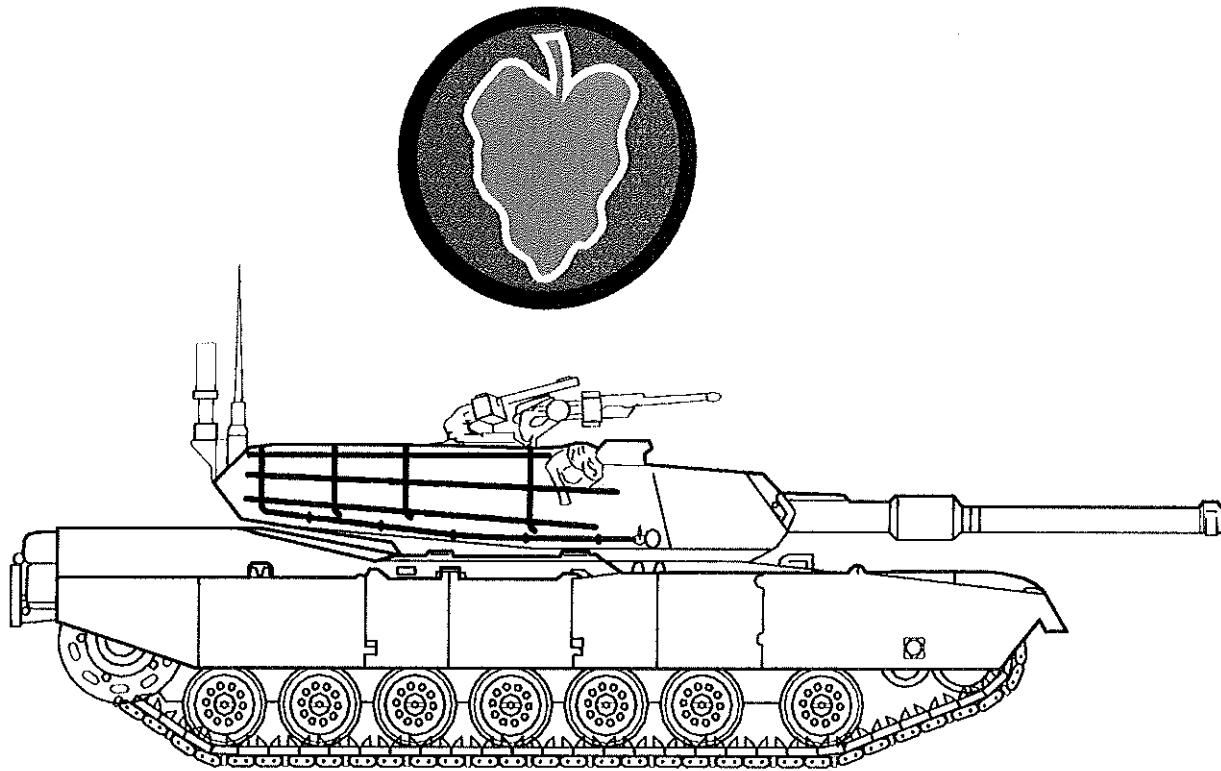


**Corrected Final
Phase I RCRA Facility Investigation Report
For 24 Solid Waste Management Units
At Fort Stewart, Georgia**

Volume I of III



May 1996

Job No. 87528.000

Prepared For



**US Army Corps
of Engineers**
Savannah District

Prepared By

RUST ENVIRONMENT &
INFRASTRUCTURE

DOCUMENT 5

CORRECTED FINAL

**PHASE I
RCRA FACILITY INVESTIGATION REPORT
FOR 24 SOLID WASTE MANAGEMENT UNITS
AT FORT STEWART, GEORGIA
VOLUME I OF III**

Prepared For

**UNITED STATES ARMY CORPS OF ENGINEERS
SAVANNAH DISTRICT**

**Contract DACA21-93-D-0029
Delivery Order 0005
Rust Project No. 87528.000
May 1996**

**Prepared By
RUST ENVIRONMENT AND INFRASTRUCTURE
2694 Lake Park Drive
Charleston, South Carolina 29406
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1.0 INTRODUCTION

This Corrected Final Phase I Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) Report for 24 Solid Waste Management Units (SWMUs) provides the results of implementation of the Phase I RFI Work Plan performed at Fort Stewart, Georgia. This Corrected Final Phase I RFI Report has been prepared by RUST Environment and Infrastructure, Inc. (RUST E&I) for the United States Army Corps of Engineers (USACE), Savannah District, Contract No. DACA21-93-D-0029, Delivery No. 0005.

The information provided in this report is based upon data provided by the USACE and Geraghty and Miller, Inc. Environmental Services (G&M). The field activities were completed in accordance with the Corrected Final Phase I RFI Work Plan (April, 1993) prepared by G&M. The Corrected Final Phase I RFI Report has been prepared in accordance with the USACE Scope of Work dated August 17, 1993 and is presented in the same format as the Corrected Final Phase I RFI Work Plan.

Twenty-four (24) SWMUs are discussed in this report. Two (2) SWMUs not included in this report are SWMU8 EOD Area (FST-008) and SWMU13 Fire Training Pit (FST-013) which are being addressed under other contracts.

The G&M field activities included the installation of 30 new ground-water monitoring wells at various SWMUs throughout the installation. During well drilling, G&M collected soil samples for analysis. The USACE completed all other sampling (ground-water, soil, sediment, surface soil, surface water, wastewater and sludge).

The soil samples for the G&M field investigations were analyzed by Savannah Laboratories in Savannah, Georgia and the Quality Assurance (QA) soil samples were analyzed by the USACE South Atlantic Division (SAD) Laboratory in Marietta, Georgia. The soil samples for the USACE field investigations were analyzed by James H. Carr and Associates, Inc.

(Carr Laboratory) in Columbia, South Carolina and International Technology Corporation Analytical Services (IT Laboratory) in Knoxville, Tennessee. The USACE QA samples were also submitted to the SAD Laboratory. All raw data from the laboratories has been included in Volume III, Appendix U of this Corrected Final Phase I RFI Report.

A Quality Control Summary Report (QCSR) and Analytical Package was prepared by G&M for the work completed by G&M in one (1) 3-ring notebook (1994). A QCSR was also prepared by USACE for the work completed by USACE in three (3) 3-ring notebooks (Volumes I, II and III)(1994).

With the exception of the following changes, the sampling program adhered to the approved Corrected Final Phase I RFI Work Plan (1993).

- Two (2) up-gradient surface water samples were collected at SWMU1, instead of the proposed one (1) up-stream and one (1) down-stream samples. The proposed down-gradient surface water sample was mistakenly taken in an up-gradient location.
- Due to drought, one (1) surface soil sample was collected at the Tac-X Landfill SWMU3 in lieu of surface water and leachate samples.
- Based on the field records, soil samples were not collected below six feet below land surface or to the water table in the location chosen for soil boring MW4 at Burn Pit SWMU4B because of sustained OVA readings above the health and safety action levels. This soil boring was abandoned and the monitoring well SWMU4B, MW4(b) was later installed by the USACE.
- Four (4) extra surface soil samples were taken at EOD Area SWMU12.
- One (1) extra surface water sample and one (1) extra QA surface water sample were collected at the Industrial Wastewater Treatment Plant SWMU18.
- No sludge sample was available at the Radiator Shop SWMU24A.
- Five (5) extra ground-water samples and five (5) extra soil samples were collected at the Waste Oil Tanks SWMU25.

- Two (2) extra soil samples and two (2) surface soil samples were collected at the 724th Tanker Purgung Station SWMU26.
- Field duplicated soil samples were mistakenly collected and submitted by G&M for laboratory analysis by pH and specific conductance at SWMU2, SWMU4A through 4F, and SWMU14.
- The analytical methods used to analyze the ground-water samples were inadvertently switched by the laboratory from SW-846 Method 8080 to Method 608. During all future sampling and analyses, it will be ensured that only SW-846 methods will be utilized.
- The detection limits for vinyl chloride and toxaphene were inadvertently higher than their MCLs, SMCLs, and/or action levels. During all future sample analyses, it will be ensured that the detection limits for all parameters are less than, or equal to, their MCLs, SMCLs, and/or action levels.

5.0 DISCUSSION OF SOLID WASTE MANAGEMENT UNITS

The following sections present a brief summary of the site description, work completed, site characterization, waste characterization, analytical results, evidence of release and exposure pathways analysis at each of the 24 RFI SWMUs.

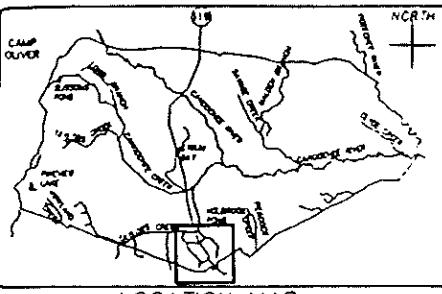
5.1 South Central Landfill SWMU1(FST-001)

5.1.1 Site Description

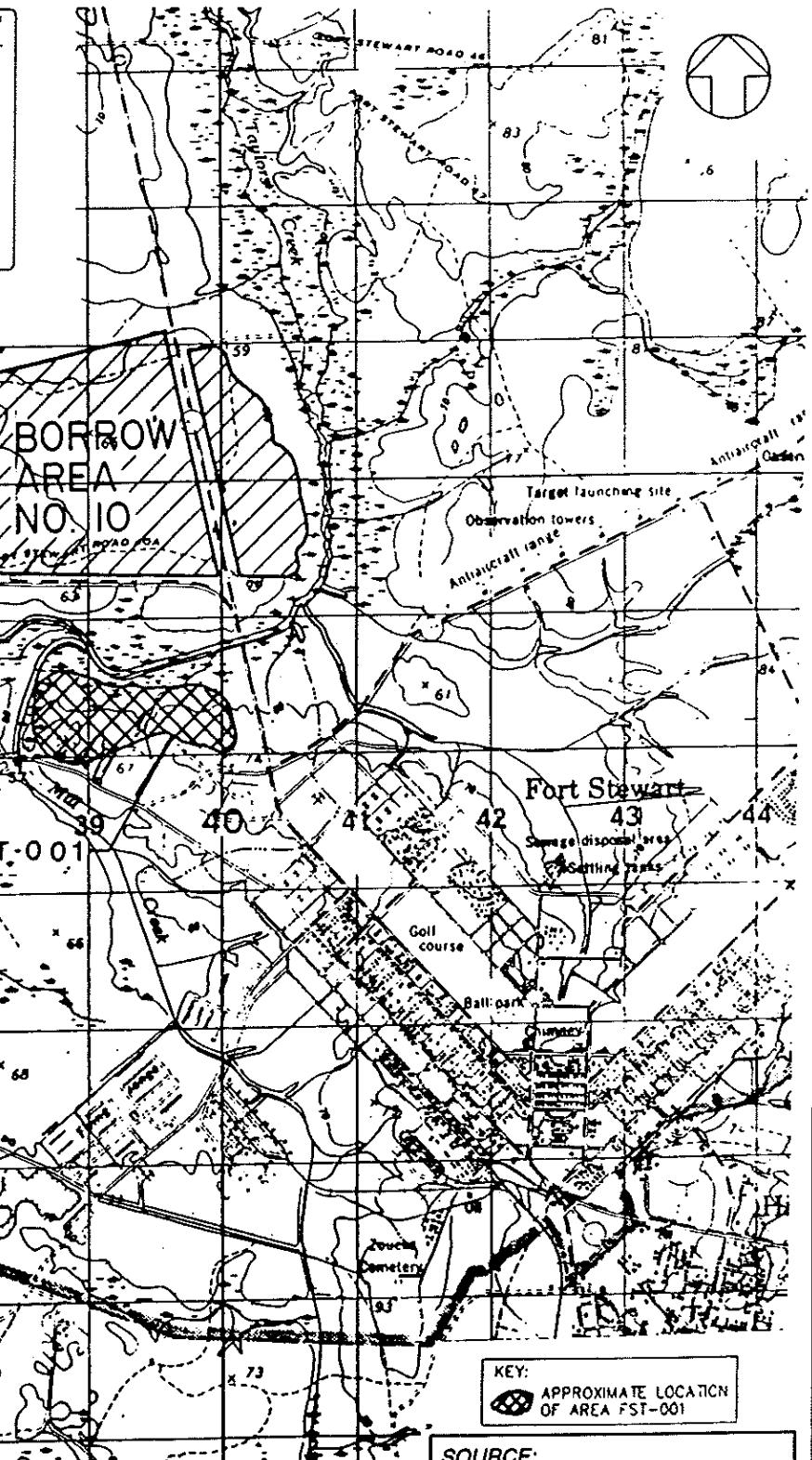
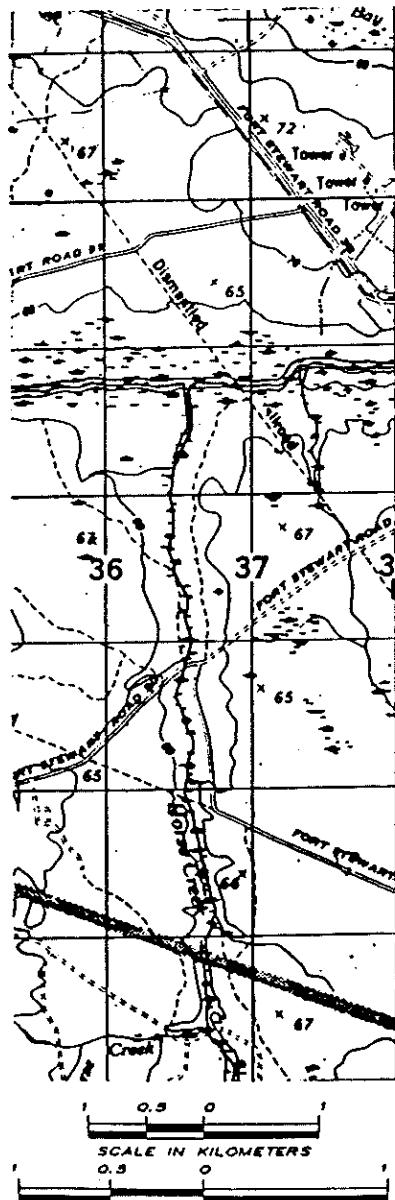
The South Central Landfill is located approximately 0.75 miles northwest of the Fort Stewart Main Cantonment area (Figure 5-1). A detailed map of the South Central Landfill showing topography, borehole/monitoring wells locations, sampling locations and drainage is provided in Figure 5-2. Photographs of the site are shown in Figure 5-3. The South Central Landfill comprises 87 acres bounded on the north by Taylors Creek and on the west and south by Mill Creek, a tributary of Taylors Creek (G&M, 1993). The South Central Landfill has operated since 1940 and continues to be active (G&M, 1993).

From 1940 to 1970, the landfill's eastern section operated as a garbage, paper waste, and construction debris burn pit. Other wastes included wastewater treatment plant sludge, waste air filters from the paint booth in the DOL Allied Trades Shop, sewage treatment plant dewatered sludge, autoclaved infectious wastes bagged in special containers, and incinerator ash. From 1970 to 1982, the trench and fill method was used in the South Central Landfill's eastern area. The trench and fill operation moved from east to west, with previously filled land being restored to forest (G&M, 1993a).

Beginning in the spring of 1982, tumulus refuse disposal operation came into use. This operation has been performed over the western portion of the previous (trench and fill) landfill. Prior to the initiation of disposal in the current landfill, the western most portion of the old (trench and fill) landfill was graded and capped with local clay. The modern landfill is constructed on the clay cap. The active landfill comprises two cells. The eastern cell covers approximately 35 acres. The western cell is about 30 acres (S&W, 1991).



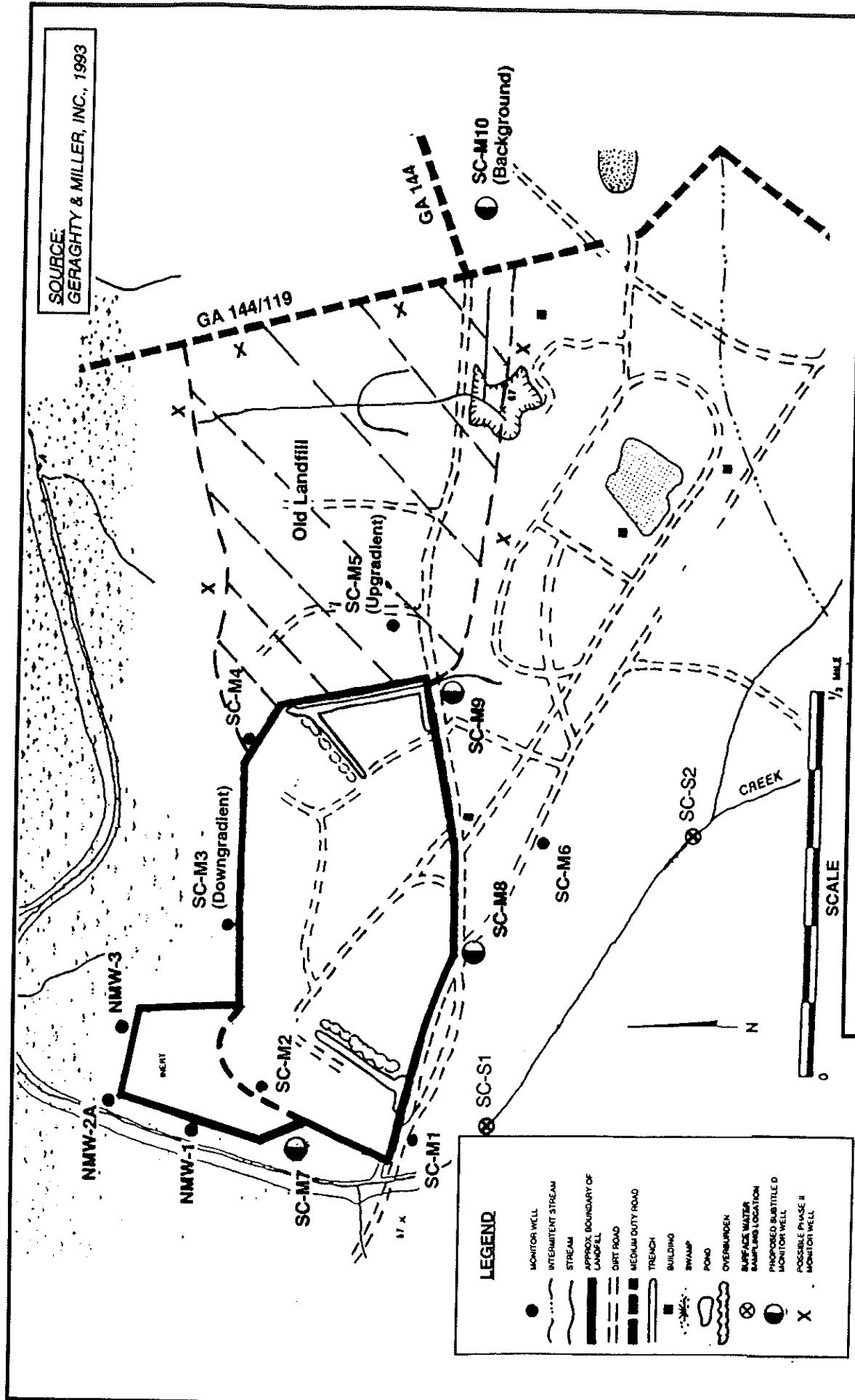
LOCATION MAP



SOURCE:
GERAGHTY & MILLER, INC., 1993

RUST ENVIRONMENT &
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LOCATION MAP
SWMU-1 (FST-001)
SOUTH CENTRAL LANDFILL, FORT STEWART, GEORGIA
PROJECT NO. 87528.000



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FIGURE 5-2
MONITORING WELL AND SURFACE
WATER LOCATIONS
SWMU-1 (FST-001)

SOUTH CENTRAL LANDFILL, FORT STEWART, GEORGIA
PROJECT NO. 87528.000



PHOTO NORTHWARD



PHOTO EASTWARD

RUST ENVIRONMENT &
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FIGURE 5-3
PHOTOGRAPHS
SWMU-1 (FST-001)
SOUTH CENTRAL LANDFILL, FORT STEWART, GEORGIA
PROJECT NO. 87528.000

According to the present landfill supervisor, the landfill is divided into two working areas, an area where dry, construction type material is disposed of and a sanitary landfill area where putresible garbage and properly packaged asbestos is disposed by license (personnel communication, Hodges to RUST, 1993).

During the summer of 1994, the USACE learned some new information regarding the South Central Landfill. After discussions with the landfill's former operator, the USACE learned that an older part of the landfill existed east of the current landfill. The old landfill extended east of the current landfill to Highway 119 and north and south as illustrated in Figure 5-2. Upon learning of this old landfill, the USACE will require four (4) new wells be installed as part of the current Subtitle D landfill permit requirements.

5.1.2 Work Completed

A surface water flow direction map for the South Central Landfill SWMU1(FST-001) was completed. One round of ground-water level data was collected from the existing six monitoring wells. These data were used to prepare a ground-water level elevation map of the site. Geological cross-sections were constructed using lithologic data from site monitoring wells.

Efforts to determine potential ignition sources, which may have been used on-site from 1940 to 1970 and what hazardous waste or hazardous waste constituents were present in landfilled sludge or ash, included a site visit to interview the facility manager. Research has not identified records or knowledge that ignition sources were used or that hazardous waste or hazardous waste constituents were present in landfilled sludge or ash.

Ground-water samples were collected from the six existing monitoring wells. The following laboratory analyses were completed: pH, specific conductance, volatile organic compounds (VOCs), RCRA total metals, pesticides/PCBs, radium -226, and radium -228. Laboratory analytical results are summarized in Table 5-1. Laboratory analytical results for pH and specific conductance were not reported, however, field pH and specific conductance were

reported in the USACE QCSR (February, 1994) and are summarized in Table 5-1.

Two up-gradient surface water samples were collected from Mill Creek. Laboratory analyses indicated in the Phase I RFI Work Plan (G&M, 1993) were: pH, specific conductance, VOCs, RCRA total metals, pesticides/PCBs, radium-226 and radium-228. Laboratory analytical results for pH and specific conductance were not reported, however, field pH and specific conductance were reported in the USACE QCSR (February, 1994) and are summarized in Table 5-1. An analytical results summary is provided in Section 5.2.5.

The USACE notified RUST E&I in May 1995 that an inert section of the landfill boundary must be incorporated into the site map. In addition, the USACE installed three (3) monitoring wells along the perimeter of the inert area for future ground-water sampling. The monitoring well drilling and construction logs for these three (3) wells are included in Appendix F3.

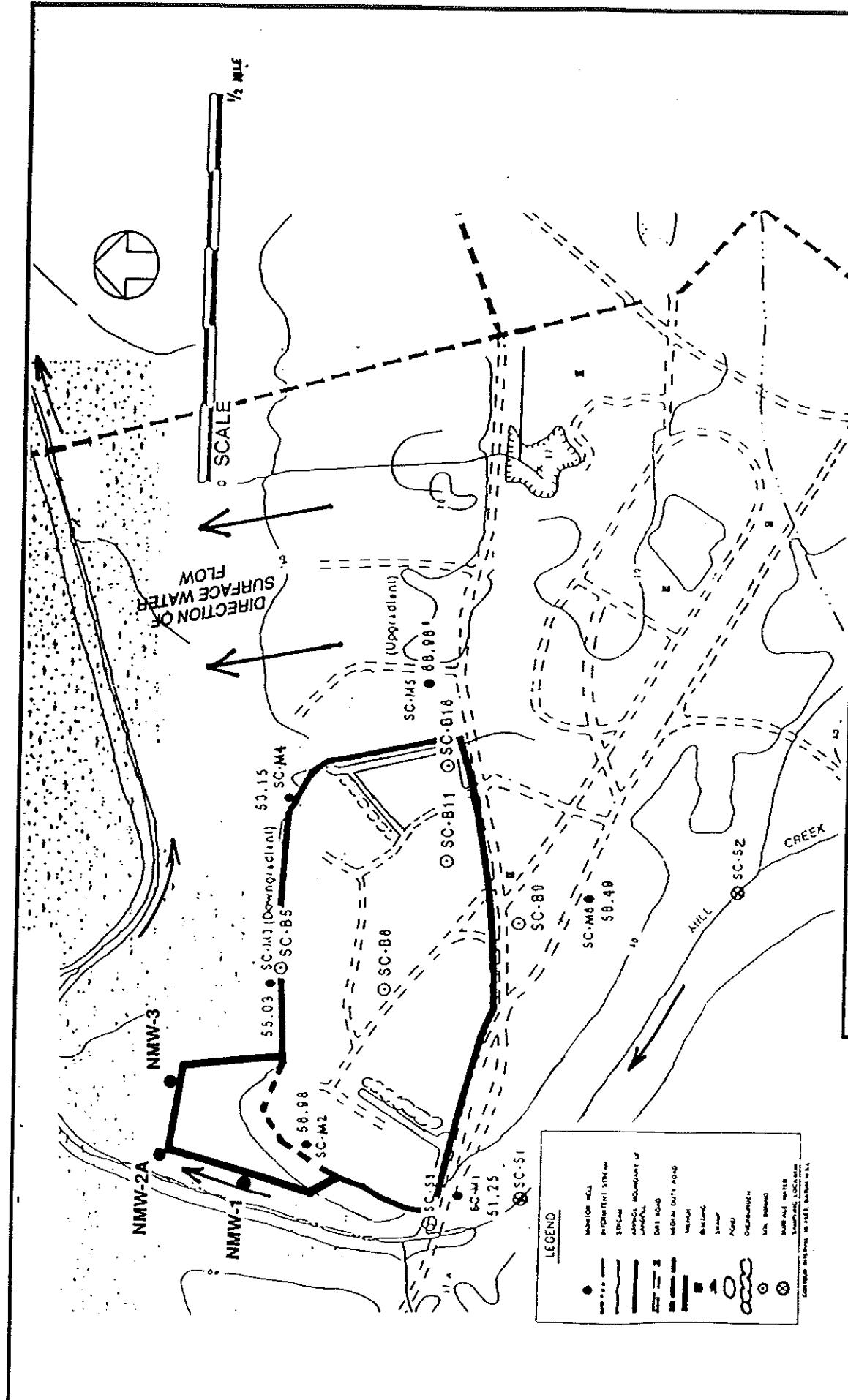
5.1.3 Site Characterization

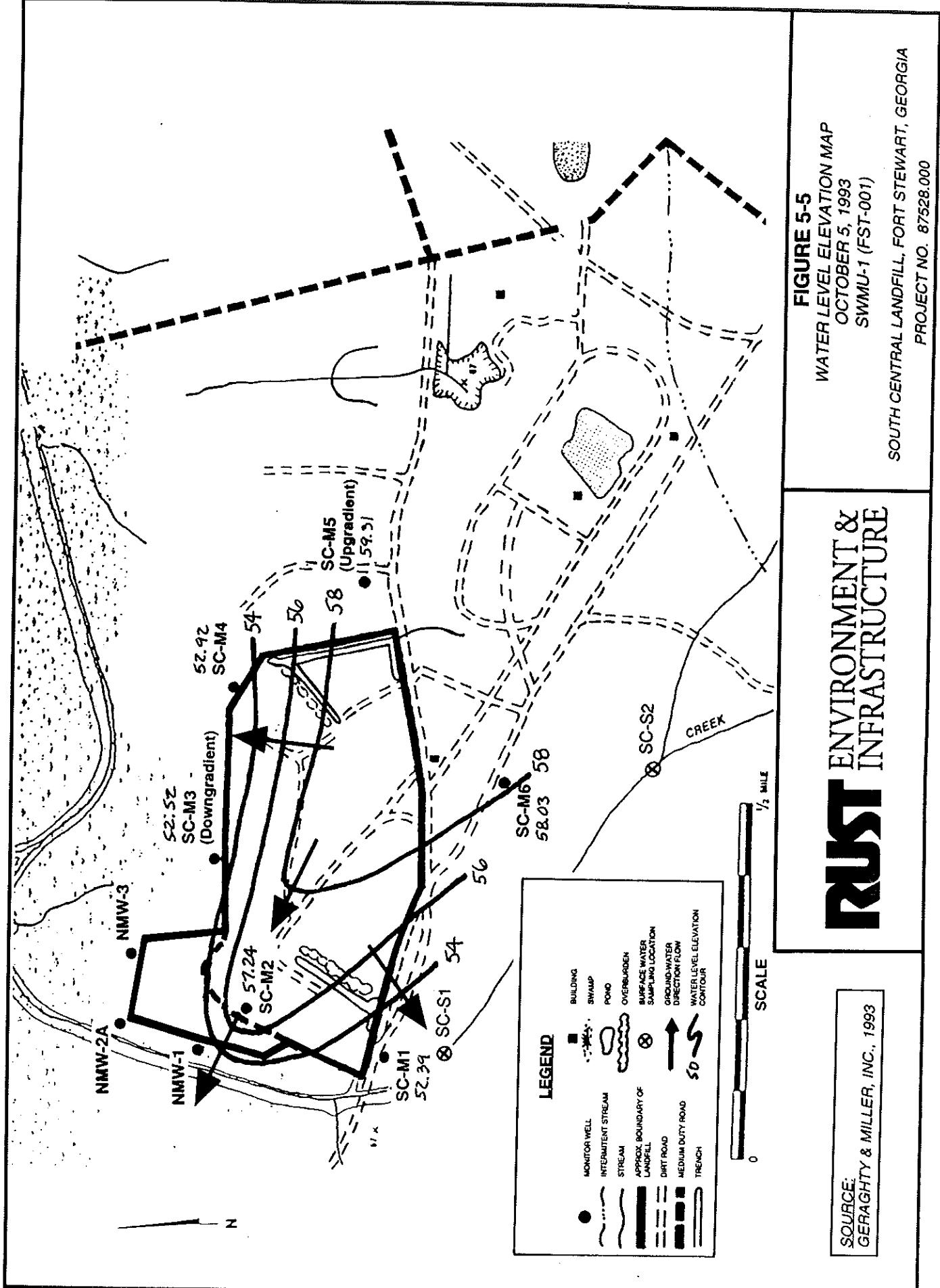
The South Central Landfill monitoring well and surface water sampling locations are shown in Figure 5-2. The surface water flow direction, based on topography and adjacent wetlands, generally flows to the north (Figure 5-4). The shallow ground-water flow direction across the site is to the north, northwest and southwest. A generalized ground-water level elevation map is provided as Figure 5-5. The ground-water level elevation data are provided in Appendix F1. The calculated horizontal hydraulic gradient across the site was 0.002 ft/ft (Appendix F2). North-south and east-west oriented geologic cross-sections are shown in Figures 5-6, 5-7 and 5-8. The monitoring well logs and soil boring logs are provided in Appendix F3. Soils reported underlying the site are predominantly sandy and clayey sands. Phase I field Photoionization Detector (PID) measurements were reported in the USACE QCSR (February, 1994) at 3.2 and 3.9 units respectively for monitoring wells SC-M2 and SC-M3. Contaminant distributions are discussed in Section 5.1.5.

SURFACE WATER FLOW MAP
 SWMU-1 (FST-001)
 SOUTH CENTRAL LANDFILL, FORT STEWART, GEORGIA
 PROJECT NO. 87528 000

RUST ENVIRONMENT & INFRASTRUCTURE

SOURCE:
 GERRAGHTY & MILLER, INC., 1993





RUST ENVIRONMENT & INFRASTRUCTURE

SOURCE:
GERAGHTY & MILLER, INC., 1993

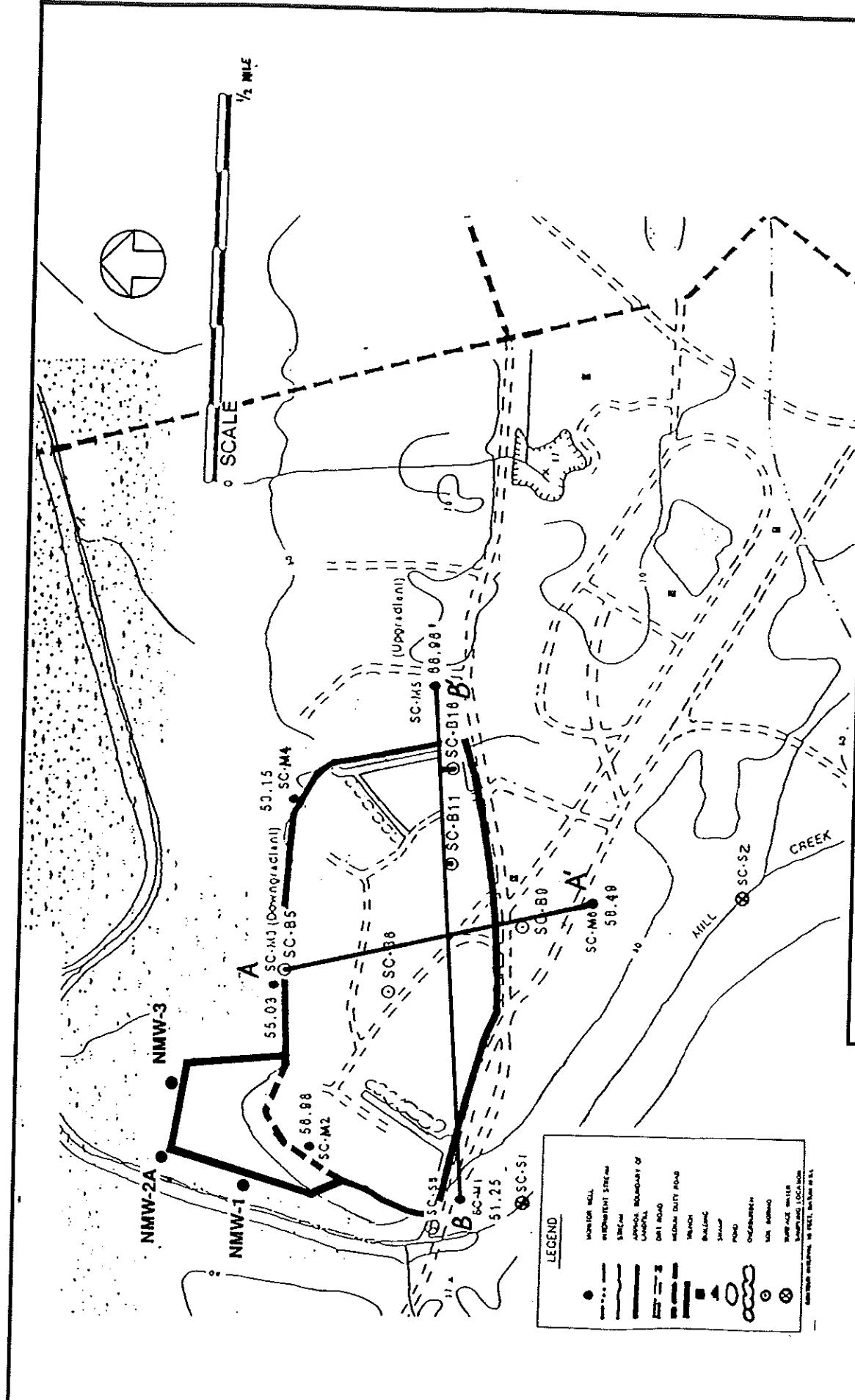


FIGURE 5-6

TRACE OF GEOLOGIC CROSS-SECTIONS
SWMU-1 (FST-001)

SOUTH CENTRAL LANDFILL, FORT STEWART, GEORGIA
PROJECT NO. 87528.000

DMC FILE: S-7-DMC PLOTTED: 4/1/94
 GEOLOGIC CROSS-SECTION A-A';
 SWMU-1(FST-001) SOUTH CENTRAL LANDFILL
 FORT STEWART, GEORGIA
 PROJECT NO. 87528.000

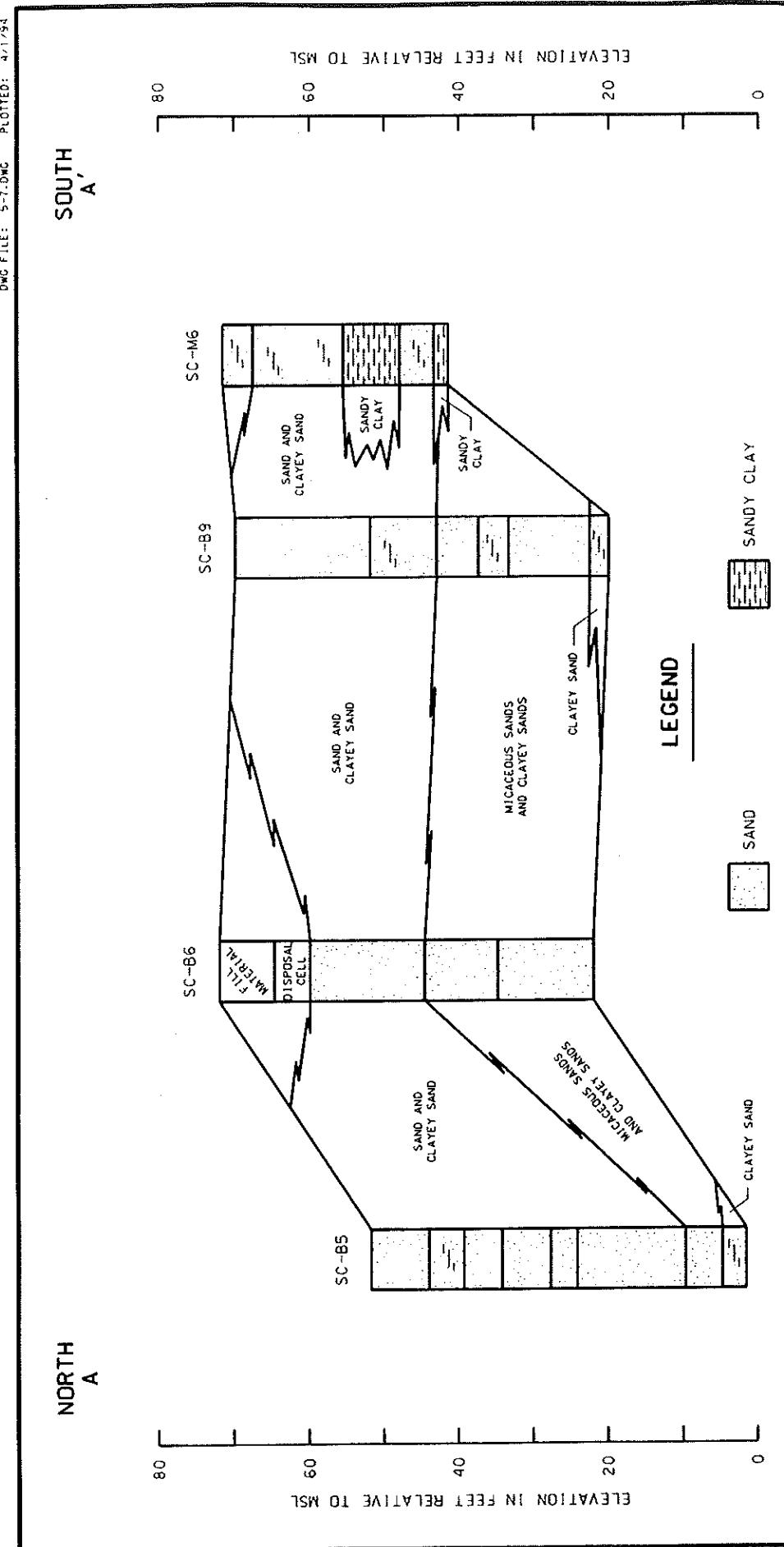
FIGURE 5-7

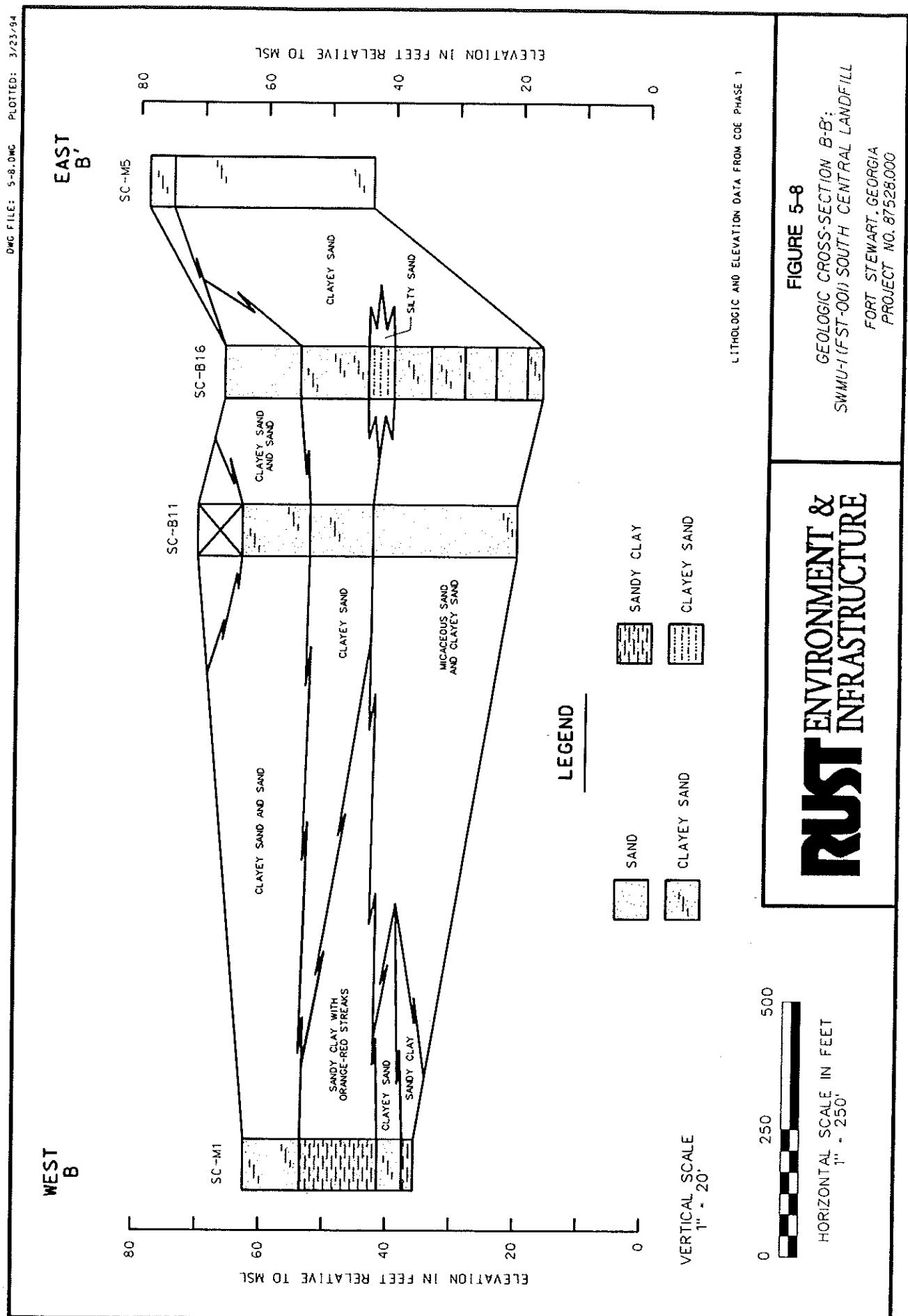
RUST ENVIRONMENT & INFRASTRUCTURE

HORIZONTAL SCALE IN FEET
 $1'' = 345'$

VERTICAL SCALE

LITHOLOGIC AND ELEVATION DATA FROM COC PHASE 1





5-11

5.1.4 Waste Characterization

Material characterization for the South Central Landfill SWMU1(FST-001) includes dry, construction-type debris, packaged asbestos (licensed disposal), paper waste, sludge from the wastewater treatment plant, dewatered sludge from the sewage treatment plant, waste air filters from the paint booth in the DOL Allied Trades Shop, autoclaved infectious waste bagged in special containers, incinerator ash, and putresible garbage (G&M, 1993). Efforts to date have not yielded information regarding ignition sources which may have been used on-site.

5.1.5 Analytical Results

The following section provides a brief summary of analytical results of the ground-water and surface water samples collected at the South Central Landfill. Ground-water samples were collected from six (6) monitoring wells and surface water samples were collected from two up-gradient locations along Mill Creek (Figure 5-2). The proposed down-gradient surface water sample was mistakenly taken in an up-gradient location. The water samples were collected during July, 1993 and analyzed for VOCs by USEPA Method 624, RCRA total metals by USEPA Methods 6010, 7470/7471, 7060, 7421 and 7740, pesticides and PCBs by USEPA Method 608, and Radium 226/228 by USEPA method 900. The USACE Quality Control Summary Report (QCSR) dated February, 1994 stated that holding times were exceeded during the July, 1993 sampling event; VOCs were re-sampled during October, 1993. No laboratory derived analytical data were provided for specific conductance and pH in the ground-water or surface water samples, however, field parameters for pH and specific conductance were reported.

Due to the number of water samples and parameters analyzed, this summary is limited to a discussion of the occurrence and distribution of analytes which exceed USEPA Maximum Contaminant Limit (MCL), Secondary Maximum Contaminant Limit (SMCLs), action level or site-specific background concentrations (for unregulated parameters). Table 4-1 in the Phase I RFI Work Plan (G&M, 1993) is included in Appendix B and provides the specific analytical parameters in groups of parameters analyzed for each sample. The Daily Quality

Control Reports and all data validation checklist are included in the USACE QCSR (February, 1994).

5.1.5.1 Action Levels and Clean-Up Standards

Table 5-1 summarizes the analytical results for the ground-water and surface water samples collected from the South Central Landfill. The table highlights (in bold) the parameters detected above the USEPA MCL, SMCL, action level or site-specific background concentrations (for unregulated parameters) in each ground-water sample and those samples above GAEVD standards in each surface water sample, as specified in the Rules and Regulations for Water Quality Control, or site-specific background concentrations (for unregulated parameters). The complete analytical results are included in the USACE QCSR (February, 1994) and Appendix U of this report.

5.1.5.2 Ground-Water

Volatile Organic Compounds

VOC concentrations were not reported above detection limit in the ground-water samples, except for 2 butanone (0.0112 mg/l) in monitoring well M6. Although no MCL is currently listed for 2 butanone, the site-specific background concentration was BDL.

Metals

During the USACE sampling event, cadmium, chromium and/or lead were detected in each of the six (6) monitoring wells in concentrations exceeding the MCL or action level (see Table 5-1). Figure 5-9 shows the metal contaminant distribution. Presence of these metals may be a result of lead and/or chromium based paints from the paint booth air filters. Also, arsenic, selenium, barium, and mercury were detected above site-specific background concentrations (M5). In addition, the G&M Work Plan (1993), found that the soil pH was found to be approximately 6.0 which creates conditions conducive for leaching of heavy metals.

TABLE 5-1
SUMMARY OF GROUND-WATER AND SURFACE WATER ANALYTICAL RESULTS
SWMUI1(FST-001) - SOUTH CENTRAL LANDFILL
JULY AND OCTOBER 1993

ID	Volatile Organic Compounds (mg/l)	Metals (mg/l)	Pesticide/PCBs (mg/l)	Ra-226/Ra-228 (pCi/l)	Field pH/Specific Conductance (mohm)
M1	BDL	Ba 0.09 Pb 0.016	Aldrin = 0.00004 Alpha BHC = 0.00007	3.8	7.10/0.43
M2/M2 Dup	BDL	Ar 0.014/0.013 Se 0.0072/0.0071 Ba 0.39/0.29 Cd 0.02/BDL Cr 0.22/0.15 Pb 0.22/0.22 Hg 0.0002/0.00026	Alpha BHC = 0.00005/ Alpha BHC = 0.00006 Delta BHC = 0.00003	8.5/8.9	7.45/0.34
M3	BDL	Ar 0.012 Ba 0.18 Cr 0.10 Pb 0.028	BDL	3.2	7.33/0.14
M4	BDL	Ar 0.009 Se 0.0052 Ba 0.37 Cd 0.03 Cr 0.12 Pb 0.079	Aldrin = 0.00004 Alpha BHC = 0.00006 Gamma BHC = 0.00003	5.0	7.01/0.27
M5 (Background)	BDL	Ba 0.1 Pb 0.034	Aldrin = 0.0001 Heptachlor = 0.00002	2.8	7.29/0.32

ID	Volatile Organic Compounds (mg/l)	Metals (mg/l)	Pesticide/PCBs (mg/l)	Ra-226/Ra-228 (pCi/l)	Field pH/Specific Conductance (mohm)
M6	2 Butanone = 0.0112	Ba 0.06 Pb 0.02	BDL	1.6	7.11/0.09
S-1/S-1 Dup	BDL / BDL	BDL / BDL	BDL / BDL ⁽¹⁾	0.6/1.3	7.10/0.07
S-2 (Background)	BDL	BDL	Alpha BHC = 0.00004 Beta BHC = 0.00005 Delta BHC = 0.00006	0.34	7.42/0.19
MCL (Ground-Water)	2 Butanone = NL	Ar 0.05 Se 0.05 Ba 2.0 Cd 0.005 Cr 0.1 Pb 0.015* Hg 0.002	Aldrin = NL BHC = 0.0002 Heptachlor = 0.0004	5	(S) 6.5-8.5/NL
GAEPD Standards (Surface Water)	NA	NA	Alpha BHC = 0.0000131 Beta BHC = 0.000046 Delta BHC = NL	NL	NA

NOTES:

- (1) Due to interference, detection limit is greater than the MCL

MCL = Maximum Contaminant Limit

Dup = Duplicate

NA = Not Applicable

Ar = Arsenic

Se = Selenium

Ba = Barium

Cd = Cadmium

Cr = Chromium

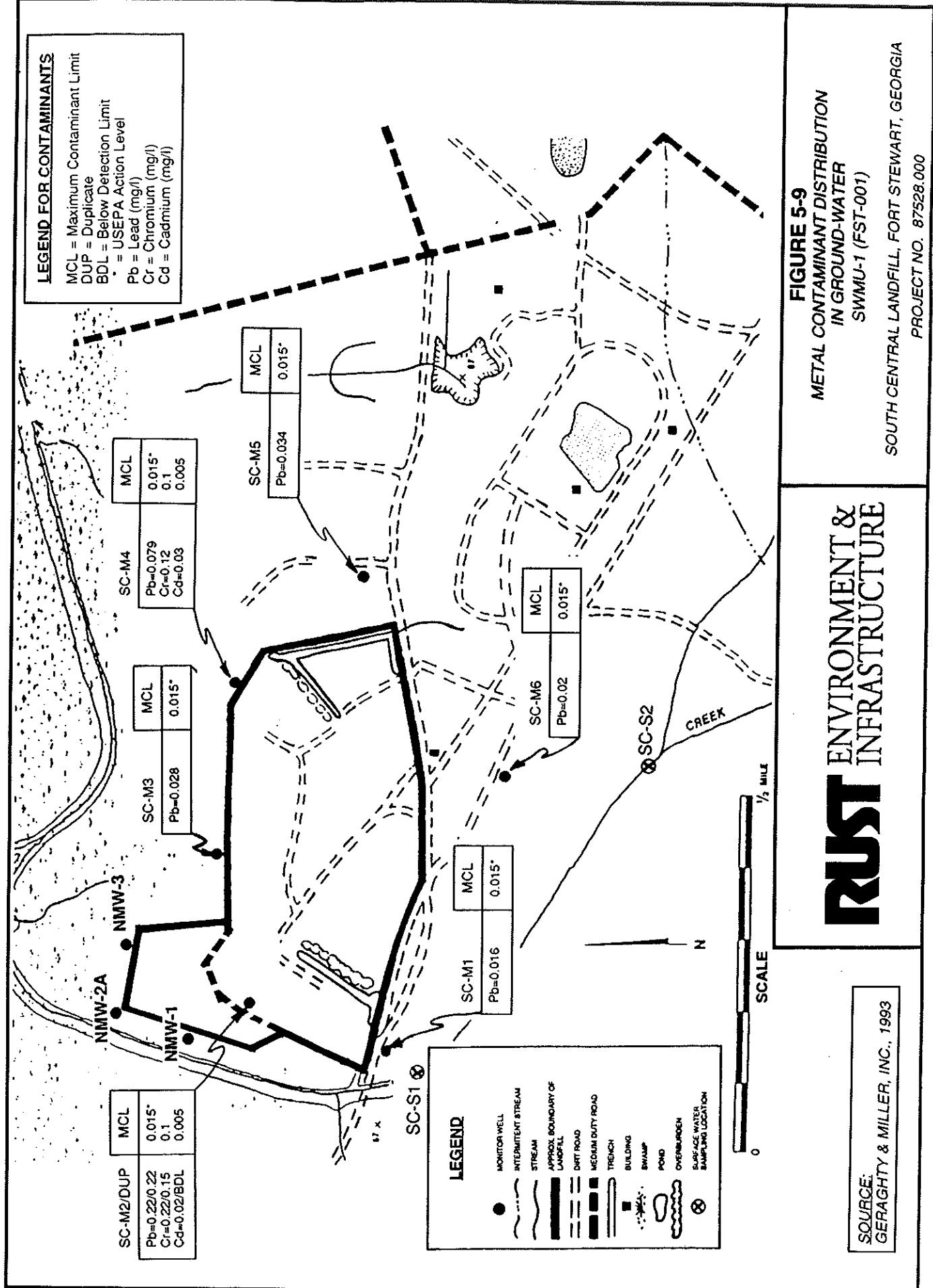
Pb = Lead

Hg = Mercury

* = USEPA action level

NL = Not Listed

(S) = Secondary MCL



Pesticide/PCBs

Alpha benzene hexachloride (BHC), delta BHC (lindane), gamma BHC and heptachlor were reported in ground-water samples, but were not in excess of their respective MCLs. Aldrin was reported in monitoring wells M1 and M4, but was less than the reported concentration in background monitoring well M5. No PCB concentrations were detected in the ground-water samples. However, it should be noted that matrix interference resulted in detection limits in samples collected from monitoring wells M1, and M2, and M2 duplicate in excess of the MCL for some PCB aroclors and toxaphene.

Radium 226/228

No radium 226/228 concentrations were detected above the MCL in monitoring wells M1, M3, M5, and M6. Samples from monitoring wells M2, the M2 duplicate, and M4 had reported concentrations of 8.5 pCi/l, 8.9 pCi/l, and 5 pCi/l, respectively, but were slightly above the MCL of 5 pCi/l.

Specific Conductance and pH

No laboratory analytical data were provided for specific conductance and pH in the ground-water samples. However, field pH ranged from 7.01 to 7.45 and field specific conductance ranged from 0.09 mohm to 0.43 mohm.

5.1.5.3 Surface Water

Volatile Organic Compounds

VOC concentrations were not reported above detection limit in the surface water samples.

Metals

No metal concentrations were detected above detection limit in the surface water samples.

Pesticide/PCBs

Alpha, beta and delta BHC were reported in surface water sample S-2. Alpha and beta BHC were in excess of their respective GAEPD guidelines. No PCB concentrations were

detected above detection limit in the surface water samples. However, matrix interference resulted in elevated detection limits in the sample SW-1 duplicate which was in excess of the MCL for some PCB aroclors and toxaphene. Pesticide contaminant distribution in surface water are shown in Figure 5-9A.

Radium 226/228

No radium 226/228 concentrations were detected above the MCL in the surface water samples.

Specific Conductance and pH

No laboratory analytical data were provided for specific conductance and pH in the surface water samples. However, field pH ranged from 7.10 to 7.42 and field specific conductance ranged from 0.07 mohm to 0.19 mohm.

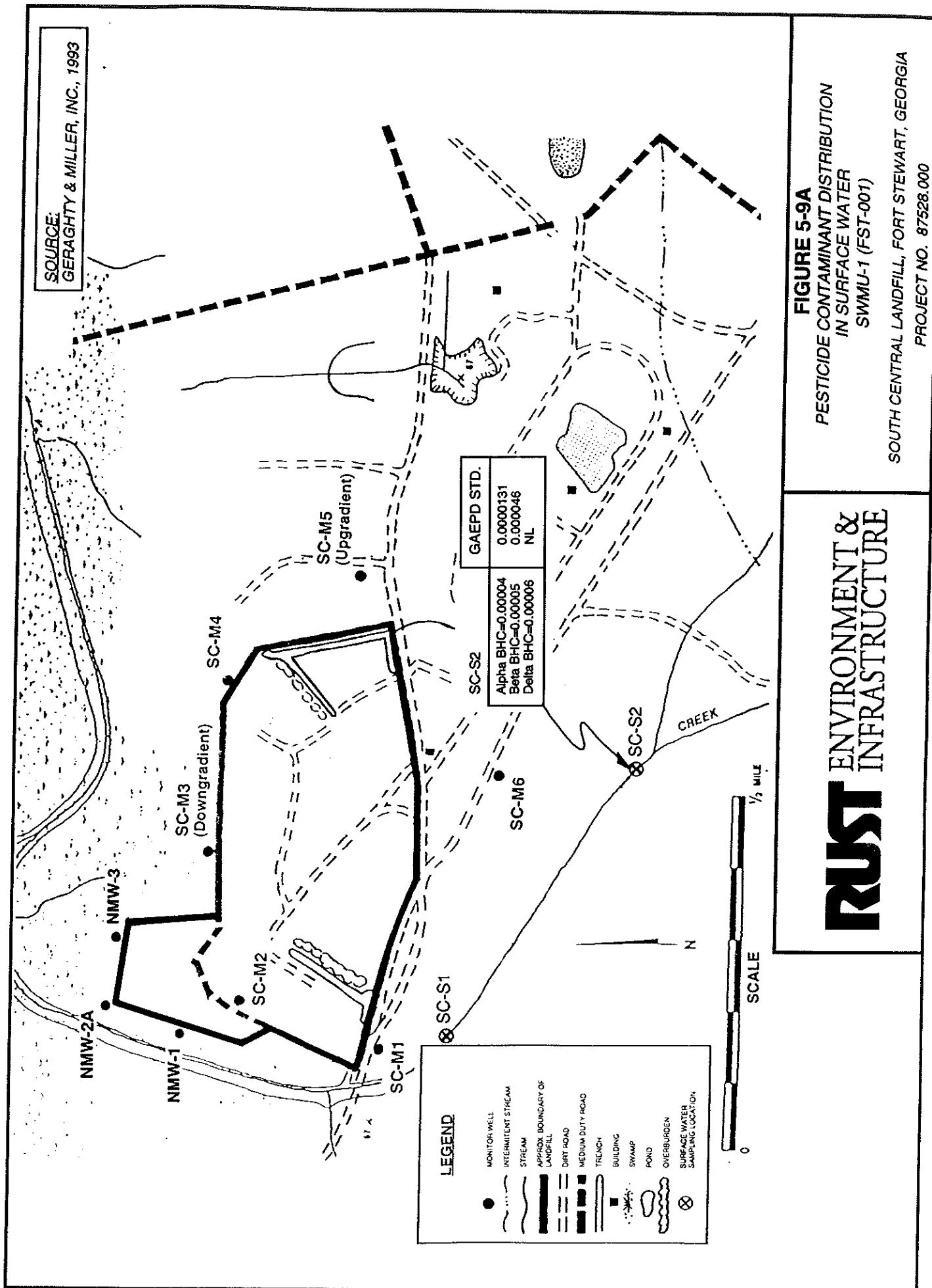
5.1.5.4 Data Evaluation

A problem encountered during sampling at the South Central Landfill was that "holding times were exceeded with the samples taken on 15-19 July 1993 and were resampled and rerun on 5 October 1993." In addition during the July, 1993 sampling event, sample temperatures were in excess of protocol upon arrival at the laboratories. The sample cooling and shipment procedures were changed and samples were maintained at proper temperature during the re-sampling event in October, 1993.

In conclusion, the USACE QCSR (February, 1994) states that all data samples were within usable QC limits even though some had to be resampled to be considered usable. The USEPA Level III data quality objective was met. In addition, both data quality objectives and completeness criteria were met, and the data for SWMU1 met the project objectives.

5.1.6 Evidence of Release from the Site

The analytical results indicate that 2-butanone was detected above the background level, cadmium, chromium and/or lead concentrations were in excess of the MCL or action level



in the ground-water and pesticide concentrations of alpha-BHC and beta-BHC were in excess of the GAEPD standard in one surface water sample at the South Central Landfill SWMU1. In addition, radium-226/228, was in excess of site-specific background concentration (S2, 0.34 pCi/l) in surface water sample S-1/S-1 Duplicate. Also, arsenic, selenium, barium, and mercury were detected above site-specific background concentrations for soils. These parameters may have entered the ground-water and/or soil by way of the landfill and may indicate a release has occurred at the site.

5.1.7 Health and Environmental Assessment

The objective of the Health and Environmental Assessment (HEA) is to provide information necessary to evaluate the need for appropriate interim corrective measures or for a Corrective Measures Study (CMS). The following sections describe transport pathways and potential exposure routes for the receiving media of concern, human health and environmental toxicity criteria, and the preliminary risk evaluation for constituents and media of potential concern. Following the identification of exposure routes, constituent concentrations detected in each medium were compared to exposure-limit criteria developed for selected exposure pathways. Human and ecological exposure criteria were developed using procedures described in Chapter 8 of the *Interim Final RCRA Facility Investigation (RFI) Guidance - Development of an RFI Work Plan and General Considerations for RCRA Facility Investigations* (USEPA, 1989a).

5.1.7.1 Human Health Assessment

Transport Mechanisms and Exposure Pathways

Following release from a source, contaminants may migrate in environmental media by any of several transport mechanisms, including:

- Resuspension and airborne dispersal of contaminated soil particulates,
- Volatilization of organics from soil, surface water, or ground-water,
- Uptake of contaminants by biota,
- Stormwater runoff to surface water and sediments,

- Infiltration/percolation of soil contaminants to ground-water, and
- Discharge of ground-water to surface water and sediments.

For the purposes of this assessment, all potentially contaminated media were considered, however, only those media considered to present the most significant exposure potential were quantitatively evaluated. At SWMU1, ground-water and surface water samples were collected from areas of probable contamination. The resulting data were used in quantitatively evaluating the following potential mechanisms of contaminant migration: stormwater runoff to surface water, infiltration and/or percolation of soil contaminants to ground-water, and discharge of ground-water into surface water.

A complete exposure pathway includes a contaminant source, a transport mechanism, an exposure point where contact by a receptor with the contaminated medium may occur, and a route of intake of the contaminated medium at the exposure point.

Potentially complete human exposure pathways at SWMU1 include: ingestion of and dermal contact with ground-water, surface water, and sediment; inhalation of vapor; and ingestion of contaminated biota. All pathways considered to be complete were addressed and those that represented the greatest potential for risk were quantitatively evaluated. Potential exposure pathways that were quantitatively evaluated for human receptors were ingestion of surface water and ground-water.

Toxicity Criteria

The primary element of the human health assessment is the set of criteria (risk-based constituent concentrations) used to evaluate constituent concentrations associated with SWMU1. Human health criteria were based on EPA-established chronic exposure limits.

The maximum contaminant levels (MCLs) for drinking water promulgated under the Safe Drinking Water Act were used as the toxicity criteria for human drinking water consumption for constituents released to ground-water or surface water. If MCLs did not exist for a

particular constituent of concern, the criterion used was the health-based criterion for carcinogens, the health-based criterion for noncarcinogens, or the lower of these two values if both existed for the constituent of potential concern.

The health-based criteria for carcinogens, calculated from Risk-Specific Doses (RSDs), were developed in accordance with EPA RCRA Facility Investigation (RFI) Guidance (USEPA, 1989a). The RSD is an upper bound estimate of the average daily dose of a carcinogen corresponding to an excess cancer risk for lifetime exposure of 10^{-6} for Class A and B carcinogens, or 10^{-5} for Class C carcinogens. The criteria, presented in Appendix T, were calculated from RSDs as follows:

$$C_i = (R/SF) \times (W/I) \quad (\text{Equation 1})$$

where:

- C_i = criterion concentration for the constituent of concern,
- R = risk level (10^{-6} for Class A and B, 10^{-5} for Class C carcinogens) ,
- SF = carcinogenic slope factor (mg/kg-day^{-1}) ,
- (R/SF) = the RSD,
- W = assumed weight of the exposed individual (receptor), and
- I = intake amount for a given time period.

The most current slope factors (SFs) were obtained from EPA's Integrated Risk Information System (IRIS) database (USEPA, 1994). When SFs were not available in IRIS, they were selected from the Health Effects Assessment Summary Tables (HEAST) (USEPA, 1993). If SFs could not be obtained from HEAST, provisional values supplied by the Superfund Health Risk Technical Support Center of the EPA Environmental Criteria and Assessment Office (SHRTSC-ECAO) were used.

The values (from USEPA 1989a) for the assumed weight (W) and intake rate (I) used in the calculation were:

Ground-water and Surface Water Ingestion

2.0 liters/day for 70 kg adult (70 year exposure period)

The human health-based criteria for noncarcinogens, calculated from the Reference Dose (RfD), are an estimate of the daily exposure that an individual (including sensitive individuals) can experience without appreciable risk of adverse health effects during a lifetime exposure. The criteria, shown in Appendix T, were calculated using the following equation:

$$C_i = (RfD) \times (W/I) \quad (\text{Equation 2})$$

where:

- C_i = criterion concentration for the constituent of concern,
RfD = reference dose in mg/kg-day,
W = assumed weight of the exposed individual (receptor), and
I = intake amount for a given time period.

The most current RfDs were obtained, in order of priority, from EPA's IRIS, HEAST, or SHRTSC-ECAO. The values used for the assumed weight (W) and intake rate (I) were the same as those used in calculating the carcinogen criteria.

For a given constituent of potential concern associated with systemic health effects, the noncarcinogen criteria for water ingestion were used unless MCLs or lower carcinogen criteria existed.

Preliminary Risk Evaluation

Following the calculation of exposure-limit criteria ("action levels"), comparisons were made between the action levels and the constituent concentrations present at the SWMU1. Maximum detected concentrations were used for the comparison. Concentrations that

TABLE 5-1A
COMPARISON OF INDIVIDUAL CONSTITUENT CONCENTRATIONS
WITH HUMAN HEALTH CRITERIA
SWMU1(FST-001) - SOUTH CENTRAL LANDFILL

Exposure Medium	Units	Constituent Released	Release Concentration*	Criterion Type Used	Criterion Value	Release Concentrations Exceed Criterion?
GROUND WATER						
	mg/l	Aldrin	1.00E-04	C	2.06E-06	Yes
		alpha-BHC	7.00E-05	MCL	2.00E-04	No
		2-Butanone	1.12E-02	NC	2.10E+01	No
		delta-BHC	3.00E-05	MCL	2.00E-04	No
		gamma-BHC	3.00E-05	MCL	2.00E-04	No
		Heptachlor	2.00E-05	MCL	4.00E-04	No
		Arsenic	1.40E-02	MCL	5.00E-02	No
		Barium	3.90E-01	MCL	2.00E+00	No
		Cadmium	3.00E-02	MCL	5.00E-03	Yes
		Chromium	2.20E-01	MCL	1.00E-01	Yes
		Lead	2.20E-01	MCL	1.50E-02	Yes
		Mercury	2.60E-04	MCL	2.00E-03	No
		Selenium	7.20E-03	MCL	5.00E-02	No
SURFACE WATER						
	mg/l	alpha-BHC	4.00E-05	MCL	2.00E-04	No
		beta-BHC	5.00E-05	MCL	2.00E-04	No
		delta-BHC	6.00E-05	MCL	2.00E-04	No

* Release concentration represents the maximum detected concentration for each constituent.

C - Carcinogen

NC - Noncarcinogen

MCL - Maximum Contaminant Level

TABLE 5-1B
COMPARISON OF INDIVIDUAL CONSTITUENT CONCENTRATIONS
WITH ECOLOGICAL CRITERIA
SWMU1(FST-001) - SOUTH CENTRAL LANDFILL

Exposure Medium	Units	Constituent Released	Release Concentration	Criterion Type Used	Criterion Value*	Release Concentrations Exceed Criterion?
SURFACE WATER						
	mg/l	alpha-BHC	4.00E-05	AWQC	1.00E-02	No
		beta-BHC	5.00E-05	AWQC	1.00E-02	No
		delta-BHC	6.00E-05	AWQC	1.00E-02	No

* Available AWQC value (1.00E-01) was for acute exposure. Therefore, the criterion value was calculated as 1/10 of this value.

exceeded human health action levels are shown in Table 5-1A.

Of the 13 constituents detected in ground-water at SWMU1, seven were metals, five were pesticides, and one was a volatile organic compound (VOC). Three of the metals and one of the pesticides exceeded criterion values, indicating that these constituents potentially could pose a risk to human health as a result of ground-water ingestion. Both of the pesticides that exceeded criteria are rated as Class B2 carcinogens. Additional human intake of these constituents potentially could occur as a result of dermal contact and inhalation during showering and other uses of ground-water. Also, intake could occur as a result of transport of constituents from ground-water into surface water and sediments, and subsequently into biota, such as fish, which could be consumed by humans. Inhalation of VOC vapors is another potential intake route.

Three pesticides were detected in surface water at SWMU1. However, no pesticide exceeded its criterion value, indicating that surface water at this SWMU is unlikely to pose a risk to human health.

5.1.7.2 Environmental Assessment

Transport Mechanisms and Exposure Pathways

Potential transport mechanisms and complete exposure pathways for ecological receptors are the same as those described in Section 5.1.7.1 for human receptors, except for direct exposure to ground-water. All potentially complete exposure pathways were considered. Those that represented the greatest potential for risk were quantitatively evaluated unless the human health assessment had already indicated that further SWMU assessment for that pathway would be required.

The human health assessment showed that further evaluation would be required for only the ground-water exposure pathway. Direct exposure to ground-water is not a complete exposure pathway for ecological receptors. Therefore, the potential exposure pathway that was quantitatively evaluated for ecological receptors was exposure of aquatic organisms to

surface water.

Toxicity Criteria

The ecological criteria used in evaluating potential exposure of aquatic receptors to surface water at SWMU1 were EPA Ambient Water Quality Criteria for the protection of aquatic life. Chronic criteria were not available for the pesticides detected, so acute criterion values were used after dividing them by an uncertainty factor of 10 to allow for possible longer-term environmental exposures.

Preliminary Risk Evaluation

Toxicity to ecological receptors was evaluated by comparison of ecological exposure criteria (derived as described above) to maximum detected release concentrations. The results of this evaluation are shown in Table 5-1B. The release concentration of each pesticide constituent was well below its criterion value based on AWQCs, indicating that surface water exposure does not pose a significant risk to ecological receptors at the unit.

5.1.8 Potential for Phase II Investigation

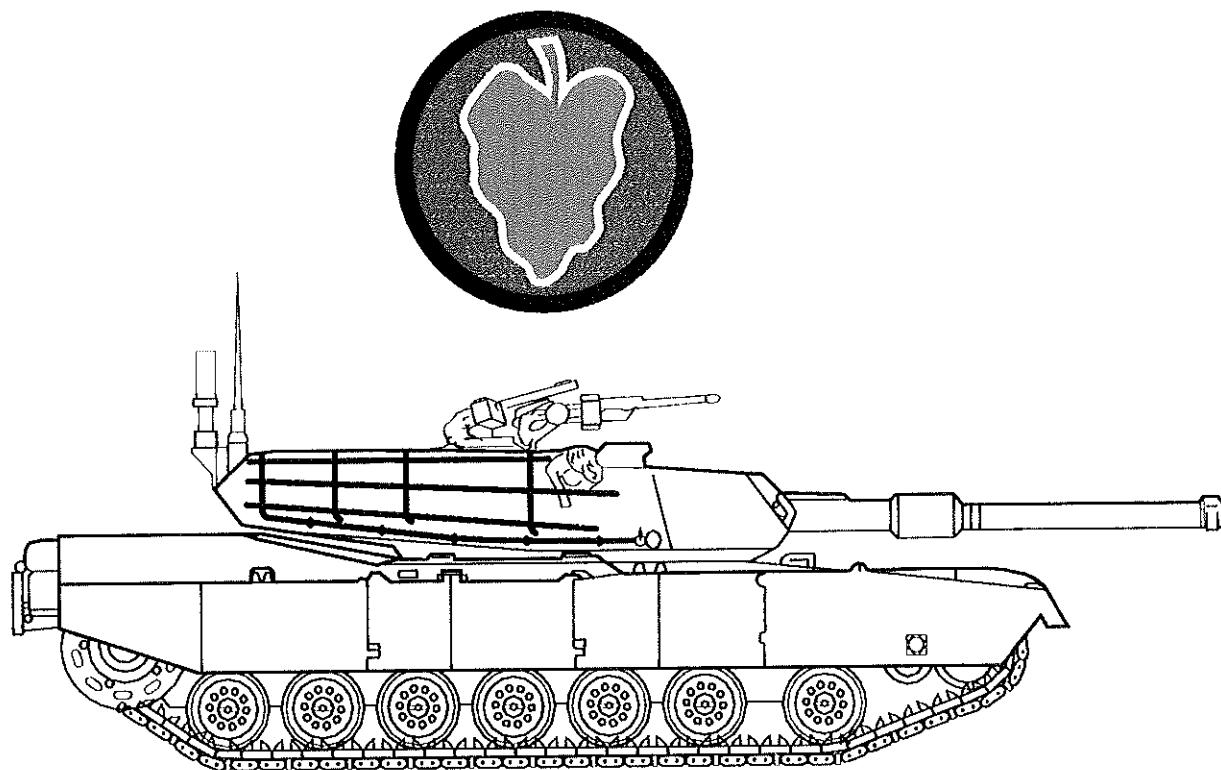
As stated in Section 5.1.6, the analytical results indicate that a release may have occurred at SWMU1. Based on these results, a Phase II investigation is recommended. In that two (2) up-stream surface water samples were collected in Phase I, it is recommended that one (1) up-stream and one (1) down-stream surface water be sampled and analyzed for RCRA metals, pesticide/PCBs, radionuclides, pH and specific conductance.

The Phase II investigation would include a detailed research (with interviews of all former landfill operators) to locate the former boundary and obtain descriptions of waste types; a site inspection (walk-over) to locate any surface features such as mounds, trenches, stressed vegetation, or leachate; a geophysical survey; and installation of six (6) additional monitoring wells around the new boundary of the old landfill (refer to Figure 5-2). Soil samples should be collected during construction of the monitoring wells for analysis. If any leachate is identified, the leachate would be sampled. The Phase II investigation would also include

sampling the six (6) original monitoring wells, the three (3) new monitoring wells, the four (4) planned Subtitle D monitoring wells, and six (6) additional Phase II monitoring wells for VOCs, metals, pesticide/PCBs, pH, radionuclides and specific conductance. An HEA is recommended as part of the Phase II investigation.

**Corrected Final
Phase I RCRA Facility Investigation Report
For 24 Solid Waste Management Units
At Fort Stewart, Georgia**

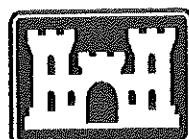
Volume II of III



May 1996

Job No. 87528.000

Prepared For



**US Army Corps
of Engineers**
Savannah District

Prepared By

RUST ENVIRONMENT &
INFRASTRUCTURE

CORRECTED FINAL

**PHASE I
RCRA FACILITY INVESTIGATION REPORT
FOR 24 SOLID WASTE MANAGEMENT UNITS
AT FORT STEWART, GEORGIA
VOLUME II OF III**

Prepared For

**UNITED STATES ARMY CORPS OF ENGINEERS
SAVANNAH DISTRICT**

**Contract DACA21-93-D-0029
Delivery Order 0005
Rust Project No. 87528.000
May 1996**

**Prepared By
RUST ENVIRONMENT AND INFRASTRUCTURE
2694 Lake Park Drive
Charleston, South Carolina 29406
803/572-5600**

Appendix F

SWMU1(FST-001) South Central Landfill

Appendix F1

Water Level Elevation Data

**WATER ELEVATIONS
SWMU1(FST-001)
SOUTH CENTRAL LANDFILL
OCTOBER 5, 1993**

WELL ID	TOC ELEVATION	DEPTH TO WATER	WATER LEVEL ELEVATION
SC-M1	60.71	8.32	52.39
SC-M2	66.69	9.45	57.24
SC-M3	52.52	0.00	52.52
SC-M4	56.09	3.17	52.92
SC-M5	69.41	10.10	59.31
SC-M6	69.55	11.52	58.03

NOTES:

TOC = Top of Casing

Fort Stewart RFI

Dec. 1993
Survey

EI. Top of Riser

FST-001

MW-1	60.71
MW-2	66.69
MW-3	52.52
MW-4	56.09
MW-5	69.41
MW-6	69.55

FST-002 *

MW-1	100.89
MW-2	87.95
MW-3	75.48
MW-4	76.92

FST-003 **

MW-1	100.68
MW-2	98.43
MW-3	95.46
MW-4	94.69

* Assumed elevation of 100' for TBM (nail in telephone pole)

** Assumed elevation of 100' for TBM (nail in tree)

readings
WATER LEVEL ELEVATIONS

<u>SITE NAME</u>	<u>DEPTH TO WATER (ft.)</u>	<u>TOP OF RISER (ft) (height)</u>	<u>DATE</u>	<u>WL Elev.</u>
South Central Landfill				
FST-001-SCM1	8.32	3.50	10/05/93	52.39
FST-001-SCM2	9.45	0.75	10/05/93	57.24
FST-001-SCM3	0.00	0.75	10/05/93	52.52
FST-001-SCM4	3.17	0.75	10/05/93	52.92
FST-001-SCM5	10.10	0.75	10/05/93	59.31
FST-001-SCM6	11.52	3.50	10/05/93	58.03
Camp Olivier Landfill				
FST-002-MW1	21.94	2.70	11/16/93	
FST-002-MW2	16.01	2.00	11/16/93	
FST-002-MW3	6.88	2.45	11/16/93	
FST-002-MW4	6.12	2.50	11/16/93	
Tac-X Landfill				
FST-003-MW1	11.96	2.40	11/17/93	
FST-003-MW2	10.65	2.00	11/17/93	
FST-003-MW3	7.90	2.60	11/18/93	
FST-003-MW4	6.72	2.40	11/17/93	
Burn Pits				
FST-004A-MW1	10.39	2.80	08/21/93	
FST-004A-MW2	10.49	2.65	08/21/93	
FST-004A-MW3	9.80	2.50	08/21/93	
FST-004A-MW4	12.20	2.82	08/21/93	
FST-004B-MW1	13.33	2.46	08/22/93	
FST-004B-MW2	10.35	2.10	08/22/93	
FST-004B-MW3	11.44	2.75	08/22/93	
FST-004B-MW4	14.95	2.75	08/22/93	
FST-004C-MW1	5.78	3.05	11/09/93	
FST-004C-MW2	4.58	3.03	11/09/93	
FST-004C-MW3	4.72	2.61	11/10/93	
FST-004C-MW4	7.29	2.88	11/10/93	
FST-004D-MW1	9.55	3.27	07/30/93	
FST-004D-MW2	10.12	3.50	07/30/93	
FST-004D-MW3	9.84	3.00	07/30/93	
FST-004D-MW4	7.96	3.15	07/30/93	
FST-004E-MW1	13.72	2.80	08/19/93	
FST-004E-MW2	13.82	2.92	08/19/93	
FST-004E-MW3	13.39	2.95	08/19/93	
FST-004E-MW4	13.30	3.00	08/19/93	
FST-004F-MW1	16.14	2.90	08/20/93	
FST-004F-MW2	13.63	3.10	08/20/93	
FST-004F-MW3	18.03	2.90	08/20/93	
FST-004F-MW4	17.50	2.60	08/20/93	
Old Fire Training Pit				
FST-014-MW1	11.70	2.45	07/28/93	
FST-014-MW2	11.40	2.50	07/28/93	
FST-014-MW3	11.02	3.00	07/28/93	
FST-014-MW4	12.97	2.50	07/28/93	

WATER LEVEL ELEVATIONS
Temporary Monitoring Well Readings

<u>SITE NAME</u>	<u>DEPTH TO WATER (ft.)</u>	<u>TOP OF RISER (ft)</u>	<u>DATE</u>
86 Waste Oil Tanks		<i>height</i>	
FST-025-4A	11.11	2.37	10/14/93
FST-025-4AA	14.64	3.78	11/09/93
FST-025-56	13.12	5.45	10/14/93
FST-025-64	12.63	4.83	09/02/93
FST-025-64A	-	3.65	09/03/93
FST-025-67	5.07	0.65	10/25/93
FST-025-70	17.95	0.75	10/25/93
FST-025-94	5.07	0.65	10/25/93
FST-025-94B	9.11	2.38	09/02/93
FST-025-94C	-	1.47	09/02/93
FST-025-100A	14.25	2.00	09/02/93
FST-025-100B	8.90	1.34	09/02/93
FST-025-214	8.21	0.80	10/17/93
FST-025-215	12.25	3.75	10/17/93
FST-025-220	10.85	3.20	10/13/93
FST-025-232	10.60	3.15	10/13/93

Appendix F2

Horizontal Hydraulic Gradient Calculations

HORIZONTAL HYDRAULIC GRADIENT CALCULATIONS
SWMU1 - SOUTH CENTRAL LANDFILL
FORT STEWART, GEORGIA
OCTOBER 5, 1993

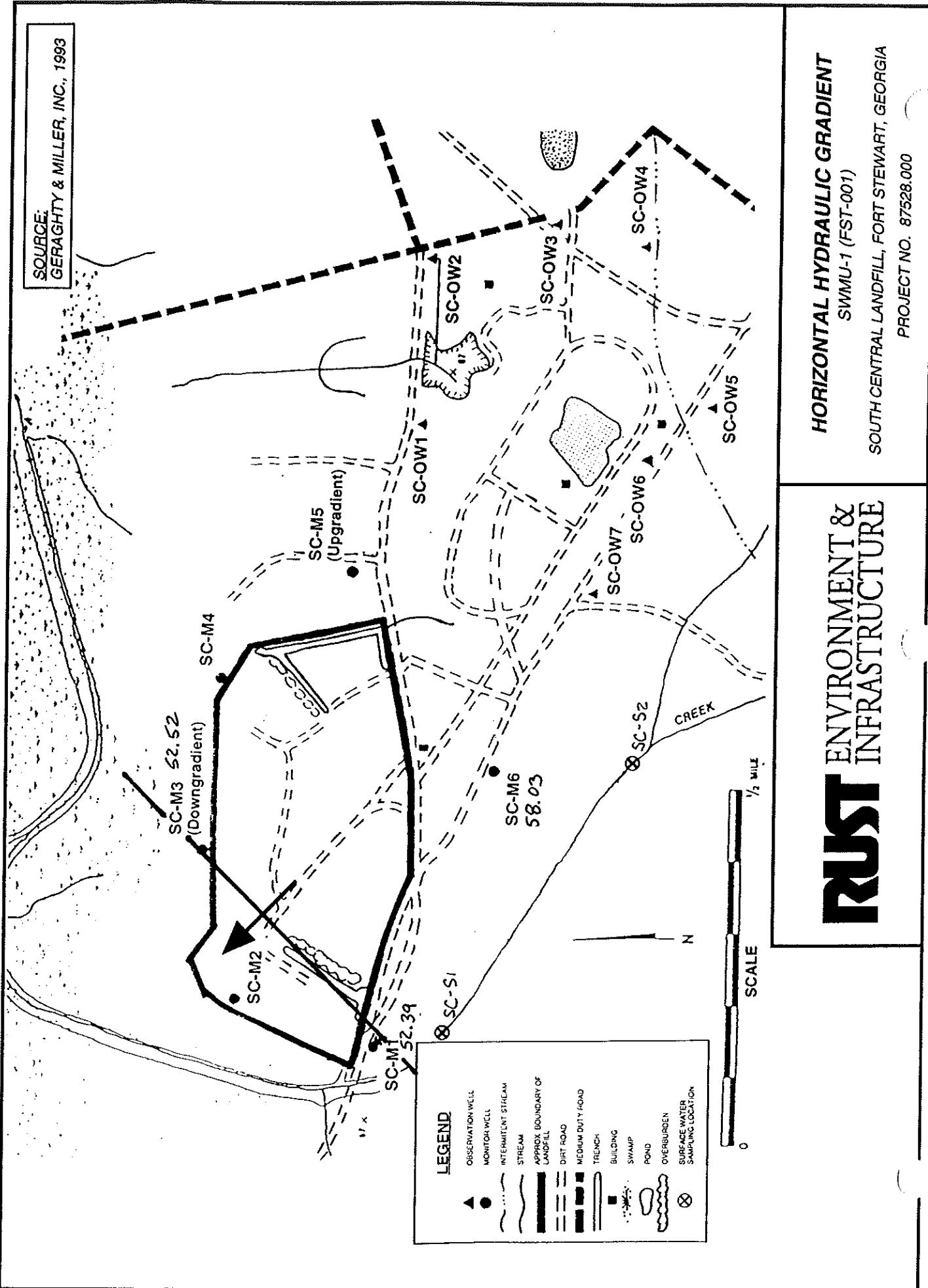
<u>ID</u>	<u>WATER LEVEL ELEVATION</u>
M6	58.03 HIGH
M3	52.52 MIDDLE
M1	52.39 LOW

$$\frac{58.03 - 52.52}{X} = \frac{58.03 - 52.39}{2223}$$

$$X = 2172$$

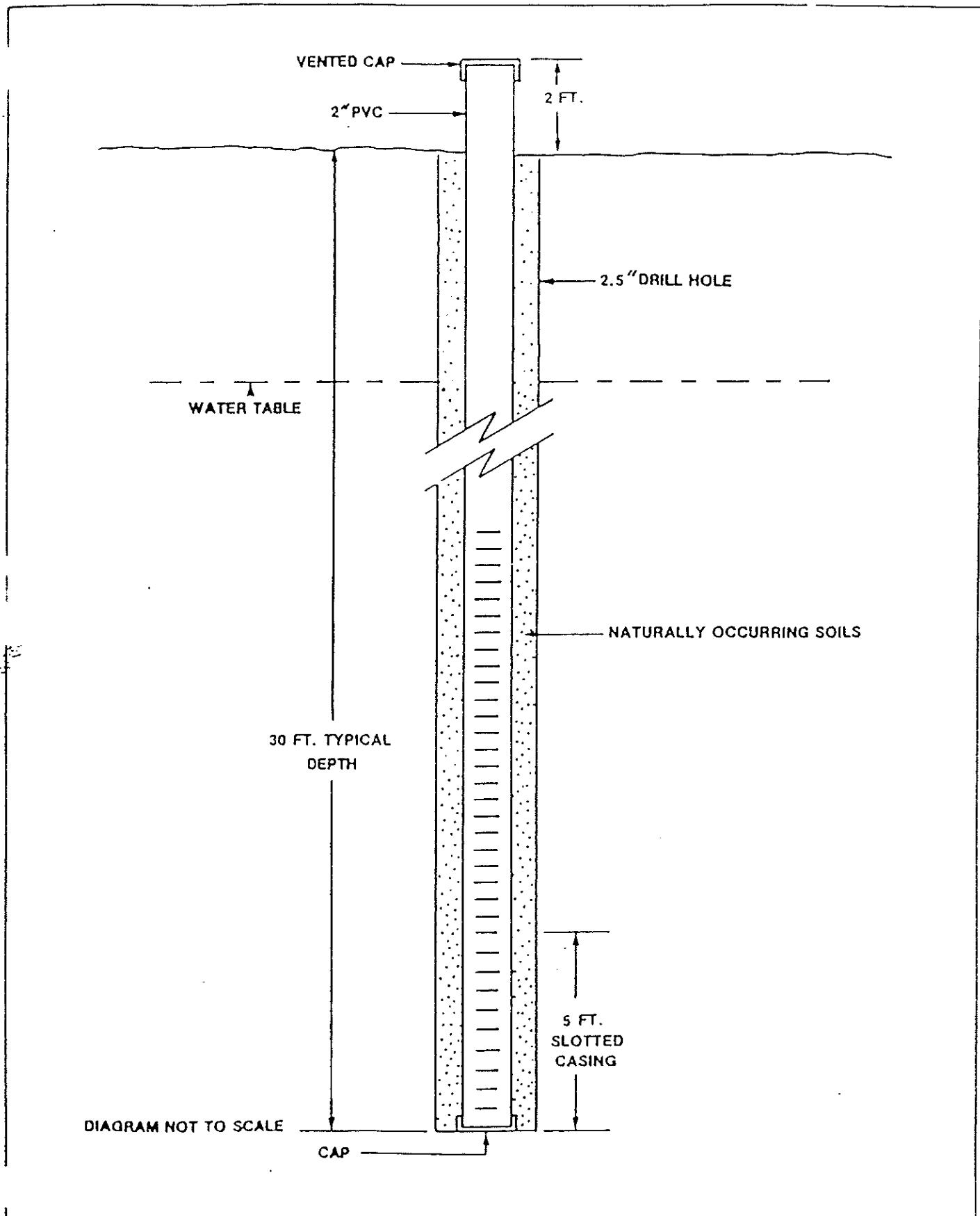
$$\frac{52.52 - 52.39}{65} = 0.002 \text{ ft/ft gradient}$$

Ground-water flow direction is north and west.



Appendix F3

Monitoring Well and Soil Boring Logs



FORT STEWART

TYPICAL OBSERVATION WELL INSTALLATION

Source: U. S. Army Environmental Hygiene Agency 1988

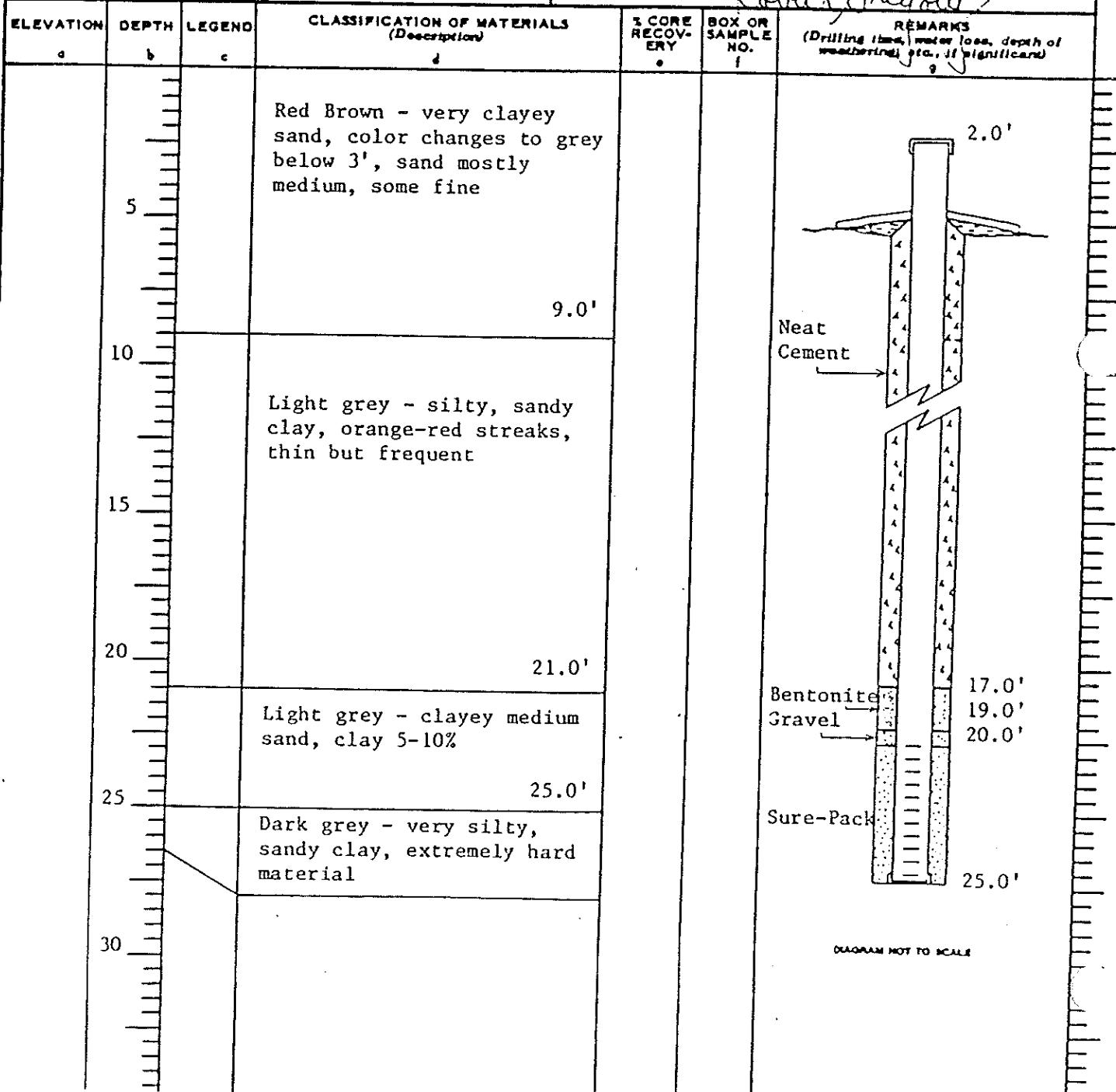
(1980 Wells)

Hole No. SC-M1

SHEET 1

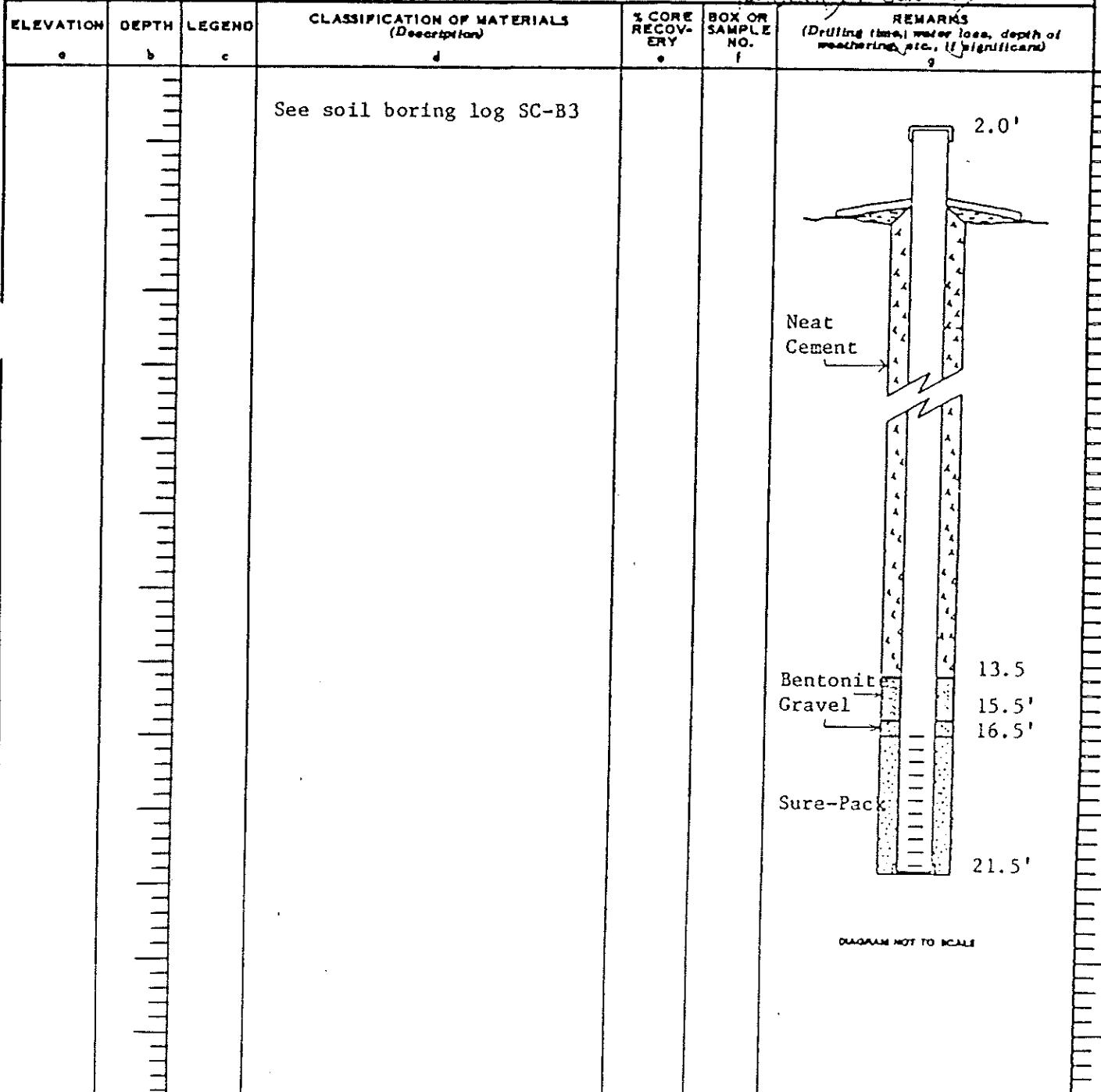
OF 1 SHEETS

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Fort Stewart, GA
1. PROJECT Fort Stewart RCRA Studies		10. SIZE AND TYPE OF BIT 9"	
2. LOCATION (Coordinates or Station) N686890.30 E660515.96		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL	
3. DRILLING AGENCY Paul N. Clawson		12. MANUFACTURER'S DESIGNATION OF DRILL SIMCO	
4. HOLE NO. (As shown on drawing title and file number) SC-M1		13. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN	DISTURBED 0
		UNDISTURBED 0	
5. NAME OF DRILLER Paul N. Clawson		14. TOTAL NUMBER CORE BOXES	
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED DEG. FROM VERT.		15. ELEVATION GROUND WATER 6.9' @ 24 hrs.	
7. THICKNESS OF OVERTBURDEN		16. DATE HOLE STARTED 2/26/80 COMPLETED 2/29/80	
8. DEPTH DRILLED INTO ROCK 0'		17. ELEVATION TOP OF HOLE 62.31'	
9. TOTAL DEPTH OF HOLE 26.5'		18. TOTAL CORE RECOVERY FOR BORING	
		19. SIGNATURE OF INSPECTOR Robert H. Gregor	

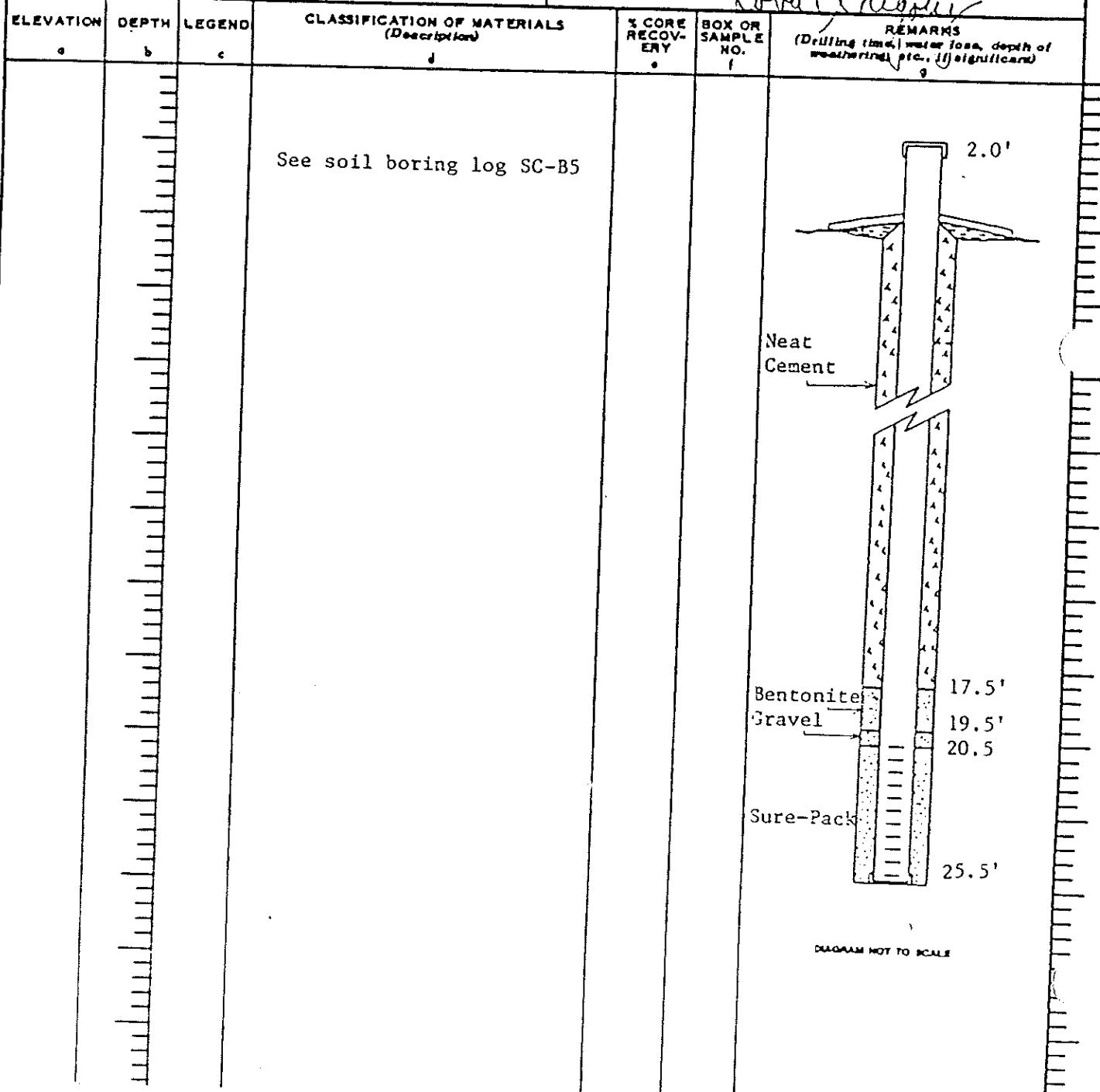


Hole No. SC-M2

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Fort Stewart, GA	SHEET 1 OF 1 SHEETS
1. PROJECT Fort Stewart RCRA Studies	10. SIZE AND TYPE OF BIT 9"		
2. LOCATION (Coordinates or Station) N687929.13 E661144.17	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL		
3. DRILLING AGENCY Paul N. Clawson	12. MANUFACTURER'S DESIGNATION OF DRILL SIMCO		
4. HOLE NO. (As shown on drawing title and file number)	SC-M2	13. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN	DISTURBED 0 UNDISTURBED 0
5. NAME OF DRILLER Paul N. Clawson	14. TOTAL NUMBER CORE BOXES		
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED DEG. FROM VERT.	15. ELEVATION GROUND WATER 6.1' @ 24 hrs.		
7. THICKNESS OF OVERTBURDEN	16. DATE HOLE STARTED 3/1/80 COMPLETED 3/4/80		
8. DEPTH DRILLED INTO ROCK 0'	17. ELEVATION TOP OF HOLE 64.65'		
9. TOTAL DEPTH OF HOLE 26.5'	18. TOTAL CORE RECOVERY FOR BORING %		
19. SIGNATURE OF INSPECTOR <i>Robert J. Nealon</i>			



DRILLING LOG		DIVISION South Atlantic	INSTALLATION Fort Stewart, GA	Hole No. SC-M3	SHEET 1 OF 1 SHEETS
1. PROJECT Fort Stewart RCRA Studies		10. SIZE AND TYPE OF BIT 9"			
2. LOCATION (Coordinates or Station) N688276.58 E622041.66		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL			
3. DRILLING AGENCY Paul N. Clawson		12. MANUFACTURER'S DESIGNATION OF DRILL SIMCO			
4. HOLE NO. (As shown on drawing title and file number)		SC-M3	13. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN	DISTURBED 0	UNDISTURBED 0
5. NAME OF DRILLER Paul N. Clawson		14. TOTAL NUMBER CORE BOXES			
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED DEG. FROM VERT.		15. ELEVATION GROUND WATER Flowing well			
7. THICKNESS OF OVERTBURDEN		16. DATE HOLE STARTED COMPLETED 3/6/80 3/10/80			
8. DEPTH DRILLED INTO ROCK 0'		17. ELEVATION TOP OF HOLE 53.77'			
9. TOTAL DEPTH OF HOLE 27.0'		18. TOTAL CORE RECOVERY FOR BORING			
		19. SIGNATURE OF INSPECTOR F. K. N. Clegg			



DRILLING LOG		DIVISION South Atlantic		INSTALLATION Fort Stewart, GA		SHEET 1 OF 1 SHEETS	
1. PROJECT Fort Stewart RCRA Studies				10. SIZE AND TYPE OF BIT 9"			
LOCATION (Coordinates or Station) 1688197.28 E662979.40				11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL			
DRILLING AGENCY Paul N. Clawson				12. MANUFACTURER'S DESIGNATION OF DRILL SIMCO			
4. HOLE NO. (As shown on drawing title and file number) SC-M4				13. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN		DISTURBED 0	UNDISTURBED 0
5. NAME OF DRILLER Paul N. Clawson				14. TOTAL NUMBER CORE BOXES			
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED DEG. FROM VERT.				15. ELEVATION GROUND WATER +0.5' @ 24 hrs.			
7. THICKNESS OF OVERTBURDEN				16. DATE HOLE STARTED 3/11/80		COMPLETED 3/15/80	
8. DEPTH DRILLED INTO ROCK 0'				17. ELEVATION TOP OF HOLE 57.85'			
9. TOTAL DEPTH OF HOLE 23'				18. TOTAL CORE RECOVERY FOR BORING %			
ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOV- ERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g	
			Buff - fine sand 1.5'				
5			Brown - changing to grey below 5 ft., clayey fine to medium sand, clay increases with depth, from 20% near top to 60% 9.0'				
10			Grey-plastic sticky slightly sandy clay				
15				16.0'			
20			Light grey - clayey fine to medium sand	21.0'			
25			Dark grey silty, sandy clay				
30							
DIAGRAM NOT TO SCALE							

E - 1

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Fort Stewart, GA	Hole No. SC-M5	SHEET 1 OF 2 SHEETS	
1. PROJECT Fort Stewart RCRA Studies		10. SIZE AND TYPE OF BIT 9"				
2. LOCATION (Coordinates or Station) N687038.91 E664075.21		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL				
3. DRILLING AGENCY Paul N. Clawson		12. MANUFACTURER'S DESIGNATION OF DRILL SIMCO				
4. HOLE NO. (As shown on drawing title and file number) SC-M5		13. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN		DISTURBED 0	UNDISTURBED 0	
5. NAME OF DRILLER Paul N. Clawson		14. TOTAL NUMBER CORE BOXES				
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED DEG. FROM VERT.		15. ELEVATION GROUND WATER 4.5' @ 24 hrs.				
7. THICKNESS OF OVERTURDEN		16. DATE HOLE STARTED 3/16/80 COMPLETED 3/19/80				
8. DEPTH DRILLED INTO ROCK 0'		17. ELEVATION TOP OF HOLE 78.53'				
9. TOTAL DEPTH OF HOLE 35.0'		18. TOTAL CORE RECOVERY FOR BORING				
		19. SIGNATURE OF INSPECTOR R. Polley, Geotech				
ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVER- Y e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)
			Brown - clayey, medium to coarse sand, gradual color change to light grey starts about 3 ft. 4.0'			
5			Grey, white - medium to coarse sand, clay content varies to bottom of hole			
10						
15						
20						
25			Grey, white medium to coarse sand, varying amount of clay material			
30						
						2.0'
						Neat Cement
						25.5'
						27.5'
						28.5'
						33.5'
						Sure-Pack
						Bentonite Gravel
						Diagram not to scale

DRILLING LOG (Cont Sheet)

ELEVATION TOP OF HOLE

78.53'

Hole No. SC-M5

PROJECT

Fort Stewart RCRA Studies

INSTALLATION

Fort Stewart, GA

SHEET
2
OF 2 SHEETS

SECTION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS <i>(Description)</i> d	% CORE RECOV. ERY e	BOX OR SAMPLE NO. f	REMARKS <i>(Drilling time, water loss, depth of weathering, etc., if significant)</i> g
	35					

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Fort Stewart, GA	SHEET 1 OF 1 SHEETS	
1. PROJECT Fort Stewart RCRA Studies		10. SIZE AND TYPE OF BIT 9"			
2. LOCATION (Coordinates or Station) N686000.42 E662567.15		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL			
3. DRILLING AGENCY Paul N. Clawson		12. MANUFACTURER'S DESIGNATION OF DRILL SIMCO			
4. HOLE NO. (As shown on drawing title and file number)		13. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN		DISTURBED	UNDISTURBED
SC-M6				0	0
5. NAME OF DRILLER Paul N. Clawson		14. TOTAL NUMBER CORE BOXES			
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED DEG. FROM VERT.		15. ELEVATION GROUND WATER 6.1' @ 24 hrs.			
16. DATE HOLE STARTED 3/20/80 COMPLETED 3/24/80		17. ELEVATION TOP OF HOLE 71.55'			
7. THICKNESS OF OVERTBURDEN		18. TOTAL CORE RECOVERY FOR BORING			
8. DEPTH DRILLED INTO ROCK 0'		19. SIGNATURE OF INSPECTOR			
9. TOTAL DEPTH OF HOLE 30'				<i>Robert Murphy</i>	
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	% CORE RECOV- ERY	BOX OR SAMPLE NO.
0	4.0'		Rust brown - clayey sand		
5	16.0'		Buff-light grey - sandy clay clayey sand, sand mostly fine and makes up 30-70% of samples		
10	23.5'		White-light grey - silty, sandy clay, few thin orange beds		
15	28.0'		Fine to medium slightly clayey sand, clay 5% +		
20	27.5'		Dark grey - silty sandy clay, small muscovite flakes		
25	21.5'				
30	22.5'				
					<i>(Drilling time, water loss, depth of weathering, etc., if significant)</i>
					2.0'
					Neat Cement
					Bentonite Gravel
					Sure-Pack

F-14

Hole No. SC-B5

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Fort Stewart, GA	SHEET 1 OF 2 SHEETS		
1. PROJECT Fort Stewart RCRA Studies		10. SIZE AND TYPE OF BIT S.S. 1$\frac{1}{2}$" I.D., Bit 3 7/8"				
2. LOCATION (Coordinates or Station) N. 688276.58 E. 622041.66		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL				
3. DRILLING AGENCY Pittsburgh Testing Laboratories		12. MANUFACTURER'S DESIGNATION OF DRILL Acker AD2				
4. HOLE NO. (As shown on drawing title and file number) SC-B5		13. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN DISTURBED UNDISTURBED 10 1				
5. NAME OF DRILLER Robert Prophet		14. TOTAL NUMBER CORE BOXES				
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED _____ DEG. FROM VERT.		15. ELEVATION GROUND WATER 1.83' ATOB				
7. THICKNESS OF OVERTURDEN		16. DATE HOLE STARTED COMPLETED 2-6-80 2-6-80				
8. DEPTH DRILLED INTO ROCK 0'		17. ELEVATION TOP OF HOLE 51.7'				
9. TOTAL DEPTH OF HOLE 50'		18. TOTAL CORE RECOVERY FOR BORING				
		19. SIGNATURE OF INSPECTOR Robert Prophet				
ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOV- ERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, hole dia., depth of weathering, etc., if significant)
			SP 10 YR 5/2 greyish brown slightly silty fine sand, poorly sorted		1	loose, moist Blows/ft —pushed
	5		SP 10 YR 7/1 light grey, slightly silty fine sand, poorly sorted		2	dense, moist foul odor present
	10		SC 2.5 Y 6/4; 2.5 Y 7/2 mixed light grey, light yellowish brown, very slightly silty clayey fine	7.75'	3	stiff, moist
	15		SM 10 YR 8/1; 5.Y 6/2, mixed white and light olive grey, silty fine sand	12.5'	4	shelby tube Pushed
	20		SM-SC 5 Y 6/1 grey clayey silty fine sand	(17.5')	5	soft, moist
	25		ML 5 Y 4/1 grey very slightly clayey very fine sandy silt	24.0'	6	very soft, moist
	30		SM. 5 Y 5/2 olive grey slightly silty fine sand	27.5'	7	very stiff, moist
				32.5'		

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Fort Stewart	Sheet 1 of 2 Sheets		
1. PROJECT Fort Stewart RCRA Studies		10. SIZE AND TYPE OF BITS 1½" I.D., Bit 3 7/8"				
2. LOCATION (Coordinates or Station) N. 687382.17		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)				
3. DRILLING AGENCY Pittsburgh Testing Laboratories		12. MANUFACTURER'S DESIGNATION OF DRILL Acker AD2				
4. HOLE NO. (As shown on drawing title and file number) SC-B6		13. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN		DISTURBED 10	UNDISTURBED	
5. NAME OF DRILLER Robert Prophet		14. TOTAL NUMBER CORE BOXES				
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED _____ DEG. FROM VERT.		15. ELEVATION GROUND WATER 7.92' ATOB				
7. THICKNESS OF OVERTBURDEN		16. DATE HOLE STARTED COMPLETED 1-28-80 1-30-80				
8. DEPTH DRILLED INTO ROCK 0'		17. ELEVATION TOP OF HOLE 71.8'				
9. TOTAL DEPTH OF HOLE 50'		18. TOTAL CORE RECOVERY FOR BORING				
19. SIGNATURE OF INSPECTOR Robert Prophet						
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE RECOV- ERY	BOX OR SAMPLE NO.	REMARKS (Drilling time, water level, depth of weathering, etc., if significant)
			SP-SM 10 YR 7/2, 10 YR 7/6 mixed yellow, light grey very slightly clayey silty fine sand	*	1	loose, moist blows/ft pushed
5			SP-SM 2.5 Y 5/4, 10 YR 5/1, mixed grey; light olive brown, very slightly clayey silky fine sand, poorly sorted	*	2	loose, moist pushed
10			(7.5)			
10			No sample taken, solid waste cell		(3)	
12.0'						
15			SP 2.5 Y 7/4 pale yellow, slightly silty fine sand	*	4	very firm, moist 24 foul odor
20			SP 2.5 Y 7/4 pale yellow, slightly silty medium to coarse sand	*	5	firm, moist pushed foul odor
25			SP 2.5 Y 7/2 light grey, slightly silty fine sand, poorly sorted	*	6	very loose, moist 2 no odor
27.5'						
30			SM 2.5 Y 8/2 white, very slightly clayey micaceous silty very fine sand	*	7	hard, moist difficult drilling 7
32.5'						

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Fort Stewart, GA	SHEET 1 OF 2 SHEETS
1. PROJECT Fort Stewart RCRA Studies		10. SIZE AND TYPE OF BITS S.S. 1½" I.D., Bit 3 7/8"		
2. LOCATION (Coordinates or Station) N. 686343.38 E. 662077.47		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL		
3. DRILLING AGENCY Pittsburgh Testing Laboratories		12. MANUFACTURER'S DESIGNATION OF DRILL Acker AD2		
4. HOLE NO. (As shown on drawing title and file number) SC-B9		13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN DISTURBED 11 UNDISTURBED		
5. NAME OF DRILLER Robert Prophet		14. TOTAL NUMBER CORE BOXES		
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED DEG. FROM VERT.		15. ELEVATION GROUND WATER 8.75' ATOB		
7. THICKNESS OF OVERBURDEN		16. DATE HOLE STARTED 1-25-80 COMPLETED 1-25-80		
8. DEPTH DRILLED INTO ROCK 0'		17. ELEVATION TOP OF HOLE 69.8'		
9. TOTAL DEPTH OF HOLE 50'		18. TOTAL CORE RECOVERY FOR BORING		
		19. SIGNATURE OF INSPECTOR Robert Prophet		
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	REMARKS (Drilling time, water level, depth of weathering, etc. if significant)
	b	c	d	e
			SP 10 YR 6/6 brownish yellow slightly silty fine sand, poorly sorted	1 very loose, dry Blows/ft oily pushed
			SP 2.5 Y 6/4 light yellowish brown, slightly silty fine sand, poorly sorted	2 loose, moist oil present in mud pit 9
	5		SP 10 YR 2/2 very dark brown very slightly silty fine sand, poorly sorted	3 firm, moist foul odor - oily 11
	10		SP 10 YR 2/1 black silty very fine sand, poorly sorted	4 firm moist no odor or oil present 21
	15		18.0'	
	20		SM 10 YR 6/2 light brownish grey clayey silty fine sand	5 stiff, moist 14
	25		SM 10 YR 5/2 greyish brown silty fine sand	6 stiff, moist 9
	30		27.0'	
			SM-SP 10 YR 5/2 greyish brown, silty fine sand, poorly sorted	7 very loose, moist 1
			32.5'	

DRILLING LOG (Cont Sheet)

ELEVATION TOP OF HOLE

69.8'

Hole No. SC-B9

PROJECT

Fort Stewart RCRA Studies

INSTALLATION

Fort Stewart, GA

SHEET 2
OF 2 SHEETS

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOV. ERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
			32.5'			
35			SG-SM 10 YR white, silty, clayey micaceous very fine sand	8	hard, moist, oily	65
40			(37.5')			
			SM 5 Y 6/3 pale olive, very slightly clayey silty micaceous fine sand	9	hard, moist, difficult drilling	44
45			SM 5 Y 6/3 pale olive, very slightly clayey silty micaceous fine sand	10	hard, partially cemented, moist difficult drilling	54
			(47.5')			
50			SM-SC 5 Y 6/2 light olive grey very slightly clayey silty fine sand	11	hard, moist difficult drilling	54

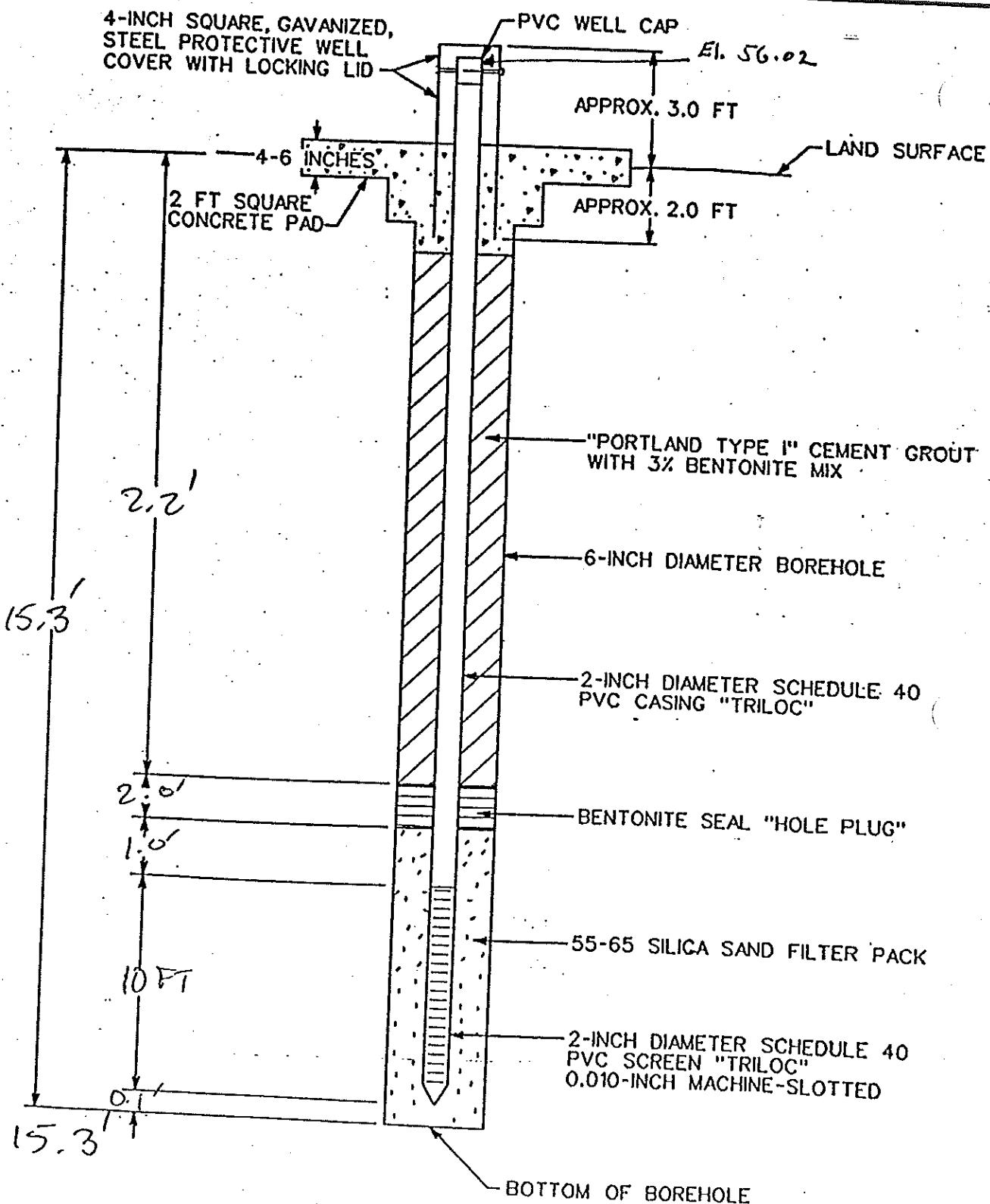
DRILLING LOG		DIVISION South Atlantic	INSTALLATION Fort Stewart, GA	SHEET 1 OF 2 SHEETS
1. PROJECT Fort Stewart RCRA Studies		10. SIZE AND TYPE OF BITS S. S. 11-1/2" I.D. Bit 3 7/8"		
2. LOCATION (Coordinates or Station) N. 687186.82 E. 662733.11		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL		
DRILLING AGENCY Pittsburgh Testing Laboratories		12. MANUFACTURER'S DESIGNATION OF DRILL Acker AD2		
4. HOLE NO. (As shown on drawing title and file number) SC-B11		13. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN 8 DISTURBED 8 UNDISTURBED 1		
5. NAME OF DRILLER Robert Prophet		14. TOTAL NUMBER CORE BOXES		
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED DEG. FROM VERT.		15. ELEVATION GROUND WATER 7.50' ATOB		
7. THICKNESS OF OVERBURDEN		16. DATE HOLE STARTED 2-5-80 COMPLETED 2-5-80		
8. DEPTH DRILLED INTO ROCK 0'		17. ELEVATION TOP OF HOLE 70.26'		
9. TOTAL DEPTH OF HOLE 50'		18. TOTAL CORE RECOVERY FOR BORING %		
		19. SIGNATURE OF INSPECTOR Robert Prophet		
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	REMARKS / (Drilling time, major losses, depth of weathering, etc.) if significant
a	b	c	d	e
				Blows/ft
5			No samples taken solid waste cell	
10			7.0'	
15			SM 10 YR 6/8 brownish yellow very slightly clayey fine to medium silty sand, poorly sorted	3 firm, moist 11
20			SM 5 Y 7/4, 5 Y 8/2 mixed pale yellow and white, silty fine sand	4 shelby tube pushed
25			(17.5')	
30			SP-SM 10 YR 7/1 light grey very slightly clayey silty fine sand	5 firm, moist 7
			(22.5')	
25			SM 10 YR 7/2 light grey very slightly clayey silty fine to medium sand	6 loose, moist 3
30			(27.5')	
			SP-SM 10 YR 6/1 light grey silty micaceous fine to medium sand	7 firm, moist 9
			(32.5')	

DRILLING LOG (Cont Sheet)			ELEVATION TOP OF HOLE	70.26'	Hole No.	SC-B11
PROJECT			INSTALLATION			SHEET 2 OF 2 SHEETS
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	% CORE RECOV. ERY	BOX OR SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)
a	b	c	d	e	f	g
			(32.5')			
35			SM 2.5 YR 7/4 pale yellow slightly silty micaceous fine sand	8		hard, dry, <u>28/0.17'</u> cemented, difficult drilling
40			SM 5 Y 6/3 pale olive slightly silty micaceous fine sand	9		hard, dry, <u>50/0.75'</u> partially cemented difficult drilling
45			SM 5 Y 5/2 olive grey, very slightly clayey silty micaceous fine sand	10		hard, dry, partially <u>42</u> cemented, difficult drilling
50			SM 5 Y 5/1 grey, very slightly clayey silty fine sand	11		hard, dry, <u>50/0.92'</u> partially cemented, difficult drilling

File No. SC-B16

DRILLING LOG (Cont Sheet)			ELEVATION TOP OF HOLE	66.34'	Hole No. SC-B16		
PROJECT			INSTALLATION		SHEET 2 OF 2 SHEETS		
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)		% CORE RECOV. ERY	BOX OR SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)
a	b	c	d	e	f	g	
			SM (32.5')				
35			SC-SM 5 Y 5/3 olive clayey silty micaceous fine sand		8		hard, moist difficult drilling 53
			37.5'				
40			SP-SM 5 Y 5/1 grey very slightly clayey, silty micaceous fine sand		9		hard, partially cemented, moist 50/0.33'
			(42.5')				
45			SP 5 Y 5/3 olive very slightly silty micaceous fine sand		10		hard, moist difficult drilling 34
			(47.5')				
50			SC 5 Y 6/2 light olive grey very slightly silty, clayey micaceous fine sand, slight amount of coarse sand		11		hard, moist 50/0.42

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Ft. Stewart, Ga	SHEET 1 OF 1 SHEETS		
1. PROJECT <u>Monitoring well Installation</u>		10. SIZE AND TYPE OF BIT 4" Spiral Auger; 6x10				
2. LOCATION (Coordinates or Station) <u>South Central landfill, Inert Facility</u>		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) <u>MSL</u> Hollow Stem Auger				
3. DRILLING AGENCY <u>Savannah District</u>		12. MANUFACTURER'S DESIGNATION OF DRILL Tailing 1500				
4. HOLE NO. (As shown on drawing 1110 and file number) <u>NMW-1</u>		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN <u>0</u> DISTURBED <u>0</u> UNDISTURBED				
5. NAME OF DRILLER <u>Douglas LaRouche</u>		14. TOTAL NUMBER CORE BOXES <u>N/A</u>				
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED DEG. FROM VERT.		15. ELEVATION GROUND WATER <u>See Remarks</u>				
7. THICKNESS OF OVERTBURDEN <u>15.0'</u>		16. DATE HOLE STARTED <u>14 Jul 93</u> COMPLETED <u>14 Jul 93</u>				
8. DEPTH DRILLED INTO ROCK <u>-</u>		17. ELEVATION TOP OF HOLE <u>53.4'</u>				
9. TOTAL DEPTH OF HOLE <u>15.0'</u>		18. TOTAL CORE RECOVERY FOR BORING <u>N/A</u>				
ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOV. ERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
	0'		(SM) Light Gray, Dk Brown, fine silty sand			
	2'		(SC) Dark Brown, Black clayey sand; w/ wood			
	4'					
	6'		(SM) Tan, Beige, to Dark Brown, fine silty sand. Light gray, fine to medium moist			
	8'		(SC) Light gray sand clayey sand			
	10'					
	12'					
	14'		(CL) Dark to light gray, Dark Brown lean Clay			
			(SM) Light Gray medium to coarse silty sand; wet			
			(CL) Lt. gray, yellow lean clay			
			(SM) Orange to light yellow,			



NOTE: AFTER WELL INSTALLATION AND
REMOVAL OF PVC WELL CAP, WATER
LEVEL MEASURED AT FT FROM
TOP OF CASING. CONSTRUCTION
DIAGRAM NOT TO SCALE

U.S. ARMY ENGINEER DISTRICT, SAVANNAH
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

MONITOR WELL NMW-1
CONSTRUCTION DIAGRAM

F Stewart So. Central Bank of NY
F-74

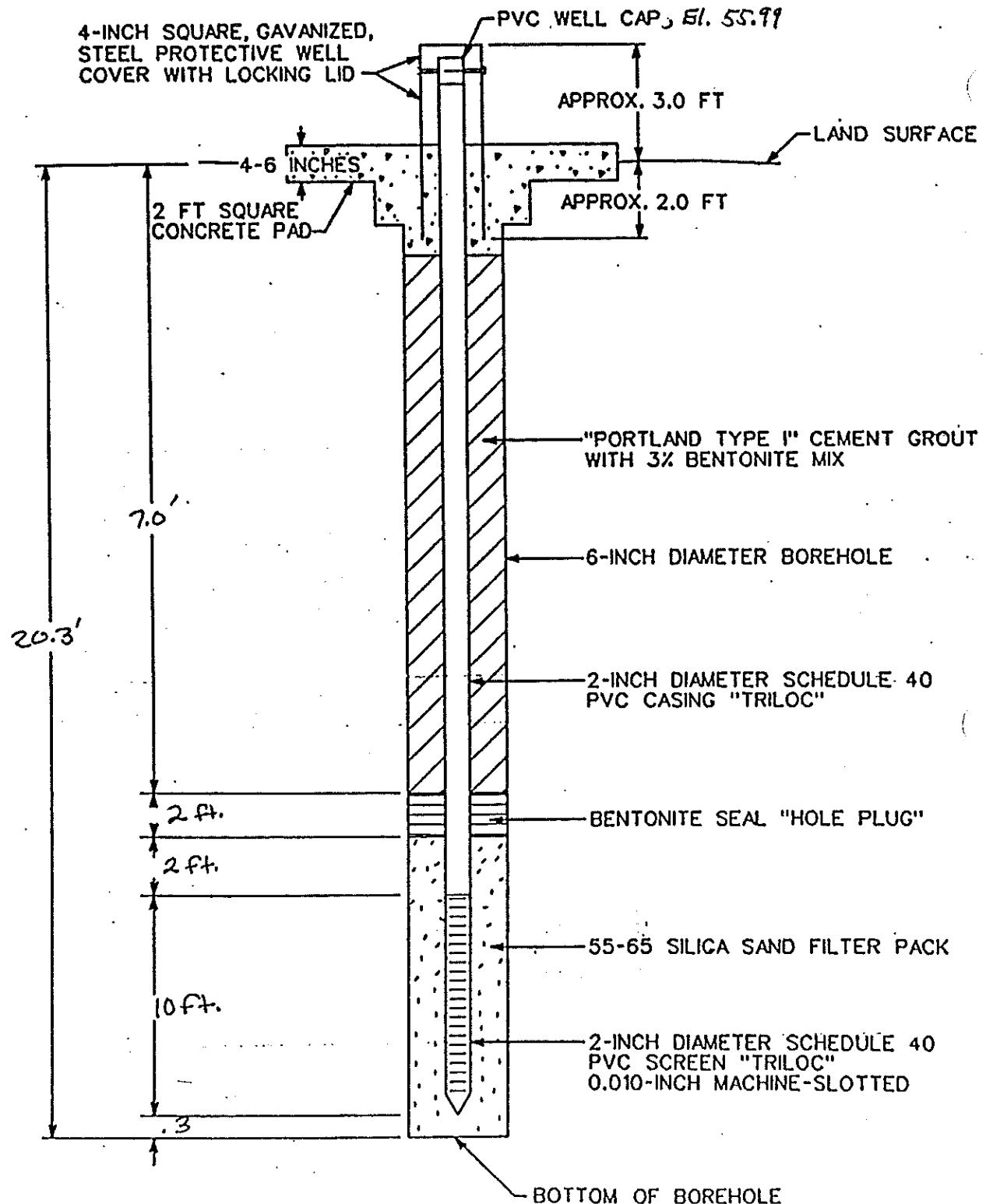
Hole No. NMW-2

SHEET 1
OF 2 SHEET

DRILLING LOG			DIVISION	INSTALLATION		
			South Atlantic	Fl Stewart, Ga		
1. PROJECT			10. SIZE AND TYPE OF BIT 4" Special Auger; 6x10 Hollow			
Monitoring Well Installation			11. DATUM FOR ELEVATION SHOWN (TBM or MSL) Stem aug MSL			
2. LOCATION (Coordinates or Station)			12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500			
So Central Inert Landfill Facility			13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN DISTURBED -0- UNDISTURBED -0-			
3. DRILLING AGENCY			14. TOTAL NUMBER CORE BOXES N/A			
Savannah District			15. ELEVATION GROUND WATER			
4. HOLE NO. (As shown on drawing title and file number)			16. DATE HOLE STARTED 14 Jul 93 COMPLETED 14 Jul 93			
NMW-2			17. ELEVATION TOP OF HOLE			
5. NAME OF DRILLER Douglas LaRocche			18. TOTAL CORE RECOVERY FOR BORING N/A			
6. DIRECTION OF HOLE			19. SIGNATURE OF INSPECTOR Gerald Black			
<input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED DEG. FROM VERT.						
7. THICKNESS OF OVERTBURDEN 25.0'						
8. DEPTH DRILLED INTO ROCK —						
9. TOTAL DEPTH OF HOLE 25.0'						
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	% CORE RECOVERY	BOX OR SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)
0'	6'	c	(sm) Tan, light yellow, medium silty sand Black, Dk Brown, fine to medium moist			Note: No Groundwater encountered during excavation.
2'	4'					
6'	8'					
10'	12'		Darker			
12'	14'		(cl) Dark Brown, light gray, lean clay			
14'			Very light gray, w some dark brown			
			Very light gray, green w/			

DRILLING LOG (Cont Sheet)			ELEVATION TOP OF HOLE	Hole No. NMW-2		
PROJECT	Monitoring Well Installation		INSTALLATION	SHEET 2 of 2		
ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOV. ERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, etc., if significant) g
	16'		(SC) Very light Gray, Green w/ yellow, light Blue clayey sand			
	18'		(CL) Very Light Gray Lean Clay			
	20'		Light Olive Green to Light Gray			
	22'					
	24'					
			Bottom of Boring @ 25.0'			

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Fort Stewart, Ga	SHEET OF SHEET
1. PROJECT <u>Monitoring Well Installation</u>		10. SIZE AND TYPE OF BIT 4 1/2" Spherical Auger; 6x10		
2. LOCATION (Coordinates or Station) <u>South Central Landfill; Inert Facility</u>		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) Hallow Stemmed MSL		
3. DRILLING AGENCY <u>Savannah District</u>		12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500		
4. HOLE NO. (As shown on drawing title and file number) <u>NMW-2A</u>		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN DISTURBED UNDISTURBED -0- -0-		
5. NAME OF DRILLER <u>Douglas LaRouche</u>		14. TOTAL NUMBER CORE BOXES N/A		
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED DEG. FROM VERT.		15. ELEVATION GROUND WATER See Remarks 15' 0"		
7. THICKNESS OF OVERTBURDEN 20.3'		16. DATE HOLE STARTED COMPLETED 15 Jun 93 16 Jun 93		
8. DEPTH DRILLED INTO ROCK —		17. ELEVATION TOP OF HOLE 55' 79.53.0		
9. TOTAL DEPTH OF HOLE 20.3'		18. TOTAL CORE RECOVERY FOR BORING N/A		
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	% CORE RECOV- ERY •
0'	0'	c	(SC) Light to Dark Gray clayey sand	•
5'	5'		(Sm) Light to Dark Gray medium to coarse silty sand moist	•
10'	10'		(SC) Dark Gray, Brown, tan clayey sand	•
10'	10'		(Cl) Light Gray to white lean clay	•
10'	10'		Olive, Light Gray	•
10'	10'		Olive	•
15'	15'		Olive, Light Gray	•
20'	20'		Bottom of Boring @ 20.3'	•
				REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) Note: Ground water detected at 14.3'



Ft. STEWART So. CENTRAL LANDFILL
 NON-PUTRIFICABLE SITE

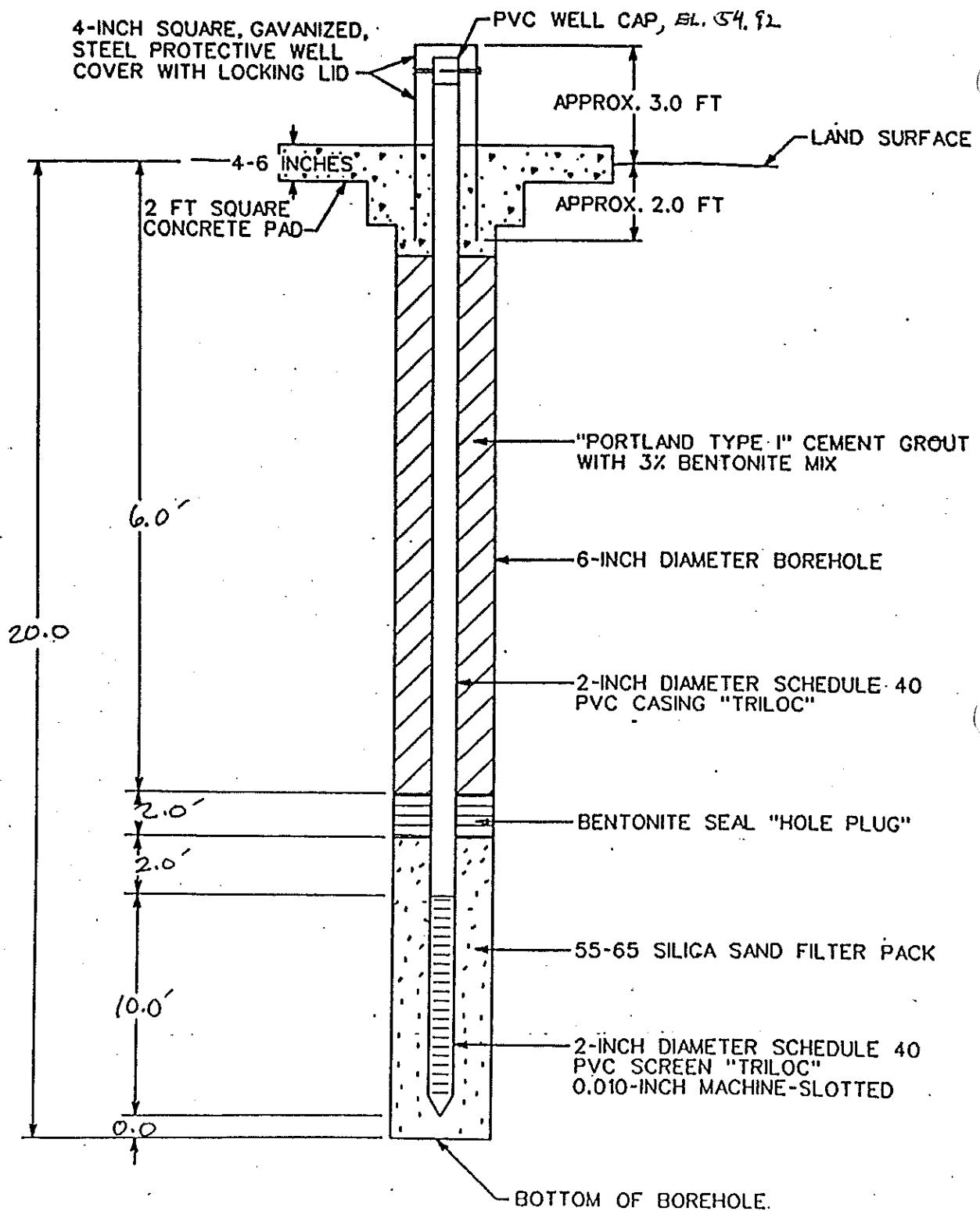
NOTE: AFTER WELL INSTALLATION AND
 REMOVAL OF PVC WELL CAP, WATER
 LEVEL MEASURED AT FT FROM
 TOP OF CASING. CONSTRUCTION
 DIAGRAM NOT TO SCALE.

U. S. ARMY ENGINEER DISTRICT, SAVANNAH
 CORPS OF ENGINEERS
 SAVANNAH, GEORGIA

MONITOR WELL NMW-2A
 CONSTRUCTION DIAGRAM

DRILLING LOG	DIVISION South Atlanta	INSTALLATION Fl. Stewart, Ga	SHEET 1 OF SHEET			
1. PROJECT <u>Monitoring Well Installation</u>	10. SIZE AND TYPE OF BIT 4" Spiral Auger 6x10 Hollow					
2. LOCATION (Coordinates or Station) <u>South Central Landfill; Inert Facility</u>	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) Stem auger MSL					
3. DRILLING AGENCY <u>Savannah District</u>	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500					
4. HOLE NO. (As shown on drawing title and file number) <u>NMW-3</u>	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN DISTURBED UNDISTURBED -0- -0-					
5. NAME OF DRILLER <u>Douglas LaRouche</u>	14. TOTAL NUMBER CORE BOXES N/A					
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED DEG. FROM VERT.	15. ELEVATION GROUND WATER See Remarks					
7. THICKNESS OF OVERTBURDEN 20.0'	16. DATE HOLE STARTED COMPLETED 15 Jul 93 15 Jul 93					
8. DEPTH DRILLED INTO ROCK —	17. ELEVATION TOP OF HOLE 54.9 ± 51.9					
9. TOTAL DEPTH OF HOLE 20.0'	18. TOTAL CORE RECOVERY FOR BORING N/A					
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	% CORE RECOVERY	BOX OR SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)
0'	5'		(SM) Tan, Dark Brown, Fine Silty Sand			
			(SC) Lt. to Dk. Gray, Dk. Brown, Tan clayey sand			
			(CL) Tan, Brown Lean Clay			
	5'		Tan, Light Gray			
			Light Gray			
	10'		Olive			
			Gray			
	15'					
	20'		Bottom of Boring @ 20.0'			

Note: Groundwater encountered at 13.1' during excavation



FORT STEWART GO. CENTRAL LANDFILL
NON-PURIFCABLE SITE

NOTE: AFTER WELL INSTALLATION AND
REMOVAL OF PVC WELL CAP, WATER
LEVEL MEASURED AT FT FROM
TOP OF CASING. CONSTRUCTION
DIAGRAM NOT TO SCALE.

U. S. ARMY ENGINEER DISTRICT, SAVANNAH
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

MONITOR WELL NMW-3
CONSTRUCTION DIAGRAM

James H. Carr & Associates, Inc.

Office & Laboratories
 P.O. Box 90209
 Columbia, SC 29290
 (803) 776-7789
 (800) 435-3995

01/31/94

Ms. Toni Nicholson
 US Army Engr. Dist., Sav.
 P.O. Box 889
 Savannah, GA 31402

Dear Ms. Nicholson:

The following are the results of the parameters you requested we check on your FST-001 samples listed below.

Parameter		Analyst	Date -- Time	Analysis Results	Units	Lowest Detectable Level	Method Number
Sample Date: 07/19/93	In House # 07-4471-93			Source: SCM1-7-93		Location: FT.STEWART	
Metals Sample Preparation - Water		JAG	08/05/93 18:00	0.000		0.00	
Pesticide - water extraction		MR	07/23/93 08:00	0.000		0.00	
PCB - Water extraction		MR	07/23/93 08:00	0.000		0.00	
Ra 226/228 - liquid		TMA	07/30/93 12:00	3.800 pCi/l		0.00 pCi/l	903.1
Arsenic - liquid		CW	08/06/93 12:37	< 5.000 ug/l		5.00 ug/l	206.2
Selenium - Liquid		CW	08/06/93 02:52	< 5.000 ug/l		5.00 ug/l	270.2
Barium - Liquid		CMP	08/11/93 15:08	0.090 mg/l		0.05 mg/l	200.7
Cadmium - Liquid		CMP	08/11/93 15:08	< 0.020 mg/l		0.01 mg/l	200.7
Chromium - Liquid		CMP	08/11/93 15:08	< 0.050 mg/l		0.05 mg/l	200.7
Lead - Liquid		CW	08/06/93 19:27	16.000 ug/l		5.00 ug/l	239.2
Silver - Liquid		CMP	08/11/93 15:08	< 0.050 mg/l		0.05 mg/l	200.7
Mercury - Liquid		KAH	08/05/93 10:0	< 0.200 ug/l		0.20 ug/l	245.1
Carbon Disulfide - liquid		KG	07/30/93 09:40	< 10.000 ug/l		10.00 ug/l	624.
2-Hexanone - Liquid		KG	07/30/93 09:40	< 50.000 ug/L		50.00 ug/L	8240
Styrene - Liquid		KG	07/30/93 09:40	< 5.000 ug/L		5.00 ug/L	8240
Endrin - Liquid		RMK	08/23/93 13:50	< 0.200 ug/l		0.10 ug/l	608
Methoxychlor - Liquid		RMK	08/23/93 13:50	< 0.200 ug/l		0.10 ug/l	608
Aldrin - liquid		RMK	08/23/93 13:50	0.045 ug/l		0.02 ug/l	608.
Alpha BHC - liquid		RMK	08/23/93 13:50	0.068 ug/l		0.02 ug/l	608.
Beta BHC - liquid		RMK	08/23/93 13:50	< 0.040 ug/l		0.02 ug/l	608.
Delta BHC - liquid		RMK	08/23/93 13:50	< 0.040 ug/l		0.02 ug/l	608.
Gamma BHC - liquid		RMK	08/23/93 13:50	< 0.040 ug/l		0.02 ug/l	608.
4,4-DDT - liquid		RMK	08/23/93 13:50	< 0.200 ug/l		0.10 ug/l	608
4,4-DDE - liquid		RMK	08/23/93 13:50	< 0.040 ug/l		0.02 ug/l	608
4,4-DDD - liquid		RMK	08/23/93 13:50	< 0.200 ug/l		0.10 ug/l	608
Dieldrin - liquid		RMK	08/23/93 13:50	< 0.040 ug/l		0.02 ug/l	608
A-Endosulfan - liquid		RMK	08/23/93 13:50	< 0.040 ug/l		0.02 ug/l	608
B-Endosulfan - liquid		RMK	08/23/93 13:50	< 0.200 ug/l		0.10 ug/l	608
Endosulfan Sulfate - liquid		RMK	08/23/93 13:50	< 0.200 ug/l		0.10 ug/l	608
Endrin Aldehyde - liquid		RMK	08/23/93 13:50	< 0.200 ug/l		0.10 ug/l	608
Heptachlor - liquid		RMK	08/23/93 13:50	< 0.040 ug/l		0.02 ug/l	608
Heptachlor Epoxide - liquid		RMK	08/23/93 13:50	< 0.040 ug/l		0.02 ug/l	608
PCB-1242 - liquid		RMK	08/23/93 13:50	< 1.000 ug/l		0.50 ug/l	608
PCB-1254 - liquid		RMK	08/23/93 13:50	< 1.000 ug/l		0.50 ug/l	608
PCB-1221 - liquid		RMK	08/23/93 13:50	< 1.000 ug/l		0.50 ug/l	608
PCB-1232 - liquid		RMK	08/23/93 13:50	< 1.000 ug/l		0.50 ug/l	608
PCB-1248 - liquid		RMK	08/23/93 13:50	< 1.000 ug/l		0.50 ug/l	608
PCB-1260 - liquid		RMK	08/23/93 13:50	< 1.000 ug/l		0.50 ug/l	608
PCB-1016 - liquid		RMK	08/23/93 13:50	< 1.000 ug/l		0.50 ug/l	608
Toxaphene - liquid		RMK	08/23/93 13:50	< 4.000 ug/l		2.00 ug/l	608.0
Chloroethane - liquid		KG	07/30/93 09:40	< 10.000 ug/l		10.00 ug/l	624
Methyl chloride - liquid		KG	07/30/93 09:40	< 10.000 ug/l		10.00 ug/l	624

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Parameter		Analysis				Lowest Detectable Level	Method Number
Sample Date: 07/19/93	In House # 07-4471-93	Analyst	Date -- Time	Results	Units		
Source: SCM1-7-93 Location: FT.STEWART - CONTINUED -							
Methyl bromide - liquid	KG	07/30/93	09:40	<	10.000 ug/l	10.00 ug/l	624
Vinyl chloride - liquid	KG	07/30/93	09:40	<	10.000 ug/l	10.00 ug/l	624
Methylene Chloride - liquid	KG	07/30/93	09:40	<	5.000 ug/l	5.00 ug/l	624
1,1-Dichloroethane - liquid	KG	07/30/93	09:40	<	5.000 ug/l	5.00 ug/l	624
Trans 1,2-Dichloroethene - liquid	KG	07/30/93	09:40	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloroethane - liquid	KG	07/30/93	09:40	<	5.000 ug/l	5.00 ug/l	624
1,1,1-Trichloroethane - liquid	KG	07/30/93	09:40	<	5.000 ug/l	5.00 ug/l	624
Bromodichloromethane - liquid	KG	07/30/93	09:40	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloropropane - liquid	KG	07/30/93	09:40	<	5.000 ug/l	5.00 ug/l	624
Trans-1,3-Dichloropropene - liquid	KG	07/30/93	09:40	<	5.000 ug/l	5.00 ug/l	624
Trichloroethene - liquid	KG	07/30/93	09:40	<	5.000 ug/l	5.00 ug/l	624
Chlorodibromomethane - liquid	KG	07/30/93	09:40	<	5.000 ug/l	5.00 ug/l	624
1,1,2-Trichloroethane - liquid	KG	07/30/93	09:40	<	5.000 ug/l	5.00 ug/l	624
Cis-1,3-Dichloropropene - liquid	KG	07/30/93	09:40	<	5.000 ug/l	5.00 ug/l	624
Benzene - liquid	KG	07/30/93	09:40	<	5.000 ug/l	5.00 ug/l	624
Bromoform - liquid	KG	07/30/93	09:40	<	5.000 ug/l	5.00 ug/l	624
1,1,2,2-Tetrachloroethane - liquid	KG	07/30/93	09:40	<	5.000 ug/l	5.00 ug/l	624
Tetrachloroethene - liquid	KG	07/30/93	09:40	<	5.000 ug/l	5.00 ug/l	624
Toluene - liquid	KG	07/30/93	09:40	<	5.000 ug/l	5.00 ug/l	624
Chlorobenzene - liquid	KG	07/30/93	09:40	<	5.000 ug/l	5.00 ug/l	624
Ethylbenzene - liquid	KG	07/30/93	09:40	<	5.000 ug/l	5.00 ug/l	624
Chloroform - liquid	KG	07/30/93	09:40	<	5.000 ug/l	5.00 ug/l	624
Carbon Tetrachloride - liquid	KG	07/30/93	09:40	<	5.000 ug/l	5.00 ug/l	624
Xylene - liquid	KG	07/30/93	09:40	<	10.000 ug/l	10.00 ug/l	624
Acetone - liquid	KG	07/30/93	09:40	<	20.000 ug/l	20.00 ug/l	624.
1,1-Dichloroethene - liquid	KG	07/30/93	09:40	<	5.000 ug/l	5.00 ug/l	624.
2-Chloroethylvinyl Ether - liquid	KG	07/30/93	09:40	<	15.000 ug/l	15.00 ug/l	624.
Trichlorofluoromethane - liquid	KG	07/30/93	09:40	<	12.000 ug/l	12.00 ug/l	624.
2- Butanone - liquid	KG	07/30/93	09:40	<	10.000 ug/l	10.00 ug/l	624.
4-Methyl - 2 pentanone - liquid	KG	07/30/93	09:40	<	10.000 ug/l	10.00 ug/l	624.
Vinyl Acetate - liquid	KG	07/30/93	09:40	<	10.000 ug/l	10.00 ug/l	8240

Comments:

The volatile run was initiated at 13:27. For Pest/PCB analyses: due to extensive interferences present in this sample, an elevated detection limit has been provided (DL X 2).

Sample Date: 07/15/93 In House # 07-4472-93 Source: SCM2-7-93 Location: FT.STEWART

Metals Sample Preparation - water	JAG	08/05/93	18:00	0.000	0.00		
Pesticide - Water extraction	MR	07/23/93	08:00	0.000	0.00		
PCB - Water extraction	MR	07/23/93	08:00	0.000	0.00		
Ra 226/228 - liquid	TMA	07/30/93	12:00	8.500 pCi/l	0.00 pCi/l		903.1
Arsenic - liquid	CW	08/06/93	12:46	14.000 ug/l	5.00 ug/l		206.2
Selenium - Liquid	CW	08/06/93	02:58	7.200 ug/l	5.00 ug/l		270.2
Barium - Liquid	CMP	08/11/93	15:12	0.390 mg/l	0.05 mg/l		200.7
Cadmium - Liquid	CMP	08/11/93	15:12	0.020 mg/l	0.01 mg/l		200.7
Chromium - Liquid	CMP	08/11/93	15:12	0.220 mg/l	0.05 mg/l		200.7
Lead - Liquid	CW	08/06/93	19:40	220.000 ug/l	5.00 ug/l		239.2
Silver - Liquid	CMP	08/11/93	15:12	< 0.050 mg/l	0.05 mg/l		200.7
Mercury - Liquid	KAH	08/05/93	10:00	0.230 ug/l	0.20 ug/l		245.1
Carbon Disulfide - liquid	KG	07/30/93	09:35	< 10.000 ug/l	10.00 ug/l		624.
2-Hexanone - Liquid	KG	07/30/93	11:35	< 50.000 ug/l	50.00 ug/L		8240
Styrene - Liquid	KG	07/30/93	11:35	< 5.000 ug/L	5.00 ug/L		8240
Endrin - Liquid	RMK	08/23/93	14:29	< 0.100 ug/l	0.10 ug/l		608
Methoxychlor - Liquid	RMK	08/23/93	14:29	< 0.100 ug/l	0.10 ug/l		608
Aldrin - liquid	RMK	08/23/93	14:29	< 0.020 ug/l	0.02 ug/l		608.
Alpha BHC - liquid	RMK	08/23/93	14:29	0.056 ug/l	0.02 ug/l		608.
Beta BHC - liquid	RMK	08/23/93	14:29	< 0.020 ug/l	0.02 ug/l		608.
Delta BHC - liquid	RMK	08/23/93	14:29	0.033 ug/l	0.02 ug/l		608.
Gamma BHC - liquid	RMK	08/23/93	14:29	< 0.020 ug/l	0.02 ug/l		608.
4,4-DDT - liquid	RMK	08/23/93	14:29	< 0.100 ug/l	0.10 ug/l		608
4,4-DDE - liquid	RMK	08/23/93	14:29	< 0.020 ug/l	0.02 ug/l		608
4,4-DDD - liquid	RMK	08/23/93	14:29	< 0.100 ug/l	0.10 ug/l		608
Dieldrin - liquid	RMK	08/23/93	14:29	< 0.020 ug/l	0.02 ug/l		608
A-Endosulfan - liquid	RMK	08/23/93	14:29	< 0.020 ug/l	0.02 ug/l		608

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Parameter	Analyst	Date -- Time	Results	Units	Lowest Detectable Level	Method Number
Sample Date: 07/15/93 In House # 07-4472-93		Source: SCRM2-7-93		Location: FT.STEWART		
- CONTINUED -						
B-Endosulfan - liquid	RMK	08/23/93 14:29	<	0.100 ug/l	0.10 ug/l	608
Endosulfan Sulfate - liquid	RMK	08/23/93 14:29	<	0.100 ug/l	0.10 ug/l	608
Endrin Aldehyde - liquid	RMK	08/23/93 14:29	<	0.100 ug/l	0.10 ug/l	608
Heptachlor - liquid	RMK	08/23/93 14:29	<	0.020 ug/l	0.02 ug/l	608
Heptachlor Epoxide - liquid	RMK	08/23/93 14:29	<	0.020 ug/l	0.02 ug/l	608
PCB-1242 - liquid	RMK	08/23/93 14:29	<	0.500 ug/l	0.50 ug/l	608
PCB-1254 - liquid	RMK	08/23/93 14:29	<	0.500 ug/l	0.50 ug/l	608
PCB-1221 - liquid	RMK	08/23/93 14:29	<	0.500 ug/l	0.50 ug/l	608
PCB-1232 - liquid	RMK	08/23/93 14:29	<	0.500 ug/l	0.50 ug/l	608
PCB-1248 - liquid	RMK	08/23/93 14:29	<	0.500 ug/l	0.50 ug/l	608
PCB-1260 - liquid	RMK	08/23/93 14:29	<	0.500 ug/l	0.50 ug/l	608
PCB-1016 - liquid	RMK	08/23/93 14:29	<	0.500 ug/l	0.50 ug/l	608
Toxaphene - liquid	RMK	08/23/93 14:29	<	2.000 ug/l	2.00 ug/l	608.0
Chloroethane - liquid	KG	07/30/93 09:35	<	10.000 ug/l	10.00 ug/l	624
Methyl chloride - liquid	KG	07/30/93 09:35	<	10.000 ug/l	10.00 ug/l	624
Methyl bromide - liquid	KG	07/30/93 09:35	<	10.000 ug/l	10.00 ug/l	624
Vinyl chloride - liquid	KG	07/30/93 09:35	<	10.000 ug/l	10.00 ug/l	624
Methylene Chloride - liquid	KG	07/30/93 09:35	<	5.000 ug/l	5.00 ug/l	624
1,1-Dichloroethane - liquid	KG	07/30/93 09:35	<	5.000 ug/l	5.00 ug/l	624
Trans 1,2-Dichloroethene - liquid	KG	07/30/93 09:35	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloroethane - liquid	KG	07/30/93 09:35	<	5.000 ug/l	5.00 ug/l	624
1,1,1-Trichloroethane - liquid	KG	07/30/93 09:35	<	5.000 ug/l	5.00 ug/l	624
Bromodichloromethane - liquid	KG	07/30/93 09:35	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloropropane - liquid	KG	07/30/93 09:35	<	5.000 ug/l	5.00 ug/l	624
Trans-1,3-Dichloropropene - liquid	KG	07/30/93 09:35	<	5.000 ug/l	5.00 ug/l	624
Trichloroethene - liquid	KG	07/30/93 09:35	<	5.000 ug/l	5.00 ug/l	624
Chlorodibromomethane - liquid	KG	07/30/93 09:35	<	5.000 ug/l	5.00 ug/l	624
1,1,2-Trichloroethane - liquid	KG	07/30/93 09:35	<	5.000 ug/l	5.00 ug/l	624
Cis-1,3-Dichloropropene - liquid	KG	07/30/93 09:35	<	5.000 ug/l	5.00 ug/l	624
Benzene - liquid	KG	07/30/93 09:35	<	5.000 ug/l	5.00 ug/l	624
Bromoform - liquid	KG	07/30/93 09:35	<	5.000 ug/l	5.00 ug/l	624
1,1,2,2-Tetrachloroethane - liquid	KG	07/30/93 09:35	<	5.000 ug/l	5.00 ug/l	624
Tetrachloroethene - liquid	KG	07/30/93 09:35	<	5.000 ug/l	5.00 ug/l	624
Toluene - liquid	KG	07/30/93 09:35	<	5.000 ug/l	5.00 ug/l	624
Chlorobenzene - liquid	KG	07/30/93 09:35	<	5.000 ug/l	5.00 ug/l	624
Ethylbenzene - liquid	KG	07/30/93 09:35	<	5.000 ug/l	5.00 ug/l	624
Chloroform - liquid	KG	07/30/93 09:35	<	5.000 ug/l	5.00 ug/l	624
Carbon Tetrachloride - liquid	KG	07/30/93 09:35	<	5.000 ug/l	5.00 ug/l	624
Xylene - liquid	KG	07/30/93 09:35	<	10.000 ug/l	10.00 ug/l	624
Acetone - liquid	KG	07/30/93 09:35	<	20.000 ug/l	20.00 ug/l	624.
1,1-Dichloroethene - liquid	KG	07/30/93 09:35	<	5.000 ug/l	5.00 ug/l	624.
2-Chloroethylvinyl Ether - liquid	KG	07/30/93 09:35	<	15.000 ug/l	15.00 ug/l	624.
Trichlorofluoromethane - liquid	KG	07/30/93 09:35	<	12.000 ug/l	12.00 ug/l	624.
2- Butanone - liquid	KG	07/30/93 09:35	<	10.000 ug/l	10.00 ug/l	624.
4-Methyl - 2 pentanone - liquid	KG	07/30/93 09:35	<	10.000 ug/l	10.00 ug/l	624.
Vinyl Acetate - liquid	KG	07/30/93 09:35	<	10.000 ug/l	10.00 ug/l	8240

Comments:

The volatile run was initiated at 11:35.

Sample Date: 07/15/93 In House # 07-4473-93 Source: SEECOMMENT Location: FT.STEWART

Metals Sample Preparation - water	JAG	08/05/93 18:00	0.000	0.00		
Pesticide - water extraction	MR	07/23/93 08:00	0.000	0.00		
PCB - water extraction	MR	07/23/93 08:00	0.000	0.00		
Ra 226/228 - liquid	TMA	07/30/93 12:00	8.900 pCi/l	0.00 pCi/l		903.1
Arsenic - Liquid	CW	08/06/93 12:46	13.000 ug/l	5.00 ug/l		206.2
Selenium - Liquid	CW	08/06/93 03:05	7.100 ug/l	5.00 ug/l		270.2
Barium - Liquid	CMP	08/11/93 15:16	0.290 mg/l	0.05 mg/l		200.7
Cadmium - Liquid	CMP	08/11/93 15:16	< 0.020 mg/l	0.01 mg/l		200.7
Chromium - Liquid	CMP	08/11/93 15:16	0.150 mg/l	0.05 mg/l		200.7
Lead - Liquid	CW	08/06/93 19:53	220.000 ug/l	5.00 ug/l		239.2
Silver - Liquid	CMP	08/11/93 15:16	< 0.050 mg/l	0.05 mg/l		200.7
Mercury - Liquid	KAH	08/05/93 10:00	0.260 ug/l	0.20 ug/l		245.1
Carbon Disulfide - liquid	KG	07/30/93 09:38	< 10.000 ug/l	10.00 ug/l		624.

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Parameter	Analyst	Analysis			Units	Lowest Detectable Level	Method Number
		Date -- Time	Results	Source: SEEComment			
Sample Date: 07/15/93	In House # 07-4473-93			Location: FT.STEWART			
- CONTINUED -							
2-Hexanone - Liquid	KG	07/30/93 09:38	<	50.000 ug/L	50.00 ug/L	8240	
Styrene - Liquid	KG	07/30/93 09:38	<	5.000 ug/L	5.00 ug/L	8240	
Endrin - Liquid	RMK	08/23/93 15:07	<	0.200 ug/l	0.10 ug/l	608	
Methoxychlor - Liquid	RMK	08/23/93 15:07	<	0.200 ug/l	0.10 ug/l	608	
Aldrin - liquid	RMK	08/23/93 15:07	<	0.040 ug/l	0.02 ug/l	608.	
Alpha BHC - liquid	RMK	08/23/93 15:07	<	0.059 ug/l	0.02 ug/l	608.	
Beta BHC - liquid	RMK	08/23/93 15:07	<	0.040 ug/l	0.02 ug/l	608.	
Delta BHC - liquid	RMK	08/23/93 15:07	<	0.040 ug/l	0.02 ug/l	608.	
Gamma BHC - liquid	RMK	08/23/93 15:07	<	0.040 ug/l	0.02 ug/l	608.	
4,4-DDT - liquid	RMK	08/23/93 15:07	<	0.200 ug/l	0.10 ug/l	608	
4,4-DDE - liquid	RMK	08/23/93 15:07	<	0.040 ug/l	0.02 ug/l	608	
4,4-DDD - liquid	RMK	08/23/93 15:07	<	0.200 ug/l	0.10 ug/l	608	
Dieldrin - liquid	RMK	08/23/93 15:07	<	0.040 ug/l	0.02 ug/l	608	
A-Endosulfan - liquid	RMK	08/23/93 15:07	<	0.040 ug/l	0.02 ug/l	608	
B-Endosulfan - liquid	RMK	08/23/93 15:07	<	0.200 ug/l	0.10 ug/l	608	
Endosulfan Sulfate - liquid	RMK	08/23/93 15:07	<	0.200 ug/l	0.10 ug/l	608	
Endrin Aldehyde - liquid	RMK	08/23/93 15:07	<	0.200 ug/l	0.10 ug/l	608	
Heptachlor - liquid	RMK	08/23/93 15:07	<	0.040 ug/l	0.02 ug/l	608	
Heptachlor Epoxide - liquid	RMK	08/23/93 15:07	<	0.040 ug/l	0.02 ug/l	608	
PCB-1242 - liquid	RMK	08/23/93 15:07	<	1.000 ug/l	0.50 ug/l	608	
PCB-1254 - liquid	RMK	08/23/93 15:07	<	1.000 ug/l	0.50 ug/l	608	
PCB-1221 - liquid	RMK	08/23/93 15:07	<	1.000 ug/l	0.50 ug/l	608	
PCB-1232 - liquid	RMK	08/23/93 15:07	<	1.000 ug/l	0.50 ug/l	608	
PCB-1248 - liquid	RMK	08/23/93 15:07	<	1.000 ug/l	0.50 ug/l	608	
PCB-1260 - liquid	RMK	08/23/93 15:07	<	1.000 ug/l	0.50 ug/l	608	
PCB-1016 - liquid	RMK	08/23/93 15:07	<	1.000 ug/l	0.50 ug/l	608	
Toxaphene - liquid	RMK	08/23/93 15:07	<	4.000 ug/l	2.00 ug/l	608.0	
Chloroethane - liquid	KG	07/30/93 09:38	<	10.000 ug/l	10.00 ug/l	624	
Methyl chloride - liquid	KG	07/30/93 09:38	<	10.000 ug/l	10.00 ug/l	624	
Methyl bromide - liquid	KG	07/30/93 09:38	<	10.000 ug/l	10.00 ug/l	624	
Vinyl chloride - liquid	KG	07/30/93 09:38	<	10.000 ug/l	10.00 ug/l	624	
Methylene Chloride - liquid	KG	07/30/93 09:38	<	5.000 ug/l	5.00 ug/l	624	
1,1-Dichloroethane - liquid	KG	07/30/93 09:38	<	5.000 ug/l	5.00 ug/l	624	
Trans 1,2-Dichloroethene - liquid	KG	07/30/93 09:38	<	5.000 ug/l	5.00 ug/l	624	
1,2-Dichloroethane - liquid	KG	07/30/93 09:38	<	5.000 ug/l	5.00 ug/l	624	
1,1,1-Trichloroethane - liquid	KG	07/30/93 09:38	<	5.000 ug/l	5.00 ug/l	624	
Bromodichloromethane - liquid	KG	07/30/93 09:38	<	5.000 ug/l	5.00 ug/l	624	
1,2-Dichloropropane - liquid	KG	07/30/93 09:38	<	5.000 ug/l	5.00 ug/l	624	
Trans-1,3-Dichloropropene - liquid	KG	07/30/93 09:38	<	5.000 ug/l	5.00 ug/l	624	
Trichloroethene - liquid	KG	07/30/93 09:38	<	5.000 ug/l	5.00 ug/l	624	
Chlorodibromomethane - liquid	KG	07/30/93 09:38	<	5.000 ug/l	5.00 ug/l	624	
1,1,2-Trichloroethane - liquid	KG	07/30/93 09:38	<	5.000 ug/l	5.00 ug/l	624	
Cis-1,3-Dichloropropene - liquid	KG	07/30/93 09:38	<	5.000 ug/l	5.00 ug/l	624	
Benzene - liquid	KG	07/30/93 09:38	<	5.000 ug/l	5.00 ug/l	624	
Bromoform - liquid	KG	07/30/93 09:38	<	5.000 ug/l	5.00 ug/l	624	
1,1,2,2,-Tetrachloroethane - liquid	KG	07/30/93 09:38	<	5.000 ug/l	5.00 ug/l	624	
Tetrachloroethene - liquid	KG	07/30/93 09:38	<	5.000 ug/l	5.00 ug/l	624	
Toluene - liquid	KG	07/30/93 09:38	<	5.000 ug/l	5.00 ug/l	624	
Chlorobenzene - liquid	KG	07/30/93 09:38	<	5.000 ug/l	5.00 ug/l	624	
Ethylbenzene - liquid	KG	07/30/93 09:38	<	5.000 ug/l	5.00 ug/l	624	
Chloroform - liquid	KG	07/30/93 09:38	<	5.000 ug/l	5.00 ug/l	624	
Carbon Tetrachloride - liquid	KG	07/30/93 09:38	<	5.000 ug/l	5.00 ug/l	624	
Xylene - liquid	KG	07/30/93 09:38	<	10.000 ug/l	10.00 ug/l	624	
Acetone - liquid	KG	07/30/93 09:38	<	20.000 ug/l	20.00 ug/l	624,	
1,1-Dichloroethene - liquid	KG	07/30/93 09:38	<	5.000 ug/l	5.00 ug/l	624.	
2-Chloroethylvinyl Ether - liquid	KG	07/30/93 09:38	<	15.000 ug/l	15.00 ug/l	624.	
Trichlorofluoromethane - liquid	KG	07/30/93 09:38	<	12.000 ug/l	12.00 ug/l	624.	
2- Butanone - liquid	KG	07/30/93 09:38	<	10.000 ug/l	10.00 ug/l	624.	
4-Methyl - 2 pentanone - liquid	KG	07/30/93 09:38	<	10.000 ug/l	10.00 ug/l	624.	
Vinyl Acetate - liquid	KG	07/30/93 09:38	<	10.000 ug/l	10.00 ug/l	8240	

Comments:

Client sample ID (SCM2-DUP-7-93)

The volatile run was initiated at 12:32. For Pest/PCB: due to extensive interferences present in this sample, an

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elevated detection limit has been provided (DL X 2).

Sample Date: 07/15/93 In House # 07-4474-93 Source: SCM3-7-93 Location: FT.STEWART

Metals Sample Preparation - water	JAG	08/05/93	18:00	0.000	0.00	
Pesticide - water extraction	MR	07/23/93	08:00	0.000	0.00	
PCB - water extraction	MR	07/23/93	08:00	0.000	0.00	
Ra 226/228 - liquid	TMA	07/30/93	12:00	3.200 pCi/l	0.00 pCi/l	903.1
Arsenic - liquid	CW	08/06/93	13:05	12.000 ug/l	5.00 ug/l	206.2
Selenium - Liquid	CW	08/06/93	03:11	< 5.000 ug/l	5.00 ug/l	270.2
Barium - Liquid	CMP	08/11/93	15:20	0.180 mg/l	0.05 mg/l	200.7
Cadmium - Liquid	CMP	08/11/93	15:20	< 0.020 mg/l	0.01 mg/l	200.7
Chromium - Liquid	CMP	08/11/93	15:20	0.100 mg/l	0.05 mg/l	200.7
Lead - Liquid	JDW	08/12/93	03:10	28.000 ug/l	5.00 ug/l	239.2
Silver - Liquid	CMP	08/13/93	12:56	< 0.050 mg/l	0.05 mg/l	200.7
Mercury - Liquid	KAH	08/05/93	10:00	< 0.200 ug/l	0.20 ug/l	245.1
Carbon Disulfide - liquid	KG	07/30/93	09:39	< 10.000 ug/l	10.00 ug/l	624.
2-Hexanone - Liquid	KG	07/30/93	09:39	< 50.000 ug/L	50.00 ug/L	8240
Styrene - Liquid	KG	07/30/93	09:39	< 5.000 ug/L	5.00 ug/L	8240
Endrin - Liquid	RMK	08/23/93	15:46	< 0.100 ug/l	0.10 ug/l	608
Methoxychlor - Liquid	RMK	08/23/93	15:46	< 0.100 ug/l	0.10 ug/l	608
Aldrin - liquid	RMK	08/23/93	15:46	< 0.020 ug/l	0.02 ug/l	608.
Alpha BHC - liquid	RMK	08/23/93	15:46	< 0.020 ug/l	0.02 ug/l	608.
Beta BHC - liquid	RMK	08/23/93	15:46	< 0.020 ug/l	0.02 ug/l	608.
Delta BHC - liquid	RMK	08/23/93	15:46	< 0.020 ug/l	0.02 ug/l	608.
Gamma BHC - liquid	RMK	08/23/93	15:46	< 0.020 ug/l	0.02 ug/l	608.
4,4-DDT - liquid	RMK	08/23/93	15:46	< 0.100 ug/l	0.10 ug/l	608
4,4-DDE - liquid	RMK	08/23/93	15:46	< 0.020 ug/l	0.02 ug/l	608
4,4-DDD - liquid	RMK	08/23/93	15:46	< 0.100 ug/l	0.10 ug/l	608
Dieldrin - liquid	RMK	08/23/93	15:46	< 0.020 ug/l	0.02 ug/l	608
A-Endosulfan - liquid	RMK	08/23/93	15:46	< 0.020 ug/l	0.02 ug/l	608
B-Endosulfan - liquid	RMK	08/23/93	15:46	< 0.100 ug/l	0.10 ug/l	608
Endosulfan Sulfate - liquid	RMK	08/23/93	15:46	< 0.100 ug/l	0.10 ug/l	608
Endrin Aldehyde - liquid	RMK	08/23/93	15:46	< 0.100 ug/l	0.10 ug/l	608
Heptachlor - liquid	RMK	08/23/93	15:46	< 0.020 ug/l	0.02 ug/l	608
Heptachlor Epoxide - liquid	RMK	08/23/93	15:46	< 0.020 ug/l	0.02 ug/l	608
PCB-1242 - liquid	RMK	08/23/93	15:46	< 0.500 ug/l	0.50 ug/l	608
PCB-1254 - liquid	RMK	08/23/93	15:46	< 0.500 ug/l	0.50 ug/l	608
PCB-1221 - liquid	RMK	08/23/93	15:46	< 0.500 ug/l	0.50 ug/l	608
PCB-1232 - liquid	RMK	08/23/93	15:46	< 0.500 ug/l	0.50 ug/l	608
PCB-1248 - liquid	RMK	08/23/93	15:46	< 0.500 ug/l	0.50 ug/l	608
PCB-1260 - liquid	RMK	08/23/93	15:46	< 0.500 ug/l	0.50 ug/l	608
PCB-1016 - liquid	RMK	08/23/93	15:46	< 0.500 ug/l	0.50 ug/l	608
Toxaphene - liquid	RMK	08/23/93	15:46	< 2.000 ug/l	2.00 ug/l	608.0
Chloroethane - liquid	KG	07/30/93	09:39	< 10.000 ug/l	10.00 ug/l	624
Methyl chloride - liquid	KG	07/30/93	09:39	< 10.000 ug/l	10.00 ug/l	624
Methyl bromide - liquid	KG	07/30/93	09:39	< 10.000 ug/l	10.00 ug/l	624
Vinyl chloride - liquid	KG	07/30/93	09:39	< 10.000 ug/l	10.00 ug/l	624
Methylene Chloride - liquid	KG	07/30/93	09:39	< 10.000 ug/l	10.00 ug/l	624
1,1-Dichloroethane - liquid	KG	07/30/93	09:39	< 5.000 ug/l	5.00 ug/l	624
Trans 1,2-Dichloroethene - liquid	KG	07/30/93	09:39	< 5.000 ug/l	5.00 ug/l	624
1,2-Dichloroethane - liquid	KG	07/30/93	09:39	< 5.000 ug/l	5.00 ug/l	624
1,1,1-Trichloroethane - liquid	KG	07/30/93	09:39	< 5.000 ug/l	5.00 ug/l	624
Bromodichloromethane - liquid	KG	07/30/93	09:39	< 5.000 ug/l	5.00 ug/l	624
1,2-Dichloropropane - liquid	KG	07/30/93	09:39	< 5.000 ug/l	5.00 ug/l	624
Trans-1,3-Dichloropropene - liquid	KG	07/30/93	09:39	< 5.000 ug/l	5.00 ug/l	624
Trichloroethene - liquid	KG	07/30/93	09:39	< 5.000 ug/l	5.00 ug/l	624
Chlorodibromomethane - liquid	KG	07/30/93	09:39	< 5.000 ug/l	5.00 ug/l	624
1,1,2-Trichloroethane - liquid	KG	07/30/93	09:39	< 5.000 ug/l	5.00 ug/l	624
Cis-1,3-Dichloropropene - liquid	KG	07/30/93	09:39	< 5.000 ug/l	5.00 ug/l	624
Benzene - liquid	KG	07/30/93	09:39	< 5.000 ug/l	5.00 ug/l	624
Bromoform - liquid	KG	07/30/93	09:39	< 5.000 ug/l	5.00 ug/l	624
1,1,2,2-Tetrachloroethane - liquid	KG	07/30/93	09:39	< 5.000 ug/l	5.00 ug/l	624
Tetrachloroethene - liquid	KG	07/30/93	09:39	< 5.000 ug/l	5.00 ug/l	624
Toluene - liquid	KG	07/30/93	09:39	< 5.000 ug/l	5.00 ug/l	624
Chlorobenzene - liquid	KG	07/30/93	09:39	< 5.000 ug/l	5.00 ug/l	624
Ethylbenzene - liquid	KG	07/30/93	09:39	< 5.000 ug/l	5.00 ug/l	624
Chloroform - liquid	KG	07/30/93	09:39	< 5.000 ug/l	5.00 ug/l	624
Carbon Tetrachloride - liquid	KG	07/30/93	09:39	< 5.000 ug/l	5.00 ug/l	624
Xylene - liquid	KG	07/30/93	09:39	< 10.000 ug/l	10.00 ug/l	624

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Parameter	Analyst	Date	Time	Results	Units	Lowest Detectable Level	Method Number
Sample Date: 07/15/93 In House # 07-4474-93		Source: SCM3-7-93		Location: FT STEWART			
- CONTINUED -							
Acetone - liquid	KG	07/30/93	09:39	<	20.000 ug/l	20.00 ug/l	624.
1,1-Dichloroethene - liquid	KG	07/30/93	09:39	<	5.000 ug/l	5.00 ug/l	624.
2-Chloroethylvinyl Ether - liquid	KG	07/30/93	09:39	<	15.000 ug/l	15.00 ug/l	624.
Trichlorofluoromethane - liquid	KG	07/30/93	09:39	<	12.000 ug/l	12.00 ug/l	624.
2- Butanone - liquid	KG	07/30/93	09:39	<	10.000 ug/l	10.00 ug/l	624.
4-Methyl - 2 pentanone - liquid	KG	07/30/93	09:39	<	10.000 ug/l	10.00 ug/l	624.
Vinyl Acetate - liquid	KG	07/30/93	09:39	<	10.000 ug/l	10.00 ug/l	8240

Comments:

The volatile run was initiated at 13:00.

Sample Date: 07/19/93 In House # 07-4475-93 Source: SCM4-7-93 Location: FT STEWART

Metals Sample Preparation - Water	JAG	08/05/93	18:00	0.000	0.00		
Pesticide - water extraction	MR	07/23/93	08:00	0.000	0.00		
PCB - water extraction	MR	07/23/93	08:00	0.000	0.00		
Ra 226/228 - liquid	TMA	07/30/93	12:00	5.000 pCi/l	0.00 pCi/l	903.1	
Arsenic - liquid	CW	08/06/93	13:40	9.000 ug/l	5.00 ug/l	206.2	
Selenium - Liquid	CW	08/06/93	03:44	5.200 ug/l	5.00 ug/l	270.2	
Barium - Liquid	CMP	08/11/93	15:24	0.370 mg/l	0.05 mg/l	200.7	
Cadmium - Liquid	CMP	08/11/93	15:24	0.030 mg/l	0.01 mg/l	200.7	
Chromium - Liquid	CMP	08/11/93	15:24	0.120 mg/l	0.05 mg/l	200.7	
Lead - Liquid	JDW	08/12/93	03:19	79.000 ug/l	5.00 ug/l	239.2	
Silver - Liquid	CMP	08/13/93	12:58	< 0.050 mg/l	0.05 mg/l	200.7	
Mercury - Liquid	KAH	08/05/93	10:00	< 0.200 ug/l	0.20 ug/l	245.1	
Carbon Disulfide - liquid	KG	07/30/93	09:44	< 10.000 ug/l	10.00 ug/l	624.	
2-Hexanone - Liquid	KG	07/30/93	09:44	< 50.000 ug/L	50.00 ug/L	8240	
Styrene - Liquid	KG	07/30/93	09:44	< 5.000 ug/L	5.00 ug/L	8240	
Endrin - Liquid	RMK	08/23/93	16:25	< 0.100 ug/l	0.10 ug/l	608	
Methoxychlor - Liquid	RMK	08/23/93	16:25	< 0.100 ug/l	0.10 ug/l	608	
Aldrin - liquid	RMK	08/23/93	16:25	< 0.037 ug/l	0.02 ug/l	608.	
Alpha BHC - liquid	RMK	08/23/93	16:25	< 0.061 ug/l	0.02 ug/l	608.	
Beta BHC - liquid	RMK	08/23/93	16:25	< 0.020 ug/l	0.02 ug/l	608.	
Delta BHC - liquid	RMK	08/23/93	16:25	< 0.020 ug/l	0.02 ug/l	608.	
Gamma BHC - liquid	RMK	08/23/93	16:25	< 0.029 ug/l	0.02 ug/l	608.	
4,4-DDT - liquid	RMK	08/23/93	16:25	< 0.100 ug/l	0.10 ug/l	608.	
4,4-DDE - liquid	RMK	08/23/93	16:25	< 0.020 ug/l	0.02 ug/l	608.	
4,4-DDD - liquid	RMK	08/23/93	16:25	< 0.100 ug/l	0.10 ug/l	608.	
Dieldrin - liquid	RMK	08/23/93	16:25	< 0.020 ug/l	0.02 ug/l	608.	
A-Endosulfan - liquid	RMK	08/23/93	16:25	< 0.020 ug/l	0.02 ug/l	608.	
B-Endosulfan - liquid	RMK	08/23/93	16:25	< 0.100 ug/l	0.10 ug/l	608.	
Endosulfan Sulfate - liquid	RMK	08/23/93	16:35	< 0.100 ug/l	0.10 ug/l	608.	
Endrin Aldehyde - liquid	RMK	08/23/93	16:25	< 0.100 ug/l	0.10 ug/l	608.	
Heptachlor - liquid	RMK	08/23/93	16:25	< 0.020 ug/l	0.02 ug/l	608.	
Heptachlor Epoxide - liquid	RMK	08/23/93	16:25	< 0.020 ug/l	0.02 ug/l	608.	
PCB-1242 - liquid	RMK	08/23/93	16:25	< 0.500 ug/l	0.50 ug/l	608.	
PCB-1254 - liquid	RMK	08/23/93	16:25	< 0.500 ug/l	0.50 ug/l	608.	
PCB-1221 - liquid	RMK	08/23/93	16:25	< 0.500 ug/l	0.50 ug/l	608.	
PCB-1232 - liquid	RMK	08/23/93	16:25	< 0.500 ug/l	0.50 ug/l	608.	
PCB-1248 - liquid	RMK	08/23/93	16:25	< 0.500 ug/l	0.50 ug/l	608.	
PCB-1260 - liquid	RMK	08/23/93	16:25	< 0.500 ug/l	0.50 ug/l	608.	
PCB-1016 - liquid	RMK	08/23/93	16:25	< 0.500 ug/l	0.50 ug/l	608.	
Toxaphene - liquid	RMK	08/23/93	16:25	< 2.000 ug/l	2.00 ug/l	608.0	
Chloroethane - liquid	KG	07/30/93	09:44	< 10.000 ug/l	10.00 ug/l	624	
Methyl chloride - liquid	KG	07/30/93	09:44	< 10.000 ug/l	10.00 ug/l	624	
Methyl bromide - liquid	KG	07/30/93	09:44	< 10.000 ug/l	10.00 ug/l	624	
Vinyl chloride - liquid	KG	07/30/93	09:44	< 10.000 ug/l	10.00 ug/l	624	
Methylene Chloride - liquid	KG	07/30/93	09:44	< 5.000 ug/l	5.00 ug/l	624	
1,1-Dichloroethane - liquid	KG	07/30/93	09:44	< 5.000 ug/l	5.00 ug/l	624	
Trans 1,2-Dichloroethene - liquid	KG	07/30/93	09:44	< 5.000 ug/l	5.00 ug/l	624	
1,2-Dichloroethane - liquid	KG	07/30/93	09:44	< 5.000 ug/l	5.00 ug/l	624	
1,1,1-Trichloroethane - liquid	KG	07/30/93	09:44	< 5.000 ug/l	5.00 ug/l	624	
Bromodichloromethane - liquid	KG	07/30/93	09:44	< 5.000 ug/l	5.00 ug/l	624	
1,2-Dichloropropane - liquid	KG	07/30/93	09:44	< 5.000 ug/l	5.00 ug/l	624	
Trans-1,3-Dichloropropene - liquid	KG	07/30/93	09:44	< 5.000 ug/l	5.00 ug/l	624	

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Parameter	Analyst	Date -- Time	Results	Units	Lowest Detectable Level	Method Number
Sample Date: 07/19/93 In House # 07-4475-93		Source: SCM4-7-93	Location: FT STEWART			
* CONTINUED *						
Trichloroethene - liquid	KG	07/30/93 09:44	<	5.000 ug/l	5.00 ug/l	624
Chlorodibromomethane - liquid	KG	07/30/93 09:44	<	5.000 ug/l	5.00 ug/l	624
1,1,2-Trichloroethane - liquid	KG	07/30/93 09:44	<	5.000 ug/l	5.00 ug/l	624
Cis-1,3-Dichloropropene - liquid	KG	07/30/93 09:44	<	5.000 ug/l	5.00 ug/l	624
Benzene - liquid	KG	07/30/93 09:44	<	5.000 ug/l	5.00 ug/l	624
Bromoform - liquid	KG	07/30/93 09:44	<	5.000 ug/l	5.00 ug/l	624
1,1,2,2-Tetrachloroethane - liquid	KG	07/30/93 09:44	<	5.000 ug/l	5.00 ug/l	624
Tetrachloroethene - liquid	KG	07/30/93 09:44	<	5.000 ug/l	5.00 ug/l	624
Toluene - liquid	KG	07/30/93 09:44	<	5.000 ug/l	5.00 ug/l	624
Chlorobenzene - liquid	KG	07/30/93 09:44	<	5.000 ug/l	5.00 ug/l	624
Ethylbenzene - liquid	KG	07/30/93 09:44	<	5.000 ug/l	5.00 ug/l	624
Chloroform - liquid	KG	07/30/93 09:44	<	5.000 ug/l	5.00 ug/l	624
Carbon Tetrachloride - liquid	KG	07/30/93 09:44	<	5.000 ug/l	5.00 ug/l	624
Xylene - liquid	KG	07/30/93 09:44	<	10.000 ug/l	10.00 ug/l	624
Acetone - liquid	KG	07/30/93 09:44	<	20.000 ug/l	20.00 ug/l	624.
1,1-Dichloroethene - liquid	KG	07/30/93 09:44	<	5.000 ug/l	5.00 ug/l	624.
2-Chloroethylvinyl Ether - liquid	KG	07/30/93 09:44	<	15.000 ug/l	15.00 ug/l	624.
Trichlorofluoromethane - liquid	KG	07/30/93 09:44	<	12.000 ug/l	12.00 ug/l	624.
2- Butanone - liquid	KG	07/30/93 09:44	<	10.000 ug/l	10.00 ug/l	624.
4-Methyl - 2 pentanone - liquid	KG	07/30/93 09:44	<	10.000 ug/l	10.00 ug/l	624.
Vinyl Acetate - liquid	KG	07/30/93 09:44	<	10.000 ug/l	10.00 ug/l	8240

Comments:

The volatile run was initiated at 14:12.

Sample Date: 07/20/93 In House # 07-4476-93 Source: SCM5-7-93 Location: FT STEWART

Metals Sample Preparation - water	JAG	08/05/93 18:00	0.000	0.00		
Pesticide - water extraction	MR	07/23/93 08:00	0.000	0.00		
PCB - water extraction	MR	07/23/93 08:00	0.000	0.00		
Ra 226/228 - liquid	TMA	07/30/93 12:00	2.800 pCi/l	0.00 pCi/l		903.1
Arsenic - liquid	CW	08/06/93 14:03	< 5.000 ug/l	5.00 ug/l		206.2
Selenium - Liquid	CW	08/06/93 04:07	< 5.000 ug/l	5.00 ug/l		270.2
Barium - Liquid	CMP	08/11/93 15:28	0.100 mg/l	0.05 mg/l		200.7
Cadmium - Liquid	CMP	08/11/93 15:28	< 0.020 mg/l	0.01 mg/l		200.7
Chromium - Liquid	CMP	08/11/93 15:28	< 0.050 mg/l	0.05 mg/l		200.7
Lead - Liquid	JDW	08/12/93 03:28	34.000 ug/l	5.00 ug/l		239.2
Silver - Liquid	CMP	08/11/93 15:28	< 0.050 ug/l	0.05 mg/l		200.7
Mercury - Liquid	KAH	08/05/93 10:00	< 0.200 ug/l	0.20 ug/l		245.1
Carbon Disulfide - liquid	KG	07/30/93 09:45	< 10.000 ug/l	10.00 ug/l		624.
2-Hexanone - Liquid	KG	07/30/93 09:45	< 50.000 ug/L	50.00 ug/L		8240
Styrene - Liquid	KG	07/30/93 09:45	< 5.000 ug/L	5.00 ug/L		8240
Endrin - Liquid	RMK	08/23/93 17:04	< 0.100 ug/l	0.10 ug/l		608
Methoxychlor - Liquid	RMK	08/23/93 17:04	< 0.100 ug/l	0.10 ug/l		608
Aldrin - liquid	RMK	08/23/93 17:04	0.107 ug/l	0.02 ug/l		608.
Alpha BHC - liquid	RMK	08/23/93 17:04	< 0.020 ug/l	0.02 ug/l		608.
Beta BHC - liquid	RMK	08/23/93 17:04	< 0.020 ug/l	0.02 ug/l		608.
Delta BHC - liquid	RMK	08/23/93 17:04	< 0.020 ug/l	0.02 ug/l		608.
Gamma BHC - liquid	RMK	08/23/93 17:04	< 0.020 ug/l	0.02 ug/l		608.
4,4-DDT - Liquid	RMK	08/23/93 17:04	< 0.100 ug/l	0.10 ug/l		608
4,4-DDE - liquid	RMK	08/23/93 17:04	< 0.020 ug/l	0.02 ug/l		608
4,4-DDD - liquid	RMK	08/23/93 17:04	< 0.100 ug/l	0.10 ug/l		608
Dieldrin - liquid	RMK	08/23/93 17:04	< 0.020 ug/l	0.02 ug/l		608
A-Endosulfan - liquid	RMK	08/23/93 17:04	< 0.020 ug/l	0.02 ug/l		608
B-Endosulfan - liquid	RMK	08/23/93 17:04	< 0.100 ug/l	0.10 ug/l		608
Endosulfan Sulfate - liquid	RMK	08/23/93 17:04	< 0.100 ug/l	0.10 ug/l		608
Endrin Aldehyde - liquid	RMK	08/23/93 17:04	< 0.100 ug/l	0.10 ug/l		608
Heptachlor - liquid	RMK	08/23/93 17:04	0.020 ug/l	0.02 ug/l		608
Heptachlor Epoxide - liquid	RMK	08/23/93 17:04	< 0.020 ug/l	0.02 ug/l		608
PCB-1242 - liquid	RMK	08/23/93 17:04	< 0.500 ug/l	0.50 ug/l		608
PCB-1254 - liquid	RMK	08/23/93 17:04	< 0.500 ug/l	0.50 ug/l		608
PCB-1221 - liquid	RMK	08/23/93 17:04	< 0.500 ug/l	0.50 ug/l		608
PCB-1232 - liquid	RMK	08/23/93 17:04	< 0.500 ug/l	0.50 ug/l		608
PCB-1248 - liquid	RMK	08/23/93 17:04	< 0.500 ug/l	0.50 ug/l		608
PCB-1260 - liquid	RMK	08/23/93 17:04	< 0.500 ug/l	0.50 ug/l		608

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Parameter	Analyst	Date :: Time	Analysis Results	Units	Lowest Detectable Level	Method Number
Sample Date: 07/20/93 In House # 07-4476-93		Source: SCM5-7-93	Location: FT.STEWART			
- CONTINUED -						
PCB-1016 - liquid	RMK	08/23/93 17:04	< 0.500 ug/l	0.50 ug/l	608	
Toxaphene - liquid	RMK	08/23/93 17:04	< 2.000 ug/l	2.00 ug/l	608.0	
Chloroethane - liquid	KG	07/30/93 09:45	< 10.000 ug/l	10.00 ug/l	624	
Methyl chloride - liquid	KG	07/30/93 09:45	< 10.000 ug/l	10.00 ug/l	624	
Methyl bromide - liquid	KG	07/30/93 09:45	< 10.000 ug/l	10.00 ug/l	624	
Vinyl chloride - liquid	KG	07/30/93 09:45	< 10.000 ug/l	10.00 ug/l	624	
Methylene Chloride - liquid	KG	07/30/93 09:45	< 5.000 ug/l	5.00 ug/l	624	
1,1-Dichloroethane - liquid	KG	07/30/93 09:45	< 5.000 ug/l	5.00 ug/l	624	
Trans 1,2-Dichloroethene - liquid	KG	07/30/93 09:45	< 5.000 ug/l	5.00 ug/l	624	
1,2-Dichloroethane - liquid	KG	07/30/93 09:45	< 5.000 ug/l	5.00 ug/l	624	
1,1,1-Trichloroethane - liquid	KG	07/30/93 09:45	< 5.000 ug/l	5.00 ug/l	624	
Bromodichloromethane - liquid	KG	07/30/93 09:45	< 5.000 ug/l	5.00 ug/l	624	
1,2-Dichloropropane - liquid	KG	07/30/93 09:45	< 5.000 ug/l	5.00 ug/l	624	
Trans-1,3-Dichloropropene - liquid	KG	07/30/93 09:45	< 5.000 ug/l	5.00 ug/l	624	
Trichloroethene - liquid	KG	07/30/93 09:45	< 5.000 ug/l	5.00 ug/l	624	
Chlorodibromomethane - liquid	KG	07/30/93 09:45	< 5.000 ug/l	5.00 ug/l	624	
1,1,2-Trichloroethane - liquid	KG	07/30/93 09:45	< 5.000 ug/l	5.00 ug/l	624	
Cis-1,3-Dichloropropene - liquid	KG	07/30/93 09:45	< 5.000 ug/l	5.00 ug/l	624	
Benzene - liquid	KG	07/30/93 09:45	< 5.000 ug/l	5.00 ug/l	624	
Bromoform - liquid	KG	07/30/93 09:45	< 5.000 ug/l	5.00 ug/l	624	
1,1,2,2-Tetrachloroethane - liquid	KG	07/30/93 09:45	< 5.000 ug/l	5.00 ug/l	624	
Tetrachloroethene - liquid	KG	07/30/93 09:45	< 5.000 ug/l	5.00 ug/l	624	
Toluene - liquid	KG	07/30/93 09:45	< 5.000 ug/l	5.00 ug/l	624	
Chlorobenzene - liquid	KG	07/30/93 09:45	< 5.000 ug/l	5.00 ug/l	624	
Ethylbenzene - liquid	KG	07/30/93 09:45	< 5.000 ug/l	5.00 ug/l	624	
Chloroform - liquid	KG	07/30/93 09:45	< 5.000 ug/l	5.00 ug/l	624	
Carbon Tetrachloride - liquid	KG	07/30/93 09:45	< 5.000 ug/l	5.00 ug/l	624	
Xylene - liquid	KG	07/30/93 09:45	< 10.000 ug/l	10.00 ug/l	624	
Acetone - liquid	KG	07/30/93 09:45	< 20.000 ug/l	20.00 ug/l	624	
1,1-Dichloroethene - liquid	KG	07/30/93 09:45	< 5.000 ug/l	5.00 ug/l	624.	
2-Chloroethylvinyl Ether - liquid	KG	07/30/93 09:45	< 15.000 ug/l	15.00 ug/l	624.	
Trichlorofluoromethane - liquid	KG	07/30/93 09:45	< 12.000 ug/l	12.00 ug/l	624.	
2- Butanone - liquid	KG	07/30/93 09:45	< 10.000 ug/l	10.00 ug/l	624.	
4-Methyl - 2 pentanone - liquid	KG	07/30/93 09:45	< 10.000 ug/l	10.00 ug/l	624.	
Vinyl Acetate - liquid	KG	07/30/93 09:45	< 10.000 ug/l	10.00 ug/l	8240	

Comments:

The volatile run was initiated at 14:41.

Sample Date: 07/20/93 In House # 07-4477-93 Source: SCM6-7-93 Location: FT.STEWART

Metals Sample Preparation - water	JAG	08/05/93 18:00	0.000	0.00	
Pesticide - water extraction	MR	07/23/93 08:00	0.000	0.00	
PCB - water extraction	MR	07/23/93 08:00	0.000	0.00	
Ra 226/228 - liquid	TMA	07/30/93 12:00	1.600 pCi/l	0.00 pCi/l	903.1
Arsenic - liquid	CW	08/06/93 14:09	< 5.000 ug/l	5.00 ug/l	206.2
Selenium - Liquid	CW	08/06/93 04:13	< 5.000 ug/l	5.00 ug/l	270.2
Barium - Liquid	CMP	08/11/93 15:40	0.060 mg/l	0.05 mg/l	200.7
Cadmium - Liquid	CMP	08/11/93 15:40	< 0.020 mg/l	0.01 mg/l	200.7
Chromium - Liquid	CMP	08/11/93 15:40	< 0.050 mg/l	0.05 mg/l	200.7
Lead - Liquid	JDW	08/12/93 03:37	20.000 ug/l	5.00 ug/l	239.2
Silver - Liquid	CMP	08/11/93 15:40	< 0.050 mg/l	0.05 mg/l	200.7
Mercury - Liquid	KAH	08/05/93 10:00	< 0.200 ug/l	0.20 ug/l	245.1
Carbon Disulfide - liquid	KG	07/30/93 13:04	< 10.000 ug/l	10.00 ug/l	624.
2-Hexanone - Liquid	KG	07/30/93 18:43	< 50.000 ug/L	50.00 ug/L	8240
Styrene - Liquid	KG	07/30/93 18:43	< 5.000 ug/L	5.00 ug/L	8240
Endrin - Liquid	RMK	08/25/93 03:36	< 0.100 ug/l	0.10 ug/l	608
Methoxychlor - Liquid	RMK	08/25/93 03:36	< 0.100 ug/l	0.10 ug/l	608
Aldrin - liquid	RMK	08/25/93 03:36	< 0.020 ug/l	0.02 ug/l	608
Alpha BHC - liquid	RMK	08/25/93 03:36	< 0.020 ug/l	0.02 ug/l	608.
Beta BHC - liquid	RMK	08/25/93 03:36	< 0.020 ug/l	0.02 ug/l	608.
Delta BHC - liquid	RMK	08/25/93 03:36	< 0.020 ug/l	0.02 ug/l	608.
Gamma BHC - liquid	RMK	08/25/93 03:36	< 0.020 ug/l	0.02 ug/l	608.
4,4-DDT - liquid	RMK	08/25/93 03:36	< 0.020 ug/l	0.02 ug/l	608.
4,4-DDE - liquid	RMK	08/25/93 03:36	< 0.100 ug/l	0.10 ug/l	608
	RMK	08/25/93 03:36	< 0.020 ug/l	0.02 ug/l	608

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Parameter	Analyst	Date -- Time	Results	Units	Lowest Detectable Level	Method Number
Sample Date: 07/20/93 In House # 07-4477-93		Source: SCM6-7-93		Location: FT.STEWART		
- CONTINUED -						
4,4-DDD - liquid	RMK	08/25/93 03:36	<	0.100 ug/l	0.10 ug/l	608
Dieldrin - liquid	RMK	08/25/93 03:36	<	0.020 ug/l	0.02 ug/l	608
A-Endosulfan - liquid	RMK	08/25/93 03:36	<	0.020 ug/l	0.02 ug/l	608
B-Endosulfan - liquid	RMK	08/25/93 03:36	<	0.100 ug/l	0.10 ug/l	608
Endosulfan Sulfate - liquid	RMK	08/25/93 03:36	<	0.100 ug/l	0.10 ug/l	608
Endrin Aldehyde - liquid	RMK	08/25/93 03:36	<	0.100 ug/l	0.10 ug/l	608
Heptachlor - liquid	RMK	08/25/93 03:36	<	0.020 ug/l	0.02 ug/l	608
Heptachlor Epoxide - liquid	RMK	08/25/93 03:36	<	0.020 ug/l	0.02 ug/l	608
PCB-1242 - liquid	RMK	08/25/93 03:36	<	0.500 ug/l	0.50 ug/l	608
PCB-1254 - liquid	RMK	08/25/93 03:36	<	0.500 ug/l	0.50 ug/l	608
PCB-1221 - liquid	RMK	08/25/93 03:36	<	0.500 ug/l	0.50 ug/l	608
PCB-1232 - liquid	RMK	08/25/93 03:36	<	0.500 ug/l	0.50 ug/l	608
PCB-1248 - liquid	RMK	08/25/93 03:36	<	0.500 ug/l	0.50 ug/l	608
PCB-1260 - liquid	RMK	08/25/93 03:36	<	0.500 ug/l	0.50 ug/l	608
PCB-1016 - liquid	RMK	08/25/93 03:36	<	0.500 ug/l	0.50 ug/l	608
Toxaphene - liquid	RMK	08/25/93 03:36	<	2.000 ug/l	2.00 ug/l	608.0
Chloroethane - liquid	KG	07/30/93 13:04	<	10.000 ug/l	10.00 ug/l	624
Methyl chloride - liquid	KG	07/30/93 13:04	<	10.000 ug/l	10.00 ug/l	624
Methyl bromide - liquid	KG	07/30/93 13:04	<	10.000 ug/l	10.00 ug/l	624
Vinyl chloride - liquid	KG	07/30/93 13:04	<	10.000 ug/l	10.00 ug/l	624
Methylene Chloride - liquid	KG	07/30/93 13:04	<	5.000 ug/l	5.00 ug/l	624
1,1-Dichloroethane - liquid	KG	07/30/93 13:04	<	5.000 ug/l	5.00 ug/l	624
Trans 1,2-Dichloroethene - liquid	KG	07/30/93 13:04	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloroethane - liquid	KG	07/30/93 13:04	<	5.000 ug/l	5.00 ug/l	624
1,1,1-Trichloroethane - liquid	KG	07/30/93 13:04	<	5.000 ug/l	5.00 ug/l	624
Bromodichloromethane - liquid	KG	07/30/93 13:04	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloropropane - liquid	KG	07/30/93 13:04	<	5.000 ug/l	5.00 ug/l	624
Trans-1,3-Dichloropropene - liquid	KG	07/30/93 13:04	<	5.000 ug/l	5.00 ug/l	624
Trichloroethene - liquid	KG	07/30/93 13:04	<	5.000 ug/l	5.00 ug/l	624
Chlorodibromomethane - liquid	KG	07/30/93 13:04	<	5.000 ug/l	5.00 ug/l	624
1,1,2-Trichloroethane - liquid	KG	07/30/93 13:04	<	5.000 ug/l	5.00 ug/l	624
Cis-1,3-Dichloropropene - liquid	KG	07/30/93 13:04	<	5.000 ug/l	5.00 ug/l	624
Benzene - liquid	KG	07/30/93 13:04	<	5.000 ug/l	5.00 ug/l	624
Bromoform - liquid	KG	07/30/93 13:04	<	5.000 ug/l	5.00 ug/l	624
1,1,2,2-Tetrachloroethane - liquid	KG	07/30/93 13:04	<	5.000 ug/l	5.00 ug/l	624
Tetrachloroethene - liquid	KG	07/30/93 13:04	<	5.000 ug/l	5.00 ug/l	624
Toluene - liquid	KG	07/30/93 13:04	<	5.000 ug/l	5.00 ug/l	624
Chlorobenzene - liquid	KG	07/30/93 13:04	<	5.000 ug/l	5.00 ug/l	624
Ethylbenzene - liquid	KG	07/30/93 13:04	<	5.000 ug/l	5.00 ug/l	624
Chloroform - liquid	KG	07/30/93 13:04	<	5.000 ug/l	5.00 ug/l	624
Carbon Tetrachloride - liquid	KG	07/30/93 13:04	<	5.000 ug/l	5.00 ug/l	624
Xylene - liquid	KG	07/30/93 13:04	<	10.000 ug/l	10.00 ug/l	624
Acetone - liquid	KG	07/30/93 13:04	<	20.000 ug/l	20.00 ug/l	624.
1,1-Dichloroethene - liquid	KG	07/30/93 13:04	<	5.000 ug/l	5.00 ug/l	624.
2-Chloroethylvinyl Ether - liquid	KG	07/30/93 13:04	<	15.000 ug/l	15.00 ug/l	624.
Trichlorofluoromethane - liquid	KG	07/30/93 13:04	<	12.000 ug/l	12.00 ug/l	624.
2- Butanone - liquid	KG	07/30/93 13:04	<	11.200 ug/l	10.00 ug/l	624.
4-Methyl - 2 pentanone - liquid	KG	07/30/93 13:04	<	10.000 ug/l	10.00 ug/l	624.
Vinyl Acetate - liquid	KG	07/30/93 13:04	<	10.000 ug/l	10.00 ug/l	8240

Comments:

The volatile run was initiated at 18:43.

Sample Date: 07/20/93 In House # 07-4478-93 Source: SEE COMMENT Location: FT.STEWART

Metals Sample Preparation - water	JAG	08/05/93 18:00	0.000	0.00		
Pesticide - water extraction	MR	07/23/93 08:00	0.000	0.00		
PCB - water extraction	MR	07/23/93 08:00	0.000	0.00		
Ra 226/228 - liquid	TMA	07/30/93 12:00	< 0.710 pCi/l	0.00 pCi/l		903.1
Arsenic - liquid	CW	08/06/93 14:15	< 5.000 ug/l	5.00 ug/l		206.2
Selenium - Liquid	CW	08/06/93 04:20	< 5.000 ug/l	5.00 ug/l		270.2
Barium - Liquid	CMP	08/11/93 15:44	< 0.050 mg/l	0.05 mg/l		200.7
Cadmium - Liquid	CMP	08/11/93 15:44	< 0.020 mg/l	0.01 mg/l		200.7
Chromium - Liquid	CMP	08/11/93 15:44	< 0.050 mg/l	0.05 mg/l		200.7
Lead - Liquid	JDW	08/12/93 03:43	< 5.000 ug/l	5.00 ug/l		239.2

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Parameter	Analyst	Date -- Time	Results	Units	Lowest Detectable Level	Method Number
Sample Date: 07/20/93 In House # 07-4478-93		Source: SEECOMMENT		Location: FT STEWART		
- CONTINUED -						
Silver - Liquid	CMP	08/11/93 15:44	<	0.050 mg/l	0.05 mg/l	200.7
Mercury - Liquid	KAH	08/05/93 10:00	<	0.200 ug/l	0.20 ug/l	245.1
Carbon Disulfide - Liquid	KG	08/12/93 08:47	<	10.000 ug/l	10.00 ug/l	624.
2-Hexanone - Liquid	KG	08/12/93 23:47	<	50.000 ug/L	50.00 ug/L	8240
Styrene - Liquid	KG	08/12/93 23:47	<	5.000 ug/L	5.00 ug/L	8240
Endrin - Liquid	RMK	08/23/93 20:18	<	0.100 ug/l	0.10 ug/l	608
Methoxychlor - Liquid	RMK	08/23/93 20:18	<	0.100 ug/l	0.10 ug/l	608
Aldrin - liquid	RMK	08/23/93 20:18	<	0.020 ug/l	0.02 ug/l	608.
Alpha BHC - liquid	RMK	08/23/93 20:18	<	0.020 ug/l	0.02 ug/l	608.
Beta BHC - liquid	RMK	08/23/93 20:18	<	0.020 ug/l	0.02 ug/l	608.
Delta BHC - liquid	RMK	08/23/93 20:18	<	0.020 ug/l	0.02 ug/l	608.
Gamma BHC - liquid	RMK	08/23/93 20:18	<	0.020 ug/l	0.02 ug/l	608.
4,4-DDT - liquid	RMK	08/23/93 20:18	<	0.100 ug/l	0.10 ug/l	608
4,4-DDE - liquid	RMK	08/23/93 20:18	<	0.020 ug/l	0.02 ug/l	608
4,4-DDD - liquid	RMK	08/23/93 20:18	<	0.100 ug/l	0.10 ug/l	608
Dieldrin - liquid	RMK	08/23/93 20:18	<	0.020 ug/l	0.02 ug/l	608
A-Endosulfan - liquid	RMK	08/23/93 20:18	<	0.020 ug/l	0.02 ug/l	608
B-Endosulfan - liquid	RMK	08/23/93 20:18	<	0.100 ug/l	0.10 ug/l	608
Endosulfan Sulfate - liquid	RMK	08/23/93 20:18	<	0.100 ug/l	0.10 ug/l	608
Endrin Aldehyde - liquid	RMK	08/23/93 20:18	<	0.100 ug/l	0.10 ug/l	608
Heptachlor - liquid	RMK	08/23/93 20:18	<	0.020 ug/l	0.02 ug/l	608
Heptachlor Epoxide - liquid	RMK	08/23/93 20:18	<	0.020 ug/l	0.02 ug/l	608
PCB-1242 - Liquid	RMK	08/23/93 20:18	<	0.500 ug/l	0.50 ug/l	608
PCB-1254 - liquid	RMK	08/23/93 20:18	<	0.500 ug/l	0.50 ug/l	608
PCB-1221 - liquid	RMK	08/23/93 20:18	<	0.500 ug/l	0.50 ug/l	608
PCB-1232 - liquid	RMK	08/23/93 20:18	<	0.500 ug/l	0.50 ug/l	608
PCB-1248 - liquid	RMK	08/23/93 20:18	<	0.500 ug/l	0.50 ug/l	608
PCB-1260 - liquid	RMK	08/23/93 20:18	<	0.500 ug/l	0.50 ug/l	608
PCB-1016 - liquid	RMK	08/23/93 20:18	<	0.500 ug/l	0.50 ug/l	608
Toxaphene - liquid	RMK	08/23/93 20:18	<	0.500 ug/l	0.50 ug/l	608
Chloroethane - liquid	JCF	08/12/93 08:47	<	10.000 ug/l	10.00 ug/l	624
Methyl chloride - liquid	JCF	08/12/93 08:47	<	10.000 ug/l	10.00 ug/l	624
Methyl bromide - liquid	JCF	08/12/93 08:47	<	10.000 ug/l	10.00 ug/l	624
Vinyl chloride - liquid	JCF	08/12/93 08:47	<	10.000 ug/l	10.00 ug/l	624
Methylene Chloride - liquid	JCF	08/12/93 08:47	<	5.000 ug/l	5.00 ug/l	624
1,1-Dichloroethane - liquid	JCF	08/12/93 08:47	<	5.000 ug/l	5.00 ug/l	624
Trans 1,2-Dichloroethene - liquid	JCF	08/12/93 08:47	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloroethane - liquid	JCF	08/12/93 08:47	<	5.000 ug/l	5.00 ug/l	624
1,1,1-Trichloroethane - liquid	JCF	08/12/93 08:47	<	5.000 ug/l	5.00 ug/l	624
Bromodichloromethane - liquid	JCF	08/12/93 08:47	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloropropane - liquid	JCF	08/12/93 08:47	<	5.000 ug/l	5.00 ug/l	624
Trans-1,3-Dichloropropene - liquid	JCF	08/12/93 08:47	<	5.000 ug/l	5.00 ug/l	624
Trichloroethene - liquid	JCF	08/12/93 08:47	<	5.000 ug/l	5.00 ug/l	624
Chlorodibromomethane - liquid	JCF	08/12/93 08:47	<	5.000 ug/l	5.00 ug/l	624
1,1,2-Trichloroethane - liquid	JCF	08/12/93 08:47	<	5.000 ug/l	5.00 ug/l	624
Cis-1,3-Dichloropropene - liquid	JCF	08/12/93 08:47	<	5.000 ug/l	5.00 ug/l	624
Benzene - liquid	JCF	08/12/93 08:47	<	5.000 ug/l	5.00 ug/l	624
Bromoform - liquid	JCF	08/12/93 08:47	<	5.000 ug/l	5.00 ug/l	624
1,1,2,2-Tetrachloroethane - liquid	JCF	08/12/93 08:47	<	5.000 ug/l	5.00 ug/l	624
Tetrachloroethene - liquid	JCF	08/12/93 08:47	<	5.000 ug/l	5.00 ug/l	624
Toluene - liquid	JCF	08/12/93 08:47	<	5.000 ug/l	5.00 ug/l	624
Chlorobenzene - liquid	JCF	08/12/93 08:47	<	5.000 ug/l	5.00 ug/l	624
Ethylbenzene - liquid	JCF	08/12/93 08:47	<	5.000 ug/l	5.00 ug/l	624
Chloroform - liquid	JCF	08/12/93 08:47	<	5.000 ug/l	5.00 ug/l	624
Carbon Tetrachloride - liquid	JCF	08/12/93 08:47	<	5.000 ug/l	5.00 ug/l	624
Xylene - liquid	JCF	08/12/93 08:47	<	5.000 ug/l	5.00 ug/l	624
Acetone - liquid	JCF	08/12/93 08:47	<	10.000 ug/l	10.00 ug/l	624
1,1-Dichloroethene - liquid	JCF	08/12/93 08:47	<	20.000 ug/l	20.00 ug/l	624.
2-Chloroethylvinyl Ether - liquid	JCF	08/12/93 08:47	<	15.000 ug/l	15.00 ug/l	624.
Trichlorofluoromethane - liquid	JCF	08/12/93 08:47	<	12.000 ug/l	12.00 ug/l	624.
2- Butanone - liquid	JCF	08/12/93 08:47	<	10.000 ug/l	10.00 ug/l	624.
4-Methyl - 2 pentanone - liquid	JCF	08/12/93 08:47	<	10.000 ug/l	10.00 ug/l	624.
Vinyl Acetate - liquid	JCF	08/12/93 08:47	<	10.000 ug/l	10.00 ug/l	8240

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Parameter	Analyst	Date -- Time	Results	Units	Lowest Detectable Level	Method Number
Sample Date: 07/20/93	In House # 07-4478-93	Source: SEECOMMENT	Location: FT.STEWART			
- CONTINUED -						

Comments:
Client sample ID (SCM-BLK-7-93)

The volatile run was initiated at 23:47.

Sample Date: 07/19/93 In House # 07-4479-93 Source: SEECOMMENT Location: FT.STEWART

Metals Sample Preparation - water	JAG	08/05/93 18:00	0.000	0.00		
Pesticide - water extraction	MR	07/23/93 08:00	0.000	0.00		
PCB - water extraction	MR	07/23/93 08:00	0.000	0.00		
Ra 226/228 - liquid	TMA	07/30/93 12:00	0.600 pCi/l	0.00 pCi/l	903.1	
Arsenic - liquid	CW	08/06/93 14:22	< 5.000 ug/l	5.00 ug/l	206.2	
Selenium - Liquid	CW	08/06/93 04:26	< 5.000 ug/l	5.00 ug/l	270.2	
Barium - Liquid	CMP	08/11/93 15:48	< 0.050 mg/l	0.05 mg/l	200.7	
Cadmium - Liquid	CMP	08/11/93 15:48	< 0.020 mg/l	0.01 mg/l	200.7	
Chromium - Liquid	CMP	08/11/93 15:48	< 0.050 mg/l	0.05 mg/l	200.7	
Lead - Liquid	CW	08/06/93 21:26	< 5.000 ug/l	5.00 ug/l	239.2	
Silver - Liquid	CMP	08/11/93 15:48	< 0.050 mg/l	0.05 mg/l	200.7	
Mercury - Liquid	KAH	08/05/93 10:00	< 0.200 ug/l	0.20 ug/l	245.1	
Carbon Disulfide - liquid	JCF	08/13/93 24:16	< 10.000 ug/l	10.00 ug/l	624.	
2-Hexanone - Liquid	JCF	08/13/93 24:16	< 50.000 ug/L	50.00 ug/L	8240	
Styrene - Liquid	JCF	08/13/93 24:16	< 5.000 ug/L	5.00 ug/L	8240	
Endrin - Liquid	RMK	08/23/93 20:57	< 0.200 ug/l	0.10 ug/l	608	
Methoxychlor - Liquid	RMK	08/23/93 20:57	< 0.200 ug/l	0.10 ug/l	608	
Aldrin - liquid	RMK	08/23/93 20:57	< 0.040 ug/l	0.02 ug/l	608.	
Alpha BHC - liquid	RMK	08/23/93 20:57	< 0.040 ug/l	0.02 ug/l	608.	
Beta BHC - liquid	RMK	08/23/93 20:57	< 0.040 ug/l	0.02 ug/l	608.	
Delta BHC - liquid	RMK	08/23/93 20:57	0.041 ug/l	0.02 ug/l	608.	
Gamma BHC - liquid	RMK	08/23/93 20:57	< 0.040 ug/l	0.02 ug/l	608.	
4,4-DDT - liquid	RMK	08/23/93 20:57	< 0.200 ug/l	0.10 ug/l	608	
4,4-DDE - liquid	RMK	08/23/93 20:57	< 0.040 ug/l	0.02 ug/l	608	
4,4-DDD - liquid	RMK	08/23/93 20:57	< 0.200 ug/l	0.10 ug/l	608	
Dieldrin - liquid	RMK	08/23/93 20:57	< 0.040 ug/l	0.02 ug/l	608	
A-Endosulfan - liquid	RMK	08/23/93 20:57	< 0.040 ug/l	0.02 ug/l	608	
B-Endosulfan - liquid	RMK	08/23/93 20:57	< 0.200 ug/l	0.10 ug/l	608	
Endosulfan Sulfate - liquid	RMK	08/23/93 20:57	< 0.200 ug/l	0.10 ug/l	608	
Endrin Aldehyde - liquid	RMK	08/23/93 20:57	< 0.200 ug/l	0.10 ug/l	608	
Heptachlor - liquid	RMK	08/23/93 20:57	< 0.040 ug/l	0.02 ug/l	608	
Heptachlor Epoxide - liquid	RMK	08/23/93 20:57	< 0.040 ug/l	0.02 ug/l	608	
PCB-1242 - liquid	RMK	08/23/93 20:57	< 1.000 ug/l	0.50 ug/l	608	
PCB-1254 - Liquid	RMK	08/23/93 20:57	< 1.000 ug/l	0.50 ug/l	608	
PCB-1221 - liquid	RMK	08/23/93 20:57	< 1.000 ug/l	0.50 ug/l	608	
PCB-1232 - liquid	RMK	08/23/93 20:57	< 1.000 ug/l	0.50 ug/l	608	
PCB-1248 - liquid	RMK	08/23/93 20:57	< 1.000 ug/l	0.50 ug/l	608	
PCB-1260 - liquid	RMK	08/23/93 20:57	< 1.000 ug/l	0.50 ug/l	608	
PCB-1016 - liquid	RMK	08/23/93 20:57	< 1.000 ug/l	0.50 ug/l	608	
Toxaphene - liquid	RMK	08/23/93 20:57	< 4.000 ug/l	2.00 ug/l	608.0	
Chloroethane - liquid	JCF	08/13/93 08:49	< 10.000 ug/l	10.00 ug/l	624	
Methyl chloride - liquid	JCF	08/13/93 08:49	< 10.000 ug/l	10.00 ug/l	624	
Methyl bromide - liquid	JCF	08/13/93 08:49	< 10.000 ug/l	10.00 ug/l	624	
Vinyl chloride - liquid	JCF	08/13/93 08:49	< 10.000 ug/l	10.00 ug/l	624	
Methylene Chloride - liquid	JCF	08/13/93 08:49	< 5.000 ug/l	5.00 ug/l	624	
1,1-Dichloroethane - liquid	JCF	08/13/93 08:49	< 5.000 ug/l	5.00 ug/l	624	
Trans 1,2-Dichloroethene - liquid	JCF	08/13/93 08:49	< 5.000 ug/l	5.00 ug/l	624	
1,2-Dichloroethane - liquid	JCF	08/13/93 08:49	< 5.000 ug/l	5.00 ug/l	624	
1,1,1-Trichloroethane - liquid	JCF	08/13/93 08:49	< 5.000 ug/l	5.00 ug/l	624	
Bromodichloromethane - liquid	JCF	08/13/93 08:49	< 5.000 ug/l	5.00 ug/l	624	
1,2-Dichloropropane - liquid	JCF	08/13/93 08:49	< 5.000 ug/l	5.00 ug/l	624	
Trans-1,3-Dichloropropene - liquid	JCF	08/13/93 08:49	< 5.000 ug/l	5.00 ug/l	624	
Trichloroethene - liquid	JCF	08/13/93 08:49	< 5.000 ug/l	5.00 ug/l	624	
Chlorodibromomethane - liquid	JCF	08/13/93 08:49	< 5.000 ug/l	5.00 ug/l	624	
1,1,2-Trichloroethane - liquid	JCF	08/13/93 08:49	< 5.000 ug/l	5.00 ug/l	624	
Cis-1,3-Dichloropropene - liquid	JCF	08/13/93 08:49	< 5.000 ug/l	5.00 ug/l	624	
Benzene - liquid	JCF	08/13/93 08:49	< 5.000 ug/l	5.00 ug/l	624	
Bromoform - liquid	JCF	08/13/93 08:49	< 5.000 ug/l	5.00 ug/l	624	

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Parameter	Analyst	Date -- Time	Results	Units	Lowest Detectable Level	Method Number
Sample Date: 07/19/93 In House # 07-4479-93	Source: SEECOMMENT	Location: FT.STEWART				
- CONTINUED -						
1,1,2,2,-Tetrachloroethane - liquid	JCF	08/13/93 08:49	<	5.000 ug/l	5.00 ug/l	624
Tetrachloroethene - liquid	JCF	08/13/93 08:49	<	5.000 ug/l	5.00 ug/l	624
Toluene - liquid	JCF	08/13/93 08:49	<	5.000 ug/l	5.00 ug/l	624
Chlorobenzene - liquid	JCF	08/13/93 08:49	<	5.000 ug/l	5.00 ug/l	624
Ethylbenzene - liquid	JCF	08/13/93 08:49	<	5.000 ug/l	5.00 ug/l	624
Chloroform - liquid	JCF	08/13/93 08:49	<	5.000 ug/l	5.00 ug/l	624
Carbon Tetrachloride - liquid	JCF	08/13/93 08:49	<	5.000 ug/l	5.00 ug/l	624
Xylene - liquid	JCF	08/13/93 08:49	<	10.000 ug/l	10.00 ug/l	624
Acetone - liquid	JCF	08/13/93 08:49	<	20.000 ug/l	20.00 ug/l	624
1,1-Dichloroethene - liquid	JCF	08/13/93 08:49	<	5.000 ug/l	5.00 ug/l	624
2-Chloroethylvinyl Ether - liquid	JCF	08/13/93 08:49	<	15.000 ug/l	15.00 ug/l	624
Trichlorofluoromethane - liquid	JCF	08/13/93 08:49	<	12.000 ug/l	12.00 ug/l	624
2- Butanone - liquid	JCF	08/13/93 08:49	<	10.000 ug/l	10.00 ug/l	624
4-Methyl - 2 pentanone - liquid	JCF	08/13/93 08:49	<	10.000 ug/l	10.00 ug/l	624
Vinyl Acetate - liquid	JCF	08/13/93 08:49	<	10.000 ug/l	10.00 ug/l	8240

Comments:

Client sample ID (SURS-1-7-93)

The volatile run was initiated at 24:16. For Pest/PCB: due to extensive interferences present in this sample, an elevated detection limit has been provided (DL X 2).

Sample Date: 07/19/93 In House # 07-4480-93 Source: SEECOMMENT Location: FT.STEWART

Metals Sample Preparation - Water	JAG	08/05/93 18:00	0.000	0.00		
Pesticide - water extraction	MR	07/23/93 08:00	0.000	0.00		
PCB - water extraction	MR	07/23/93 08:00	0.000	0.00		
Ra 226/228 - liquid	TMA	07/30/93 12:00	1.300 pCi/l	0.00 pCi/l		
Arsenic - liquid	CW	08/06/93 14:28	<	5.000 ug/l	5.00 ug/l	903.1
Selenium - Liquid	CW	08/06/93 04:30	<	5.000 ug/l	5.00 ug/l	206.2
Barium - Liquid	CMP	08/11/93 15:52	<	0.050 mg/l	0.05 mg/l	270.2
Cadmium - Liquid	CMP	08/11/93 15:52	<	0.020 mg/l	0.01 mg/l	200.7
Chromium - Liquid	CMP	08/11/93 15:52	<	0.050 mg/l	0.05 mg/l	200.7
Lead - Liquid	JDW	08/12/93 03:49	<	5.000 ug/l	5.00 ug/l	239.2
Silver - Liquid	CMP	08/11/93 15:52	<	0.050 mg/l	0.05 mg/l	200.7
Mercury - Liquid	KAH	08/05/93 10:00	<	0.200 ug/l	0.20 ug/l	245.1
Carbon Disulfide - liquid	JCF	08/13/93 09:14	<	10.000 ug/l	10.00 ug/l	624.
2-Hexanone - Liquid	JCF	08/13/93 24:46	<	50.000 ug/L	50.00 ug/L	8240
Styrene - Liquid	JCF	08/13/93 24:46	<	5.000 ug/L	5.00 ug/L	8240
Endrin - Liquid	RMK	08/23/93 21:36	<	0.200 ug/l	0.10 ug/l	608
Methoxychlor - Liquid	RMK	08/23/93 21:36	<	0.200 ug/l	0.10 ug/l	608
Aldrin - liquid	RMK	08/23/93 21:36	<	0.040 ug/l	0.02 ug/l	608.
Alpha BHC - liquid	RMK	08/23/93 21:36	<	0.040 ug/l	0.02 ug/l	608.
Beta BHC - liquid	RMK	08/23/93 21:36	<	0.040 ug/l	0.02 ug/l	608.
Delta BHC - liquid	RMK	08/23/93 21:36	<	0.040 ug/l	0.02 ug/l	608.
Gamma BHC - liquid	RMK	08/23/93 21:36	<	0.040 ug/l	0.02 ug/l	608.
4,4-DDT - liquid	RMK	08/23/93 21:36	<	0.200 ug/l	0.10 ug/l	608.
4,4-DDE - liquid	RMK	08/23/93 21:36	<	0.040 ug/l	0.02 ug/l	608.
4,4-DDD - liquid	RMK	08/23/93 21:36	<	0.200 ug/l	0.10 ug/l	608.
Die�drin - liquid	RMK	08/23/93 21:36	<	0.200 ug/l	0.10 ug/l	608.
A-Endosulfan - liquid	RMK	08/23/93 21:36	<	0.040 ug/l	0.02 ug/l	608.
B-Endosulfan - liquid	RMK	08/23/93 21:36	<	0.040 ug/l	0.02 ug/l	608.
Endosulfan Sulfate - liquid	RMK	08/23/93 21:36	<	0.200 ug/l	0.10 ug/l	608.
Endrin Aldehyde - liquid	RMK	08/23/93 21:36	<	0.200 ug/l	0.10 ug/l	608.
Heptachlor - liquid	RMK	08/23/93 21:36	<	0.040 ug/l	0.02 ug/l	608.
Heptachlor Epoxide - liquid	RMK	08/23/93 21:36	<	0.040 ug/l	0.02 ug/l	608.
PCB-1242 - liquid	RMK	08/23/93 21:36	<	1.000 ug/l	0.02 ug/l	608.
PCB-1254 - liquid	RMK	08/23/93 21:36	<	1.000 ug/l	0.50 ug/l	608.
PCB-1221 - liquid	RMK	08/23/93 21:36	<	1.000 ug/l	0.50 ug/l	608.
PCB-1232 - liquid	RMK	08/23/93 21:36	<	1.000 ug/l	0.50 ug/l	608.
PCB-1248 - liquid	RMK	08/23/93 21:36	<	1.000 ug/l	0.50 ug/l	608.
PCB-1260 - liquid	RMK	08/23/93 21:36	<	1.000 ug/l	0.50 ug/l	608.
PCB-1016 - liquid	RMK	08/23/93 21:36	<	1.000 ug/l	0.50 ug/l	608.
Toxaphene - liquid	RMK	08/23/93 21:36	<	4.000 ug/l	2.00 ug/l	608.0
Chloroethane - liquid	JCF	08/13/93 09:14	<	10.000 ug/l	10.00 ug/l	624

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Parameter		Analysis				Lowest Detectable Level	Method Number
	Sample Date: 07/19/93	Analyst	Date -- Time	Results	Units		
- CONTINUED -							
Methyl chloride - liquid	JCF	08/13/93	09:14	<	10.000 ug/l	10.00 ug/l	624
Methyl bromide - liquid	JCF	08/13/93	09:14	<	10.000 ug/l	10.00 ug/l	624
Vinyl chloride - liquid	JCF	08/13/93	09:14	<	10.000 ug/l	10.00 ug/l	624
Methylene Chloride - liquid	JCF	08/13/93	09:14	<	5.000 ug/l	5.00 ug/l	624
1,1-Dichloroethane - liquid	JCF	08/13/93	09:14	<	5.000 ug/l	5.00 ug/l	624
Trans 1,2-Dichloroethene - liquid	JCF	08/13/93	09:14	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloroethane - liquid	JCF	08/13/93	09:14	<	5.000 ug/l	5.00 ug/l	624
1,1,1-Trichloroethane - liquid	JCF	08/13/93	09:14	<	5.000 ug/l	5.00 ug/l	624
Bromodichloromethane - liquid	JCF	08/13/93	09:14	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloropropane - liquid	JCF	08/13/93	09:14	<	5.000 ug/l	5.00 ug/l	624
Trans-1,3-Dichloropropene - liquid	JCF	08/13/93	09:14	<	5.000 ug/l	5.00 ug/l	624
Trichloroethene - liquid	JCF	08/13/93	09:14	<	5.000 ug/l	5.00 ug/l	624
Chlorodibromomethane - liquid	JCF	08/13/93	09:14	<	5.000 ug/l	5.00 ug/l	624
1,1,2-Trichloroethane - liquid	JCF	08/13/93	09:14	<	5.000 ug/l	5.00 ug/l	624
Cis-1,3-Dichloropropene - liquid	JCF	08/13/93	09:14	<	5.000 ug/l	5.00 ug/l	624
Benzene - liquid	JCF	08/13/93	09:14	<	5.000 ug/l	5.00 ug/l	624
Bromoform - liquid	JCF	08/13/93	09:14	<	5.000 ug/l	5.00 ug/l	624
1,1,2,2-Tetrachloroethane - liquid	JCF	08/13/93	09:14	<	5.000 ug/l	5.00 ug/l	624
Tetrachloroethene - liquid	JCF	08/13/93	09:14	<	5.000 ug/l	5.00 ug/l	624
Toluene - liquid	JCF	08/13/93	09:14	<	5.000 ug/l	5.00 ug/l	624
Chlorobenzene - liquid	JCF	08/13/93	09:14	<	5.000 ug/l	5.00 ug/l	624
Ethylbenzene - liquid	JCF	08/13/93	09:14	<	5.000 ug/l	5.00 ug/l	624
Chloroform - liquid	JCF	08/13/93	09:14	<	5.000 ug/l	5.00 ug/l	624
Carbon Tetrachloride - liquid	JCF	08/13/93	09:14	<	5.000 ug/l	5.00 ug/l	624
Xylene - liquid	JCF	08/13/93	09:14	<	10.000 ug/l	10.00 ug/l	624
Acetone - liquid	JCF	08/13/93	09:14	<	20.000 ug/l	20.00 ug/l	624.
1,1-Dichloroethene - liquid	JCF	08/13/93	09:14	<	5.000 ug/l	5.00 ug/l	624.
2-Chloroethylvinyl Ether - liquid	JCF	08/13/93	09:14	<	15.000 ug/l	15.00 ug/l	624.
Trichlorofluoromethane - liquid	JCF	08/13/93	09:14	<	12.000 ug/l	12.00 ug/l	624.
2- Butanone - liquid	JCF	08/13/93	09:14	<	10.000 ug/l	10.00 ug/l	624.
4-Methyl - 2 pentanone - liquid	JCF	08/13/93	09:14	<	10.000 ug/l	10.00 ug/l	624.
Vinyl Acetate - liquid	JCF	08/13/93	09:14	<	10.000 ug/l	10.00 ug/l	8240

Comments:

Client sample ID (SURS-1-DUP-7-93)

The volatile run was initiated at 24:46. For Pest/PCB: due to extensive interferences present in this sample, an elevated detection limit has been provided (DL X2).

Sample Date: 07/19/93 In House # 07-4481-93 Source: SEECOMMENT Location: FT.STEWART

Metals Sample Preparation - water	JAG	08/05/93	18:00	<	0.000	0.00	
Pesticide - water extraction	MR	07/26/93	09:00	<	0.000	0.00	
PCB - water extraction	MR	07/26/93	09:00	<	0.000	0.00	
Ra 226/228 - liquid	TMA	07/30/93	12:00	<	0.600 pCi/l	0.00 pCi/l	903.1
Arsenic - liquid	CW	08/06/93	14:35	<	5.000 ug/l	5.00 ug/l	206.2
Selenium - Liquid	CW	08/06/93	04:39	<	5.000 ug/l	5.00 ug/l	270.2
Barium - Liquid	CMP	08/11/93	16:08	<	0.050 mg/l	0.05 mg/l	200.7
Cadmium - Liquid	CMP	08/11/93	16:08	<	0.020 mg/l	0.01 mg/l	200.7
Chromium - Liquid	CMP	08/11/93	16:08	<	0.050 mg/l	0.05 mg/l	200.7
Lead - Liquid	JDW	08/12/93	03:55	<	5.000 ug/l	5.00 ug/l	239.2
Silver - Liquid	CMP	08/11/93	16:08	<	0.050 mg/l	0.05 mg/l	200.7
Mercury - Liquid	KAH	08/05/93	10:00	<	0.200 ug/l	0.20 ug/l	245.1
Carbon Disulfide - liquid	JCF	08/13/93	01:15	<	10.000 ug/l	10.00 ug/l	624.
2-Hexanone - Liquid	JCF	08/13/93	01:15	<	50.000 ug/L	50.00 ug/L	8240
Styrene - Liquid	JCF	08/13/93	01:15	<	5.000 ug/L	5.00 ug/L	8240
Endrin - Liquid	RMK	08/24/93	00:49	<	0.100 ug/l	0.10 ug/l	608
Methoxychlor - Liquid	RMK	08/24/93	00:49	<	0.100 ug/l	0.10 ug/l	608
Aldrin - Liquid	RMK	08/24/93	00:49	<	0.020 ug/l	0.02 ug/l	608.
Alpha BHC - liquid	RMK	08/24/93	00:49	<	0.020 ug/l	0.02 ug/l	608.
Beta BHC - liquid	RMK	08/24/93	00:49	<	0.020 ug/l	0.02 ug/l	608.
Delta BHC - liquid	RMK	08/24/93	00:49	<	0.032 ug/l	0.02 ug/l	608.
Gamma BHC - liquid	RMK	08/24/93	00:49	<	0.020 ug/l	0.02 ug/l	608.
4,4-DDT - liquid	RMK	08/24/93	00:49	<	0.100 ug/l	0.10 ug/l	608

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Parameter	Analyst	Date -- Time	Analysis Results	Units	Lowest Detectable Level	Method Number
Sample Date: 07/19/93 In House # 07-4481-93		Source: SEE COMMENT		Location: FT.STEWART		
- CONTINUED -						
4,4-DDE - liquid	RMK	08/24/93 00:49	<	0.020 ug/l	0.02 ug/l	608
4,4-DDD - liquid	RMK	08/24/93 00:49	<	0.100 ug/l	0.10 ug/l	608
Dieldrin - liquid	RMK	08/24/93 00:49	<	0.020 ug/l	0.02 ug/l	608
A-Endosulfan - liquid	RMK	08/24/93 00:49	<	0.020 ug/l	0.02 ug/l	608
B-Endosulfan - liquid	RMK	08/24/93 00:49	<	0.100 ug/l	0.10 ug/l	608
Endosulfan Sulfate - liquid	RMK	08/24/93 00:49	<	0.100 ug/l	0.10 ug/l	608
Endrin Aldehyde - liquid	RMK	08/24/93 00:49	<	0.100 ug/l	0.10 ug/l	608
Heptachlor - liquid	RMK	08/24/93 00:49	<	0.020 ug/l	0.02 ug/l	608
Heptachlor Epoxide - liquid	RMK	08/24/93 00:49	<	0.020 ug/l	0.02 ug/l	608
PCB-1242 - liquid	RMK	08/24/93 00:49	<	0.500 ug/l	0.50 ug/l	608
PCB-1254 - liquid	RMK	08/24/93 00:49	<	0.500 ug/l	0.50 ug/l	608
PCB-1221 - liquid	RMK	08/24/93 00:49	<	0.500 ug/l	0.50 ug/l	608
PCB-1232 - liquid	RMK	08/24/93 00:49	<	0.500 ug/l	0.50 ug/l	608
PCB-1248 - liquid	RMK	08/24/93 00:49	<	0.500 ug/l	0.50 ug/l	608
PCB-1260 - liquid	RMK	08/24/93 00:49	<	0.500 ug/l	0.50 ug/l	608
PCB-1016 - liquid	RMK	08/24/93 00:49	<	0.500 ug/l	0.50 ug/l	608
Toxaphene - liquid	RMK	08/24/93 00:49	<	2.000 ug/l	2.00 ug/l	608
Chloroethane - liquid	JCF	08/13/93 09:16	<	10.000 ug/l	10.00 ug/l	608.0
Methyl chloride - liquid	JCF	08/13/93 09:16	<	10.000 ug/l	10.00 ug/l	624
Methyl bromide - liquid	JCF	08/13/93 09:16	<	10.000 ug/l	10.00 ug/l	624
Vinyl chloride - liquid	JCF	08/13/93 09:16	<	10.000 ug/l	10.00 ug/l	624
Methylene Chloride - liquid	JCF	08/13/93 09:16	<	5.000 ug/l	5.00 ug/l	624
1,1-Dichloroethane - liquid	JCF	08/13/93 09:16	<	5.000 ug/l	5.00 ug/l	624
Trans 1,2-Dichloroethene - liquid	JCF	08/13/93 09:16	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloroethane - liquid	JCF	08/13/93 09:16	<	5.000 ug/l	5.00 ug/l	624
1,1,1-Trichloroethane - liquid	JCF	08/13/93 09:16	<	5.000 ug/l	5.00 ug/l	624
Bromodichloromethane - liquid	JCF	08/13/93 09:16	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloropropane - liquid	JCF	08/13/93 09:16	<	5.000 ug/l	5.00 ug/l	624
Trans-1,3-Dichloropropene - liquid	JCF	08/13/93 09:16	<	5.000 ug/l	5.00 ug/l	624
Trichloroethene - liquid	JCF	08/13/93 09:16	<	5.000 ug/l	5.00 ug/l	624
Chlorodibromomethane - liquid	JCF	08/13/93 09:16	<	5.000 ug/l	5.00 ug/l	624
1,1,2-Trichloroethane - liquid	JCF	08/13/93 09:16	<	5.000 ug/l	5.00 ug/l	624
Cis-1,3-Dichloropropene - liquid	JCF	08/13/93 09:16	<	5.000 ug/l	5.00 ug/l	624
Benzene - liquid	JCF	08/13/93 09:16	<	5.000 ug/l	5.00 ug/l	624
Bromoform - liquid	JCF	08/13/93 09:16	<	5.000 ug/l	5.00 ug/l	624
1,1,2,2-Tetrachloroethane - liquid	JCF	08/13/93 09:16	<	5.000 ug/l	5.00 ug/l	624
Tetrachloroethene - liquid	JCF	08/13/93 09:16	<	5.000 ug/l	5.00 ug/l	624
Toluene - liquid	JCF	08/13/93 09:16	<	5.000 ug/l	5.00 ug/l	624
Chlorobenzene - liquid	JCF	08/13/93 09:16	<	5.000 ug/l	5.00 ug/l	624
Ethylbenzene - liquid	JCF	08/13/93 09:16	<	5.000 ug/l	5.00 ug/l	624
Chloroform - liquid	JCF	08/13/93 09:16	<	5.000 ug/l	5.00 ug/l	624
Carbon Tetrachloride - liquid	JCF	08/13/93 09:16	<	5.000 ug/l	5.00 ug/l	624
Xylene - liquid	JCF	08/13/93 09:16	<	5.000 ug/l	5.00 ug/l	624
Acetone - liquid	JCF	08/13/93 09:16	<	10.000 ug/l	10.00 ug/l	624
1,1-Dichloroethene - liquid	JCF	08/13/93 09:16	<	20.000 ug/l	20.00 ug/l	624.
2-Chloroethylvinyl Ether - liquid	JCF	08/13/93 09:16	<	5.000 ug/l	5.00 ug/l	624.
Trichlorofluoromethane - liquid	JCF	08/13/93 09:16	<	15.000 ug/l	15.00 ug/l	624.
2- Butanone - liquid	JCF	08/13/93 09:16	<	12.000 ug/l	12.00 ug/l	624.
4-Methyl - 2 pentanone - liquid	JCF	08/13/93 09:16	<	10.000 ug/l	10.00 ug/l	624.
Vinyl Acetate - liquid	JCF	08/13/93 09:16	<	10.000 ug/l	10.00 ug/l	624.
						8240

Comments:

Client sample ID (SURS-BLK-7-93)

The volatile run was initiated at 01:15.

Sample Date: 07/20/93 In House # 07-4482-93 Source: SURS2-7-93 Location: FT.STEWART

Metals Sample Preparation - water	JAG	08/05/93	18:00	0.000	0.00	
Pesticide - Water extraction	MR	07/26/93	09:00	0.000	0.00	
PCB - Water extraction	MR	07/26/93	09:00	0.000	0.00	
Ra 226/228 - liquid	TMA	07/30/93	12:00	0.340 pCi/l	0.00 pCi/l	903.1
Arsenic - liquid	CW	08/06/93	14:41	< 5.000 ug/l	5.00 ug/l	206.2
Selenium - Liquid	CW	08/06/93	04:46	< 5.000 ug/l	5.00 ug/l	270.2
Barium - Liquid	CMP	08/11/93	16:12	< 0.050 mg/l	0.05 mg/l	200.7

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Parameter	Analyst	Analysis			Units	Lowest Detectable Level	Method Number
		Date -- Time	Results				
Sample Date: 07/20/93 In House # 07-4482-93		Source: SURS2-7-93		Location: FT.STEWART			
- CONTINUED -							
Cadmium - Liquid	CMP	08/11/93 16:12	<	0.020 mg/l	0.01 mg/l	200.7	
Chromium - Liquid	CMP	08/11/93 16:12	<	0.050 mg/l	0.05 mg/l	200.7	
Lead - Liquid	CW	08/06/93 21:44	<	5.000 ug/l	5.00 ug/l	239.2	
Silver - Liquid	CMP	08/11/93 16:12	<	0.050 mg/l	0.05 mg/l	200.7	
Mercury - Liquid	KAH	08/05/93 10:00	<	0.200 ug/l	0.20 ug/l	245.1	
Carbon Disulfide - liquid	JCF	08/13/93 09:18	<	10.000 ug/l	10.00 ug/l	624.	
2-Hexanone - Liquid	JCF	08/13/93 01:45	<	50.000 ug/L	50.00 ug/L	8240	
Styrene - Liquid	JCF	08/13/93 01:45	<	5.000 ug/L	5.00 ug/L	8240	
Endrin - Liquid	RMK	08/24/93 01:28	<	0.100 ug/l	0.10 ug/l	608	
Methoxychlor - Liquid	RMK	08/24/93 01:28	<	0.100 ug/l	0.10 ug/l	608	
Aldrin - liquid	RMK	08/24/93 01:28	<	0.020 ug/l	0.02 ug/l	608.	
Alpha BHC - liquid	RMK	08/24/93 01:28	<	0.036 ug/l	0.02 ug/l	608.	
Beta BHC - liquid	RMK	08/24/93 01:28	<	0.053 ug/l	0.02 ug/l	608.	
Delta BHC - liquid	RMK	08/24/93 01:28	<	0.058 ug/l	0.02 ug/l	608.	
Gamma BHC - liquid	RMK	08/24/93 01:28	<	0.020 ug/l	0.02 ug/l	608.	
4,4-DDT - liquid	RMK	08/24/93 01:28	<	0.100 ug/l	0.10 ug/l	608	
4,4-DDE - liquid	RMK	08/24/93 01:28	<	0.020 ug/l	0.02 ug/l	608	
4,4-DDD - liquid	RMK	08/24/93 01:28	<	0.100 ug/l	0.10 ug/l	608	
Dieldrin - liquid	RMK	08/24/93 01:28	<	0.020 ug/l	0.02 ug/l	608	
A-Endosulfan - liquid	RMK	08/24/93 01:28	<	0.020 ug/l	0.02 ug/l	608	
B-Endosulfan - liquid	RMK	08/24/93 01:28	<	0.100 ug/l	0.10 ug/l	608	
Endosulfan Sulfate - liquid	RMK	08/24/93 01:28	<	0.100 ug/l	0.10 ug/l	608	
Endrin Aldehyde - liquid	RMK	08/24/93 01:28	<	0.100 ug/l	0.10 ug/l	608	
Heptachlor - liquid	RMK	08/24/93 01:28	<	0.020 ug/l	0.02 ug/l	608	
Heptachlor Epoxide - liquid	RMK	08/24/93 01:28	<	0.020 ug/l	0.02 ug/l	608	
PCB-1242 - liquid	RMK	08/24/93 01:28	<	0.500 ug/l	0.50 ug/l	608	
PCB-1254 - liquid	RMK	08/24/93 01:28	<	0.500 ug/l	0.50 ug/l	608	
PCB-1221 - liquid	RMK	08/24/93 01:28	<	0.500 ug/l	0.50 ug/l	608	
PCB-1232 - liquid	RMK	08/24/93 01:28	<	0.500 ug/l	0.50 ug/l	608	
PCB-1248 - liquid	RMK	08/24/93 01:28	<	0.500 ug/l	0.50 ug/l	608	
PCB-1260 - liquid	RMK	08/24/93 01:28	<	0.500 ug/l	0.50 ug/l	608	
PCB-1016 - liquid	RMK	08/24/93 01:28	<	0.500 ug/l	0.50 ug/l	608	
Toxaphene - liquid	RMK	08/24/93 01:28	<	2.000 ug/l	2.00 ug/l	608.0	
Chloroethane - liquid	JCF	08/13/93 09:18	<	10.000 ug/l	10.00 ug/l	624	
Methyl chloride - liquid	JCF	08/13/93 09:18	<	10.000 ug/l	10.00 ug/l	624	
Methyl bromide - liquid	JCF	08/13/93 09:18	<	10.000 ug/l	10.00 ug/l	624	
Vinyl chloride - liquid	JCF	08/13/93 09:18	<	10.000 ug/l	10.00 ug/l	624	
Methylene Chloride - liquid	JCF	08/13/93 09:18	<	5.000 ug/l	5.00 ug/l	624	
1,1-Dichloroethane - liquid	JCF	08/13/93 09:18	<	5.000 ug/l	5.00 ug/l	624	
Trans 1,2-Dichloroethene - liquid	JCF	08/13/93 09:18	<	5.000 ug/l	5.00 ug/l	624	
1,2-Dichloroethane - liquid	JCF	08/13/93 09:18	<	5.000 ug/l	5.00 ug/l	624	
1,1,1-Trichloroethane - liquid	JCF	08/13/93 09:18	<	5.000 ug/l	5.00 ug/l	624	
Bromodichloromethane - liquid	JCF	08/13/93 09:18	<	5.000 ug/l	5.00 ug/l	624	
1,2-Dichloropropane - liquid	JCF	08/13/93 09:18	<	5.000 ug/l	5.00 ug/l	624	
Trans-1,3-Dichloropropene - liquid	JCF	08/13/93 09:18	<	5.000 ug/l	5.00 ug/l	624	
Trichloroethene - liquid	JCF	08/13/93 09:18	<	5.000 ug/l	5.00 ug/l	624	
Chlorodibromomethane - liquid	JCF	08/13/93 09:18	<	5.000 ug/l	5.00 ug/l	624	
1,1,2-Trichloroethane - liquid	JCF	08/13/93 09:18	<	5.000 ug/l	5.00 ug/l	624	
Cis-1,3-Dichloropropene - liquid	JCF	08/13/93 09:18	<	5.000 ug/l	5.00 ug/l	624	
Benzene - liquid	JCF	08/13/93 09:18	<	5.000 ug/l	5.00 ug/l	624	
Bromoform - liquid	JCF	08/13/93 09:18	<	5.000 ug/l	5.00 ug/l	624	
1,1,2,2-Tetrachloroethane - liquid	JCF	08/13/93 09:18	<	5.000 ug/l	5.00 ug/l	624	
Tetrachloroethene - liquid	JCF	08/13/93 09:18	<	5.000 ug/l	5.00 ug/l	624	
Toluene - liquid	JCF	08/13/93 09:18	<	5.000 ug/l	5.00 ug/l	624	
Chlorobenzene - liquid	JCF	08/13/93 09:18	<	5.000 ug/l	5.00 ug/l	624	
Ethylbenzene - liquid	JCF	08/13/93 09:18	<	5.000 ug/l	5.00 ug/l	624	
Chloroform - liquid	JCF	08/13/93 09:18	<	5.000 ug/l	5.00 ug/l	624	
Carbon Tetrachloride - liquid	JCF	08/13/93 09:18	<	5.000 ug/l	5.00 ug/l	624	
Xylene - liquid	JCF	08/13/93 09:18	<	10.000 ug/l	10.00 ug/l	624	
Acetone - liquid	JCF	08/13/93 09:18	<	20.000 ug/l	20.00 ug/l	624.	
1,1-Dichloroethene - liquid	JCF	08/13/93 09:18	<	5.000 ug/l	5.00 ug/l	624.	
2-Chloroethylvinyl Ether - liquid	JCF	08/13/93 09:18	<	15.000 ug/l	15.00 ug/l	624.	
Trichlorofluoromethane - liquid	JCF	08/13/93 09:18	<	12.000 ug/l	12.00 ug/l	624.	
2- Butanone - liquid	JCF	08/13/93 09:18	<	10.000 ug/l	10.00 ug/l	624.	
4-Methyl - 2 pentanone - liquid	JCF	08/13/93 09:18	<	10.000 ug/l	10.00 ug/l	624.	

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Parameter	Analyst	Analysis			Units	Lowest Detectable Level	Method Number
Sample Date: 07/20/93 In House # 07-4482-93		Date	-- Time	Results			
		Source: SURS2-7-93		Location: FT.STEWART			
- CONTINUED -							

Vinyl Acetate - liquid JCF 08/13/93 09:18 < 10.000 ug/l 10.00 ug/l 8240

Comments:

The volatile run was initiated at 01:45.

Sample Date: 07/19/93 In House # 07-4483-93 Source: 07/19 TB Location: FT.STEWART

Carbon Disulfide - liquid	JCF	08/13/93	09:28	<	10.000 ug/l	10.00 ug/l	624.
2-Hexanone - Liquid	JCF	08/13/93	02:14	<	50.000 ug/L	50.00 ug/L	8240
Styrene - Liquid	JCF	08/13/93	02:14	<	5.000 ug/L	5.00 ug/L	8240
Chloroethane - liquid	JCF	08/13/93	09:28	<	10.000 ug/l	10.00 ug/l	624
Methyl chloride - liquid	JCF	08/13/93	09:28	<	10.000 ug/l	10.00 ug/l	624
Methyl bromide - liquid	JCF	08/13/93	09:28	<	10.000 ug/l	10.00 ug/l	624
Vinyl chloride - liquid	JCF	08/13/93	09:28	<	10.000 ug/l	10.00 ug/l	624
Methylene Chloride - liquid	JCF	08/13/93	09:28	<	10.000 ug/l	10.00 ug/l	624
1,1-Dichloroethane - liquid	JCF	08/13/93	09:28	<	5.000 ug/l	5.00 ug/l	624
Trans-1,2-Dichloroethene - liquid	JCF	08/13/93	09:28	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloroethane - liquid	JCF	08/13/93	09:28	<	5.000 ug/l	5.00 ug/l	624
1,1,1-Trichloroethane - liquid	JCF	08/13/93	09:28	<	5.000 ug/l	5.00 ug/l	624
Bromodichloromethane - liquid	JCF	08/13/93	09:28	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloropropane - liquid	JCF	08/13/93	09:28	<	5.000 ug/l	5.00 ug/l	624
Trans-1,3-Dichloropropene - liquid	JCF	08/13/93	09:28	<	5.000 ug/l	5.00 ug/l	624
Trichloroethene - liquid	JCF	08/13/93	09:28	<	5.000 ug/l	5.00 ug/l	624
Chlorodibromomethane - liquid	JCF	08/13/93	09:28	<	5.000 ug/l	5.00 ug/l	624
1,1,2-Trichloroethane - liquid	JCF	08/13/93	09:28	<	5.000 ug/l	5.00 ug/l	624
Cis-1,3-Dichloropropene - liquid	JCF	08/13/93	09:28	<	5.000 ug/l	5.00 ug/l	624
Benzene - liquid	JCF	08/13/93	09:28	<	5.000 ug/l	5.00 ug/l	624
Bromoform - liquid	JCF	08/13/93	09:28	<	5.000 ug/l	5.00 ug/l	624
1,1,2,2-Tetrachloroethane - liquid	JCF	08/13/93	09:28	<	5.000 ug/l	5.00 ug/l	624
Tetrachloroethene - liquid	JCF	08/13/93	09:28	<	5.000 ug/l	5.00 ug/l	624
Toluene - liquid	JCF	08/13/93	09:28	<	5.000 ug/l	5.00 ug/l	624
Chlorobenzene - liquid	JCF	08/13/93	09:28	<	5.000 ug/l	5.00 ug/l	624
Ethylbenzene - liquid	JCF	08/13/93	09:28	<	5.000 ug/l	5.00 ug/l	624
Chloroform - liquid	JCF	08/13/93	09:28	<	5.000 ug/l	5.00 ug/l	624
Carbon Tetrachloride - liquid	JCF	08/13/93	09:28	<	5.000 ug/l	5.00 ug/l	624
Xylene - liquid	JCF	08/13/93	09:28	<	10.000 ug/l	10.00 ug/l	624
Acetone - liquid	JCF	08/13/93	09:28	<	20.000 ug/l	20.00 ug/l	624.
1,1-Dichloroethene - liquid	JCF	08/13/93	09:28	<	5.000 ug/l	5.00 ug/l	624.
2-Chloroethylvinyl Ether - liquid	JCF	08/13/93	09:28	<	15.000 ug/l	15.00 ug/l	624.
Trichlorofluoromethane - liquid	JCF	08/13/93	09:28	<	12.000 ug/l	12.00 ug/l	624.
2- Butanone - liquid	JCF	08/13/93	09:28	<	10.000 ug/l	10.00 ug/l	624.
4-Methyl - 2 pentanone - liquid	JCF	08/13/93	09:28	<	10.000 ug/l	10.00 ug/l	624.
Vinyl Acetate - liquid	JCF	08/13/93	09:28	<	10.000 ug/l	10.00 ug/l	8240

Comments:

The volatile run was initiated at 02:14.

Sample Date: 07/20/93 In House # 07-4484-93 Source: 7/20 TB Location: FT.STEWART

Carbon Disulfide - liquid	JCF	08/13/93	09:29	<	10.000 ug/l	10.00 ug/l	624.
2-Hexanone - Liquid	JCF	08/13/93	02:44	<	50.000 ug/L	50.00 ug/L	8240
Styrene - Liquid	JCF	08/13/93	02:44	<	5.000 ug/L	5.00 ug/L	8240
Chloroethane - liquid	JCF	08/13/93	09:29	<	10.000 ug/l	10.00 ug/l	624
Methyl chloride - liquid	JCF	08/13/93	09:29	<	10.000 ug/l	10.00 ug/l	624
Methyl bromide - liquid	JCF	08/13/93	09:29	<	10.000 ug/l	10.00 ug/l	624
Vinyl chloride - liquid	JCF	08/13/93	09:29	<	10.000 ug/l	10.00 ug/l	624
Methylene Chloride - liquid	JCF	08/13/93	09:29	<	5.000 ug/l	5.00 ug/l	624
1,1-Dichloroethane - liquid	JCF	08/13/93	09:29	<	5.000 ug/l	5.00 ug/l	624
Trans-1,2-Dichloroethene - liquid	JCF	08/13/93	09:29	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloroethane - liquid	JCF	08/13/93	09:29	<	5.000 ug/l	5.00 ug/l	624
1,1,1-Trichloroethane - liquid	JCF	08/13/93	09:29	<	5.000 ug/l	5.00 ug/l	624
Bromodichloromethane - liquid	JCF	08/13/93	09:29	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloropropane - liquid	JCF	08/13/93	09:29	<	5.000 ug/l	5.00 ug/l	624
Trans-1,3-Dichloropropene - liquid	JCF	08/13/93	09:29	<	5.000 ug/l	5.00 ug/l	624
Trichloroethene - liquid	JCF	08/13/93	09:29	<	5.000 ug/l	5.00 ug/l	624

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Parameter	Analyst	Date -- Time	Results	Units	Lowest Detectable Level	Method Number
Sample Date: 07/20/93 In House # 07-4484-93		Source: 7/20 TB		Location: FT.STEWART		
- CONTINUED -						
Chlorodibromomethane - liquid	JCF	08/13/93 09:29	<	5.000 ug/l	5.00 ug/l	624
1,1,2-Trichloroethane - liquid	JCF	08/13/93 09:29	<	5.000 ug/l	5.00 ug/l	624
Cis-1,3-Dichloropropene - liquid	JCF	08/13/93 09:29	<	5.000 ug/l	5.00 ug/l	624
Benzene - liquid	JCF	08/13/93 09:29	<	5.000 ug/l	5.00 ug/l	624
Bromoform - liquid	JCF	08/13/93 09:29	<	5.000 ug/l	5.00 ug/l	624
1,1,2,2,-Tetrachloroethane - liquid	JCF	08/13/93 09:29	<	5.000 ug/l	5.00 ug/l	624
Tetrachloroethene - liquid	JCF	08/13/93 09:29	<	5.000 ug/l	5.00 ug/l	624
Toluene - liquid	JCF	08/13/93 09:29	<	5.000 ug/l	5.00 ug/l	624
Chlorobenzene - liquid	JCF	08/13/93 09:29	<	5.000 ug/l	5.00 ug/l	624
Ethylbenzene - liquid	JCF	08/13/93 09:29	<	5.000 ug/l	5.00 ug/l	624
Chloroform - liquid	JCF	08/13/93 09:29	<	5.000 ug/l	5.00 ug/l	624
Carbon Tetrachloride - liquid	JCF	08/13/93 09:29	<	5.000 ug/l	5.00 ug/l	624
Xylene - liquid	JCF	08/13/93 09:29	<	10.000 ug/l	10.00 ug/l	624
Acetone - liquid	JCF	08/13/93 09:29	<	20.000 ug/l	20.00 ug/l	624
1,1-Dichloroethene - liquid	JCF	08/13/93 09:29	<	5.000 ug/l	5.00 ug/l	624.
2-Chloroethylvinyl Ether - liquid	JCF	08/13/93 09:29	<	15.000 ug/l	15.00 ug/l	624.
Trichlorofluoromethane - liquid	JCF	08/13/93 09:29	<	12.000 ug/l	12.00 ug/l	624.
2-Butanone - liquid	JCF	08/13/93 09:29	<	10.000 ug/l	10.00 ug/l	624.
4-Methyl - 2 pentanone - liquid	JCF	08/13/93 09:29	<	10.000 ug/l	10.00 ug/l	624.
Vinyl Acetate - liquid	JCF	08/13/93 09:29	<	10.000 ug/l	10.00 ug/l	8240

Comments:

The volatile run was initiated at 02:44.

Laboratory ID # 40111

Very truly yours,


James H. Carr, Jr.
Chemist

QUALITY CONTROL REPORT FOR FORT STEWART SAMPLING PROJECT
FST-001

<u>Identification</u>	<u>Carr Sample Number</u>
SCM1-7-93	07-4471-93
SCM2-7-93	07-4472-93
SCM2-7-93DUP	07-4473-93
SCM3-7-93	07-4474-93
SCM4-7-93	07-4475-93
SCM5-7-93	07-4476-93
SCM6-7-93	07-4477-93
SCM-BLK-7-93	07-4478-93
SURS-1-7-93	07-4479-93
SURS-1-DUP-7-93	07-4480-93
SURS-BLK-7-93	07-4481-93
SURS2-7-93	07-4482-93
7/19 TB	07-4483-93
7/20 TB	07-4484-93

LEGEND

QC Sample Number: The identifying number on a sample or known which makes unique identification of each sample possible.

Val. 1, Val. 2: Concentrations of duplicate samples, presented for precision information. * indicates a spiked duplicate sample if this information is not presented elsewhere.

RPD: Relative Percent Difference:

$$RPD = \frac{\text{abs}(D_1 - D_2)}{(D_1 + D_2)/2} * 100$$

Spike Conc.: The concentration of spike material added to the sample to produce the spiked sample.

True Value: The target concentration for the spiked sample:

$$TV = \text{Sample Conc.} - \text{Spike Conc.}$$

Observed Value: The concentration observed in the spiked sample upon analysis.

Percent Recovery: A measure of the concentration of the spiked sample relative to the spiked concentration:

$$\% \text{ Recovery} = \frac{\text{Conc. spiked sample} - \text{Conc. unspiked sample}}{\text{spike concentration}}$$

QUALITY CONTROL FOR LEAD ANALYSIS

SAMPLES NUMBERED: 07-4471-93 through 07-4482-93 analyzed 08/06/93,
reanalyzed 08/11/93;

Date	QC Sample <u>Number</u>	Val. 1 <u>(ug/1)</u>	Val. 2 <u>(ug/1)</u>	% <u>RPD</u>	Spike <u>Conc.</u>	True <u>Value</u>	Observed <u>Value</u>	Percent <u>Recovery</u>
08/06/93	TMA989					50.0	50.5	101
08/06/93	4474*	34.3	34.0	0.9	5.0	34.5	34.3	100
08/06/93	4451	<5.0	<5.0	0	100.0	100.0	102.0	102
08/06/93	4453*	12.1	12.2	0.8	5.0	12.6	12.2	92

* Indicates a spiked duplicate sample.

QUALITY CONTROL FOR ARSENIC ANALYSIS

SAMPLES NUMBERED: 07-4471-93 through 07-4482-93 analyzed 08/06/93,
reanalyzed 08/11/93;

Date	QC Sample <u>Number</u>	Val. 1 <u>(ug/1)</u>	Val. 2 <u>(ug/1)</u>	% <u>RPD</u>	Spike <u>Conc.</u>	True <u>Value</u>	Observed <u>Value</u>	Percent <u>Recovery</u>
08/06/93	TMA989					50.0	51.8	103
08/06/93	4474*	17.8	17.7	.56	5.0	17.7	17.7	100
08/06/93	4451	<5.0	<5.0	0	100.0	100.0	106.0	106
08/06/93	4453*	5.6	5.2	7.4	5.0	5.0	5.2	104

QUALITY CONTROL FOR SELENIUM ANALYSIS

SAMPLES NUMBERED: 07-4471-93 through 07-4482-93 analyzed 08/06/93,
reanalyzed 08/11/93;

Date	QC Sample Number	Val. 1 <u>ug/1</u>	Val. 2 <u>ug/1</u>	% RPD	Spike Conc.	True Value	Observed Value	Percent Recovery
08/06/93	TMA989	7.9	7.9	0	5.0	50.0	49.9	100
08/06/93	4474*	<5.0	<5.0	0	100.0	7.6	7.9	106
08/06/93	4451	4.9	5.1	4.0	5.0	100.0	111.0	111
08/06/93	4453*					5.0	4.9	98

QUALITY CONTROL FOR ICP ANALYSIS

SAMPLES NUMBERED: 07-4471-93 through 07-4482-93 analyzed 08/11/93

Date	Element	QC Sample Number	Val. 1 <u>mg/1</u>	Val. 2 <u>mg/1</u>	% RPD	Spike Conc.	True Value	Obs. Value	% Rec.
08/11/93	Ba	ICP-07					1.00	0.91	91
08/11/93	Cr	ICP-19					1.00	0.92	92
08/11/93	Cd	ICP-19					1.00	0.93	93
08/11/93	Ag	ICP-07					1.00	0.91	91
08/11/93	Cr	4480dig	<.05	<.05	0	0.10	0.100	0.100	110
08/11/93	Cd	4480dig	.011	.009	20	0.10	0.109	0.107	98
08/11/93	Ba	4480dig	<.05	<.05	0	0.10	0.136	0.131	95
08/11/93	Cr	4480	<.05	<.05	0	0.05	0.050	0.110	110
08/11/93	Cd	4480	.011	.009	20	0.05	0.111	0.102	91
08/11/93	Ba	4480	<.05	<.05	0	0.05	0.086	0.078	88
08/11/93	Cr	4859	.25	.21	17.4	0.05	0.300	0.310	120
08/11/93	Ba	4859	.18	.17	5.7	0.05	0.230	0.230	100
08/11/93	Ag	4859	<.05	<.05	0	0.05	0.050	0.048	96

QUALITY CONTROL FOR MERCURY ANALYSIS

SAMPLES NUMBERED: 07-4471-93 through 07-4482-93 analyzed 08/04/93;

<u>Date</u>	<u>QC Sample Number</u>	<u>Val. 1 (ug/l)</u>	<u>Val. 2 (ug/l)</u>	<u>% RPD</u>	<u>Spike Conc.</u>	<u>True Value</u>	<u>Observed Value</u>	<u>Percent Recovery</u>
08/28/93	WP25-1	<0.2	<0.2	0	1.0	0.60	0.73	122
08/28/93	4454	<0.2	<0.2	0	1.0	1.00	0.98	98
08/28/93	4478	<0.2	<0.2	0	1.0	1.00	0.77	77
08/28/93	4511	<0.2	<0.2	0	1.0	1.00	1.01	101

QUALITY CONTROL FOR PESTICIDES

SAMPLES NUMBERED: 07-4471-93 through 07-4477-93 and 07-4479-93 through 07-4482-93 analyzed
 08/23/93;
 SAMPLES NUMBERED: 07-4477-93 analyzed 08/25/93;

SPIKE RECOVERY DATA FOR 08/23/93

Analyte	Val. 1 <u>(ug/l)</u>	Val. 2 <u>(ug/l)</u>	spiked duplicate		True <u>Value</u>	Observed <u>Value</u>	Percent Recovery
			% <u>RPD</u>	Spike <u>Conc.</u>			
Alpha-BHC	0.084	0.081	3.6	0.08	0.08	0.08	102
Gamma-BHC	0.084	0.080	4.9	0.08	0.08	0.08	100
Beta-BHC	0.092	0.086	6.7	0.08	0.08	0.08	108
Heptachlor	0.086	0.077	11.0	0.08	0.08	0.077	96
Delta-BHC	0.065	0.059	9.7	0.08	0.08	0.065	81
Aldrin	0.081	0.079	2.5	0.08	0.08	0.081	102
Heptachlor Epox.	0.091	0.084	8.0	0.08	0.08	0.084	102
Endosulfan I	0.092	0.086	6.7	0.08	0.08	0.086	108
P,P - DDE	0.089	0.086	3.4	0.08	0.08	0.086	108
Endrin	0.090	0.099	9.5	0.08	0.08	0.090	113
P,P - DDD	0.084	0.094	11.2	0.08	0.08	0.084	105
Endosulfan II	0.089	0.085	4.6	0.08	0.08	0.085	106
Endrin Aldehyde	0.081	0.083	2.4	0.08	0.08	0.081	101
Endosulfan Sulf.	0.085	0.074	13.8	0.08	0.08	0.074	93
Methoxychlor	0.103	0.078	27.6	0.08	0.08	0.078	98
Endrin Ketone	0.114	0.077	38.7	0.08	0.08	0.077	96

SPIKE RECOVERY DATA FOR 08/25/93

SPIKE QC SAMPLE NUMBER: SPK08209,
DUPLICATE SAMPLE NUMBER: 08513593

Analyte	Val. 1 <u>(ug/l)</u>	Val. 2 <u>(ug/l)</u>	% <u>RPD</u>	Spike <u>Conc.</u>	True <u>Value</u>	Observed <u>Value</u>	Percent Recovery
Alpha-BHC	<.050	<.050	0	0.08	0.08	0.081	101
Gamma-BHC	<.050	<.050	0	0.08	0.08	0.080	100
Beta-BHC	<.050	<.050	0	0.08	0.08	0.083	104
Heptachlor	<.050	<.050	0	0.08	0.08	0.074	93
Delta-BHC	<.050	<.050	0	0.08	0.08	0.063	79
Aldrin	<.050	<.050	0	0.08	0.08	0.080	100
Heptachlor Epox.	<.050	<.050	0	0.08	0.08	0.083	104
Endosulfan I	<.050	<.050	0	0.08	0.08	0.084	105
P,P' - DDE	<.050	<.050	0	0.08	0.08	0.084	105
Dieledrin	<.050	<.050	0	0.08	0.08	0.086	106
Endrin	<.050	<.050	0	0.08	0.08	0.090	113
P,P' - DDD	<.050	<.050	0	0.08	0.08	0.093	116
Endosulfan II	<.050	<.050	0	0.08	0.08	0.086	108
P,P' - DDT	<.050	<.050	0	0.08	0.08	0.088	110
Endrin Aldehyde	<.050	<.050	0	0.08	0.08	0.086	108
Endosulfan Sulf.	<.050	<.050	0	0.08	0.08	0.078	98
Methoxychlor	<.050	<.050	0	0.08	0.08	0.083	104
Endrin Ketone	<.050	<.050	0	0.08	0.08	0.081	101

BLANK DATA FOR PESTICIDES

All analytes less than 0.05 ug/l on all dates.

SURROGATE RECOVERIES FOR PESTICIDES

<u>Sample Date</u>	<u>Sample Number</u>	<u>Theoretical Conc. (ug/l)</u>	<u>Observed Conc. (ug/l)</u>	<u>Percent Recovery</u>
08/24/93	BLANK	1.0	0.78	78
08/24/93	07-4471-93	1.0	0.79	79
08/24/93	07-4472-93	1.0	0.65	65
08/24/93	07-4473-93	1.0	0.57	57
08/24/93	07-4474-93	1.0	0.56	56
08/24/93	07-4475-93	1.0	0.42	42
08/24/93	07-4476-93	1.0	0.72	72
08/24/93	07-4477-93	1.0	0.66	66
08/24/93	07-4478-93	1.0	0.92	92
08/24/93	07-4479-93	1.0	0.39	39
08/24/93	07-4480-93	1.0	0.66	66
08/24/93	07-4481-93	1.0	0.79	79
08/24/93	07-4482-93	1.0	0.61	61
08/24/93	072393SPK	1.0	0.84	84
08/24/93	082093SPK	1.0	0.85	85

QUALITY CONTROL FOR VOLATILES

SAMPLES NUMBERED: 07-4471-93 through 07-4477-93 analyzed 07/30/93.
 SAMPLES NUMBERED: 07-4478-93 through 07-4484-93 analyzed 08/13/93.

SPIKE RECOVERY DATA FOR 07/30/93

SPIKE QC SAMPLE NUMBER: 07437693

Analyte	Val. 1 <u>(ug/1)</u>	Val. 2 <u>(ug/1)</u>	% RPD	Spike Conc.	True Value	Observed Value	Percent Recovery
1,1 Dichloroethene	<5	<5	0	50	50	32.6	65
Trichloroethene	<5	<5	0	50	50	44.6	89
Benzene	<5	<5	0	50	50	45.5	91
Toluene	<5	<5	0	50	50	45.6	91
Chlorobenzene	<5	<5	0	50	50	46.5	93

SPIKE QC SAMPLE NUMBER: 07447793

Analyte	Val. 1 <u>(ug/1)</u>	Val. 2 <u>(ug/1)</u>	% RPD	Spike Conc.	True Value	Observed Value	Percent Recovery
1,1 Dichloroethene	<5	<5	0	50	50	47.8	96
Trichloroethene	<5	<5	0	50	50	40.4	81
Benzene	<5	<5	0	50	50	50.5	101
Toluene	<5	<5	0	50	50	52.9	104
Chlorobenzene	<5	<5	0	50	50	55.6	111

SPIKE QC SAMPLE NUMBER: 07473393

Analyte	Val. 1 <u>(ug/L)</u>	Val. 2 <u>(ug/L)</u>	% RPD	Spike Conc.	True Value	Observed Value	Percent Recovery
1,1 Dichloroethene	<5	0	50	50	50	27.6	55
Benzene	<5	0	50	50	50	40.0	80
Toluene	<5	0	50	50	50	36.4	73
Chlorobenzene	<5	0	50	50	50	42.6	83

BLANK DATA FOR VOLATILES

All analytes on all dates <5 ug/L.

SURROGATE RECOVERIES FOR VOLATILES, PERCENT RECOVERY

<u>Sample Date</u>	<u>Sample Number</u>	1,2 dichloro-ethane d-4	Toluene d-8	Bromofloro benzene
07/30/93	BLANK	93	109	102
07/30/93	07-4471-93	98	89	98
07/30/93	07-4472-93	106	93	101
07/30/93	07-4473-93	98	89	98
07/30/93	07-4474-93	89	79	88
07/30/93	07-4475-93	96	87	97
07/30/93	07-4476-93	94	87	96
07/30/93	07-4376-93	96	89	99
07/30/93	07-4376DUP	84	77	88
07/30/93	07-4376SPK	94	87	98
07/30/93	07-4477-93	122	100	96
07/30/93	07-4477DUP	114	104	99
07/30/93	07-4477SPK	119	105	100
08/13/93	07-4478-93	103	78	89
08/13/93	07-4479-93	107	77	88
08/13/93	07-4480SPK	101	81	95
08/13/93	07-4481-93	105	81	94
08/13/93	07-4482-93	103	82	96
08/13/93	07-4483-93	113	79	91
08/13/93	07-4484-93	110	80	96

CARR
LABORATORIES

CHAIN OF CUSTODY RECORD

Client CESAS
 Contact Tom Nichols
 Address P.O. Box 889, Savannah GA 31402
 Collected By Jason Smith

Project No. FST-001
 Phone No. 912-652-5312
 Fax No. 912-652-5311
 Client P.O. #

A
 (Analytical Program)
 W=Wastewater
 G=Groundwater
 D=Drinking Water
 S=Solid/Haz. Waste
 N=Nonregulated

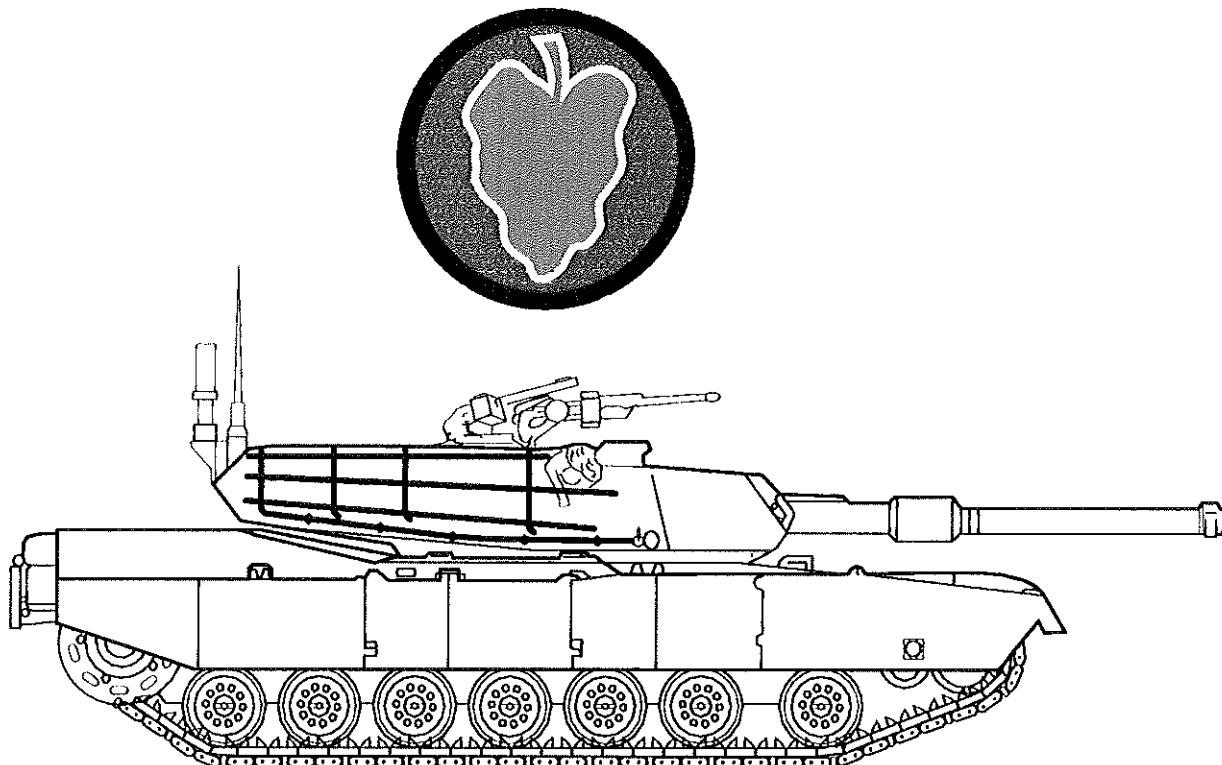
Carri's Lab No.	Sample Source	Location	Date/Time	Grav. wt.	Composite #	M T P	Analyses Requested	pH. ACCEPTABLE	
								Count of Preservatives	Count of X
FST-001-SCM1-7-93	FST-001	Ft. Stewart	7/19/93/15:35	X	LQ	5	Y	VOC	8240, 8PCB TOTAL METALS, PEST/PCB 8080, RA 226/228
FST-001-SCM2-04P-7-93	FST-001	Ft. Stewart	7/15/93/11:00	X	(5	Y	"	"
FST-001-SCM3-7-93	FST-001	Ft. Stewart	7/15/93/11:00	X)	5	Y	"	"
FST-001-SCM4-7-93	FST-001	Ft. Stewart	7/15/93/15:20	X	/	5	Y	"	"
FST-001-SCM5-7-93	FST-001	Ft. Stewart	7/15/93/15:30	X	/	5	Y	"	"
FST-001-SCM6-7-93	FST-001	Ft. Stewart	7/20/93/14:05	X	/	5	Y	"	"
FST-001-SCM-BLK-7-93	FST-001	Ft. Stewart	7/20/93/15:15-X	X	/	5	Y	"	"
FST-001-SUS-1-7-93	FST-001	Ft. Stewart	7/20/93/11:00	X	/	5	Y	"	"
FST-001-SUS-1-7-93	FST-001	Ft. Stewart	7/19/93/14:20	X	/	5	Y	"	"
FST-001-SUS-1-7-93	FST-001	Ft. Stewart	7/19/93/14:20	X	/	5	Y	"	"
FST-001-SUS-1-7-93	FST-001	Ft. Stewart	7/19/93/14:20	X	/	5	Y	"	"
Received By	Received By	Received By	Date	Date	Date	Time	Time	Time	Time
1. <u>James H. Carr</u>	2. <u>Douglas Brown</u>	3. <u>James H. Carr</u>	7-22-93	7-22-93	7-22-93	8:45	8:45	8:45	8:45
Received In Lab By	<u>James H. Carr</u>	<u>James H. Carr</u>	7-22-93	7-22-93	7-22-93	8:45	8:45	8:45	8:45

JAMES H. CARR & ASSOCIATES, INC.
 Office and Laboratories
 P.O. Box 90209
 Columbia, South Carolina 29290
 (803) 776-7789 Fax: 783-2192
 temps of samples = 18.5°C

Received in lab by Carr

**Corrected Final
Phase I RCRA Facility Investigation Report
For 24 Solid Waste Management Units
At Fort Stewart, Georgia**

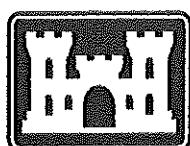
Volume III of III



May 1996

Job No. 87528.000

Prepared For



**US Army Corps
of Engineers
Savannah District**

Prepared By

**RUST ENVIRONMENT &
INFRASTRUCTURE**

CORRECTED FINAL

**PHASE I
RCRA FACILITY INVESTIGATION REPORT
FOR 24 SOLID WASTE MANAGEMENT UNITS
AT FORT STEWART, GEORGIA
VOLUME III OF III**

Prepared For

**UNITED STATES ARMY CORPS OF ENGINEERS
SAVANNAH DISTRICT**

**Contract DACA21-93-D-0029
Delivery Order 0005
Rust Project No. 87528.000
May 1996**

**Prepared By
RUST ENVIRONMENT AND INFRASTRUCTURE
2694 Lake Park Drive
Charleston, South Carolina 29406
803/572-5600**

James H. Carr & Associates, Inc.

Office & Laboratories
 P.O. Box 90209
 Columbia, SC 29290
 (803) 776-7789
 (800) 435-3995

11/09/93

Ms. Toni Nicholson
 Corps of Engineers
 PO Box 889
 Savannah, GA 31402

Dear Ms. Nicholson:

The following are the results of the parameters you requested we check on your FST-001 samples listed below.

Parameter	Analyst	Date -- Time	Results	Units	Lowest Detectable Level	Method Number
Sample Date: 10/05/93 In House # 10-6909-93		Source: SCM1-10-93		Location: FT STEWART		
Carbon Disulfide - liquid	JCF	10/15/93 16:22	<	10.000 ug/l	10.00 ug/l	624.
2-Hexanone - Liquid	JCF	10/15/93 16:22	<	50.000 ug/L	50.00 ug/L	8240
Styrene - Liquid	JCF	10/15/93 16:22	<	5.000 ug/L	5.00 ug/L	8240
Chloroethane - liquid	JCF	10/15/93 16:21	<	10.000 ug/l	10.00 ug/l	624
Methyl chloride - liquid	JCF	10/15/93 16:21	<	10.000 ug/l	10.00 ug/l	624
Methyl bromide - liquid	JCF	10/15/93 16:21	<	10.000 ug/l	10.00 ug/l	624
Vinyl chloride - liquid	JCF	10/15/93 16:21	<	10.000 ug/l	10.00 ug/l	624
Methylene Chloride - liquid	JCF	10/15/93 16:21	<	5.000 ug/l	5.00 ug/l	624
1,1-Dichloroethane - liquid	JCF	10/15/93 16:21	<	5.000 ug/l	5.00 ug/l	624
Trans-1,2-Dichloroethene - liquid	JCF	10/15/93 16:21	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloroethane - liquid	JCF	10/15/93 16:21	<	5.000 ug/l	5.00 ug/l	624
1,1,1-Trichloroethane - liquid	JCF	10/15/93 16:21	<	5.000 ug/l	5.00 ug/l	624
Bromodichloromethane - liquid	JCF	10/15/93 16:21	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloropropane - liquid	JCF	10/15/93 16:21	<	5.000 ug/l	5.00 ug/l	624
Trans-1,3-Dichloropropene - liquid	JCF	10/15/93 16:21	<	5.000 ug/l	5.00 ug/l	624
Trichloroethene - liquid	JCF	10/15/93 16:21	<	5.000 ug/l	5.00 ug/l	624
Chlorodibromomethane - liquid	JCF	10/15/93 16:21	<	5.000 ug/l	5.00 ug/l	624
1,1,2-Trichloroethane - liquid	JCF	10/15/93 16:21	<	5.000 ug/l	5.00 ug/l	624
Cis-1,3-Dichloropropene - liquid	JCF	10/15/93 16:21	<	5.000 ug/l	5.00 ug/l	624
Benzene - liquid	JCF	10/15/93 16:21	<	5.000 ug/l	5.00 ug/l	624
Bromoform - liquid	JCF	10/15/93 16:21	<	5.000 ug/l	5.00 ug/l	624
1,1,2,2-Tetrachloroethane - liquid	JCF	10/15/93 16:21	<	5.000 ug/l	5.00 ug/l	624
Tetrachloroethene - liquid	JCF	10/15/93 16:21	<	5.000 ug/l	5.00 ug/l	624
Toluene - liquid	JCF	10/15/93 16:21	<	5.000 ug/l	5.00 ug/l	624
Chlorobenzene - liquid	JCF	10/15/93 16:21	<	5.000 ug/l	5.00 ug/l	624
Ethylbenzene - liquid	JCF	10/15/93 16:21	<	5.000 ug/l	5.00 ug/l	624
Chloroform - liquid	JCF	10/15/93 16:21	<	5.000 ug/l	5.00 ug/l	624
Carbon Tetrachloride - liquid	JCF	10/15/93 16:21	<	5.000 ug/l	5.00 ug/l	624
Xylene - liquid	JCF	10/15/93 16:21	<	10.000 ug/l	10.00 ug/l	624
Acetone - liquid	JCF	10/15/93 16:21	<	20.000 ug/l	20.00 ug/l	624.
1,1-Dichloroethene - liquid	JCF	10/15/93 16:21	<	5.000 ug/l	5.00 ug/l	624.
Acrylonitrile - liquid	JCF	10/15/93 16:21	<	10.000 mg/l	10.00 mg/l	624.
Trichlorofluoromethane - liquid	JCF	10/15/93 16:21	<	12.000 ug/l	12.00 ug/l	624.
2- Butanone - liquid	JCF	10/15/93 16:21	<	10.000 ug/l	10.00 ug/l	624.
4-Methyl - 2 pentanone - liquid	JCF	10/15/93 16:21	<	10.000 ug/l	10.00 ug/l	624.
Vinyl Acetate - liquid	JCF	10/15/93 16:21	<	10.000 ug/l	10.00 ug/l	8240

Comments:

The volatile run was initiated at 22:46.

Sample Date: 10/05/93 In House # 10-6910-93 Source: SCM2-10-93 Location: FT STEWART

Ms. Toni Nicholson
11/09/93
Page 2

Parameter	Analyst	Analysis			Units	Lowest Detectable Level	Method Number
		Date	-- Time	Results			
Sample Date: 10/05/93 In House # 10-6910-93		Source: SCM2-10-93	Location: FT.STEWART				
- CONTINUED -							
Carbon Disulfide - liquid	JCF	10/15/93	16:23	<	10.000 ug/l	10.00 ug/l	624.
2-Hexanone - Liquid	JCF	10/15/93	16:23	<	50.000 ug/L	50.00 ug/L	8240
Styrene - Liquid	JCF	10/15/93	16:23	<	5.000 ug/L	5.00 ug/L	8240
Chloroethane - liquid	JCF	10/15/93	16:23	<	10.000 ug/l	10.00 ug/l	624
Methyl chloride - liquid	JCF	10/15/93	16:23	<	10.000 ug/l	10.00 ug/l	624
Methyl bromide - liquid	JCF	10/15/93	16:23	<	10.000 ug/l	10.00 ug/l	624
Vinyl chloride - liquid	JCF	10/15/93	16:23	<	10.000 ug/l	10.00 ug/l	624
Methylene Chloride - liquid	JCF	10/15/93	16:23	<	5.000 ug/l	5.00 ug/l	624
1,1-Dichloroethane - liquid	JCF	10/15/93	16:23	<	5.000 ug/l	5.00 ug/l	624
Trans 1,2-Dichloroethene - liquid	JCF	10/15/93	16:23	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloroethane - liquid	JCF	10/15/93	16:23	<	5.000 ug/l	5.00 ug/l	624
1,1,1-Trichloroethane - liquid	JCF	10/15/93	16:23	<	5.000 ug/l	5.00 ug/l	624
Bromodichloromethane - liquid	JCF	10/15/93	16:23	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloropropane - liquid	JCF	10/15/93	16:23	<	5.000 ug/l	5.00 ug/l	624
Trans-1,3-Dichloropropene - liquid	JCF	10/15/93	16:23	<	5.000 ug/l	5.00 ug/l	624
Trichloroethene - liquid	JCF	10/15/93	16:23	<	5.000 ug/l	5.00 ug/l	624
Chlorodibromomethane - liquid	JCF	10/15/93	16:23	<	5.000 ug/l	5.00 ug/l	624
1,1,2-Trichloroethane - liquid	JCF	10/15/93	16:23	<	5.000 ug/l	5.00 ug/l	624
Cis-1,3-Dichloropropene - liquid	JCF	10/15/93	16:23	<	5.000 ug/l	5.00 ug/l	624
Benzene - liquid	JCF	10/15/93	16:23	<	5.000 ug/l	5.00 ug/l	624
Bromoform - liquid	JCF	10/15/93	16:23	<	5.000 ug/l	5.00 ug/l	624
1,1,2,2,-Tetrachloroethane - liquid	JCF	10/15/93	16:23	<	5.000 ug/l	5.00 ug/l	624
Tetrachloroethene - liquid	JCF	10/15/93	16:23	<	5.000 ug/l	5.00 ug/l	624
Toluene - liquid	JCF	10/15/93	16:23	<	5.000 ug/l	5.00 ug/l	624
Chlorobenzene - liquid	JCF	10/15/93	16:23	<	5.000 ug/l	5.00 ug/l	624
Ethylbenzene - liquid	JCF	10/15/93	16:23	<	5.000 ug/l	5.00 ug/l	624
Chloroform - liquid	JCF	10/15/93	16:23	<	5.000 ug/l	5.00 ug/l	624
Carbon Tetrachloride - liquid	JCF	10/15/93	16:23	<	5.000 ug/l	5.00 ug/l	624
Xylene - liquid	JCF	10/15/93	16:23	<	10.000 ug/l	10.00 ug/l	624
Acetone - liquid	JCF	10/15/93	16:23	<	20.000 ug/l	20.00 ug/l	624.
1,1-Dichloroethene - liquid	JCF	10/15/93	16:23	<	5.000 ug/l	5.00 ug/l	624.
Acrylonitrile - liquid	JCF	10/15/93	16:23	<	10.000 mg/l	10.00 mg/l	624.
Trichlorofluoromethane - liquid	JCF	10/15/93	16:23	<	12.000 ug/l	12.00 ug/l	624.
2- Butanone - liquid	JCF	10/15/93	16:23	<	10.000 ug/l	10.00 ug/l	624.
4-Methyl - 2 pentanone - liquid	JCF	10/15/93	16:23	<	10.000 ug/l	10.00 ug/l	624.
Vinyl Acetate - liquid	JCF	10/15/93	16:23	<	10.000 ug/l	10.00 ug/l	8240

Comments:

The volatile run was initiated at 23:39.

Sample Date: 10/05/93 In House # 10-6911-93 Source: SEECOMMENT Location: FT.STEWART

Carbon Disulfide - liquid	JCF	10/16/93	16:24	<	10.000 ug/l	10.00 ug/l	624.
2-Hexanone - Liquid	JCF	10/16/93	16:24	<	50.000 ug/L	50.00 ug/L	8240
Styrene - Liquid	JCF	10/16/93	16:24	<	5.000 ug/L	5.00 ug/L	8240
Chloroethane - liquid	JCF	10/16/93	16:24	<	10.000 ug/l	10.00 ug/l	624
Methyl chloride - liquid	JCF	10/16/93	16:24	<	10.000 ug/l	10.00 ug/l	624
Methyl bromide - liquid	JCF	10/16/93	16:24	<	10.000 ug/l	10.00 ug/l	624
Vinyl chloride - liquid	JCF	10/16/93	16:24	<	10.000 ug/l	10.00 ug/l	624
Methylene Chloride - liquid	JCF	10/16/93	16:24	<	5.000 ug/l	5.00 ug/l	624
1,1-Dichloroethane - liquid	JCF	10/16/93	16:24	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloroethane - liquid	JCF	10/16/93	16:24	<	5.000 ug/l	5.00 ug/l	624
1,1,1-Trichloroethane - liquid	JCF	10/16/93	16:24	<	5.000 ug/l	5.00 ug/l	624
Bromodichloromethane - liquid	JCF	10/16/93	16:24	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloropropane - liquid	JCF	10/16/93	16:24	<	5.000 ug/l	5.00 ug/l	624
Trans-1,3-Dichloropropene - liquid	JCF	10/16/93	16:24	<	5.000 ug/l	5.00 ug/l	624
Trichloroethene - liquid	JCF	10/16/93	16:24	<	5.000 ug/l	5.00 ug/l	624
Chlorodibromomethane - liquid	JCF	10/16/93	16:24	<	5.000 ug/l	5.00 ug/l	624
1,1,2-Trichloroethane - liquid	JCF	10/16/93	16:24	<	5.000 ug/l	5.00 ug/l	624
Cis-1,3-Dichloropropene - liquid	JCF	10/16/93	16:24	<	5.000 ug/l	5.00 ug/l	624
Benzene - liquid	JCF	10/16/93	16:24	<	5.000 ug/l	5.00 ug/l	624
Bromoform - liquid	JCF	10/16/93	16:24	<	5.000 ug/l	5.00 ug/l	624
1,1,2,2,-Tetrachloroethane - liquid	JCF	10/16/93	16:24	<	5.000 ug/l	5.00 ug/l	624
Tetrachloroethene - liquid	JCF	10/16/93	16:24	<	5.000 ug/l	5.00 ug/l	624

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Parameter	Sample Date: 10/05/93	In House # 10-6911-93	Analysis				Lowest Detectable Level	Method Number
			Analyst	Date -- Time	Results	Units		
- CONTINUED -								
Toluene - liquid		JCF	10/16/93	16:24	<	5.000 ug/l	5.00 ug/l	624
Chlorobenzene - liquid		JCF	10/16/93	16:24	<	5.000 ug/l	5.00 ug/l	624
Ethylbenzene - liquid		JCF	10/16/93	16:24	<	5.000 ug/l	5.00 ug/l	624
Chloroform - liquid		JCF	10/16/93	16:24	<	5.000 ug/l	5.00 ug/l	624
Carbon Tetrachloride - liquid		JCF	10/16/93	16:24	<	5.000 ug/l	5.00 ug/l	624
Xylene - liquid		JCF	10/16/93	16:24	<	10.000 ug/l	10.00 ug/l	624
Acetone - liquid		JCF	10/16/93	16:24	<	20.000 ug/l	20.00 ug/l	624
1,1-Dichloroethene - liquid		JCF	10/16/93	16:24	<	5.000 ug/l	5.00 ug/l	624
Acrylonitrile - liquid		JCF	10/16/93	16:24	<	10.000 mg/l	10.00 mg/l	624.
Trichlorofluoromethane - liquid		JCF	10/16/93	16:24	<	12.000 ug/l	12.00 ug/l	624.
2- Butanone - liquid		JCF	10/16/93	16:24	<	10.000 ug/l	10.00 ug/l	624.
4-Methyl - 2 pentanone - liquid		JCF	10/16/93	16:24	<	10.000 ug/l	10.00 ug/l	624.
Vinyl Acetate - liquid		JCF	10/16/93	16:24	<	10.000 ug/l	10.00 ug/l	8240

Comments:

Location: SMC2-DUP-10-93

The volatile run was initiated at 24:06.

Sample Date: 10/05/93 In House # 10-6912-93 Source: SEE COMMENT Location: FT.STEWART

Carbon Disulfide - liquid	JCF	10/16/93	16:25	<	10.000 ug/l	10.00 ug/l	624.
2-Hexanone - Liquid	JCF	10/16/93	16:25	<	50.000 ug/L	50.00 ug/L	8240
Styrene - Liquid	JCF	10/16/93	16:25	<	5.000 ug/L	5.00 ug/L	8240
Chloroethane - liquid	JCF	10/16/93	16:25	<	10.000 ug/l	10.00 ug/l	624
Methyl chloride - liquid	JCF	10/16/93	16:25	<	10.000 ug/l	10.00 ug/l	624
Methyl bromide - liquid	JCF	10/16/93	16:25	<	10.000 ug/l	10.00 ug/l	624
Vinyl chloride - liquid	JCF	10/16/93	16:25	<	10.000 ug/l	10.00 ug/l	624
Methylene Chloride - liquid	JCF	10/16/93	16:25	<	5.000 ug/l	5.00 ug/l	624
1,1-Dichloroethane - liquid	JCF	10/16/93	16:25	<	5.000 ug/l	5.00 ug/l	624
Trans 1,2-Dichloroethene - liquid	JCF	10/16/93	16:25	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloroethane - liquid	JCF	10/16/93	16:25	<	5.000 ug/l	5.00 ug/l	624
1,1,1-Trichloroethane - liquid	JCF	10/16/93	16:25	<	5.000 ug/l	5.00 ug/l	624
Bromodichloromethane - liquid	JCF	10/16/93	16:25	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloropropane - liquid	JCF	10/16/93	16:25	<	5.000 ug/l	5.00 ug/l	624
Trans-1,3-Dichloropropene - liquid	JCF	10/16/93	16:25	<	5.000 ug/l	5.00 ug/l	624
Trichloroethene - liquid	JCF	10/16/93	16:25	<	5.000 ug/l	5.00 ug/l	624
Chlorodibromomethane - liquid	JCF	10/16/93	16:25	<	5.000 ug/l	5.00 ug/l	624
1,1,2-Trichloroethane - liquid	JCF	10/16/93	16:25	<	5.000 ug/l	5.00 ug/l	624
Cis-1,3-Dichloropropene - liquid	JCF	10/16/93	16:25	<	5.000 ug/l	5.00 ug/l	624
Benzene - liquid	JCF	10/16/93	16:25	<	5.000 ug/l	5.00 ug/l	624
Bromoform - liquid	JCF	10/16/93	16:25	<	5.000 ug/l	5.00 ug/l	624
1,1,2,2-Tetrachloroethane - liquid	JCF	10/16/93	16:25	<	5.000 ug/l	5.00 ug/l	624
Tetrachloroethene - liquid	JCF	10/16/93	16:25	<	5.000 ug/l	5.00 ug/l	624
Toluene - liquid	JCF	10/16/93	16:25	<	5.000 ug/l	5.00 ug/l	624
Chlorobenzene - liquid	JCF	10/16/93	16:25	<	5.000 ug/l	5.00 ug/l	624
Ethylbenzene - liquid	JCF	10/16/93	16:25	<	5.000 ug/l	5.00 ug/l	624
Chloroform - liquid	JCF	10/16/93	16:25	<	5.000 ug/l	5.00 ug/l	624
Carbon Tetrachloride - liquid	JCF	10/16/93	16:25	<	5.000 ug/l	5.00 ug/l	624
Xylene - liquid	JCF	10/16/93	16:25	<	10.000 ug/l	10.00 ug/l	624
Acetone - liquid	JCF	10/16/93	16:25	<	20.000 ug/l	20.00 ug/l	624.
1,1-Dichloroethene - liquid	JCF	10/16/93	16:25	<	5.000 ug/l	5.00 ug/l	624.
Acrylonitrile - liquid	JCF	10/16/93	16:25	<	10.000 mg/l	10.00 mg/l	624.
Trichlorofluoromethane - liquid	JCF	10/16/93	16:25	<	12.000 ug/l	12.00 ug/l	624.
2- Butanone - liquid	JCF	10/16/93	16:25	<	10.000 ug/l	10.00 ug/l	624.
4-Methyl - 2 pentanone - liquid	JCF	10/16/93	16:25	<	10.000 ug/l	10.00 ug/l	624.
Vinyl Acetate - liquid	JCF	10/16/93	16:25	<	10.000 ug/l	10.00 ug/l	8240

Comments:

Location: SCM-BLK-10-93

The volatile run was initiated at 24:32.

Sample Date: 10/05/93 In House # 10-6913-93 Source: SCM3-10-93 Location: FT.STEWART

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Parameter	Analyst	Date -- Time	Results	Units	Lowest Detectable Level	Method Number
Sample Date: 10/05/93 In House # 10-6913-93		Source: SCM3-10-93	Location: FT.STEWART			
- CONTINUED -						
Carbon Disulfide - liquid	JCF	10/15/93 16:27	<	10.000 ug/l	10.00 ug/l	624.
2-Hexanone - Liquid	JCF	10/15/93 16:27	<	50.000 ug/L	50.00 ug/L	8240
Styrene - Liquid	JCF	10/15/93 16:27	<	5.000 ug/L	5.00 ug/L	8240
Chloroethane - liquid	JCF	10/15/93 16:27	<	10.000 ug/l	10.00 ug/l	624
Methyl chloride - liquid	JCF	10/15/93 16:27	<	10.000 ug/l	10.00 ug/l	624
Methyl bromide - liquid	JCF	10/15/93 16:27	<	10.000 ug/l	10.00 ug/l	624
Vinyl chloride - liquid	JCF	10/15/93 16:27	<	10.000 ug/l	10.00 ug/l	624
Methylene Chloride - liquid	JCF	10/15/93 16:27	<	5.000 ug/l	10.00 ug/l	624
1,1-Dichloroethane - liquid	JCF	10/15/93 16:27	<	5.000 ug/l	5.00 ug/l	624
Trans 1,2-Dichloroethene - liquid	JCF	10/15/93 16:27	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloroethane - liquid	JCF	10/15/93 16:27	<	5.000 ug/l	5.00 ug/l	624
1,1,1-Trichloroethane - liquid	JCF	10/15/93 16:27	<	5.000 ug/l	5.00 ug/l	624
Bromodichloromethane - liquid	JCF	10/15/93 16:27	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloropropane - liquid	JCF	10/15/93 16:27	<	5.000 ug/l	5.00 ug/l	624
Trans-1,3-Dichloropropene - liquid	JCF	10/15/93 16:27	<	5.000 ug/l	5.00 ug/l	624
Trichloroethene - liquid	JCF	10/15/93 16:27	<	5.000 ug/l	5.00 ug/l	624
Chlorodibromomethane - liquid	JCF	10/15/93 16:27	<	5.000 ug/l	5.00 ug/l	624
1,1,2-Trichloroethane - liquid	JCF	10/15/93 16:27	<	5.000 ug/l	5.00 ug/l	624
Cis-1,3-Dichloropropene - liquid	JCF	10/15/93 16:27	<	5.000 ug/l	5.00 ug/l	624
Benzene - liquid	JCF	10/15/93 16:27	<	5.000 ug/l	5.00 ug/l	624
Bromoform - liquid	JCF	10/15/93 16:27	<	5.000 ug/l	5.00 ug/l	624
1,1,2,2,-Tetrachloroethane - liquid	JCF	10/15/93 16:27	<	5.000 ug/l	5.00 ug/l	624
Tetrachloroethene - liquid	JCF	10/15/93 16:27	<	5.000 ug/l	5.00 ug/l	624
Toluene - liquid	JCF	10/15/93 16:27	<	5.000 ug/l	5.00 ug/l	624
Chlorobenzene - liquid	JCF	10/15/93 16:27	<	5.000 ug/l	5.00 ug/l	624
Ethylbenzene - liquid	JCF	10/15/93 16:27	<	5.000 ug/l	5.00 ug/l	624
Chloroform - liquid	JCF	10/15/93 16:27	<	5.000 ug/l	5.00 ug/l	624
Carbon Tetrachloride - liquid	JCF	10/15/93 16:27	<	5.000 ug/l	5.00 ug/l	624
Xylene - liquid	JCF	10/15/93 16:27	<	5.000 ug/l	5.00 ug/l	624
Acetone - liquid	JCF	10/15/93 16:27	<	10.000 ug/l	10.00 ug/l	624
1,1-Dichloroethene - liquid	JCF	10/15/93 16:27	<	20.000 ug/l	20.00 ug/l	624.
Acrylonitrile - liquid	JCF	10/15/93 16:27	<	5.000 ug/l	5.00 ug/l	624.
Trichlorofluoromethane - liquid	JCF	10/15/93 16:27	<	10.000 mg/l	10.00 mg/l	624.
2- Butanone - liquid	JCF	10/15/93 16:27	<	12.000 ug/l	12.00 ug/l	624.
4-Methyl - 2 pentanone - liquid	JCF	10/15/93 16:27	<	10.000 ug/l	10.00 ug/l	624.
Vinyl Acetate - liquid	JCF	10/15/93 16:27	<	10.000 ug/l	10.00 ug/l	624.
						8240

Comments:

The volatile run was initiated at 24:59.

Sample Date: 10/05/93 In House # 10-6914-93 Source: SCM4-10-93 Location: FT.STEWART

Carbon Disulfide - liquid	JCF	10/16/93 16:27	<	10.000 ug/l	10.00 ug/l	624.
2-Hexanone - Liquid	JCF	10/16/93 16:28	<	50.000 ug/L	50.00 ug/L	8240
Styrene - Liquid	JCF	10/16/93 16:28	<	5.000 ug/L	5.00 ug/L	8240
Chloroethane - liquid	JCF	10/16/93 16:27	<	10.000 ug/l	10.00 ug/l	624
Methyl chloride - liquid	JCF	10/16/93 16:27	<	10.000 ug/l	10.00 ug/l	624
Methyl bromide - liquid	JCF	10/16/93 16:27	<	10.000 ug/l	10.00 ug/l	624
Vinyl chloride - liquid	JCF	10/16/93 16:27	<	10.000 ug/l	10.00 ug/l	624
Methylene Chloride - liquid	JCF	10/16/93 16:27	<	5.000 ug/l	10.00 ug/l	624
1,1-Dichloroethane - liquid	JCF	10/16/93 16:27	<	5.000 ug/l	5.00 ug/l	624
Trans 1,2-Dichloroethene - liquid	JCF	10/16/93 16:27	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloroethane - liquid	JCF	10/16/93 16:27	<	5.000 ug/l	5.00 ug/l	624
1,1,1-Trichloroethane - liquid	JCF	10/16/93 16:27	<	5.000 ug/l	5.00 ug/l	624
Bromodichloromethane - liquid	JCF	10/16/93 16:27	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloropropane - liquid	JCF	10/16/93 16:27	<	5.000 ug/l	5.00 ug/l	624
Trans-1,3-Dichloropropene - liquid	JCF	10/16/93 16:27	<	5.000 ug/l	5.00 ug/l	624
Trichloroethene - liquid	JCF	10/16/93 16:27	<	5.000 ug/l	5.00 ug/l	624
Chlorodibromomethane - liquid	JCF	10/16/93 16:27	<	5.000 ug/l	5.00 ug/l	624
1,1,2-Trichloroethane - liquid	JCF	10/16/93 16:27	<	5.000 ug/l	5.00 ug/l	624
Cis-1,3-Dichloropropene - liquid	JCF	10/16/93 16:27	<	5.000 ug/l	5.00 ug/l	624
Benzene - liquid	JCF	10/16/93 16:27	<	5.000 ug/l	5.00 ug/l	624
Bromoform - liquid	JCF	10/16/93 16:27	<	5.000 ug/l	5.00 ug/l	624
1,1,2,2,-Tetrachloroethane - liquid	JCF	10/16/93 16:27	<	5.000 ug/l	5.00 ug/l	624
Tetrachloroethene - liquid	JCF	10/16/93 16:27	<	5.000 ug/l	5.00 ug/l	624

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Parameter	Analyst	Analysis			Units	Lowest Detectable Level	Method Number
		Date	-- Time	Results			
Sample Date: 10/05/93 In House # 10-6914-93		Source: SCM6-10-93	Location: FT STEWART				
- CONTINUED -							
Toluene - liquid	JCF	10/16/93	16:27	<	5.000 ug/l	5.00 ug/l	624
Chlorobenzene - liquid	JCF	10/16/93	16:27	<	5.000 ug/l	5.00 ug/l	624
Ethylbenzene - liquid	JCF	10/16/93	16:27	<	5.000 ug/l	5.00 ug/l	624
Chloroform - liquid	JCF	10/16/93	16:27	<	5.000 ug/l	5.00 ug/l	624
Carbon Tetrachloride - liquid	JCF	10/16/93	16:27	<	5.000 ug/l	5.00 ug/l	624
Xylene - liquid	JCF	10/16/93	16:27	<	10.000 ug/l	10.00 ug/l	624
Acetone - liquid	JCF	10/16/93	16:27	<	20.000 ug/l	20.00 ug/l	624.
1,1-Dichloroethene - liquid	JCF	10/16/93	16:27	<	5.000 ug/l	5.00 ug/l	624.
Acrylonitrile - liquid	JCF	10/16/93	16:27	<	10.000 mg/l	10.00 mg/l	624.
Trichlorofluoromethane - liquid	JCF	10/16/93	16:27	<	12.000 ug/l	12.00 ug/l	624.
2- Butanone - liquid	JCF	10/16/93	16:27	<	10.000 ug/l	10.00 ug/l	624.
4-Methyl - 2 pentanone - liquid	JCF	10/16/93	16:27	<	10.000 ug/l	10.00 ug/l	624.
Vinyl Acetate - liquid	JCF	10/16/93	16:27	<	10.000 ug/l	10.00 ug/l	8240

Comments:

The volatile run was initiated at 01:25.

Sample Date: 10/05/93 In House # 10-6915-93 Source: SCM5-10-93 Location: FT STEWART

Carbon Disulfide - liquid	JCF	10/16/93	16:28	<	10.000 ug/l	10.00 ug/l	624.
2-Hexanone - Liquid	JCF	10/16/93	16:28	<	50.000 ug/L	50.00 ug/L	8240
Styrene - Liquid	JCF	10/16/93	16:28	<	5.000 ug/L	5.00 ug/L	8240
Chloroethane - liquid	JCF	10/16/93	16:28	<	10.000 ug/l	10.00 ug/l	624
Methyl chloride - liquid	JCF	10/16/93	16:28	<	10.000 ug/l	10.00 ug/l	624
Methyl bromide - liquid	JCF	10/16/93	16:28	<	10.000 ug/l	10.00 ug/l	624
Vinyl chloride - liquid	JCF	10/16/93	16:28	<	10.000 ug/l	10.00 ug/l	624
Methylene Chloride - liquid	JCF	10/16/93	16:28	<	5.000 ug/l	5.00 ug/l	624
1,1-Dichloroethane - liquid	JCF	10/16/93	16:28	<	5.000 ug/l	5.00 ug/l	624
Trans 1,2-Dichloroethene - liquid	JCF	10/16/93	16:28	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloroethane - liquid	JCF	10/16/93	16:28	<	5.000 ug/l	5.00 ug/l	624
1,1,1-Trichloroethane - liquid	JCF	10/16/93	16:28	<	5.000 ug/l	5.00 ug/l	624
Bromodichloromethane - liquid	JCF	10/16/93	16:28	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloropropane - liquid	JCF	10/16/93	16:28	<	5.000 ug/l	5.00 ug/l	624
Trans-1,3-Dichloropropene - liquid	JCF	10/16/93	16:28	<	5.000 ug/l	5.00 ug/l	624
Trichloroethene - liquid	JCF	10/16/93	16:28	<	5.000 ug/l	5.00 ug/l	624
Chlorodibromomethane - liquid	JCF	10/16/93	16:28	<	5.000 ug/l	5.00 ug/l	624
1,1,2-Trichloroethane - liquid	JCF	10/16/93	16:28	<	5.000 ug/l	5.00 ug/l	624
Cis-1,3-Dichloropropene - liquid	JCF	10/16/93	16:28	<	5.000 ug/l	5.00 ug/l	624
Benzene - liquid	JCF	10/16/93	16:28	<	5.000 ug/l	5.00 ug/l	624
Bromoform - liquid	JCF	10/16/93	16:28	<	5.000 ug/l	5.00 ug/l	624
1,1,2,2,-Tetrachloroethane - liquid	JCF	10/16/93	16:28	<	5.000 ug/l	5.00 ug/l	624
Tetrachloroethene - liquid	JCF	10/16/93	16:28	<	5.000 ug/l	5.00 ug/l	624
Toluene - liquid	JCF	10/16/93	16:28	<	5.000 ug/l	5.00 ug/l	624
Chlorobenzene - liquid	JCF	10/16/93	16:28	<	5.000 ug/l	5.00 ug/l	624
Ethylbenzene - Liquid	JCF	10/16/93	16:28	<	5.000 ug/l	5.00 ug/l	624
Chloroform - liquid	JCF	10/16/93	16:28	<	5.000 ug/l	5.00 ug/l	624
Carbon Tetrachloride - liquid	JCF	10/16/93	16:28	<	5.000 ug/l	5.00 ug/l	624
Xylene - liquid	JCF	10/16/93	16:28	<	10.000 ug/l	10.00 ug/l	624
Acetone - liquid	JCF	10/16/93	16:28	<	20.000 ug/l	20.00 ug/l	624.
1,1-Dichloroethene - liquid	JCF	10/16/93	16:28	<	5.000 ug/l	5.00 ug/l	624.
Acrylonitrile - liquid	JCF	10/16/93	16:28	<	10.000 mg/l	10.00 mg/l	624.
Trichlorofluoromethane - liquid	JCF	10/16/93	16:28	<	12.000 ug/l	12.00 ug/l	624.
2- Butanone - liquid	JCF	10/16/93	16:28	<	10.000 ug/l	10.00 ug/l	624.
4-Methyl - 2 pentanone - liquid	JCF	10/16/93	16:28	<	10.000 ug/l	10.00 ug/l	624.
Vinyl Acetate - liquid	JCF	10/16/93	16:28	<	10.000 ug/l	10.00 ug/l	8240

Comments:

The volatile run was initiated at 01:52.

Sample Date: 10/05/93 In House # 10-6916-93 Source: SCM6-10-93 Location: FT STEWART

Carbon Disulfide - liquid	JCF	10/16/93	16:29	<	10.000 ug/l	10.00 ug/l	624.
2-Hexanone - Liquid	JCF	10/16/93	16:29	<	50.000 ug/L	50.00 ug/L	8240
Styrene - Liquid	JCF	10/16/93	16:29	<	5.000 ug/L	5.00 ug/L	8240
Chloroethane - liquid	JCF	10/16/93	16:29	<	10.000 ug/l	10.00 ug/l	624

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Parameter	Analyst	Date -- Time	Analysis	Results	Units	Lowest Detectable Level	Method Number
Sample Date: 10/05/93 In House # 10-6916-93			Source: SCM6-10-93	Location: FT.STEWART			
- CONTINUED -							
Methyl chloride - liquid	JCF	10/16/93 16:29	<	10.000 ug/l	10.00 ug/l	624	
Methyl bromide - liquid	JCF	10/16/93 16:29	<	10.000 ug/l	10.00 ug/l	624	
Vinyl chloride - liquid	JCF	10/16/93 16:29	<	10.000 ug/l	10.00 ug/l	624	
Methylene Chloride - liquid	JCF	10/16/93 16:29	<	5.000 ug/l	5.00 ug/l	624	
1,1-Dichloroethane - liquid	JCF	10/16/93 16:29	<	5.000 ug/l	5.00 ug/l	624	
Trans 1,2-Dichloroethene - liquid	JCF	10/16/93 16:29	<	5.000 ug/l	5.00 ug/l	624	
1,2-Dichloroethane - liquid	JCF	10/16/93 16:29	<	5.000 ug/l	5.00 ug/l	624	
1,1,1-Trichloroethane - Liquid	JCF	10/16/93 16:29	<	5.000 ug/l	5.00 ug/l	624	
Bromodichloromethane - liquid	JCF	10/16/93 16:29	<	5.000 ug/l	5.00 ug/l	624	
1,2-Dichloropropane - liquid	JCF	10/16/93 16:29	<	5.000 ug/l	5.00 ug/l	624	
Trans-1,3-Dichloropropene - liquid	JCF	10/16/93 16:29	<	5.000 ug/l	5.00 ug/l	624	
Trichloroethene - liquid	JCF	10/16/93 16:29	<	5.000 ug/l	5.00 ug/l	624	
Chlorodibromomethane - liquid	JCF	10/16/93 16:29	<	5.000 ug/l	5.00 ug/l	624	
1,1,2-Trichloroethane - liquid	JCF	10/16/93 16:29	<	5.000 ug/l	5.00 ug/l	624	
Cis-1,3-Dichloropropene - liquid	JCF	10/16/93 16:29	<	5.000 ug/l	5.00 ug/l	624	
Benzene - liquid	JCF	10/16/93 16:29	<	5.000 ug/l	5.00 ug/l	624	
Bromoform - liquid	JCF	10/16/93 16:29	<	5.000 ug/l	5.00 ug/l	624	
1,1,2,2-Tetrachloroethane - liquid	JCF	10/16/93 16:29	<	5.000 ug/l	5.00 ug/l	624	
Tetrachloroethene - liquid	JCF	10/16/93 16:29	<	5.000 ug/l	5.00 ug/l	624	
Toluene - liquid	JCF	10/16/93 16:29	<	5.000 ug/l	5.00 ug/l	624	
Chlorobenzene - liquid	JCF	10/16/93 16:29	<	5.000 ug/l	5.00 ug/l	624	
Ethylbenzene - liquid	JCF	10/16/93 16:29	<	5.000 ug/l	5.00 ug/l	624	
Chloroform - liquid	JCF	10/16/93 16:29	<	5.000 ug/l	5.00 ug/l	624	
Carbon Tetrachloride - liquid	JCF	10/16/93 16:29	<	5.000 ug/l	5.00 ug/l	624	
Xylene - liquid	JCF	10/16/93 16:29	<	33.900 ug/l	10.00 ug/l	624	
Acetone - liquid	JCF	10/16/93 16:29	<	20.000 ug/l	20.00 ug/l	624	
1,1-Dichloroethene - liquid	JCF	10/16/93 16:29	<	5.000 ug/l	5.00 ug/l	624	
Acrylonitrile - liquid	JCF	10/16/93 16:29	<	10.000 mg/l	10.00 mg/l	624	
Trichlorofluoromethane - liquid	JCF	10/16/93 16:29	<	12.000 ug/l	12.00 ug/l	624	
2- Butanone - liquid	JCF	10/16/93 16:29	<	10.000 ug/l	10.00 ug/l	624	
4-Methyl - 2 pentanone - liquid	JCF	10/16/93 16:29	<	10.000 ug/l	10.00 ug/l	624	
Vinyl Acetate - liquid	JCF	10/16/93 16:29	<	10.000 ug/l	10.00 ug/l	8240	

Comments:

The volatile run was initiated at 02:18.

Sample Date: 10/05/93 In House # 10-6917-93 Source: SW1-10-93 Location: FT.STEWART

Carbon Disulfide - liquid	KG	10/18/93 14:39	<	10.000 ug/l	10.00 ug/l	624.
2-Hexanone - Liquid	KG	10/18/93 14:39	<	50.000 ug/L	50.00 ug/L	8240
Styrene - Liquid	KG	10/18/93 14:39	<	5.000 ug/L	5.00 ug/L	8240
Chloroethane - liquid	KG	10/18/93 14:39	<	10.000 ug/l	10.00 ug/l	624
Methyl chloride - liquid	KG	10/18/93 14:39	<	10.000 ug/l	10.00 ug/l	624
Methyl bromide - liquid	KG	10/18/93 14:39	<	10.000 ug/l	10.00 ug/l	624
Vinyl chloride - liquid	KG	10/18/93 14:39	<	10.000 ug/l	10.00 ug/l	624
Methylene Chloride - liquid	KG	10/18/93 14:39	<	5.000 ug/l	5.00 ug/l	624
1,1-Dichloroethane - liquid	KG	10/18/93 14:39	<	5.000 ug/l	5.00 ug/l	624
Trans 1,2-Dichloroethene - liquid	KG	10/18/93 14:39	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloroethane - liquid	KG	10/18/93 14:39	<	5.000 ug/l	5.00 ug/l	624
1,1,1-Trichloroethane - liquid	KG	10/18/93 14:39	<	5.000 ug/l	5.00 ug/l	624
Bromodichloromethane - liquid	KG	10/18/93 14:39	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloropropane - liquid	KG	10/18/93 14:39	<	5.000 ug/l	5.00 ug/l	624
Trans-1,3-Dichloropropene - liquid	KG	10/18/93 14:39	<	5.000 ug/l	5.00 ug/l	624
Trichloroethene - liquid	KG	10/18/93 14:39	<	5.000 ug/l	5.00 ug/l	624
Chlorodibromomethane - liquid	KG	10/18/93 14:39	<	5.000 ug/l	5.00 ug/l	624
1,1,2-Trichloroethane - liquid	KG	10/18/93 14:39	<	5.000 ug/l	5.00 ug/l	624
Cis-1,3-Dichloropropene - liquid	KG	10/18/93 14:39	<	5.000 ug/l	5.00 ug/l	624
Benzene - liquid	KG	10/18/93 14:39	<	5.000 ug/l	5.00 ug/l	624
Bromoform - liquid	KG	10/18/93 14:39	<	5.000 ug/l	5.00 ug/l	624
1,1,2,2-Tetrachloroethane - liquid	KG	10/18/93 14:39	<	5.000 ug/l	5.00 ug/l	624
Tetrachloroethene - liquid	KG	10/18/93 14:39	<	5.000 ug/l	5.00 ug/l	624
Toluene - liquid	KG	10/18/93 14:39	<	5.000 ug/l	5.00 ug/l	624
Chlorobenzene - liquid	KG	10/18/93 14:39	<	5.000 ug/l	5.00 ug/l	624
Ethylbenzene - liquid	KG	10/18/93 14:39	<	5.000 ug/l	5.00 ug/l	624
Chloroform - liquid	KG	10/18/93 14:39	<	5.000 ug/l	5.00 ug/l	624

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Parameter	Analyst	Analysis			Units	Lowest Detectable Level	Method Number
		Date --	Time	Results			
Sample Date: 10/05/93 In House # 10-6917-93		Source: SW1-10-93		Location: FT STEWART			
- CONTINUED -							
Carbon Tetrachloride - liquid	KG	10/18/93	14:39	< 5.000 ug/l	5.00 ug/l	624	
Xylene - liquid	KG	10/18/93	14:39	< 10.000 ug/l	10.00 ug/l	624	
Acetone - liquid	KG	10/18/93	14:39	< 20.000 ug/l	20.00 ug/l	624.	
1,1-Dichloroethene - liquid	KG	10/18/93	14:39	< 5.000 ug/l	5.00 ug/l	624.	
Acrylonitrile - liquid	KG	10/18/93	14:39	< 10.000 mg/l	10.00 mg/l	624.	
Trichlorofluoromethane - liquid	KG	10/18/93	14:39	< 12.000 ug/l	12.00 ug/l	624.	
2- Butanone - liquid	KG	10/18/93	14:39	< 10.000 ug/l	10.00 ug/l	624.	
4-Methyl - 2 pentanone - liquid	KG	10/18/93	14:39	< 10.000 ug/l	10.00 ug/l	624.	
Vinyl Acetate - liquid	KG	10/18/93	14:39	< 10.000 ug/l	10.00 ug/l	8240	

Comments:

The volatile run was initiated at 12:44.

Sample Date: 10/05/93 In House # 10-6918-93		Source: SEE COMMENT		Location: FT STEWART			
Carbon Disulfide - liquid	KG	10/18/93	14:41	< 10.000 ug/l	10.00 ug/l	624.	
2-Hexanone - Liquid	KG	10/18/93	14:41	< 50.000 ug/L	50.00 ug/L	8240	
Styrene - Liquid	KG	10/18/93	14:41	< 5.000 ug/L	5.00 ug/L	8240	
Chloroethane - liquid	KG	10/18/93	14:41	< 10.000 ug/l	10.00 ug/l	624	
Methyl chloride - liquid	KG	10/18/93	14:41	< 10.000 ug/l	10.00 ug/l	624	
Methyl bromide - liquid	KG	10/18/93	14:41	< 10.000 ug/l	10.00 ug/l	624	
Vinyl chloride - liquid	KG	10/18/93	14:41	< 10.000 ug/l	10.00 ug/l	624	
Hethylene Chloride - liquid	KG	10/18/93	14:41	< 5.000 ug/l	5.00 ug/l	624	
1,1-Dichloroethane - liquid	KG	10/18/93	14:41	< 5.000 ug/l	5.00 ug/l	624	
Trans 1,2-Dichloroethene - liquid	KG	10/18/93	14:41	< 5.000 ug/l	5.00 ug/l	624	
1,2-Dichloroethane - liquid	KG	10/18/93	14:41	< 5.000 ug/l	5.00 ug/l	624	
1,1,1-Trichloroethane - liquid	KG	10/18/93	14:41	< 5.000 ug/l	5.00 ug/l	624	
Bromodichloromethane - liquid	KG	10/18/93	14:41	< 5.000 ug/l	5.00 ug/l	624	
1,2-Dichloropropane - liquid	KG	10/18/93	14:41	< 5.000 ug/l	5.00 ug/l	624	
Trans-1,3-Dichloropropene - liquid	KG	10/18/93	14:41	< 5.000 ug/l	5.00 ug/l	624	
Trichloroethene - liquid	KG	10/18/93	14:41	< 5.000 ug/l	5.00 ug/l	624	
Chlorodibromomethane - liquid	KG	10/18/93	14:41	< 5.000 ug/l	5.00 ug/l	624	
1,1,2-Trichloroethane - liquid	KG	10/18/93	14:41	< 5.000 ug/l	5.00 ug/l	624	
Cis-1,3-Dichloropropene - liquid	KG	10/18/93	14:41	< 5.000 ug/l	5.00 ug/l	624	
Benzene - liquid	KG	10/18/93	14:41	< 5.000 ug/l	5.00 ug/l	624	
Bromoform - liquid	KG	10/18/93	14:41	< 5.000 ug/l	5.00 ug/l	624	
1,1,2,2,-Tetrachloroethane - liquid	KG	10/18/93	14:41	< 5.000 ug/l	5.00 ug/l	624	
Tetrachloroethene - liquid	KG	10/18/93	14:41	< 5.000 ug/l	5.00 ug/l	624	
Toluene - liquid	KG	10/18/93	14:41	< 5.000 ug/l	5.00 ug/l	624	
Chlorobenzene - liquid	KG	10/18/93	14:41	< 5.000 ug/l	5.00 ug/l	624	
Ethylbenzene - liquid	KG	10/18/93	14:41	< 5.000 ug/l	5.00 ug/l	624	
Chloroform - liquid	KG	10/18/93	14:41	< 5.000 ug/l	5.00 ug/l	624	
Carbon Tetrachloride - liquid	KG	10/18/93	14:41	< 5.000 ug/l	5.00 ug/l	624	
Xylene - liquid	KG	10/18/93	14:41	< 10.000 ug/l	10.00 ug/l	624	
Acetone - liquid	KG	10/18/93	14:41	< 20.000 ug/l	20.00 ug/l	624.	
1,1-Dichloroethene - liquid	KG	10/18/93	14:41	< 5.000 ug/l	5.00 ug/l	624.	
Acrylonitrile - liquid	KG	10/18/93	14:41	< 10.000 mg/l	10.00 mg/l	624.	
Trichlorofluoromethane - liquid	KG	10/18/93	14:41	< 12.000 ug/l	12.00 ug/l	624.	
2- Butanone - liquid	KG	10/18/93	14:41	< 10.000 ug/l	10.00 ug/l	624.	
4-Methyl - 2 pentanone - liquid	KG	10/18/93	14:41	< 10.000 ug/l	10.00 ug/l	624.	
Vinyl Acetate - liquid	KG	10/18/93	14:41	< 10.000 ug/l	10.00 ug/l	8240	

Comments:

Location: SW1-DUP-10-93

The volatile run was initiated at 13:10.

Sample Date: 10/05/93 In House # 10-6919-93		Source: SEE COMMENT		Location: FT STEWART		
Carbon Disulfide - liquid	KG	10/18/93	14:42	< 10.000 ug/l	10.00 ug/l	624.
2-Hexanone - Liquid	KG	10/18/93	14:42	< 50.000 ug/L	50.00 ug/L	8240
Styrene - Liquid	KG	10/18/93	14:42	< 5.000 ug/L	5.00 ug/L	8240
Chloroethane - liquid	KG	10/18/93	14:42	< 10.000 ug/l	10.00 ug/l	624
Methyl chloride - liquid	KG	10/18/93	14:42	< 10.000 ug/l	10.00 ug/l	624
Methyl bromide - liquid	KG	10/18/93	14:42	< 10.000 ug/l	10.00 ug/l	624

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Parameter	Analyst	Date	Time	Results	Units	Lowest Detectable Level	Method Number
Sample Date: 10/05/93 In House # 10-6919-93				Source: SEECOMMENT	Location: FT.STEWART		
- CONTINUED -							
Vinyl chloride - liquid	KG	10/18/93	14:42	<	10.000 ug/l	10.00 ug/l	624
Methylene Chloride - liquid	KG	10/18/93	14:42	<	5.000 ug/l	5.00 ug/l	624
1,1-Dichloroethane - liquid	KG	10/18/93	14:42	<	5.000 ug/l	5.00 ug/l	624
Trans 1,2-Dichloroethene - liquid	KG	10/18/93	14:42	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloroethane - liquid	KG	10/18/93	14:42	<	5.000 ug/l	5.00 ug/l	624
1,1,1-Trichloroethane - liquid	KG	10/18/93	14:42	<	5.000 ug/l	5.00 ug/l	624
Bromodichloromethane - liquid	KG	10/18/93	14:42	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloropropane - liquid	KG	10/18/93	14:42	<	5.000 ug/l	5.00 ug/l	624
Trans-1,3-Dichloropropene - liquid	KG	10/18/93	14:42	<	5.000 ug/l	5.00 ug/l	624
Trichloroethene - liquid	KG	10/18/93	14:42	<	5.000 ug/l	5.00 ug/l	624
Chlorodibromomethane - liquid	KG	10/18/93	14:42	<	5.000 ug/l	5.00 ug/l	624
1,1,2-Trichloroethane - liquid	KG	10/18/93	14:42	<	5.000 ug/l	5.00 ug/l	624
Cis-1,3-Dichloropropene - liquid	KG	10/18/93	14:42	<	5.000 ug/l	5.00 ug/l	624
Benzene - liquid	KG	10/18/93	14:42	<	5.000 ug/l	5.00 ug/l	624
Bromoform - liquid	KG	10/18/93	14:42	<	5.000 ug/l	5.00 ug/l	624
1,1,2,2-Tetrachloroethane - liquid	KG	10/18/93	14:42	<	5.000 ug/l	5.00 ug/l	624
Tetrachloroethene - liquid	KG	10/18/93	14:42	<	5.000 ug/l	5.00 ug/l	624
Toluene - liquid	KG	10/18/93	14:42	<	5.000 ug/l	5.00 ug/l	624
Chlorobenzene - liquid	KG	10/18/93	14:42	<	5.000 ug/l	5.00 ug/l	624
Ethylbenzene - liquid	KG	10/18/93	14:42	<	5.000 ug/l	5.00 ug/l	624
Chloroform - liquid	KG	10/18/93	14:42	<	5.000 ug/l	5.00 ug/l	624
Carbon Tetrachloride - liquid	KG	10/18/93	14:42	<	5.000 ug/l	5.00 ug/l	624
Xylene - liquid	KG	10/18/93	14:42	<	10.000 ug/l	10.00 ug/l	624
Acetone - liquid	KG	10/18/93	14:42	<	20.000 ug/l	20.00 ug/l	624.
1,1-Dichloroethene - liquid	KG	10/18/93	14:42	<	5.000 ug/l	5.00 ug/l	624.
Acrylonitrile - liquid	KG	10/18/93	14:42	<	10.000 mg/l	10.00 mg/l	624.
Trichlorofluoromethane - liquid	KG	10/18/93	14:42	<	12.000 ug/l	12.00 ug/l	624.
2- Butanone - liquid	KG	10/18/93	14:42	<	10.000 ug/l	10.00 ug/l	624.
4-Methyl - 2 pentanone - liquid	KG	10/18/93	14:42	<	10.000 ug/l	10.00 ug/l	624.
Vinyl Acetate - liquid	KG	10/18/93	14:42	<	10.000 ug/l	10.00 ug/l	8240

Comments:

Location: SW-BLK-10-93

The volatile run was initiated at 13:37.

Sample Date: 10/05/93 In House # 10-6920-93 Source: SW2-10-93 Location: FT.STEWART

Carbon Disulfide - liquid	KG	10/18/93	14:44	<	10.000 ug/l	10.00 ug/l	624.
2-Hexanone - Liquid	KG	10/18/93	14:44	<	50.000 ug/L	50.00 ug/L	8240
Styrene - Liquid	KG	10/18/93	14:44	<	5.000 ug/L	5.00 ug/L	8240
Chloroethane - liquid	KG	10/18/93	14:44	<	10.000 ug/l	10.00 ug/l	624
Methyl chloride - liquid	KG	10/18/93	14:44	<	10.000 ug/l	10.00 ug/l	624
Methyl bromide - liquid	KG	10/18/93	14:44	<	10.000 ug/l	10.00 ug/l	624
Vinyl chloride - liquid	KG	10/18/93	14:44	<	10.000 ug/l	10.00 ug/l	624
Methylene Chloride - liquid	KG	10/18/93	14:44	<	5.000 ug/l	5.00 ug/l	624
1,1-Dichloroethane - liquid	KG	10/18/93	14:44	<	5.000 ug/l	5.00 ug/l	624
Trans 1,2-Dichloroethene - liquid	KG	10/18/93	14:44	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloroethane - liquid	KG	10/18/93	14:44	<	5.000 ug/l	5.00 ug/l	624
1,1,1-Trichloroethane - liquid	KG	10/18/93	14:44	<	5.000 ug/l	5.00 ug/l	624
Bromodichloromethane - liquid	KG	10/18/93	14:44	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloropropane - liquid	KG	10/18/93	14:44	<	5.000 ug/l	5.00 ug/l	624
Trans-1,3-Dichloropropene - liquid	KG	10/18/93	14:44	<	5.000 ug/l	5.00 ug/l	624
Trichloroethene - liquid	KG	10/18/93	14:44	<	5.000 ug/l	5.00 ug/l	624
Chlorodibromomethane - liquid	KG	10/18/93	14:44	<	5.000 ug/l	5.00 ug/l	624
1,1,2-Trichloroethane - liquid	KG	10/18/93	14:44	<	5.000 ug/l	5.00 ug/l	624
Cis-1,3-Dichloropropene - liquid	KG	10/18/93	14:44	<	5.000 ug/l	5.00 ug/l	624
Benzene - liquid	KG	10/18/93	14:44	<	5.000 ug/l	5.00 ug/l	624
Bromoform - liquid	KG	10/18/93	14:44	<	5.000 ug/l	5.00 ug/l	624
1,1,2,2-Tetrachloroethane - liquid	KG	10/18/93	14:44	<	5.000 ug/l	5.00 ug/l	624
Tetrachloroethene - liquid	KG	10/18/93	14:44	<	5.000 ug/l	5.00 ug/l	624
Toluene - liquid	KG	10/18/93	14:44	<	5.000 ug/l	5.00 ug/l	624
Chlorobenzene - liquid	KG	10/18/93	14:44	<	5.000 ug/l	5.00 ug/l	624
Ethylbenzene - liquid	KG	10/18/93	14:44	<	5.000 ug/l	5.00 ug/l	624
Chloroform - liquid	KG	10/18/93	14:44	<	5.000 ug/l	5.00 ug/l	624

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Parameter	Sample Date: 10/05/93	In House #	Analyst	Analysis			Units	Lowest Detectable Level	Method Number
				Date --	Time	Results			
- CONTINUED -									
Carbon Tetrachloride - liquid			KG	10/18/93	14:44	<	5.000 ug/l	5.00 ug/l	624
Xylene - liquid			KG	10/18/93	14:44	<	10.000 ug/l	10.00 ug/l	624
Acetone - liquid			KG	10/18/93	14:44	<	20.000 ug/l	20.00 ug/l	624.
1,1-Dichloroethene - liquid			KG	10/18/93	14:44	<	5.000 ug/l	5.00 ug/l	624.
Acrylonitrile - liquid			KG	10/18/93	14:44	<	10.000 mg/l	10.00 mg/l	624.
Trichlorofluoromethane - liquid			KG	10/18/93	14:44	<	12.000 ug/l	12.00 ug/l	624.
2- Butanone - liquid			KG	10/18/93	14:44	<	10.000 ug/l	10.00 ug/l	624.
4-Methyl - 2 pentanone - liquid			KG	10/18/93	14:44	<	10.000 ug/l	10.00 ug/l	624.
Vinyl Acetate - liquid			KG	10/18/93	14:44	<	10.000 ug/l	10.00 ug/l	8240

Comments:

The volatile run was initiated at 14:03.

Sample Date: 10/05/93 In House # 10-6921-93 Source: TRIP BLANK Location: SCM

Carbon Disulfide - liquid	KG	10/18/93	14:45	<	10.000 ug/l	10.00 ug/l	624.
2-Hexanone - Liquid	KG	10/18/93	14:45	<	50.000 ug/L	50.00 ug/L	8240
Styrene - Liquid	KG	10/18/93	14:45	<	5.000 ug/L	5.00 ug/L	8240
Chloroethane - liquid	KG	10/18/93	14:45	<	10.000 ug/l	10.00 ug/l	624
Methyl chloride - liquid	KG	10/18/93	14:45	<	10.000 ug/l	10.00 ug/l	624
Methyl bromide - liquid	KG	10/18/93	14:45	<	10.000 ug/l	10.00 ug/l	624
Vinyl chloride - liquid	KG	10/18/93	14:45	<	10.000 ug/l	10.00 ug/l	624
Methylene Chloride - liquid	KG	10/18/93	14:45	<	5.000 ug/l	5.00 ug/l	624
1,1-Dichloroethane - liquid	KG	10/18/93	14:45	<	5.000 ug/l	5.00 ug/l	624
Trans 1,2-Dichloroethene - liquid	KG	10/18/93	14:45	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloroethane - liquid	KG	10/18/93	14:45	<	5.000 ug/l	5.00 ug/l	624
1,1,1-Trichloroethane - liquid	KG	10/18/93	14:45	<	5.000 ug/l	5.00 ug/l	624
Bromodichloromethane - liquid	KG	10/18/93	14:45	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloropropane - liquid	KG	10/18/93	14:45	<	5.000 ug/l	5.00 ug/l	624
Trans-1,3-Dichloropropene - liquid	KG	10/18/93	14:45	<	5.000 ug/l	5.00 ug/l	624
Trichloroethene - liquid	KG	10/18/93	14:45	<	5.000 ug/l	5.00 ug/l	624
Chlorodibromomethane - liquid	KG	10/18/93	14:45	<	5.000 ug/l	5.00 ug/l	624
1,1,2-Trichloroethane - liquid	KG	10/18/93	14:45	<	5.000 ug/l	5.00 ug/l	624
Cis-1,3-Dichloropropene - liquid	KG	10/18/93	14:45	<	5.000 ug/l	5.00 ug/l	624
Benzene - liquid	KG	10/18/93	14:45	<	5.000 ug/l	5.00 ug/l	624
Bromoform - liquid	KG	10/18/93	14:45	<	5.000 ug/l	5.00 ug/l	624
1,1,2,2,-Tetrachloroethane - liquid	KG	10/18/93	14:45	<	5.000 ug/l	5.00 ug/l	624
Tetrachloroethene - liquid	KG	10/18/93	14:45	<	5.000 ug/l	5.00 ug/l	624
Toluene - liquid	KG	10/18/93	14:45	<	5.000 ug/l	5.00 ug/l	624
Chlorobenzene - liquid	KG	10/18/93	14:45	<	5.000 ug/l	5.00 ug/l	624
Ethylbenzene - liquid	KG	10/18/93	14:45	<	5.000 ug/l	5.00 ug/l	624
Chloroform - liquid	KG	10/18/93	14:45	<	5.000 ug/l	5.00 ug/l	624
Carbon Tetrachloride - liquid	KG	10/18/93	14:45	<	5.000 ug/l	5.00 ug/l	624
Xylene - liquid	KG	10/18/93	14:45	<	10.000 ug/l	10.00 ug/l	624
Acetone - liquid	KG	10/18/93	14:45	<	20.000 ug/l	20.00 ug/l	624.
1,1-Dichloroethene - liquid	KG	10/18/93	14:45	<	5.000 ug/l	5.00 ug/l	624.
Acrylonitrile - liquid	KG	10/18/93	14:45	<	10.000 mg/l	10.00 mg/l	624.
Trichlorofluoromethane - liquid	KG	10/18/93	14:45	<	12.000 ug/l	12.00 ug/l	624.
2- Butanone - liquid	KG	10/18/93	14:45	<	10.000 ug/l	10.00 ug/l	624.
4-Methyl - 2 pentanone - liquid	KG	10/18/93	14:45	<	10.000 ug/l	10.00 ug/l	624.
Vinyl Acetate - liquid	KG	10/18/93	14:45	<	10.000 ug/l	10.00 ug/l	8240

Comments:

The volatile run was initiated at 14:30.

Sample Date: 10/05/93 In House # 10-6922-93 Source: TRIP BLANK Location: SW

Carbon Disulfide - liquid	KG	10/18/93	14:48	<	10.000 ug/l	10.00 ug/l	624.
2-Hexanone - Liquid	KG	10/18/93	14:48	<	50.000 ug/L	50.00 ug/L	8240
Styrene - Liquid	KG	10/18/93	14:48	<	5.000 ug/L	5.00 ug/L	8240
Chloroethane - liquid	KG	10/18/93	14:48	<	10.000 ug/l	10.00 ug/l	624
Methyl chloride - liquid	KG	10/18/93	14:48	<	10.000 ug/l	10.00 ug/l	624
Methyl bromide - liquid	KG	10/18/93	14:48	<	10.000 ug/l	10.00 ug/l	624
Vinyl chloride - liquid	KG	10/18/93	14:48	<	10.000 ug/l	10.00 ug/l	624
Methylene Chloride - liquid	KG	10/18/93	14:48	<	5.000 ug/l	5.00 ug/l	624

Ms. Toni Nicholson
11/09/93
Page 10

Parameter	Analyst	Date -- Time	Results	Units	Lowest Detectable Level	Method Number
Sample Date: 10/05/93 In House # 10-6922-93		Source: TRIP BLANK	Location: SW			
- CONTINUED -						
1,1-Dichloroethane - liquid	KG	10/18/93 14:48	<	5.000 ug/l	5.00 ug/l	624
Trans 1,2-Dichloroethene - liquid	KG	10/18/93 14:48	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloroethane - liquid	KG	10/18/93 14:48	<	5.000 ug/l	5.00 ug/l	624
1,1,1-Trichloroethane - liquid	KG	10/18/93 14:48	<	5.000 ug/l	5.00 ug/l	624
Bromodichloromethane - liquid	KG	10/18/93 14:48	<	5.000 ug/l	5.00 ug/l	624
1,2-Dichloropropane - liquid	KG	10/18/93 14:48	<	5.000 ug/l	5.00 ug/l	624
Trans-1,3-Dichloropropene - liquid	KG	10/18/93 14:48	<	5.000 ug/l	5.00 ug/l	624
Trichloroethylene - liquid	KG	10/18/93 14:48	<	5.000 ug/l	5.00 ug/l	624
Chlorodibromomethane - liquid	KG	10/18/93 14:48	<	5.000 ug/l	5.00 ug/l	624
1,1,2-Trichloroethane - liquid	KG	10/18/93 14:48	<	5.000 ug/l	5.00 ug/l	624
Cis-1,3-Dichloropropene - liquid	KG	10/18/93 14:48	<	5.000 ug/l	5.00 ug/l	624
Benzene - liquid	KG	10/18/93 14:48	<	5.000 ug/l	5.00 ug/l	624
Bromoform - liquid	KG	10/18/93 14:48	<	5.000 ug/l	5.00 ug/l	624
1,1,2,2-Tetrachloroethane - liquid	KG	10/18/93 14:48	<	5.000 ug/l	5.00 ug/l	624
Tetrachloroethene - liquid	KG	10/18/93 14:48	<	5.000 ug/l	5.00 ug/l	624
Toluene - liquid	KG	10/18/93 14:48	<	5.000 ug/l	5.00 ug/l	624
Chlorobenzene - liquid	KG	10/18/93 14:48	<	5.000 ug/l	5.00 ug/l	624
Ethylbenzene - liquid	KG	10/18/93 14:48	<	5.000 ug/l	5.00 ug/l	624
Chloroform - liquid	KG	10/18/93 14:48	<	5.000 ug/l	5.00 ug/l	624
Carbon Tetrachloride - liquid	KG	10/18/93 14:48	<	5.000 ug/l	5.00 ug/l	624
Xylene - liquid	KG	10/18/93 14:48	<	10.000 ug/l	10.00 ug/l	624
Acetone - liquid	KG	10/18/93 14:48	<	20.000 ug/l	20.00 ug/l	624
1,1-Dichloroethene - liquid	KG	10/18/93 14:48	<	5.000 ug/l	5.00 ug/l	624.
Acrylonitrile - liquid	KG	10/18/93 14:48	<	10.000 mg/l	10.00 mg/l	624.
Trichlorofluoromethane - liquid	KG	10/18/93 14:48	<	12.000 ug/l	12.00 ug/l	624.
2- Butanone - liquid	KG	10/18/93 14:48	<	10.000 ug/l	10.00 ug/l	624.
4-Methyl - 2 pentanone - liquid	KG	10/18/93 14:48	<	10.000 ug/l	10.00 ug/l	624.
Vinyl Acetate - liquid	KG	10/18/93 14:48	<	10.000 ug/l	10.00 ug/l	8240

Comments:

The volatile run was initiated at 14:56.

Laboratory ID # 40111

Very truly yours,

James H. Carr, Jr.
Chemist

FT. STEWART Number Key
FST-001

<u>Carr Lab No.</u>	<u>FT STEWART ID</u>
10-6909-93	SCM1-10-93
10-6910-93	SCM2-10-93
10-6911-93	SCM2-DUP-10-93
10-6912-93	SCM-BLK-10-93
10-6913-93	SCM3-10-93
10-6914-93	SCM4-10-93
10-6915-93	SCM5-10-93
10-6916-93	SCM6-10-93
10-6917-93	SW1-10-93
10-6918-93	SW1-DUP-10-93
10-6919-93	SW-BLK-10-93
10-6920-93	SW2-10-93
10-6921-93	TRIP BLANK SCM
10-6922-93	TRIP BLANK SW

LEGEND

QC Sample Number: The identifying number on a sample or known which makes unique identification of each sample possible.

Val. 1, Val. 2: Concentrations of duplicate samples, presented for precision information. * indicates a spiked duplicate sample if this information is not presented elsewhere.

RPD: Relative Percent Difference:

$$RPD = \frac{abs(D_1 - D_2)}{(D_1 + D_2)/2} * 100$$

Spike Conc.: The concentration of spike material added to the sample to produce the spiked sample.

True Value: The target concentration for the spiked sample:

$$TV = \text{Sample Conc.} - \text{Spike Conc.}$$

Observed Value: The concentration observed in the spiked sample upon analysis.

Percent Recovery: A measure of the concentration of the spiked sample relative to the spiked concentration:

$$\% \text{ Recovery} = \frac{\text{Conc. spiked sample} - \text{Conc. unspiked sample}}{\text{spike concentration}}$$

QUALITY CONTROL FOR VOLATILES

SAMPLES NUMBERED: 10-6909-93 through 09-6916-93 analyzed 10/15-16/93;
 SAMPLES NUMBERED: 10-6917-93 through 10-6922-93 analyzed 10/18/93;

SPIKE RECOVERY DATA FOR 10/15/93

SPIKE QC SAMPLE NUMBER: 10684193 spiked duplicate

Analyte	Val. 1 <u>(ug/l)</u>	Val. 2 <u>(ug/l)</u>	% RPD	Spike Conc.	True Value	Observed Value	Percent Recovery
1,1 Dichloroethene	40.2	43.3	7.4	50	50	43.3	87
Trichloroethene	38.0	42.0	10.0	50	50	42.0	84
Benzene	42.9	45.2	5.2	50	50	45.2	90
Toluene	38.0	42.0	10.0	50	50	42.0	84
Chlorobenzene	35.4	38.4	8.1	50	50	38.4	77

SPIKE RECOVERY DATA FOR 10/18/93

SPIKE QC SAMPLE NUMBER: 10685193 spiked duplicate

Analyte	Val. 1 <u>(ug/l)</u>	Val. 2 <u>(ug/l)</u>	% RPD	Spike Conc.	True Value	Observed Value	Percent Recovery
1,1 Dichloroethene	40.3	50.7	22.9	50	50	50.7	101
Trichloroethene	39.4	46.3	16.1	50	50	46.3	93
Benzene	45.6	51.4	12.0	50	50	51.4	103
Toluene	40.6	51.4	23.5	50	50	51.4	103
Chlorobenzene	37.0	47.9	25.7	50	50	47.9	96

BLANK DATA FOR VOLATILES

All analytes on all dates <5 ug/L.

SURROGATE RECOVERIES FOR VOLATILES, PERCENT RECOVERY

<u>Sample Date</u>	<u>Sample Number</u>	<u>1, 2 dichloro-ethane d-4</u>	<u>Toluene d-8</u>	<u>Bromofloro benzene</u>
10/15/93	BLANK	106	90	79
10/15/93	10-6909-93	110	97	81
10/15/93	10-6910-93	104	97	82
10/15/93	10-6911-93	97	86	74
10/15/93	10-6912-93	92	83	69
10/15/93	10-6913-93	101	78	67
10/15/93	10-6914-93	94	82	70
10/15/93	10-6915-93	92	77	71
10/15/93	10-6916-93	86	69	60
10/15/93	10-6841-93	101	87	71
10/15/93	10-6841SPK	102	79	65
10/15/93	10-6841SPKDUP	92	72	57
10/18/93	BLANK	136	106	105
10/18/93	10-6917-93	97	78	73
10/18/93	10-6918-93	109	90	81
10/18/93	10-6919-93	89	72	68
10/18/93	10-6920-93	107	93	83
10/18/93	10-6921-93	88	79	69
10/18/93	10-6922-93	104	92	82
10/18/93	10-6851-93	93	106	70
10/18/93	10-6851SPK	90	73	61
10/18/93	10-6851SPKDUP	113	94	84

CARR
LABORATORIES

CHAIN OF CUSTODY RECORD

Client	<u>CESAS</u>	Project No.	<u>FST-001</u>	MT	(Matrix Type)	<u>(Analytical Program)</u>
Contact	<u>Toni Nicholas</u>	Phone No.	<u>912-652-5312</u>	<u>L</u>	Liquid	W=Wastewater
Address	<u>Po Box 889, Sav. Ga. 31402</u>	Fax No.	<u>912-652-5311</u>	<u>S</u>	Soil	G=Groundwater
Collected By	<u>Dressed Sewer</u>	Client P.O.#		<u>O</u>	Oil	D=Drinking Water
				<u>X</u>	Other	S=Solid/Haz. Waste
				<u>X</u>		N=Nonregulated

Carr's Lab No.	Sample Source	Location	Date/Time	Site	Analyses Requested			
					Grp	M	A	P
FST-001-SW1-10-93	FT STEWART	FST-001	10/5/93 / 14:25	X	L	2	Y	VOC 8240
FST-001-SW2-10-93	FT STEWART	FST-001	10/5/93 / 13:20	X	L	2	Y	VOC 8240
FST-001-SW3-10-93	FT STEWART	FST-001	10/5/93 / 13:20	X	L	2	Y	VOC 8240
FST-001-SW4-10-93	FT STEWART	FST-001	10/5/93 / 13:20	X	L	2	Y	VOC 8240
FST-001-SW5-10-93	FT STEWART	FST-001	10/5/93 / 09:30	X	L	2	Y	VOC 8240
FST-001-SW6-10-93	FT STEWART	FST-001	10/5/93 / 10:00	X	L	2	Y	VOC 8240
FST-001-SW7-10-93	FT STEWART	FST-001	10/5/93 / 12:25	X	L	2	Y	VOC 8240
FST-001-SW8-10-93	FT STEWART	FST-001	10/5/93 / 13:40	X	L	2	Y	VOC 8240
FST-001-SW9-10-93	FT STEWART	FST-001	10/5/93 / 14:35	X	L	2	Y	VOC 8240
FST-001-SW10-10-93	FT STEWART	FST-001	10/5/93 / 14:35	X	L	2	Y	VOC 8240
FST-001-SW11-10-93	FT STEWART	FST-001	10/5/93 / 14:35	X	L	2	Y	VOC 8240
Received By	<u>Theresa Ballou</u>	Received By	<u>Theresa Ballou</u>	Date	<u>10/8/93</u>	Time	<u>08:05</u>	JAMES H. CARR & ASSOCIATES, INC.
1. <u>Theresa Ballou</u>	<u>Office Director</u>	2. <u>Office Director</u>	<u>Office Director</u>		<u>10/8/93</u>		<u>10:15</u>	Office and Laboratories
Received In Lab By	<u>OK</u>							P.O. Box 90209
								Columbia, South Carolina 29290
								(803) 776-7789 Fax: 783-2192

CARR
LABORATORIES

CHAIN OF CUSTODY RECORD

Client CESAS Project No. FST 001
Contact Tony N. Choles Phone No. 912-652-5312
Address P.O. Box 889, Sav. Ga. 31402 Fax No. 912-652-5311
Collected By Joseph Smith Client P.O. #

6.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the Phase I investigation (analytical results did not indicate a release had occurred, analytical results indicated concentrations were below the GAEPD guidelines and/or the site was never used), no further action is recommended at the following sites:

- SWMU4G(FST-004G) Burn Pit
- SWMU24A(FST-024A) New Radiator Shop
- SWMU27(FST-027) DOL Maintenance Motor Pool
- SWMU28(FST-028) 724th Battery Shop
- SWMU30(FST-030) Recirculating Wash Impoundment "Bird Bath"
- SWMU33(FST-033) DEH Pesticide Warehouse

Continued monitoring is recommended at SWMU20(FST-020) Wright Army Airfield Sewage Disposal Beds (Land Spray Application and Lagoon) in accordance with the NPDES permit.

Based on the Phase I results of the soil and ground-water analytical data and the exposure pathways analyses, a Phase II investigation is recommended at the following sites:

- SWMU1(FST-001) South Central Landfill
- SWMU2(FST-002) Camp Oliver Landfill
- SWMU3(FST-003) TAC-X Landfill
- SWMU4(FST-004) Burn Pits A through F
- SWMU9(FST-009) Inactive EOD Area
- SWMU10(FST-010) Inactive EOD Area
- SWMU11(FST-011) Inactive EOD Area
- SWMU12(FST-012) Active EOD Area
- SWMU14(FST-014) Old Fire Training Area
- SWMU17(FST-017) DRMO Hazardous Waste Storage Area
- SWMU18(FST-018) Industrial Wastewater Treatment Plant
- SWMU19(FST-019) Old Sludge Drying Beds

- SWMU24A(FST-024A) Old Radiator Shop
- SWMU24B(FST-024B) Paint Booth
- SWMU25(FST-025) Waste Oil Tanks (All 15 sampled tanks and the tanks that failed the tank tightness test)
- SWMU26(FST-026) 724th Tanker Purging Station
- SWMU27(FST-027) Motor Pools (All motor pools with oil/water separators)
- SWMU29(FST-029) Evans Army Heliport POL Storage Facility
- SWMU31(FST-031) DEH Asphalt Tanks
- SWMU32(FST-032) Supply Diesel Tank
- SWMU34(FST-034) DEH Equipment Wash Rack

RUST E&I recommends that a Phase II RFI Work Plan be prepared for the previously noted SWMUs at Fort Stewart. The Phase II RFI Work Plan will document procedures to be utilized for RCRA investigations at each of the SWMUs. Prior to initiation of Phase II field activities, the Phase II RFI Work Plan must meet GAEPD approval. The Phase II field investigations will include monitoring well installation, soil sampling and soil permeability testing, ground-water sampling, horizontal and vertical extent of contamination, ground-water flow rate calculations, map preparation, data quality objectives for risk assessment needs and any requirements that the GAEPD recommends.

Upon completion of Phase II field activities, a Phase II RFI Report will be submitted to the GAEPD that summarizes the results of all work completed. The results of the Phase II investigations will be evaluated along with the results of the Phase I investigations to confirm if Corrective Measure Studies (CMS) are warranted.