ethylbenzene	100.	730.	
1330-20-7	Xylene (Total)	100.	6100.	
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.	ND	U
106-46-7	1,4-Dichlorobenzene	100.	ND	U
95-50-1	1,2-Dichlorobenzene	100.	ND	U

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

Project ID : 35195.62
Sample ID : A4A-BKT2
Matrix : WATER
Date Sampled :11/22/94
Date Analyzed :11/25/94
Instrument ID : MSD1

Anametrix ID : 9411239-02
Analyst : DM
Supervisor : DCS

Dilution Factor : 20.0
Conc. Units : ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	200.	ND	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
75-35-4	1,1-Dichloroethene	100.	ND	U
76-13-1	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	U
156-60-5	Trans-1,2-dichloroethene	100.	ND	U
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	U
78-87-5	1,2-Dichloropropane	100.	ND	U
75-27-4	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	U
591-78-6	2-Hexanone	200.	ND	U
124-48-1	Dibromochloromethane	100.	ND	U
108-90-7	Chlorobenzene	100.	ND	U
100-41-4	Ethylbenzene	100.	1100.	
1330-20-7	Xylene (Total)	100.	6700.	
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.	ND	U
106-46-7	1,4-Dichlorobenzene	100.	ND	U
95-50-1	1,2-Dichlorobenzene	100.	ND	U

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

Project ID : 35195.62
Sample ID : A4A-BKT3
Matrix : WATER
Date Sampled :11/22/94
Date Analyzed :11/25/94
Instrument ID : MSD1

Anametrix ID : 9411239-03
Analyst : DP
Supervisor : DS

Dilution Factor : 100.0
Conc. Units : ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	1000.	ND	U
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
75-35-4	1,1-Dichloroethene	500.	ND	U
76-13-1	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
75-34-3	1,1-Dichloroethane	500.	ND	U
156-59-2	Cis-1,2-dichloroethene	500.	ND	U
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
56-23-5	Carbon tetrachloride	500.	ND	U
108-05-4	Vinyl acetate	1000.	ND	U
71-43-2	Benzene	500.	ND	U
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
108-90-7	Chlorobenzene	500.	ND	U
100-41-4	Ethylbenzene	500.	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
95-50-1	1,2-Dichlorobenzene	500.	ND	U

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

Project ID : 35195.62
Sample ID : A4A-BKT4
Matrix : WATER
Date Sampled :11/22/94
Date Analyzed :11/25/94
Instrument ID : MSD1

Anametrix ID : 9411239-04
Analyst : DP
Supervisor : DLS

Dilution Factor : 100.0
Conc. Units : ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	1000.	ND	U
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
75-35-4	1,1-Dichloroethene	500.	ND	U
76-13-1	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
75-34-3	1,1-Dichloroethane	500.	ND	U
156-59-2	Cis-1,2-dichloroethene	500.	ND	U
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
56-23-5	Carbon tetrachloride	500.	ND	U
108-05-4	Vinyl acetate	1000.	ND	U
71-43-2	Benzene	500.	ND	U
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
108-90-7	Chlorobenzene	500.	ND	U
100-41-4	Ethylbenzene	500.	3900.	
1330-20-7	Xylene (Total)	500.	18000.	
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
95-50-1	1,2-Dichlorobenzene	500.	ND	U

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

Project ID : 35195.62
Sample ID : A4A-BKT5
Matrix : WATER
Date Sampled :11/22/94
Date Analyzed :11/25/94
Instrument ID : MSD1

Anametrix ID : 9411239-05
Analyst : DP
Supervisor : DLS

Dilution Factor : 20.0
Conc. Units : ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	200.	ND	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
75-35-4	1,1-Dichloroethene	100.	ND	U
76-13-1	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	U
156-60-5	Trans-1,2-dichloroethene	100.	ND	U
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	U
78-87-5	1,2-Dichloropropane	100.	ND	U
75-27-4	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	U
591-78-6	2-Hexanone	200.	ND	U
124-48-1	Dibromochloromethane	100.	ND	U
108-90-7	Chlorobenzene	100.	ND	U
100-41-4	Ethylbenzene	100.	ND	U
1330-20-7	Xylene (Total)	100.	2500.	
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.	ND	U
106-46-7	1,4-Dichlorobenzene	100.	ND	U
95-50-1	1,2-Dichlorobenzene	100.	ND	U

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

Project ID : 35195.62
Sample ID : A4A-BKT6
Matrix : WATER
Date Sampled :11/22/94
Date Analyzed :11/25/94
Instrument ID : MSD1

Anametrix ID : 9411239-06
Analyst : DP
Supervisor : DLS

Dilution Factor : 20.0
Conc. Units : ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	200.	ND	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
75-35-4	1,1-Dichloroethene	100.	ND	U
76-13-1	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	U
156-60-5	Trans-1,2-dichloroethene	100.	ND	U
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	U
78-87-5	1,2-Dichloropropane	100.	ND	U
75-27-4	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	U
591-78-6	2-Hexanone	200.	ND	U
124-48-1	Dibromochloromethane	100.	ND	U
108-90-7	Chlorobenzene	100.	ND	U
100-41-4	Ethylbenzene	100.	ND	U
1330-20-7	Xylene (Total)	100.	2500.	
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.	ND	U
106-46-7	1,4-Dichlorobenzene	100.	ND	U
95-50-1	1,2-Dichlorobenzene	100.	ND	U

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

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 : MP
Supervisor : DCS

Dilution Factor : 1.0
Conc. Units : ug/L

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	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.	ND	U
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
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.	ND	U
107-06-2	1,2-Dichloroethane	5.	ND	U
79-01-6	Trichloroethene	5.	ND	U
78-87-5	1,2-Dichloropropane	5.	ND	U
75-27-4	Bromodichloromethane	5.	ND	U
10061-01-5	Cis-1,3-dichloropropene	5.	ND	U
108-10-1	4-Methyl-2-pentanone	10.	ND	U
108-88-3	Toluene	5.	ND	U
10061-02-6	Trans-1,3-dichloropropene	5.	ND	U
79-00-5	1,1,2-Trichloroethane	5.	ND	U
127-18-4	Tetrachloroethene	5.	ND	U
591-78-6	2-Hexanone	10.	ND	U
124-48-1	Dibromochloromethane	5.	ND	U
108-90-7	Chlorobenzene	5.	ND	U
100-41-4	Ethylbenzene	5.	ND	U
1330-20-7	Xylene (Total)	5.	ND	U
100-42-5	Styrene	5.	ND	U
75-25-2	Bromoform	5.	ND	U
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	5.	ND	U

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

Project ID :
Sample ID : VBLKOL
Matrix : WATER
Date Sampled : 0/ 0/ 0
Date Analyzed : 11/25/94
Instrument ID : MSD1

Anametrix ID : BN2502A2
Analyst : DP
Supervisor : DLS

Dilution Factor : 1.0
Conc. Units : ug/L

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	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.	ND	U
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
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.	ND	U
107-06-2	1,2-Dichloroethane	5.	ND	U
79-01-6	Trichloroethene	5.	ND	U
78-87-5	1,2-Dichloropropane	5.	ND	U
75-27-4	Bromodichloromethane	5.	ND	U
10061-01-5	Cis-1,3-dichloropropene	5.	ND	U
108-10-1	4-Methyl-2-pentanone	10.	ND	U
108-88-3	Toluene	5.	ND	U
10061-02-6	Trans-1,3-dichloropropene	5.	ND	U
79-00-5	1,1,2-Trichloroethane	5.	ND	U
127-18-4	Tetrachloroethene	5.	ND	U
591-78-6	2-Hexanone	10.	ND	U
124-48-1	Dibromochloromethane	5.	ND	U
108-90-7	Chlorobenzene	5.	ND	U
100-41-4	Ethylbenzene	5.	ND	U
1330-20-7	Xylene (Total)	5.	ND	U
100-42-5	Styrene	5.	ND	U
75-25-2	Bromoform	5.	ND	U
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	5.	ND	U

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

Project ID : 35195.62
Matrix : LIQUID

Anametrix ID : 9411239
Analyst : DP
Supervisor : DLS

	SAMPLE ID	SU1	SU2	SU3
1	VBLKOL	95	103	101
2	VLCSPC	95	103	100
3	A4A-BKT3	96	102	98
4	T. BLANK	95	102	100
5	A4A-BKT1	95	103	99
6	A4A-BKT2	95	104	97
7	A4A-BKT4	96	102	100
8	A4A-BKT6	96	101	98
9	A4A-BKT5	95	103	98
10				
11				
12				
13				
14				
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25				
26				
27				
28				
29				
30				

	QC LIMITS
SU1 = 1,2-Dichloroethane-d4	(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
Matrix	: WATER	Analyst	: DF
Date Sampled	:	Supervisor	: DC
Date Analyzed	: 25 Nov 94 1:09 pm	SDG/Batch	:
Instrument ID	: MSD1	Sample ID	: VLCSPC @ 50ug/

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	%REC LIMITS
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

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 # : 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
Department : METALS
Sub-Department: METALS

QA/QC SUMMARY :

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

Department Supervisor 11/29/94 Date

Chemist 11/29/94 Date

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

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

Date Sampled: **11/22/94**
Analyst: SC
Supervisor: MW

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	**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**	
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**	

COMMENTS:

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

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

Date Sampled: **11/22/94**
Analyst: [illegible]
Supervisor: MW

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	**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**	
Copper	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	**ND**	
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**	
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	**116**	

COMMENTS:

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

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

Date Sampled: **11/22/94**
Analyst: JL
Supervisor: MN

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	**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**	

COMMENTS:

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

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

Date Sampled: **11/22/94**
Analyst:
Supervisor:

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	**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	**82.9**	

COMMENTS:

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

Anametrix Sample ID: **9411239-05**
Client Sample ID: **A4A-BKT5**
Client Project Number: **35195.624**
Matrix: **WATER**

Date Sampled: **11/22/94**
Analyst: JC
Supervisor: MW

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**	
Copper	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**	
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	**108**	

COMMENTS:

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

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

Date Sampled: **11/22/94**
Analyst: SC
Supervisor: MM

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	**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	**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	**73.4**	

COMMENTS:

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

Anametrix Sample ID: **BN234WB, BN234WC, BN234WA**
Anametrix WO #: **9411239**
Client Project Number: **35195.624**
Matrix: **WATER**

Analyst: SC
Supervisor: MP

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	ND	
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	ND	

COMMENTS:

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

Anametrix Sample ID: **9411239-02D**
Client Sample ID: **A4A-BKT2**
Client Project Number: **35195.624**
Matrix: **WATER**

Analyst: [illegible]
Supervisor: MM

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**	**48.5**	
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**	**N/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**	

COMMENTS:

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

Anametrix. Sample ID: **9411239-01MS,MD**
Client Sample ID: **A4A-BKT1**
Client Proj. Number: **35195.624**
Matrix: **WATER**

Analyst:
Supervisor:

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
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**	**1.9**	
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**	
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**	

COMMENTS:

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**

Analyst: SC
Supervisor: MN

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**	
Cobalt	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	**102**	
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**	

COMMENTS:

Inchcape Testing Services
Anametrix Laboratories

SAMPLE RECEIVING CHECKLIST

WORKORDER NUMBER: 9411239 CLIENT PROJECT ID: 35195.624

COOLER

Shipping slip (airbill, etc.) present? If YES, enter carrier name and airbill # :	YES	NO	(N/A)
Custody Seal on the outside of cooler? Condition: INTACT ____ BROKEN ____	YES	NO	(N/A)
Temperature of sample (s) within range? List temperature of cooler (s): 10°C	YES	(NO)	N/A

SAMPLES

Chain of custody seal present for each container? Condition: INTACT ____ BROKEN ____	YES	NO	(N/A)
Samples arrived within holding time?	(YES)	NO	N/A
Samples in proper containers for methods requested? Condition of containers: INTACT ✓ BROKEN ____ If NO, were samples transferred to proper container? ____	(YES)	NO	
Were VOA containers received with zero headspace? If NO, was it noted on the chain of custody? ____	(YES)	NO	N/A
Were container labels complete? (ID, date, time preservative, etc.)	(YES)	NO	
Were samples preserved with the proper preservative? If NO, was the proper preservative added at time of receipt? ____	(YES)	NO	N/A
pH check of samples required at time of receipt? If YES, pH checked and recorded by: [illegible]	(YES)	NO	
Sufficient amount of sample received for methods requested? If NO, has the client or lab project manager been notified? ____	(YES)	NO	
Field blanks received with sample batch? # of Sets: ____	YES	NO	(N/A)
Trip blanks received with sample batch? # of Sets: 1	(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 date?	(YES)	NO
Turnaround time? REGULAR ____ RUSH ✓		

Any NO response and/or any "BROKEN" that was checked must be detailed in the Corrective Action Form.

Sample Custodian: [signature] Date: 11/22/94 Project Manager: SW Date: 11/22/94

#11530

RUST ENVIRONMENT & INFRASTRUCTURE

WAHLER LABELS

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

9411239

(16) (10/13)

Chain of Custody Record

Custody Seal #	RUST E&I Cooler #

Project Number	Project Name/Client
35195.624	American National Can

Samplers: (Signature) Richard Burzynski

Item No.	Sample Description (Field ID Number)	Date	Time	Grab	Comp.	Lab Sample Number	Container Number	Analysis Required: EPA 8240	Analysis Required: CAM 17 Metals	Matrix: Sample Type: H_2O	Matrix: Sample Container: 500 ml plastic w/ HNO_3	Matrix: Sample Container: 40 ml VOAs w/ HCl
1	A4A - BKT 1	11/22/94	12:00					X	X	✓	1	3
2	A4A - BKT 2	↑	12:15					X	X	✓	1	3
3	A4A - BKT 3		12:25					X	X	✓	1	3
4	A4A - BKT 4		12:33					X	X	✓	1	3
5	A4A - BKT 5	↓	12:42					X	X	✓	1	3
6	A4A - BKT 6	11/22/94	12:52					X	X	✓	1	3
7	Travel Blank	11/22/94	11:00					X		✓		3
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Disposed of by: (Signature)	Items:	Date/Time
Richard Burzynski	11/22/94 1410				
Relinquished by: (Signature)	Date/Time	Received by: (Signature) [Laboratory]	Disposed of by: (Signature)	Items:	Date/Time

Send Lab Results To: Walter Howard
RUST E&I
12 Metro Park Road
Albany, N.Y. 12205

Remarks: fax a copy of results to: Richard Burzynski - RUST, Palo Alto - 415/968-5365
Verbals by Tuesday morn? 11/29/94?
Federal Express Airbill No.:
Lab:

Check Delivery Method:
- [x] Samples delivered in person
- [ ] Common carrier
- [ ] Mail

Laboratory Receiving Notes:
Custody Seal Intact? N/A
Temp. of Shipping Container: 10 C
Sample Condition: Good

Rev. 4/93 White Copy – Lab Yellow Copy – File Pink Copy – Client F514/Earth.Sci