# Soil Investigation and Remediation Activities Report Former ANC Facility - Building 12 Oakland, California

Prepared for:
American National Can Company
Chicago, Illinois

Prepared by:
RUST Environment & Infrastructure
Albany, New York

**February 1, 1995**

QUALITY
♦
INTEGRITY
♦
CREATIVITY
♦
RESPONSIVENESS

RUST ENVIRONMENT & INFRASTRUCTURE

# TABLE OF CONTENTS



## LIST OF FIGURES

Figure



## LIST OF TABLES

Table



## LIST OF APPENDICES

Appendix

## 1.0 INTRODUCTION

This report summarizes the results of a soil investigation and subsequent soil remediation conducted at the northern end of former Building 12 located at the Former ANC Facility in Oakland, California. The soil investigation was conducted on September 27, 1994 by RUST Environment and Infrastructure, Inc. (RUST) for American National Can Company (ANC), to evaluate the extent of impacted soil reportedly encountered during plant demolition activities. Based on the results of this investigation, potentially impacted soil was excavated on November 11, 1994 by HSR, Inc. under the direction of RUST. A summary of the excavation activities and the results of post excavation sampling is included in this report.

The soil investigation and remediation were conducted in accordance with the approved Remedial Work Plan for Areas 2 and 4.

## 2.0 SOIL INVESTIGATION

The soil investigation included the drilling and sampling of nine test borings (T-1 through T-4 and S-1 through S-5) to a depth of approximately six feet. Figure 1 shows the locations of the nine borings. Borings T-1 and S-1 were drilled immediately adjacent to the respective T-1 and S-1 samples collected by PES Environmental, Inc. in June and July, 1994. A PES representative provided RUST personnel with their sampling locations. The remaining borings were located on a grid with 15-foot centers surrounding borings T-1 and S-1.

Soil samples were collected from each boring on a continuous basis using percussion-driven soil coring equipment. The 2-1/4-inch casing was fitted with a brass liner to facilitate the preparation of samples retained for possible laboratory analysis. The end of each soil sample was screened with a photoionization detector (PID) for the presence of volatile organic compounds (VOCs) as it was retrieved from the borehole. Headspace screening was performed on selected samples by placing the liner contents in a plastic bag, loosening the soil and setting the bag in the sun for 15 minutes. The headspace inside the bag was then screened with the PID and the result recorded on the boring log. Based on headspace screening, soil samples were selected for laboratory analysis. These samples were sealed with end caps, labeled and placed in a cooler on ice for transport to the laboratory. Each sample was analyzed for total petroleum hydrocarbons (TPH) as mineral spirits by modified EPA Method 8015 following California Department of Health Services (Cal-DHS) approved methods. Detailed soil boring logs are provided in Appendix A which depict subsurface conditions and indicate the soil sampling intervals selected for laboratory analysis. The logs also show the results of soil headspace analysis.

The results of soil headspace and laboratory analysis are summarized on Table 1 and the laboratory report is provided in Appendix B. Soil samples collected from borings S-1 (6.0 feet deep), S-5 (5.0 feet deep) and T-4 (5.0 feet deep) contained mineral spirits at a concentration of less than 1 part per million (ppm). Mineral spirits were detected in the sample collected at 3.0 feet from boring S-4 at 9.7 ppm. The sample collected at 6.5 feet from boring T-1 was reported to contain 1,700 ppm of mineral spirits. All other samples collected did not reveal the presence of mineral spirits at the detection limit of 0.5 ppm.

Based on laboratory analytical results, a contour map (Figure 2) was prepared to present the lateral and vertical extent of potentially impacted soil. The values used in contouring reflect the deepest contamination that was detected, based on laboratory analytical results and PID headspace screening results. The amount of soil delineated as potentially impacted was estimated at 125 to 150 cubic yards.

## 3.0 SOIL REMEDIATION ACTIVITIES

On November 11, 1994, soil was excavated from the area shown on Figure 3. The limits of the excavation were nearly equal to that projected on Figure 2. Approximately 150 cubic yards of soil was excavated and stockpiled on polyethylene sheeting alongside a separate stockpile of soil excavated from Area 4.

RUST collected five post excavation samples in a manner consistent with the approved Remedial Work Plan for Areas 2 and 4 to confirm that impacted soil had been removed to the maximum extent feasible. The samples were collected at intervals of 20 feet along the excavation walls (4 samples) and one sample was sufficient to test the floor of the excavation. The samples were analyzed for mineral spirits and for total petroleum hydrocarbons as gasoline (TPHg) by modified EPA Method 8015 following Cal-DHS approved methods. Samples were not tested for BTEX (benzene, toluene, ethylbenzene, and xylenes) as these specific compounds have been previously shown to be present in the groundwater flowing into this area from the Ekotek Lube property. Through volatilization off the floating product on the water table, detection of these compounds in Building 12 soil could as much reflect impacts from Ekotek Lube sources as they would the suspected Building 12 source (mineral spirits).

The results of post-excavation sample analysis are summarized on Table 2 and the laboratory report is provided in Appendix C. Mineral spirits were detected in post excavation sample B12-2 at a concentration of 8.8 ppm, in sample B12-3 at a concentration of 0.8 ppm, and were not detected in the other three samples. TPHg was not detected in any of the five samples. These data demonstrate that the excavation activities were sufficient to effectively remediate the impacted soil to the maximum extent feasible. The excavation was backfilled on November 22, 1995 with clean fill material from an off-site source.

## 4.0 SAMPLING AND ANALYSIS OF STOCKPILED SOIL

Excavated soil from the northern end of former Building 12 was stockpiled on plastic sheeting adjacent to Area 4 stockpiled soil. On November 14, 1994, RUST personnel collected a sample of the Building 12 stockpiled soil to characterize the waste for disposal. The sample, B12SS, was analyzed for volatile organics by EPA Method 8240 and mineral spirits by modified EPA Method 8015 following Cal-DHS approved methods.

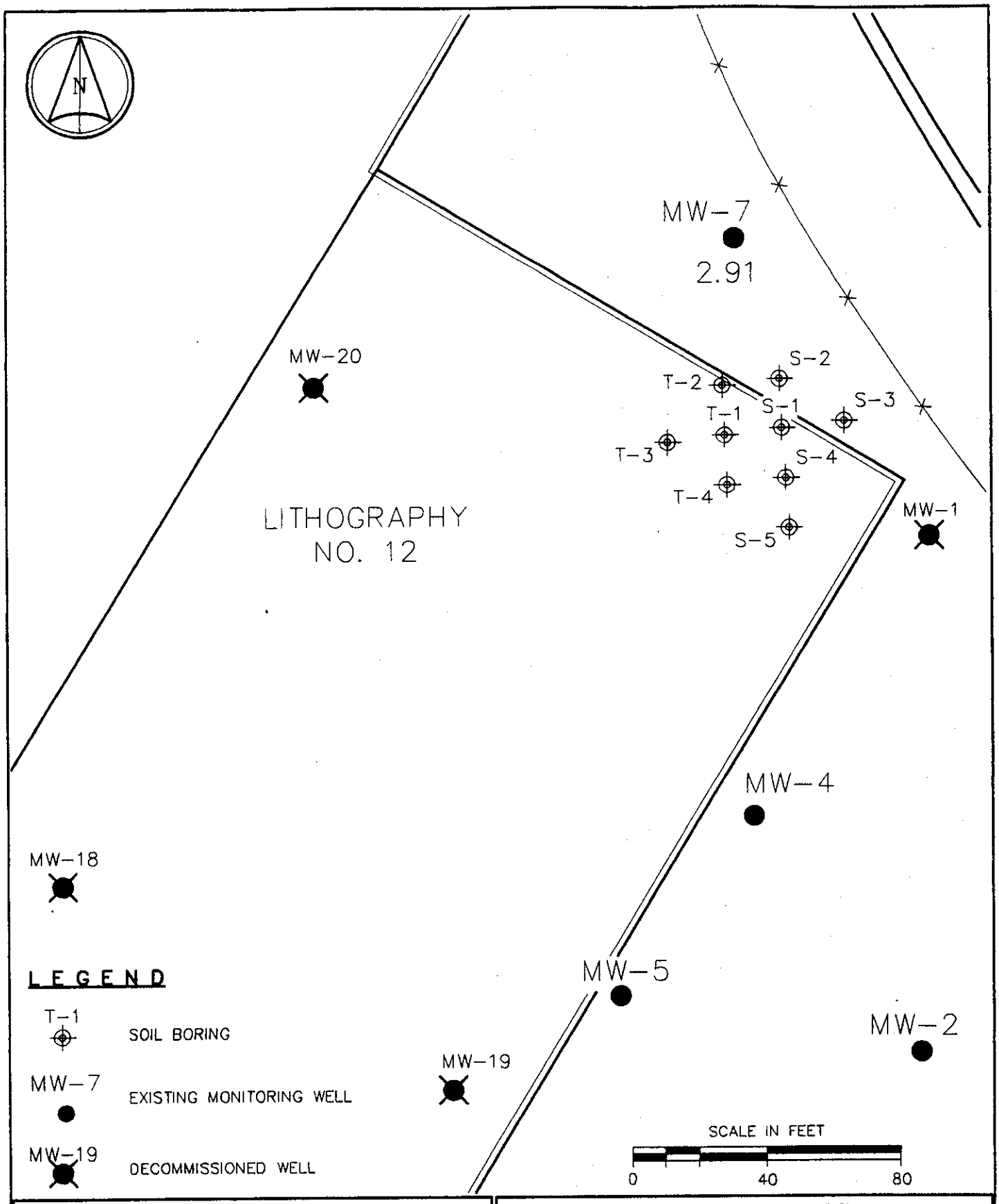
The results of these analyses are included in Appendix D. Mineral spirits were detected in sample B12SS at a concentration of 3.4 ppm. Volatile organics were not detected in the sample. The acetone concentration reported in the results was also detected in the laboratory method blank sample and is therefore considered associated with laboratory contamination and not site-related.

Based on these results, the soil may be characterized the same as Area 4 soil. RUST is currently evaluating options for off-site disposal of this soil.

## 5.0 CONCLUSION

Based on the results of the soil investigation and post-excavation sampling, the soil remediation at the northern end of former Building 12 is considered to be adequate and no additional action is recommended for this area.

# FIGURES

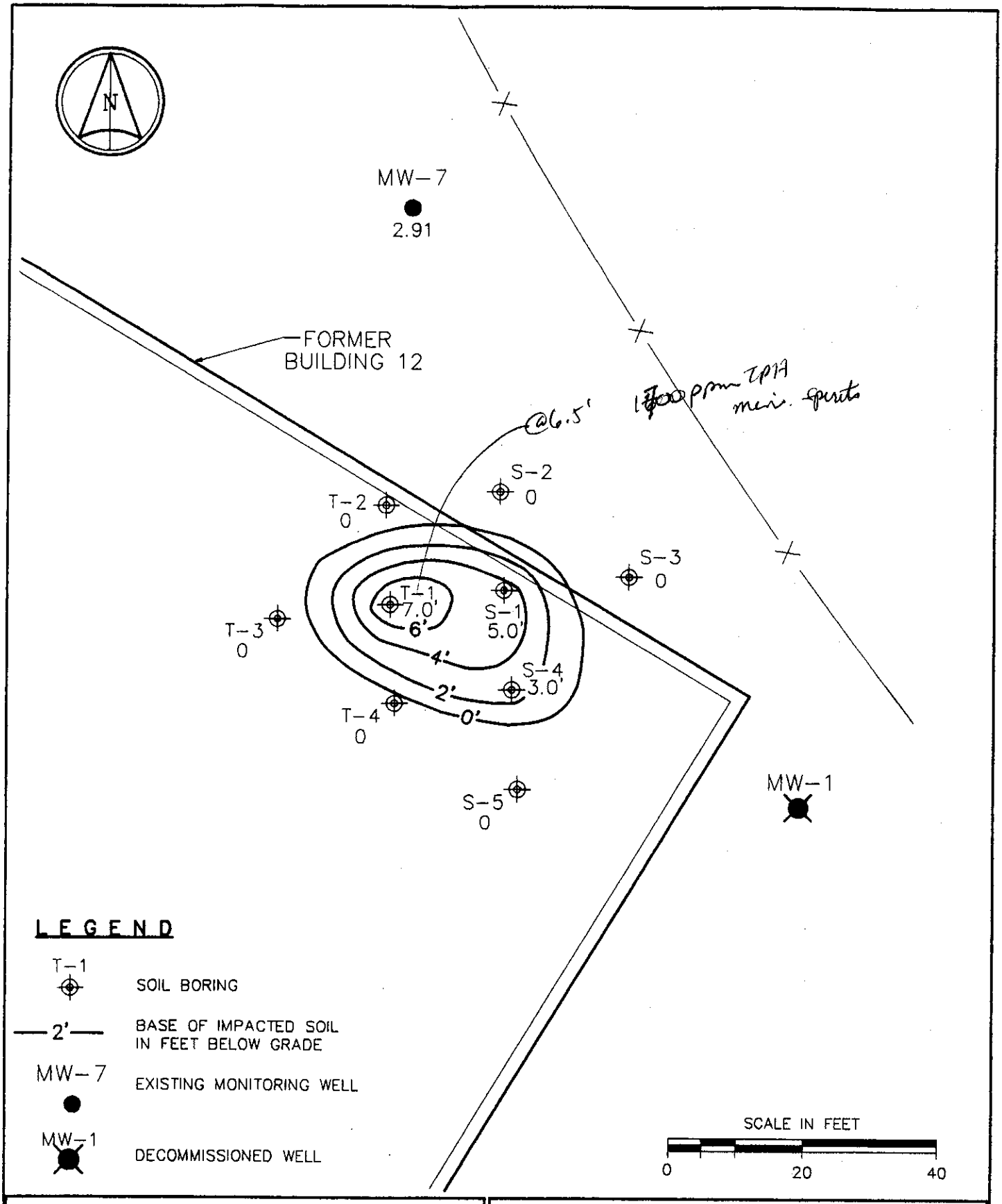



RUST ENVIRONMENT & INFRASTRUCTURE

BUILDING 12 INVESTIGATION
SOIL BORING LOCATION MAP

**AMERICAN NATIONAL CAN COMPANY**
FORMER OAKLAND CALIFORNIA PLANT

| PROJECT NO. 35195.630 | DATE 10/94 | DWG. NO. 35195-07 | SCALE 1"=40' | FIGURE NO. 1 |
|---|---|---|---|---|

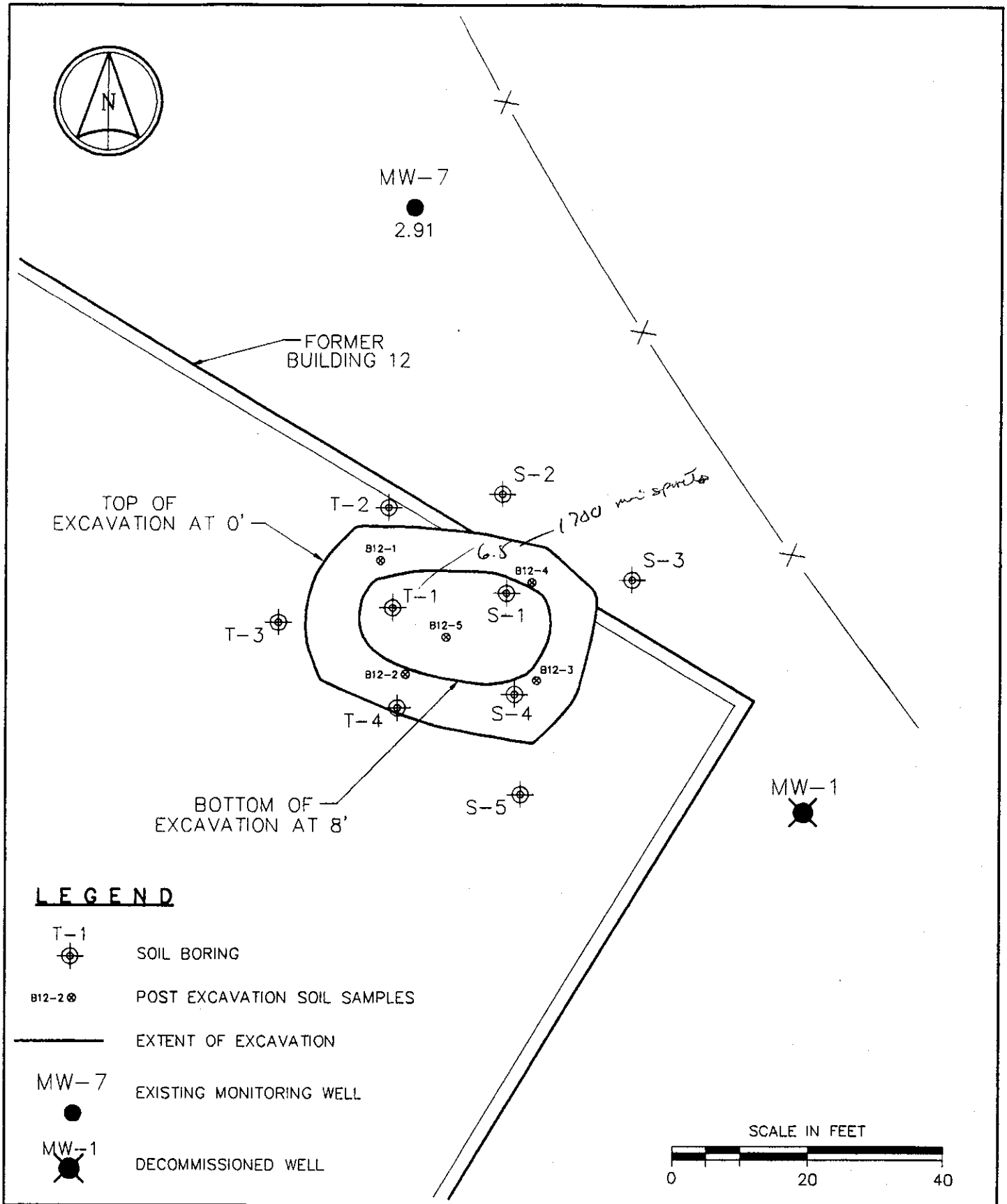



RUST ENVIRONMENT & INFRASTRUCTURE

EXTENT OF POTENTIAL SOIL CONTAMINATION

**AMERICAN NATIONAL CAN COMPANY**
FORMER OAKLAND CALIFORNIA PLANT

| PROJECT NO. 35195.630 | DATE 10/94 | DWG. NO. 35195-08 | SCALE 1"=20' | FIGURE NO. 2 |
|---|---|---|---|---|




RUST ENVIRONMENT & INFRASTRUCTURE

EXTENT OF EXCAVATION AND LOCATION OF POST EXCAVATION SAMPLES

**AMERICAN NATIONAL CAN COMPANY**

FORMER OAKLAND CALIFORNIA PLANT

| PROJECT NO. 35195.630 | DATE 11/94 | DWG. NO. 35195-09 | SCALE 1"=20' | FIGURE NO. 3 |
|---|---|---|---|---|

# TABLES

# TABLE 1

## SUMMARY OF SOIL BORING SAMPLE ANALYSIS

## AMERICAN NATIONAL CAN COMPANY
**Former Oakland California Plant**

| BORING ID | SAMPLING INTERVAL (FEET) | HEADSPACE ANALYSIS VOCs (PPM) | LABORATORY ANALYSIS MINERAL SPIRITS (PPM) |
|---|---|---|---|
| **S-1** | 2.5-3 | 9.8 | - |
| | 4-4.5 | 6.5 | - |
| | 4.5-5 | 32 | - |
| | 5-5.5 | 2.3 | - |
| | 5.5-6 | 3.1 | - |
| | 6-6.5 | - | 0.84 |
| **S-2** | 1-1.5 | 1.7 | - |
| | 2.5-3 | 1.8 | - |
| | 4-4.5 | - | <0.5 |
| **S-3** | 1-1.5 | 1.6 | - |
| | 2.5-3 | 1.1 | - |
| | 3.5-4 | 0.5 | - |
| | 4-4.5 | - | <0.5 |
| | 5-5.5 | 0.5 | - |
| **S-4** | 1-1.5 | 1.1 | - |
| | 2.5-3 | 149 | - |
| | 3-3.5 | - | 9.7 |
| | 4-4.5 | 0.6 | - |
| | 4.5-5 | - | <0.5 |
| **S-5** | 1-1.5 | 1 | - |
| | 2.5-3 | 0.9 | - |
| | 4.5-5 | 6.6 | - |
| | 5-5.5 | - | 0.67 |
| **T-1** | 1-1.5 | 3 | - |
| | 2.5-3 | 11.5 | - |
| | 6.5-7 | - | 1700 |
| **T-2** | 1-1.5 | 1.8 | - |
| | 1.5-2 | 1.6 | - |
| | 2-2.5 | - | <0.5 |
| | 4-4.5 | - | <0.5 |
| **T-3** | 1-1.5 | 2 | - |
| | 2.5-3 | 1.2 | - |
| | 4.5-5 | 1.8 | - |
| | 5-5.5 | - | <0.5 |
| **T-4** | 1-1.5 | 1 | - |
| | 2.5-3 | 5.2 | - |
| | 5-5.5 | - | 0.62 |

- Not analyzed

# TABLE 2

## SUMMARY OF POST EXCAVATION SAMPLE ANALYSIS

## AMERICAN NATIONAL CAN COMPANY
**Former Oakland California Plant**

| SAMPLE ID | LABORATORY ANALYSIS MINERAL SPIRITS (PPM) | TPH as GASOLINE (PPM) |
|---|---|---|
| **B12-1** | <0.5 | <0.5 |
| **B12-2** | 8.8 | <0.5 |
| **B12-3** | 0.8 | <0.5 |
| **B12-4** | <0.5 | <0.5 |
| **B12-5** | <0.5 | <0.5 |

↑ Samples taken @ ~ 8' below T-1 (6.5')

# APPENDICIES

# APPENDIX A

# BORING LOGS

| BORING LOCATION: ANC - Building 12 | | APPROVED BY: RAB | GROUND EL: |
|---|---|---|---|
| DEPTH/ELEV.WATER : NA | DRILL CONTRACTOR: Precision Drilling | | TOTAL DEPTH: 7.0' |
| DRILL RIG: MD-1 | BORING DIA.: 2-1/4" | DATE DRILLED: 9/27/94 | LOGGED BY: RAB |

| SOIL CLASS | DESCRIPTION | DEPTH | SAMPLE NO. | PR / RQD | REC. | MODE | REMARKS |
|---|---|---|---|---|---|---|---|
| GW | 0'-1' Baserock and residual crushed concrete. | 0 | | | | | Advanced 2-1/4" outer casing by percussion drilling (PD). |
| | 1'-5' SILTY GRAVEL W/SAND: moderate yellowish brown; dry; medium dense. | | | | | PD | Placed cuttings in plastic bag and analyzed headspace with photoionization detector (PID). Measured organic vapors in parts per million (ppm). |
| GM | | 2 | | | | | |
| | | | | | 100% | | 2.5'-3.0': PID = 9.8 ppm |
| | 5'-5.25' GRAVELLY CLAY: moderate yellowish brown (10 YR 5/4); damp; stiff; moderate plasticity; sweet hydrocarbon odor. | 4 | | | | | 4.0'-4.5': PID = 6.5 ppm<br>4.5'-5.0': PID = 32 ppm<br>5.0'-5.5': PID = 2.3 ppm |
| CL | | | | | | | 5.5'-6.0': PID = 3.1 ppm |
| GM | 5.25'-6.75' SILTY GRAVEL W/SAND: same as 1'-5' interval. | 6 | S1-6.0 | | | | |
| CH | 6.75'-7.0' CLAY: dusky brown; damp; stiff; high plasticity. | | PES | | | | |
| | Terminated boring at 7.0'. | 8 | | | | | Grouted hole to surface with neat cement mix. |
| | | 10 | | | | | |
| | | 12 | | | | | |
| | | 14 | | | | | |
| | | 16 | | | | | |
| | | 18 | | | | | |
| | | 20 | | | | | |

DATA ON THIS LOG ARE AN APPROXIMATION OF THE GEOLOGIC AND SUBSURFACE CONDITIONS BECAUSE THE INFORMATION WAS OBTAINED FROM INDIRECT, DISCONTINUOUS, AND POSSIBLY DISTURBED SAMPLING NECESSITATED BY USE OF SMALL- DIAMETER HOLES. ROTARY AND WASH BORING HOLES HAVE FURTHER COMPLICATIONS IN THIS REGARD BECAUSE OF THE NEED TO USE DRILLING FLUID AND/OR CASING IN ADVANCING HOLES.

THIS LOG INDICATES CONDITIONS IN THIS HOLE ONLY ON THE DATE INDICATED AND MAY NOT REPRESENT CONDITIONS AT OTHER LOCATIONS AND ON OTHER DATES. ANY WATER LEVELS SHOWN ARE SUBJECT TO VARIATION.

THIS HOLE WAS LOGGED IN SUCH A WAY AS TO PROVIDE DATA PRIMARILY FOR DESIGN PURPOSES AND NOT NECESSARILY FOR THE PURPOSES OF SPECIFIC CONTRACTORS.

THE STRATIFICATION LINES OR DEPTH INTERVALS REPRESENT THE APPROXIMATE BOUNDARIES BETWEEN MATERIAL TYPES, AND THE TRANSITIONS MAY BE GRADUAL.

SOIL CLASSIFICATIONS SHOWN ON LOGS ARE FIELD CLASSIFICATIONS BASED ON THE UNIFIED SOILS CLASSIFICATION SYSTEM.

| RUST ENVIRONMENT & INFRASTRUCTURE | AMERICAN NATIONAL CAN<br>OAKLAND, CALIFORNIA<br>BUILDING 12 | EXPLORATION BORING LOG | | BORING NO. |
|---|---|---|---|---|
| | | PROJECT NO. | SHEET: | |
| | | 35195.650 | 1 of 1 | S-1 |

| BORING LOCATION: ANC - Building 12 | | APPROVED BY: RAB | GROUND EL: |
|---|---|---|---|
| DEPTH/ELEV.WATER : NA | DRILL CONTRACTOR: Precision Drilling | | TOTAL DEPTH: 6.0' |
| DRILL RIG: MD-1 | BORING DIA.: 2-1/4" | DATE DRILLED: 9/27/94 | LOGGED BY: RAB |

| SOIL CLASS | DESCRIPTION | DEPTH | SAMPLE NO. | PR/RQD | REC. | MODE | REMARKS |
|---|---|---|---|---|---|---|---|
| GW | 0'-1' Baserock and residual crushed concrete. | 0 | | | | PD | Advanced 2-1/4" outer casing by percussion drilling (PD). Placed cuttings in plastic bag and analyzed headspace with photoionization detector (PID). Measured organic vapors in parts per million (ppm). |
| CL | 1'-2' SILTY CLAY w/trace sand: moderate olive brown (5 Y 4/9) with dusky brown (5 YR 2/2) concretions; damp; stiff; moderate plasticity. | 2 | | | | | |
| CH | 2.0'-5.0' CLAY: dusky brown (5 YR 2/2); damp; stiff; high plasticity. 5.0'-5.5' CLAY: dark yellowish brown (10 YR 4/2) w/dusky brown (5 yr 2/2) concretions; damp; stiff; inclusions of weathered rock fragments. | 4 | S2-4.0 PES | | 100% | | 1.0'-1.5': PID = 1.7 ppm 2.5'-3.0': PID = 1.8 ppm |
| GM CH | 5.5'-6.0' SILTY CLAY: moderate yellowish brown (10 YR 5/4); damp; firm; moderate plasticity; 5% sand. | 6 | | | | | |
| | Terminated boring at 6.0'. | | | | | | Grouted hole to surface with neat cement mix. |
| | | 8 | | | | | |
| | | 10 | | | | | |
| | | 12 | | | | | |
| | | 14 | | | | | |
| | | 16 | | | | | |
| | | 18 | | | | | |
| | | 20 | | | | | |

DATA ON THIS LOG ARE AN APPROXIMATION OF THE GEOLOGIC AND SUBSURFACE CONDITIONS BECAUSE THE INFORMATION WAS OBTAINED FROM INDIRECT, DISCONTINUOUS, AND POSSIBLY DISTURBED SAMPLING NECESSITATED BY USE OF SMALL- DIAMETER HOLES. ROTARY AND WASH BORING HOLES HAVE FURTHER COMPLICATIONS IN THIS REGARD BECAUSE OF THE NEED TO USE DRILLING FLUID AND/OR CASING IN ADVANCING HOLES.

THIS LOG INDICATES CONDITIONS IN THIS HOLE ONLY ON THE DATE INDICATED AND MAY NOT REPRESENT CONDITIONS AT OTHER LOCATIONS AND ON OTHER DATES. ANY WATER LEVELS SHOWN ARE SUBJECT TO VARIATION.

THIS HOLE WAS LOGGED IN SUCH A WAY AS TO PROVIDE DATA PRIMARILY FOR DESIGN PURPOSES AND NOT NECESSARILY FOR THE PURPOSES OF SPECIFIC CONTRACTORS.

THE STRATIFICATION LINES OR DEPTH INTERVALS REPRESENT THE APPROXIMATE BOUNDARIES BETWEEN MATERIAL TYPES, AND THE TRANSITIONS MAY BE GRADUAL.

SOIL CLASSIFICATIONS SHOWN ON LOGS ARE FIELD CLASSIFICATIONS BASED ON THE UNIFIED SOILS CLASSIFICATION SYSTEM.

| RUST ENVIRONMENT & INFRASTRUCTURE | AMERICAN NATIONAL CAN OAKLAND, CALIFORNIA BUILDING 12 | EXPLORATION BORING LOG | | BORING NO. |
|---|---|---|---|---|
| | | PROJECT NO. 35195.650 | SHEET: 1 of 1 | S-2 |

| BORING LOCATION: ANC - Building 12 | | APPROVED BY: RAB | GROUND EL: |
|---|---|---|---|
| DEPTH/ELEV.WATER : NA | DRILL CONTRACTOR: Precision Drilling | | TOTAL DEPTH: 6.0' |
| DRILL RIG: MD-1 | BORING DIA.: 2-1/4" | DATE DRILLED: 9/27/94 | LOGGED BY: RAB |

| SOIL CLASS | DESCRIPTION | DEPTH | SAMPLE NO. | PR / RQD | REC. | MODE | REMARKS |
|---|---|---|---|---|---|---|---|
| GW | 0'-0.5' Baserock and residual crushed concrete. | 0 | | | | PD | Advanced 2-1/4" outer casing by percussion drilling (PD). Placed cuttings in plastic bag and analyzed headspace with photoionization detector (PID). Measured organic vapors in parts per million (ppm). |
| CL | .5'-1.0' SILTY CLAY w/gravel: moderate olive brown (5 Y 4/4) with dusky brown (5 YR 2/2) concretions; damp; stiff; moderate plasticity. | | | | | | |
| CH | 1.0'-3.5' CLAY: dusky brown (5 YR 2/2); damp; stiff; high plasticity. | 2 | | | | | |
| CL | 3.5'-4.0' SILTY CLAY: moderate olive brown (5 Y 4/4) w/dusky brown (5 YR 2/2) concretions; damp; stiff; moderate plasticity. | 4 | S3-4.0 | | 100% | | 1.0'-1.5': PID = 1.6 ppm<br>2.5'-3.0': PID = 1.1 ppm<br>3.5'-4.0': PID = 0.5 ppm<br>5.0'-5.5': PID = 0.5 ppm |
| CL | 4.0'-6.0' SILTY CLAY: moderate olive brown (5 Y 4/4); damp; stiff; moderate plasticity; trace gravel. | | PES | | | | |
| | Terminated boring at 6.0'. | 6 | | | | | Grouted hole to surface with neat cement mix. |
| | | 8 | | | | | |
| | | 10 | | | | | |
| | | 12 | | | | | |
| | | 14 | | | | | |
| | | 16 | | | | | |
| | | 18 | | | | | |
| | | 20 | | | | | |

DATA ON THIS LOG ARE AN APPROXIMATION OF THE GEOLOGIC AND SUBSURFACE CONDITIONS BECAUSE THE INFORMATION WAS OBTAINED FROM INDIRECT, DISCONTINUOUS, AND POSSIBLY DISTURBED SAMPLING NECESSITATED BY USE OF SMALL- DIAMETER HOLES. ROTARY AND WASH BORING HOLES HAVE FURTHER COMPLICATIONS IN THIS REGARD BECAUSE OF THE NEED TO USE DRILLING FLUID AND/OR CASING IN ADVANCING HOLES.

THIS LOG INDICATES CONDITIONS IN THIS HOLE ONLY ON THE DATE INDICATED AND MAY NOT REPRESENT CONDITIONS AT OTHER LOCATIONS AND ON OTHER DATES. ANY WATER LEVELS SHOWN ARE SUBJECT TO VARIATION.

THIS HOLE WAS LOGGED IN SUCH A WAY AS TO PROVIDE DATA PRIMARILY FOR DESIGN PURPOSES AND NOT NECESSARILY FOR THE PURPOSES OF SPECIFIC CONTRACTORS.

THE STRATIFICATION LINES OR DEPTH INTERVALS REPRESENT THE APPROXIMATE BOUNDARIES BETWEEN MATERIAL TYPES, AND THE TRANSITIONS MAY BE GRADUAL.

SOIL CLASSIFICATIONS SHOWN ON LOGS ARE FIELD CLASSIFICATIONS BASED ON THE UNIFIED SOILS CLASSIFICATION SYSTEM.

| RUST ENVIRONMENT & INFRASTRUCTURE | AMERICAN NATIONAL CAN<br>OAKLAND, CALIFORNIA<br>BUILDING 12 | EXPLORATION BORING LOG | | BORING NO. |
|---|---|---|---|---|
| | | PROJECT NO. | SHEET: | |
| | | 35195.650 | 1 of 1 | S-3 |

| BORING LOCATION: ANC - Building 12 | | APPROVED BY: RAB | GROUND EL: |
|---|---|---|---|
| DEPTH/ELEV.WATER : NA | DRILL CONTRACTOR: Precision Drilling | | TOTAL DEPTH: 6.0' |
| DRILL RIG: MD-1 | BORING DIA.: 2-1/4" | DATE DRILLED: 9/27/94 | LOGGED BY: RAB |

| SOIL CLASS | DESCRIPTION | DEPTH | SAMPLE NO. | PR/RQD | REC. | MODE | REMARKS |
|---|---|---|---|---|---|---|---|
| GW | 0'-.5' Baserock and residual crushed concrete. | 0 | | | | PD | Advanced 2-1/4" outer casing by percussion drilling (PD). Placed cuttings in plastic bag and analyzed headspace with photoionization detector (PID). Measured organic vapors in parts per million (ppm). |
| GM | .5'-2.5' SILTY GRAVEL w/sand: moderate yellowish brown; dry; medium dense. | 2 | | | | | |
| CL | 2.5'-4.5' GRAVELLY CLAY: moderate yellowish brown (10 YR 5/4); damp; stiff; moderate plasticity. | 4 | S4-3.0 PES | | 100% | | 1.0'-1.5': PID = 1.1 ppm<br>2.5'-3.0': PID = 149 ppm<br>4.0'-4.5': PID = 0.6 ppm |
| CL | 4.5'-6.0' SILTY CLAY: moderate olive brown (5 Y 4/4); damp; stiff; moderate plasticity; trace gravel. | 6 | S4-4.5 PES | | | | |
| | Terminated boring at 6.0'. | 8 | | | | | Grouted hole to surface with neat cement mix. |
| | | 10 | | | | | |
| | | 12 | | | | | |
| | | 14 | | | | | |
| | | 16 | | | | | |
| | | 18 | | | | | |
| | | 20 | | | | | |

DATA ON THIS LOG ARE AN APPROXIMATION OF THE GEOLOGIC AND SUBSURFACE CONDITIONS BECAUSE THE INFORMATION WAS OBTAINED FROM INDIRECT, DISCONTINUOUS, AND POSSIBLY DISTURBED SAMPLING NECESSITATED BY USE OF SMALL- DIAMETER HOLES. ROTARY AND WASH BORING HOLES HAVE FURTHER COMPLICATIONS IN THIS REGARD BECAUSE OF THE NEED TO USE DRILLING FLUID AND/OR CASING IN ADVANCING HOLES.

THIS LOG INDICATES CONDITIONS IN THIS HOLE ONLY ON THE DATE INDICATED AND MAY NOT REPRESENT CONDITIONS AT OTHER LOCATIONS AND ON OTHER DATES. ANY WATER LEVELS SHOWN ARE SUBJECT TO VARIATION.

THIS HOLE WAS LOGGED IN SUCH A WAY AS TO PROVIDE DATA PRIMARILY FOR DESIGN PURPOSES AND NOT NECESSARILY FOR THE PURPOSES OF SPECIFIC CONTRACTORS.

THE STRATIFICATION LINES OR DEPTH INTERVALS REPRESENT THE APPROXIMATE BOUNDARIES BETWEEN MATERIAL TYPES, AND THE TRANSITIONS MAY BE GRADUAL.

SOIL CLASSIFICATIONS SHOWN ON LOGS ARE FIELD CLASSIFICATIONS BASED ON THE UNIFIED SOILS CLASSIFICATION SYSTEM.

| RUST ENVIRONMENT & INFRASTRUCTURE | AMERICAN NATIONAL CAN OAKLAND, CALIFORNIA BUILDING 12 | EXPLORATION BORING LOG | | BORING NO. |
|---|---|---|---|---|
| | | PROJECT NO. | SHEET: | |
| | | 35195.650 | 1 of 1 | S-4 |

| BORING LOCATION: ANC - Building 12 | | APPROVED BY: RAB | GROUND EL: |
|---|---|---|---|
| DEPTH/ELEV.WATER : NA | DRILL CONTRACTOR: Precision Drilling | | TOTAL DEPTH: 6.0' |
| DRILL RIG: MD-1 | BORING DIA.: 2-1/4" | DATE DRILLED: 9/27/94 | LOGGED BY: RAB |

| SOIL CLASS | DESCRIPTION | DEPTH | SAMPLE NO. | PR / RQD | REC. | MODE | REMARKS |
|---|---|---|---|---|---|---|---|
| GM | 0'-4.5'? SILTY GRAVEL w/sand: moderate yellowish brown; dry; medium dense. | 0 | | | 100% | PD | Advanced 2-1/4" outer casing by percussion drilling (PD). Placed cuttings in plastic bag and analyzed headspace with photoionization detector (PID). Measured organic vapors in parts per million (ppm). |
| | | 2 | | | 67% | | 1.0'-1.5': PID = 1.0 ppm |
| CH | 4.5'?-5.5' CLAY: dusky brown; damp; stiff; high plasticity. | 4 | | | 50% | | 2.5'-3.0': PID = 0.9 ppm |
| CL | 5.5'-6.0' SILTY CLAY: moderate yellowish brown; damp; firm; moderate plasticity. | 6 | S5-5.0 PES | | | | 4.5'-5.0': PID = 6.6 ppm |
| | Terminated boring at 6.0'. | | | | | | Grouted hole to surface with neat cement mix. |
| | | 8 | | | | | |
| | | 10 | | | | | |
| | | 12 | | | | | |
| | | 14 | | | | | |
| | | 16 | | | | | |
| | | 18 | | | | | |
| | | 20 | | | | | |

DATA ON THIS LOG ARE AN APPROXIMATION OF THE GEOLOGIC AND SUBSURFACE CONDITIONS BECAUSE THE INFORMATION WAS OBTAINED FROM INDIRECT, DISCONTINUOUS, AND POSSIBLY DISTURBED SAMPLING NECESSITATED BY USE OF SMALL-DIAMETER HOLES. ROTARY AND WASH BORING HOLES HAVE FURTHER COMPLICATIONS IN THIS REGARD BECAUSE OF THE NEED TO USE DRILLING FLUID AND/OR CASING IN ADVANCING HOLES.

THIS LOG INDICATES CONDITIONS IN THIS HOLE ONLY ON THE DATE INDICATED AND MAY NOT REPRESENT CONDITIONS AT OTHER LOCATIONS AND ON OTHER DATES. ANY WATER LEVELS SHOWN ARE SUBJECT TO VARIATION.

THIS HOLE WAS LOGGED IN SUCH A WAY AS TO PROVIDE DATA PRIMARILY FOR DESIGN PURPOSES AND NOT NECESSARILY FOR THE PURPOSES OF SPECIFIC CONTRACTORS.

THE STRATIFICATION LINES OR DEPTH INTERVALS REPRESENT THE APPROXIMATE BOUNDARIES BETWEEN MATERIAL TYPES, AND THE TRANSITIONS MAY BE GRADUAL.

SOIL CLASSIFICATIONS SHOWN ON LOGS ARE FIELD CLASSIFICATIONS BASED ON THE UNIFIED SOILS CLASSIFICATION SYSTEM.

| RUST ENVIRONMENT & INFRASTRUCTURE | AMERICAN NATIONAL CAN OAKLAND, CALIFORNIA BUILDING 12 | EXPLORATION BORING LOG | | BORING NO. |
|---|---|---|---|---|
| | | PROJECT NO. | SHEET: | |
| | | 35195.650 | 1 of 1 | S-5 |

| BORING LOCATION: ANC - Building 12 | | APPROVED BY: RAB | GROUND EL: |
|---|---|---|---|
| DEPTH/ELEV.WATER : NA | DRILL CONTRACTOR: Precision Drilling | | TOTAL DEPTH: 7.5' |
| DRILL RIG: MD-1 | BORING DIA.: 2-1/4" | DATE DRILLED: 9/27/94 | LOGGED BY: RAB |

| SOIL CLASS | DESCRIPTION | DEPTH | SAMPLE NO. | PR / RQD | REC. | MODE | REMARKS |
|---|---|---|---|---|---|---|---|
| GW | 0'-1' Baserock and residual crushed concrete. | 0 | | | | | Advanced 2-1/4" outer casing by percussion drilling (PD). |
| | | | | | 100% | PD | |
| GM | 1'-6.5'? SILTY GRAVEL w/sand: moderate yellowish brown; dry; medium dense. | 2 | | | 100% | | Placed cuttings in plastic bag and analyzed headspace with photoionization detector (PID). Measured organic vapors in parts per million (ppm). |
| | | 4 | | | 10% | | 1.0'-1.5': PID = 3 ppm |
| | | | | | | | 2.5'-3.0': PID = 11.5 ppm |
| | | 6 | | | 100% | | |
| CH | 6.5'-7.5' CLAY: moderate brown; damp; stiff; high plasticity. | | T1-6.5 PES | | 67% | | |
| | Terminated boring at 7.5'. | 8 | | | | | Grouted hole to surface with neat cement mix. |
| | | 10 | | | | | |
| | | 12 | | | | | |
| | | 14 | | | | | |
| | | 16 | | | | | |
| | | 18 | | | | | |
| | | 20 | | | | | |

DATA ON THIS LOG ARE AN APPROXIMATION OF THE GEOLOGIC AND SUBSURFACE CONDITIONS BECAUSE THE INFORMATION WAS OBTAINED FROM INDIRECT, DISCONTINUOUS, AND POSSIBLY DISTURBED SAMPLING NECESSITATED BY USE OF SMALL- DIAMETER HOLES. ROTARY AND WASH BORING HOLES HAVE FURTHER COMPLICATIONS IN THIS REGARD BECAUSE OF THE NEED TO USE DRILLING FLUID AND/OR CASING IN ADVANCING HOLES.

THIS LOG INDICATES CONDITIONS IN THIS HOLE ONLY ON THE DATE INDICATED AND MAY NOT REPRESENT CONDITIONS AT OTHER LOCATIONS AND ON OTHER DATES. ANY WATER LEVELS SHOWN ARE SUBJECT TO VARIATION.

THIS HOLE WAS LOGGED IN SUCH A WAY AS TO PROVIDE DATA PRIMARILY FOR DESIGN PURPOSES AND NOT NECESSARILY FOR THE PURPOSES OF SPECIFIC CONTRACTORS.

THE STRATIFICATION LINES OR DEPTH INTERVALS REPRESENT THE APPROXIMATE BOUNDARIES BETWEEN MATERIAL TYPES, AND THE TRANSITIONS MAY BE GRADUAL.

SOIL CLASSIFICATIONS SHOWN ON LOGS ARE FIELD CLASSIFICATIONS BASED ON THE UNIFIED SOILS CLASSIFICATION SYSTEM.

| RUST ENVIRONMENT & INFRASTRUCTURE | AMERICAN NATIONAL CAN OAKLAND, CALIFORNIA BUILDING 12 | EXPLORATION BORING LOG | | BORING NO. |
|---|---|---|---|---|
| | | PROJECT NO. 35195.650 | SHEET: 1 of 1 | T-1 |

| BORING LOCATION: ANC - Building 12 | | APPROVED BY: RAB | GROUND EL: |
|---|---|---|---|
| DEPTH/ELEV.WATER : NA | DRILL CONTRACTOR: Precision Drilling | | TOTAL DEPTH: 6.0' |
| DRILL RIG: MD-1 | BORING DIA.: 2-1/4" | DATE DRILLED: 9/27/94 | LOGGED BY: RAB |

| SOIL CLASS | DESCRIPTION | DEPTH | SAMPLE NO. | PR / RQD | REC. | MODE | REMARKS |
|---|---|---|---|---|---|---|---|
| | 0'-1' Baserock and residual crushed concrete. | 0 | | | | | Advanced 2-1/4" outer casing by percussion drilling (PD). Placed cuttings in plastic bag and analyzed headspace with photoionization detector (PID). Measured organic vapors in parts per million (ppm). |
| GW | | | | | | PD | |
| GM | 1'-2' SILTY GRAVEL w/sand: moderate yellowish brown; dry; medium dense. | | | | | | |
| CH | 2'-4.5' CLAY: dusky brown (5 YR 2/2); damp; stiff; high plasticity. | 2 | T2-2.0 PES | | | | |
| | 4.5'-5.0' CLAY: dark yellowish brown (10 YR 4/2) w/dusky brown (5 YR 2/2) concretions; damp; stiff; trace pea gravel. | 4 | T2-4.0 PES | | 100% | | 1.0'-1.5': PID = 1.8 ppm<br>1.5'-2.0': PID = 1.6 ppm |
| CL | | | | | | | |
| CL | 5.0'-6.0' SILTY CLAY: moderate yellowish brown (10 YR 5/4); damp; firm; moderate plasticity; trace sand. | 6 | | | | | |
| | Terminated boring at 6.0'. | | | | | | Grouted hole to surface with neat cement mix. |
| | | 8 | | | | | |
| | | 10 | | | | | |
| | | 12 | | | | | |
| | | 14 | | | | | |
| | | 16 | | | | | |
| | | 18 | | | | | |
| | | 20 | | | | | |

DATA ON THIS LOG ARE AN APPROXIMATION OF THE GEOLOGIC AND SUBSURFACE CONDITIONS BECAUSE THE INFORMATION WAS OBTAINED FROM INDIRECT, DISCONTINUOUS, AND POSSIBLY DISTURBED SAMPLING NECESSITATED BY USE OF SMALL- DIAMETER HOLES. ROTARY AND WASH BORING HOLES HAVE FURTHER COMPLICATIONS IN THIS REGARD BECAUSE OF THE NEED TO USE DRILLING FLUID AND/OR CASING IN ADVANCING HOLES.

THIS LOG INDICATES CONDITIONS IN THIS HOLE ONLY ON THE DATE INDICATED AND MAY NOT REPRESENT CONDITIONS AT OTHER LOCATIONS AND ON OTHER DATES. ANY WATER LEVELS SHOWN ARE SUBJECT TO VARIATION.

THIS HOLE WAS LOGGED IN SUCH A WAY AS TO PROVIDE DATA PRIMARILY FOR DESIGN PURPOSES AND NOT NECESSARILY FOR THE PURPOSES OF SPECIFIC CONTRACTORS.

THE STRATIFICATION LINES OR DEPTH INTERVALS REPRESENT THE APPROXIMATE BOUNDARIES BETWEEN MATERIAL TYPES, AND THE TRANSITIONS MAY BE GRADUAL.

SOIL CLASSIFICATIONS SHOWN ON LOGS ARE FIELD CLASSIFICATIONS BASED ON THE UNIFIED SOILS CLASSIFICATION SYSTEM.

| RUST ENVIRONMENT & INFRASTRUCTURE | AMERICAN NATIONAL CAN<br>OAKLAND, CALIFORNIA<br>BUILDING 12 | EXPLORATION BORING LOG | | BORING NO. |
|---|---|---|---|---|
| | | PROJECT NO. | SHEET: | |
| | | 35195.650 | 1 of 1 | T-2 |

| BORING LOCATION: ANC - Building 12 | | APPROVED BY: RAB | GROUND EL: |
|---|---|---|---|
| DEPTH/ELEV.WATER : NA | DRILL CONTRACTOR: Precision Drilling | | TOTAL DEPTH: 6.0' |
| DRILL RIG: MD-1 | BORING DIA.: 2-1/4" | DATE DRILLED: 9/27/94 | LOGGED BY: RAB |

| SOIL CLASS | DESCRIPTION | DEPTH | SAMPLE NO. | PR / RQD | REC. | MODE | REMARKS |
|---|---|---|---|---|---|---|---|
| | 0'-1' Baserock and residual crushed concrete. | 0 | | | | | Advanced 2-1/4" outer casing by percussion drilling (PD). |
| GW | 1'-5.75' SILTY GRAVEL w/sand: moderate yellowish brown; dry; medium dense. | | | | 100% | PD | Placed cuttings in plastic bag and analyzed headspace with photoionization detector (PID). Measured organic vapors in parts per million (ppm). |
| GM | | 2 | | | 67% | | 1.0'-1.5': PID = 2 ppm |
| | | 4 | | | 33% | | 2.5'-3.0': PID = 1.2 ppm |
| CH | 5.75'-6.0' CLAY: moderate brown; damp; stiff;high plasticity. | 6 | T3-5.0 PES | | | | 4.5'-5.0': PID = 1.8 ppm |
| | Terminated boring at 6.0'. | | | | | | Grouted hole to surface with neat cement mix. |
| | | 8 | | | | | |
| | | 10 | | | | | |
| | | 12 | | | | | |
| | | 14 | | | | | |
| | | 16 | | | | | |
| | | 18 | | | | | |
| | | 20 | | | | | |

DATA ON THIS LOG ARE AN APPROXIMATION OF THE GEOLOGIC AND SUBSURFACE CONDITIONS BECAUSE THE INFORMATION WAS OBTAINED FROM INDIRECT, DISCONTINUOUS, AND POSSIBLY DISTURBED SAMPLING NECESSITATED BY USE OF SMALL- DIAMETER HOLES. ROTARY AND WASH BORING HOLES HAVE FURTHER COMPLICATIONS IN THIS REGARD BECAUSE OF THE NEED TO USE DRILLING FLUID AND/OR CASING IN ADVANCING HOLES.

THIS LOG INDICATES CONDITIONS IN THIS HOLE ONLY ON THE DATE INDICATED AND MAY NOT REPRESENT CONDITIONS AT OTHER LOCATIONS AND ON OTHER DATES. ANY WATER LEVELS SHOWN ARE SUBJECT TO VARIATION.

THIS HOLE WAS LOGGED IN SUCH A WAY AS TO PROVIDE DATA PRIMARILY FOR DESIGN PURPOSES AND NOT NECESSARILY FOR THE PURPOSES OF SPECIFIC CONTRACTORS.

THE STRATIFICATION LINES OR DEPTH INTERVALS REPRESENT THE APPROXIMATE BOUNDARIES BETWEEN MATERIAL TYPES, AND THE TRANSITIONS MAY BE GRADUAL.

SOIL CLASSIFICATIONS SHOWN ON LOGS ARE FIELD CLASSIFICATIONS BASED ON THE UNIFIED SOILS CLASSIFICATION SYSTEM.

| RUST ENVIRONMENT & INFRASTRUCTURE | AMERICAN NATIONAL CAN OAKLAND, CALIFORNIA BUILDING 12 | EXPLORATION BORING LOG | | BORING NO. |
|---|---|---|---|---|
| | | PROJECT NO. | SHEET: | |
| | | 35195.650 | 1 of 1 | T-3 |

| BORING LOCATION: ANC - Building 12 | | APPROVED BY: RAB | GROUND EL: |
|---|---|---|---|
| DEPTH/ELEV.WATER : NA | DRILL CONTRACTOR: Precision Drilling | | TOTAL DEPTH: 6.0' |
| DRILL RIG: MD-1 | BORING DIA.: 2-1/4" | DATE DRILLED: 9/27/94 | LOGGED BY: RAB |

| SOIL CLASS | DESCRIPTION | DEPTH | SAMPLE NO. | PR / RQD | REC. | MODE | REMARKS |
|---|---|---|---|---|---|---|---|
| | 0'-0.5' Baserock and residual crushed concrete. | 0 | | | | | Advanced 2-1/4" outer casing by percussion drilling (PD). Placed cuttings in plastic bag and analyzed headspace with photoionization detector (PID). Measured organic vapors in parts per million (ppm). 1.0'-1.5': PID = 1.0 ppm 2.5'-3.0': PID = 5.2 ppm |
| GW | 0.5'-3' SILTY GRAVEL w/sand: moderate yellowish brown; dry; medium dense. | | | | 67% | PD | |
| GM | | 2 | | | 33% | | |
| — | 3'-4.5' Same as 0.5'-3'?? | | | | | | |
| GM | | 4 | | | 10% | | |
| CL | 4.5'-6.0' SILTY CLAY: moderate olive brown (5 Y 4/4); damp; stiff; moderate plasticity. | | T4-5.0 PES | | 100% | | |
| | Terminated boring at 6.0'. | 6 | | | | | Grouted hole to surface with neat cement mix. |
| | | 8 | | | | | |
| | | 10 | | | | | |
| | | 12 | | | | | |
| | | 14 | | | | | |
| | | 16 | | | | | |
| | | 18 | | | | | |
| | | 20 | | | | | |

DATA ON THIS LOG ARE AN APPROXIMATION OF THE GEOLOGIC AND SUBSURFACE CONDITIONS BECAUSE THE INFORMATION WAS OBTAINED FROM INDIRECT, DISCONTINUOUS, AND POSSIBLY DISTURBED SAMPLING NECESSITATED BY USE OF SMALL- DIAMETER HOLES. ROTARY AND WASH BORING HOLES HAVE FURTHER COMPLICATIONS IN THIS REGARD BECAUSE OF THE NEED TO USE DRILLING FLUID AND/OR CASING IN ADVANCING HOLES.

THIS LOG INDICATES CONDITIONS IN THIS HOLE ONLY ON THE DATE INDICATED AND MAY NOT REPRESENT CONDITIONS AT OTHER LOCATIONS AND ON OTHER DATES. ANY WATER LEVELS SHOWN ARE SUBJECT TO VARIATION.

THIS HOLE WAS LOGGED IN SUCH A WAY AS TO PROVIDE DATA PRIMARILY FOR DESIGN PURPOSES AND NOT NECESSARILY FOR THE PURPOSES OF SPECIFIC CONTRACTORS.

THE STRATIFICATION LINES OR DEPTH INTERVALS REPRESENT THE APPROXIMATE BOUNDARIES BETWEEN MATERIAL TYPES, AND THE TRANSITIONS MAY BE GRADUAL.

SOIL CLASSIFICATIONS SHOWN ON LOGS ARE FIELD CLASSIFICATIONS BASED ON THE UNIFIED SOILS CLASSIFICATION SYSTEM.

| RUST ENVIRONMENT & INFRASTRUCTURE | AMERICAN NATIONAL CAN OAKLAND, CALIFORNIA BUILDING 12 | EXPLORATION BORING LOG | | BORING NO. |
|---|---|---|---|---|
| | | PROJECT NO. 35195.650 | SHEET: 1 of 1 | T-4 |

# APPENDIX B

## SOIL BORING SAMPLE
## LABORATORY ANALYTICAL REPORT

# 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 # : 9409220
Date Received : 09/27/94
Project ID : 35195.650
Purchase Order: E-25237

The following samples were received at Anametrix for analysis :

| ANAMETRIX ID | CLIENT SAMPLE ID |
|---|---|
| 9409220- 1 | S1-6.0 |
| 9409220- 2 | T1-6.5 |
| 9409220- 3 | T3-5.0 |
| 9409220- 4 | T2-2.0 |
| 9409220- 5 | T2-4.0 |
| 9409220- 6 | S2-4.0 |
| 9409220- 7 | S3-4.0 |
| 9409220- 8 | S4-3.0 |
| 9409220- 9 | S4-4.5 |
| 9409220-10 | T4-5.0 |
| 9409220-11 | S5-5.0 |

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 us as soon as possible. Thank you for using Anametrix.

Corinne Blum for
Doug Robbins
Laboratory Director

10/10/94
Date

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 # : 9409220
Date Received : 09/27/94
Project ID : 35195.650
Purchase Order: E-25237
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

| ANAMETRIX SAMPLE ID | CLIENT SAMPLE ID | MATRIX | DATE SAMPLED | METHOD |
|---|---|---|---|---|
| 9409220- 1 | S1-6.0 | SOIL | 09/27/94 | TPHg |
| 9409220- 2 | T1-6.5 | SOIL | 09/27/94 | TPHg |
| 9409220- 3 | T3-5.0 | SOIL | 09/27/94 | TPHg |
| 9409220- 4 | T2-2.0 | SOIL | 09/27/94 | TPHg |
| 9409220- 5 | T2-4.0 | SOIL | 09/27/94 | TPHg |
| 9409220- 6 | S2-4.0 | SOIL | 09/27/94 | TPHg |
| 9409220- 7 | S3-4.0 | SOIL | 09/27/94 | TPHg |
| 9409220- 8 | S4-3.0 | SOIL | 09/27/94 | TPHg |
| 9409220- 9 | S4-4.5 | SOIL | 09/27/94 | TPHg |
| 9409220-10 | T4-5.0 | SOIL | 09/27/94 | TPHg |
| 9409220-11 | S5-5.0 | SOIL | 09/27/94 | TPHg |

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

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

Workorder # : 9409220
Date Received : 09/27/94
Project ID : 35195.650
Purchase Order: E-25237
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- The concentration reported as mineral spirits for sample S1-6.0 is primarily due to the presence of a petroleum product of hydrocarbon range C6-C12, possibly gasoline.

Cheryl Balmer 10/7/94
Department Supervisor Date

Lucia Shor 10/10/94
Chemist Date

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

Anametrix W.O.: 9409220
Matrix : SOIL
Date Sampled : 09/27/94

Project Number : 35195.650
Date Released : 10/05/94

| COMPOUNDS | Reporting Limit (mg/Kg) | Sample I.D.# S1-6.0 -01 | Sample I.D.# T1-6.5 -02 | Sample I.D.# T3-5.0 -03 | Sample I.D.# T2-2.0 -04 | Sample I.D.# T2-4.0 -05 |
|---|---|---|---|---|---|---|
| TPH as Mineral Spirits | 0.5 | 0.84 | 1700 | ND | ND | ND |
| % Surrogate Recovery | | 92% | 115% | 90% | 84% | 68% |
| Instrument I.D. | | HP12 | HP12 | HP12 | HP12 | HP12 |
| Date Analyzed | | 09/29/94 | 10/04/94 | 10/04/94 | 10/03/94 | 10/03/94 |
| RLMF | | 1 | 250 | 1 | 1 | 1 |

ND - Not detected at or above the practical quantitation limit for the method.
TPHg - Total Petroleum Hydrocarbons as mineral spirits is determined by GC/FID using modified EPA Method 8015 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.

Lucia Shor 10/10/94
Analyst Date

Cheryl Bellman 10/7/94
Supervisor Date

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

Anametrix W.O.: 9409220
Matrix : SOIL
Date Sampled : 09/27/94

Project Number : 35195.650
Date Released : 10/05/94

| COMPOUNDS | Reporting Limit (mg/Kg) | Sample I.D.# S2-4.0 -06 | Sample I.D.# S3-4.0 -07 | Sample I.D.# S4-3.0 -08 | Sample I.D.# S4-4.5 -09 | Sample I.D.# T4-5.0 -10 |
|---|---|---|---|---|---|---|
| TPH as Mineral Spirits | 0.5 | ND | ND | 9.7 | ND | 0.62 |
| % Surrogate Recovery | | 75% | 91% | 95% | 94% | 91% |
| Instrument I.D. | | HP12 | HP12 | HP12 | HP12 | HP12 |
| Date Analyzed | | 10/03/94 | 10/03/94 | 10/04/94 | 10/03/94 | 10/03/94 |
| RLMF | | 1 | 1 | 2.5 | 1 | 1 |

ND - Not detected at or above the practical quantitation limit for the method.
TPHg - Total Petroleum Hydrocarbons as mineral spirits is determined by GC/FID using modified EPA Method 8015 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.

Dana Shea 10/10/94
Analyst Date

Cheryl Burman 10/7/94
Supervisor Date

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

Anametrix W.O.: 9409220
Matrix : SOIL
Date Sampled : 09/27/94

Project Number : 35195.650
Date Released : 10/05/94

| COMPOUNDS | Reporting Limit (mg/Kg) | Sample I.D.# S5-5.0 -11 | Sample I.D.# BS2901E1 BLANK | Sample I.D.# BO0301E1 BLANK | Sample I.D.# BO0302E1 BLANK | Sample I.D.# BO0304E1 BLANK |
|---|---|---|---|---|---|---|
| TPH as Mineral Spirits | 0.5 | 0.67 | ND | ND | ND | ND |
| % Surrogate Recovery | | 86% | 108% | 95% | 104% | 91% |
| Instrument I.D. | | HP12 | HP12 | HP12 | HP12 | HP12 |
| Date Analyzed | | 10/04/94 | 09/29/94 | 10/03/94 | 10/04/94 | 10/04/94 |
| RLMF | | 1 | 1 | 1 | 1 | 1 |

ND - Not detected at or above the practical quantitation limit for the method.
TPHg - Total Petroleum Hydrocarbons as mineral spirits is determined by GC/FID using modified EPA Method 8015 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 10/10/97 Date

Supervisor 10/7/94 Date

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

Sample I.D. : 35195.650 T2-2.0
Matrix : SOIL
Date Sampled : 09/27/94
Date Analyzed : 09/29/94

Anametrix I.D. : 9409220-04
Analyst : IS
Supervisor : [illegible]
Date Released : 10/06/94
Instrument ID : HP12

| COMPOUND | SPIKE AMT (mg/Kg) | SAMPLE CONC (mg/Kg) | REC MS (mg/Kg) | % REC MS | REC MD (mg/Kg) | % REC MD | RPD | % REC LIMITS * |
|---|---|---|---|---|---|---|---|---|
| MINERAL SPIRITS | 0.50 | 0.12 | 0.67 | 110% | 0.77 | 130% | 17% | 48-149 |
| P-BFB | | | | 92% | | 83% | | 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 : 09/29/94

Anametrix I.D. : MS2902E1
Analyst : IS
Supervisor : JB
Date Released : 10/06/94
Instrument I.D.: HP12

| COMPOUND | SPIKE AMT. (mg/Kg) | REC LCS (mg/Kg) | %REC LCS | % REC LIMITS * |
|---|---|---|---|---|
| MINERAL SPIRITS | 0.50 | 0.56 | 112% | 58-130 |
| p-BFB | | | 104% | 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 : 10/03/94

Anametrix I.D. : MO0301E1
Analyst : LS
Supervisor : CB
Date Released : 10/06/94
Instrument I.D.: HP12

| COMPOUND | SPIKE AMT. (mg/Kg) | REC LCS (mg/Kg) | %REC LCS | % REC LIMITS * |
|---|---|---|---|---|
| MINERAL SPIRITS | 0.50 | 0.45 | 90% | 58-130 |
| p-BFB | | | 95% | 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 : 10/04/94

Anametrix I.D. : MO0401E1
Analyst : IS
Supervisor : [illegible]
Date Released : 10/06/94
Instrument I.D.: HP12

| COMPOUND | SPIKE AMT. (mg/Kg) | REC LCS (mg/Kg) | %REC LCS | % REC LIMITS * |
|---|---|---|---|---|
| MINERAL SPIRITS | 0.50 | 0.47 | 94% | 58-130 |
| p-BFB | | | 103% | 53-147 |

* Quality control limits established by Anametrix, Inc.

**Inchcape Testing Services**
**Anametrix Laboratories**

# SAMPLE RECEIVING CHECKLIST

WORKORDER NUMBER: 9409220 CLIENT PROJECT ID: 35195.650

## 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): 21°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: BGd Date: 9/27/94 Project Manager: KD Date: 9/28/94

RUST ENVIRONMENT & INFRASTRUCTURE

9409220

# Chain of Custody Record

| Custody Seal # | RUST E&I Cooler # |
|---|---|
| | |

| Project Number | Project Name/Client |
|---|---|
| 35195.650 | Bldg. 12 – ANC |

Samplers: (Signature) Richard Burmeli

| Item No. | Sample Description (Field ID Number) | Date | Time | Grab | Comp. | Lab Sample Number | Container Number | Analysis Required: EPA 8015 for mineral spirits | Matrix: Sample Type: Soil | Matrix: Sample Container: 6" SS liner |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | S1 – 6.0 | 9-27-94 | 10:10 | | | | | X | ✓ | 1 |
| 2 | T1 – 6.5 | | 10:40 | | | | | X | ✓ | 1 |
| 3 | T3 – 5.0 | | 11:10 | | | | | X | ✓ | 1 |
| 4 | T2 – 2.0 | | 11:35 | | | | | X | ✓ | 1 |
| 5 | T2 – 4.0 | | 11:45 | | | | | X | ✓ | 1 |
| 6 | S2 – 4.0 | | 12.05 | | | | | X | ✓ | 1 |
| 7 | S3 – 4.0 | | 1:10 | | | | | X | ✓ | 1 |
| 8 | S4 – 3.0 | | 1:45 | | | | | X | ✓ | 1 |
| 9 | S4 – 4.5 | | 1:50 | | | | | X | ✓ | 1 |
| 10 | T4 – 5.0 | | 2:15 | | | | | X | ✓ | 1 |
| 11 | S5 – 5.0 | 9-27-94 | 2:40 | | | | | X | ✓ | 1 |
| 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 Burmeli / Walker/Rust | 9/27/94 1615 | | | | |
| Relinquished by: (Signature) | Date/Time | Received by: (Signature) [Laboratory] Josephine DeCarli | Disposed of by: (Signature) | Items: | Date/Time |

Send Lab Results To: Walt Howard c/o RUST – Albany N.Y.
send copy to Richard Burmeli c/o RUST/WALKER – Palo Alto

Remarks: standard QA/QC

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: 21°C
Sample Condition: good

Rev. 4/93

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

F514/Earth.Sci

**APPPENDIX C**

**POST EXCAVATION SAMPLE**
**LABORATORY ANALYTICAL REPORT**

# 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 # : 9411151
Date Received : 11/11/94
Project ID : 35195.624
Purchase Order: E-25237

The following samples were received at Anametrix for analysis :

| ANAMETRIX ID | CLIENT SAMPLE ID |
|---|---|
| 9411151- 1 | B12-1 |
| 9411151- 2 | B12-2 |
| 9411151- 3 | B12-3 |
| 9411151- 4 | B12-4 |
| 9411151- 5 | B12-5 |

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

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

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

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

Susan Kraska Yeager
Laboratory Director

11/17/94
Date

Project Manager

This report consists of 11 pages.

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

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

Workorder # : 9411151
Date Received : 11/11/94
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 |
|---|---|---|---|---|
| 9411151- 1 | B12-1 | SOIL | 11/11/94 | TPHg |
| 9411151- 2 | B12-2 | SOIL | 11/11/94 | TPHg |
| 9411151- 3 | B12-3 | SOIL | 11/11/94 | TPHg |
| 9411151- 4 | B12-4 | SOIL | 11/11/94 | TPHg |
| 9411151- 5 | B12-5 | SOIL | 11/11/94 | TPHg |

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

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

Workorder # : 9411151
Date Received : 11/11/94
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 Beeman 11/17/94
Department Supervisor Date

Reggie Davison 11/17/94
Chemist Date

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

Anametrix W.O.: 9411151
Matrix : SOIL
Date Sampled : 11/11/94

Project Number : 35195.624
Date Released : 11/16/94

| COMPOUNDS | Reporting Limit (mg/Kg) | Sample I.D.# B12-1 -01 | Sample I.D.# B12-2 -02 | Sample I.D.# B12-3 -03 | Sample I.D.# B12-4 -04 | Sample I.D.# B12-5 -05 |
|---|---|---|---|---|---|---|
| Mineral Spirits | 0.5 | ND | 8.8 | 0.8 | ND | ND |
| TPH as Gasoline | 0.5 | ND | ND | ND | ND | ND |
| % Surrogate Recovery | | 113% | 123% | 113% | 111% | 118% |
| Instrument I.D. | | HP21 | HP21 | HP21 | HP21 | HP21 |
| Date Analyzed | | 11/14/94 | 11/15/94 | 11/15/94 | 11/15/94 | 11/15/94 |
| RLMF | | 1 | 2.5 | 1 | 1 | 1 |

ND - Not detected at or above the practical quantitation limit for the method.
TPHg - Total Petroleum Hydrocarbons as gasoline and mineral spirits determined by GCFID using modified EPA Method 8015 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 11/17/94
Analyst Date

Cheryl Beelman 11/17/94
Supervisor Date

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

Anametrix W.O.: 9411151
Matrix : SOIL
Date Sampled : 11/11/94

Project Number : 35195.624
Date Released : 11/16/94

| COMPOUNDS | Reporting Limit (mg/Kg) | Sample I.D.# BN1404E1 BLANK | Sample I.D.# BN1405E1 BLANK |
|---|---|---|---|
| Mineral Spirits | 0.5 | ND | ND |
| TPH as Gasoline | 0.5 | ND | ND |
| % Surrogate Recovery | | 120% | 116% |
| Instrument I.D. | | HP21 | HP21 |
| Date Analyzed | | 11/14/94 | 11/15/94 |
| RLMF | | 1 | 1 |

ND - Not detected at or above the practical quantitation limit for the method.
TPHg - Total Petroleum Hydrocarbons as gasoline and mineral spirits determined by GCFID using modified EPA Method 8015 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 11/17/94
Analyst Date

Cheryl Balman 11/17/94
Supervisor Date

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

Sample I.D. : 35195.624 B12-1
Matrix : SOIL
Date Sampled : 11/11/94
Date Analyzed : 11/14/94

Anametrix I.D. : 9411151-01
Analyst : RD
Supervisor : [illegible]
Date Released : 11/16/94
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 | 0.99 | 99% | 0.88 | 88% | -12% | 48-149 |
| P-BFB | | | | 114% | | 118% | | 53-147 |

* Quality control limits established by Anametrix, Inc.

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

Sample I.D. : 35195.624 B12-5
Matrix : SOIL
Date Sampled : 11/11/94
Date Analyzed : 11/15/94

Anametrix I.D. : 9411151-05
Analyst : RD
Supervisor : [illegible]
Date Released : 11/15/94
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 | 0.92 | 92% | 0.87 | 87% | -6% | 48-149 |
| P-BFB | | | | 129% | | 131% | | 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 : 11/15/94

Anametrix I.D. : MN1402E1
Analyst : RD
Supervisor : CS
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 | 0.46 | 92% | 58-130 |
| p-BFB | | | 116% | 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 : 11/15/94

Anametrix I.D. : MN1501E1
Analyst : RD
Supervisor : G
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 | 0.37 | 74% | 58-130 |
| p-BFB | | | 124% | 53-147 |

* Quality control limits established by Anametrix, Inc.

Inchcape Testing Services
Anametrix Laboratories

# SAMPLE RECEIVING CHECKLIST

WORKORDER NUMBER: 9411151 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): 3°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: [illegible] Date: 11/11/94 Project Manager: KD Date: 11/14/94

4454

RUST ENVIRONMENT & INFRASTRUCTURE

48 hr T.A.T 9411151 (2)

Chain of Custody Record

Walker Labels

| 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: 8 RCRA Metals + Lead, TCLP | Matrix: Sample Type: Soil | Matrix: Sample Container: 8 oz. Glass Liner |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | B12-1 | 11-1-94 | 2:50 | | | | | X | ✓ | 1 |
| 2 | B12-2 | ↑ | 2:55 | | | | | X | ✓ | 1 |
| 3 | B12-3 | | 2:58 | | | | | X | ✓ | 1 |
| 4 | B12-4 | ↓ | 3:01 | | | | | X | ✓ | 1 |
| 5 | B12-5 | 11-1-94 | 3:04 | | | | | X | ✓ | 1 |
| 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 | 11/1/94 1614 | | | | |
| Relinquished by: (Signature) | Date/Time | Received by: (Signature) [Laboratory] ITS-Anaverde | Disposed of by: (Signature) | Items: | Date/Time |

Send Lab Results To: RUST E & I
% Walter Howard
12 Metro Park Rd.
Albany, NY. 12205

Remarks: Fax copy of results to Dick Burzynski - RUST, Palo Alto 415/968-5365
Burzynski will call for verbals.
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: 3°C
Sample Condition: good

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

F514/Earth Sc

# APPENDIX D

## STOCKPILED SOIL SAMPLE
## LABORATORY ANALYTICAL REPORT

# 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 Pham 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 Lowell 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 : B12SS (Stockpile Soil)
Matrix : SOIL
Date Sampled :11/14/94
Date Analyzed :11/21/94
Instrument ID : MSD2

Anametrix ID : 9411161-02
Analyst : SN
Supervisor : MP

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 |

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 :
Supervisor :

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 : M

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 : SV
Supervisor : DH

| | 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 | : MN2101A1 |
| Matrix | : SOIL | Analyst | : |
| Date Sampled | : | Supervisor | : |
| 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 Brenner 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

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

Renee Shor 11/22/94
Analyst Date

Cheryl Balmer 11/22/94
Supervisor Date

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

Sample I.D. : LAB CONTROL SAMPLE
Matrix : SOIL
Date Sampled : N/A
Date Analyzed : 11/17/94

Anametrix I.D. : MN1701E1
Analyst : IS
Supervisor : cs
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 |

**Inchcape Testing Services**
**Anametrix Laboratories**

# SAMPLE RECEIVING CHECKLIST

WORKORDER NUMBER: 94/1161 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

RUST ENVIRONMENT & INFRASTRUCTURE

48 hr T.A.T.

9411151 (2)

# 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 Burginski

| Item No. | Sample Description (Field ID Number) | Date | Time | Grab | Comp. | Lab Sample Number | Container Number | Analysis Required: Total Petroleum Oil & Grease-LUFT (Gravimetric) | LUFT-TPHG/BTEX | TTLC Cadmium | TTLC Chromium | Prof-2 Lead-LUFT | TTLC Zinc | TTLC Nickel | TTLC Lead | EPA 8240 | LUFT Diesel Fuels | Matrix: Sample Type | Matrix: Sample Container (6" stainless steel liners) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | A4SS | 11-14-94 | 9:10 | | | | | X | X | X | X | X | X | X | X | X | X | soil | 2 |
| 2 | B12SS | 11-14-94 | 9:20 | | | | | X | X | X | X | X | X | X | X | X | X | soil | 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 Burginski | 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 Burginski - 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:

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

RUST ENVIRONMENT & INFRASTRUCTURE

48 hr T.A.T. 9411161 (2)

**Chain of Custody Record**

WAHLER CABLES

| Project Number | Project Name/Client |
|---|---|
| 35195.624 | American National Can |

Samplers: (Signature) Richard Buginski

Custody Seal # | RUST E&I Cooler #

| Item No. | Sample Description (Field ID Number) | Date | Time | Grab | Comp. | Lab Sample Number | Container Number | Analysis Required: Total Petroleum Oil & Grease-LUFT | LUFT-TPH/BTEX | TTLC Cadmium | TTLC Chromium | Prop 65-LUFT Lead | TTLC Zinc | TTLC Nickle | TTLC Lead | EPA 8240 | LUFT Arbitrary Split | Matrix: Sample Type: soil | Sample Container: 6" stainless steel liners |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | A4 SS | 11-14-94 | 9:10 | | | | | X | X | X | X | X | X | X | X | X | | ✓ | 2 |
| 2 | B12 SS | 11-14-94 | 9:20 | | | | | X | X | X | X | X | X | X | X | 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 |
|---|---|---|---|---|---|
| Richard Buginski | 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 Buginski - RUST Pleasanton 415/468-5365

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: 5°C
Sample Condition:

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