N60478.AR.000213
NWS EARLE
5090.3a

ENSR

ENSR Consulting
and Engineering
35 Nagog Park
Acton, Massachusetts 01720
(508) 635-9500
(508) 635-9180 (FAX)

ENSR Reference: 5060-016
ENSR Doc. No.: EPMC-6623

July 20, 1992

RECEIVED
JUL 21 1992

Mr. Brian Helland
Northern Division,
Naval Facilities Engineering Command
10 Industrial Highway
Mail Stop #82
Lester, PA 19113-2090
Attn: Code 1812

Reference: Navy CLEAN Contract No. N62472-90-D-1298
Subcontract No. GCPP-91-002-1298
Deliverable Under CTO 0037, Site Investigation
Report For Field Work for Environmental Evaluation of
"Wayside" Naval Weapons Station Earle,
Colts Neck, New Jersey

Dear Mr. Helland:

Enclosed please find six (6) copies of the subject document. Four (4) copies were sent to NWS Earle under separate cover. These are the final deliverables under CTO 0037.

Please do not hesitate to call me or Gail Scott with any questions you may have.

Sincerely,

Susan A. Taylor
Corporate Contract Administrator

SAT/smq

Enclosures

cc: J. Pawlus/NWS Earle
J. Trepanowski/HALLIBURTON NUS
P. Patton/HALLIBURTON NUS
G. Scott/ENSR
W. Tambo/ENSR

5060-016-510

WAYSIDE AREA
NAVAL WEAPONS STATION EARLE
COLTS NECK, NEW JERSEY

SITE INVESTIGATION REPORT

PREPARED BY:
ENSR CONSULTING & ENGINEERING

SUBMITTED BY:
HALLIBURTON NUS
ENVIRONMENTAL CORPORATION

COMPREHENSIVE LONG-TERM
ENVIRONMENTAL ACTION
NAVY (CLEAN) PROGRAM

CONTRACT NO. N62472-90-D-1298
CONTRACT TASK ORDER (CTO) NO. 37

JULY 1992

HALLIBURTON NUS
Environmental Corporation

Donohue ENGINEERS ARCHITECTS SCIENTISTS

ENSR™

5060-016-510

WAYSIDE AREA
NAVAL WEAPONS STATION EARLE
COLTS NECK, NEW JERSEY

SITE INVESTIGATION REPORT

COMPREHENSIVE LONG-TERM ENVIRONMENTAL ACTION NAVY (CLEAN) PROGRAM

Submitted to:
Northern Division
Environmental Branch, Code 18
Naval Facilities Engineering Command
10 Industrial Highway Mailstop No. 82
Lester, PA 19113-2090

Prepared by:
ENSR Consulting & Engineering
35 Nagog Park
Acton, MA 01720

Submitted by:
HALLIBURTON NUS Environmental Corporation
993 Old Eagle School Road
Wayne, PA 19087-1710

Contract No. N62472-90-D-1298
Contract Task Order Number 0037

JULY 1992

SUBMITTED BY:
Gail E. Scott
GAIL SCOTT, P.E.
PROJECT MANAGER
ENSR

APPROVED BY:
John Trepanowski
JOHN TREPANOWSKI, P.E.
PROGRAM MANAGER
HALLIBURTON NUS ENVIRONMENTAL CORP.

CONTENTS

1.0 INTRODUCTION 1-1
1.1 REPORT OVERVIEW 1-1
1.2 ENVIRONMENTAL SETTING 1-1
1.2.1 General Facility Description 1-1
1.2.2 Topography 1-1
1.2.3 Climate 1-4
1.2.4 Geology 1-4
1.2.5 Soils 1-4
1.3 STUDY BACKGROUND 1-4
1.3.1 Site History 1-4
1.3.2 Historical Site Uses 1-6
1.3.3 Environmental Evaluation, Fall 1991 1-7
1.3.3.1 Septic Tank at CECOM-EMI Building 1-7
1.3.3.2 Septic Tank at Building N 1-7
1.3.3.3 Pistol Range 1-10
1.3.3.4 Potential Waste Disposal Area Southwest of Pistol Range 1-10
1.3.3.5 Cleared Area in Southeastern Corner of Wayside Area 1-10
1.3.3.6 Buildings with Potential Asbestos Insulation 1-10
1.3.3.7 Buildings with Potential Lead Paint 1-10
1.3.3.8 Above Ground Fuel Tanks 1-10
1.3.3.9 Empty Transformer Pads 1-11
1.3.3.10 Observation Towers B2 and B7 1-11
1.3.3.11 Other Areas 1-11
1.4 PROJECT DESCRIPTION 1-11
1.5 REPORT ORGANIZATION 1-12

2.0 FIELD INVESTIGATION PROGRAM 2-1
2.1 SEPTIC TANK AT CECOM-EMI BUILDING 2-1
2.2 SEPTIC TANK AT BUILDING N 2-1
2.3 PISTOL RANGE 2-6
2.4 POTENTIAL DISPOSAL AREA SOUTHWEST OF PISTOL RANGE 2-6
2.5 POTENTIAL DISPOSAL AREA IN SOUTHEAST CORNER OF WAYSIDE AREA 2-8
2.6 BUILDINGS WITH POTENTIAL ASBESTOS INSULATION 2-8
2.7 BUILDINGS WITH POTENTIAL LEAD PAINT 2-8
2.8 ABOVE GROUND FUEL TANKS 2-8
2.9 EMPTY TRANSFORMER PADS 2-11
2.10 BACKGROUND SOIL SAMPLES 2-11

CONTENTS
(Cont'd)

3.0 RESULTS 3-1
- 3.1 SEPTIC TANK AT CECOM-EMI BUILDING 3-1
  - 3.1.1 VOC 3-1
  - 3.1.2 SVOC 3-3
  - 3.1.3 Pesticides/PCBs 3-3
  - 3.1.4 Metals 3-6
- 3.2 SEPTIC TANK AT BUILDING N 3-6
- 3.3 PISTOL RANGE 3-10
- 3.4 POTENTIAL WASTE DISPOSAL AREA SOUTHWEST OF PISTOL RANGE 3-10
- 3.5 CLEARED AREA IN SOUTHEAST CORNER OF WAYSIDE AREA 3-16
- 3.6 BUILDINGS WITH POTENTIAL ASBESTOS INSULATION 3-16
- 3.7 BUILDINGS WITH POTENTIAL LEAD PAINT 3-16
- 3.8 ABOVE GROUND TANK AT BUILDING M 3-16
- 3.9 ABOVE GROUND TANK IN ANTENNA FIELD 3-25
- 3.10 EMPTY TRANSFORMER PADS 3-25
- 3.11 BACKGROUND SOIL SAMPLES 3-25

4.0 CONCLUSIONS AND RECOMMENDATIONS 4-1

APPENDICES

A LIST OF ABBREVIATIONS/ACRONYMS
B DOCUMENTS REVIEWED
C TEST PIT LOGS
D LABORATORY DATA

LIST OF TABLES

1-1	Areas of Investigation	1-9
2-1	Sample Collection Summary	2-2
3-1	Volatile Organic Compound Analysis Results	3-2
3-2	Semivolatile Organic Compound Analysis Results	3-4
3-3	Pesticide/PCB Analysis Results	3-5
3-4	Background Concentrations and Proposed New Jersey Cleanup Standards for Organic Compounds	3-7
3-5	TAL Metals Analysis Results	3-8
3-6	Typical Background Concentrations and Proposed New Jersey Cleanup Standards for Inorganics	3-9
3-7	Select Metals Analysis Results	3-11
3-8	Geophysical Investigation Summary	3-17
3-9	Asbestos Analysis Results	3-22
3-10	Total Lead Analysis Results from Paint Samples	3-23
3-11	Total Petroleum Hydrocarbons and Total Lead Analysis Results	3-24
3-12	PCB Analysis Results	3-26

LIST OF FIGURES

1-1	Wayside Area, NWS Earle	1-2
1-2	General Site Map	1-3
1-3	Areas of Investigation	1-8
2-1	Sample Locations, Vicinity of CECOM Building and Pistol Range	2-4
2-2	Sample Locations, Vicinity of Building N	2-5
2-3	Geophysical Plan Map	2-7
2-4	Sample Locations, Southeastern Corner of Wayside Area	2-9
2-5	Sample Locations, Western Corner of Wayside Area	2-10
2-6	Sample Locations, Antenna Field and Laser Test Range	2-12
3-1	Magnetic Contour Map, Southwest of Pistol Range	3-12
3-2	Soil Conductivity Contour Map, Southwest of Pistol Range	3-13
3-3	Metal Amplitude Contour Map, Southwest of Pistol Range	3-14
3-4	Geophysical Anomaly Map, Southwest of Pistol Range	3-15
3-5	Magnetic Contour Map, Southeastern Corner of Wayside Area	3-18
3-6	Soil Conductivity Contour Map, Southeastern Corner of Wayside Area	3-19
3-7	Metal Amplitude Contour Map, Southeastern Corner of Wayside Area	3-20
3-8	Geophysical Anomaly Map, Southeastern Corner of Wayside Area	3-21

1.0 INTRODUCTION

1.1 REPORT OVERVIEW

The Wayside Area of Naval Weapons Station (NWS) Earle, located in the Town of Colts Neck, Monmouth County, New Jersey has been used by the Army for training exercises and equipment testing for approximately 45 years. The Navy is currently evaluating this area for siting 500 units of Navy family housing and two school buildings. As part of this evaluation the Navy engaged the HALLIBURTON NUS Team under the CLEAN Program to locate areas of known or potential contamination that might render portions of the site unsuitable for housing or schools.

In the fall of 1991 an environmental evaluation was carried out as a first step in this investigation. The environmental evaluation did not find any areas which would be unsuitable for housing or schools based on the study criteria; however field investigations were recommended at selected locations which may warrant remediation prior to development.

In February, 1992, the Navy authorized the HALLIBURTON NUS Team to prepare a detailed work plan and to carry out the field investigations (Contract No. N62472-90-D-1298, CTO 037) recommended in the initial evaluation. The results of those investigations are presented in this document.

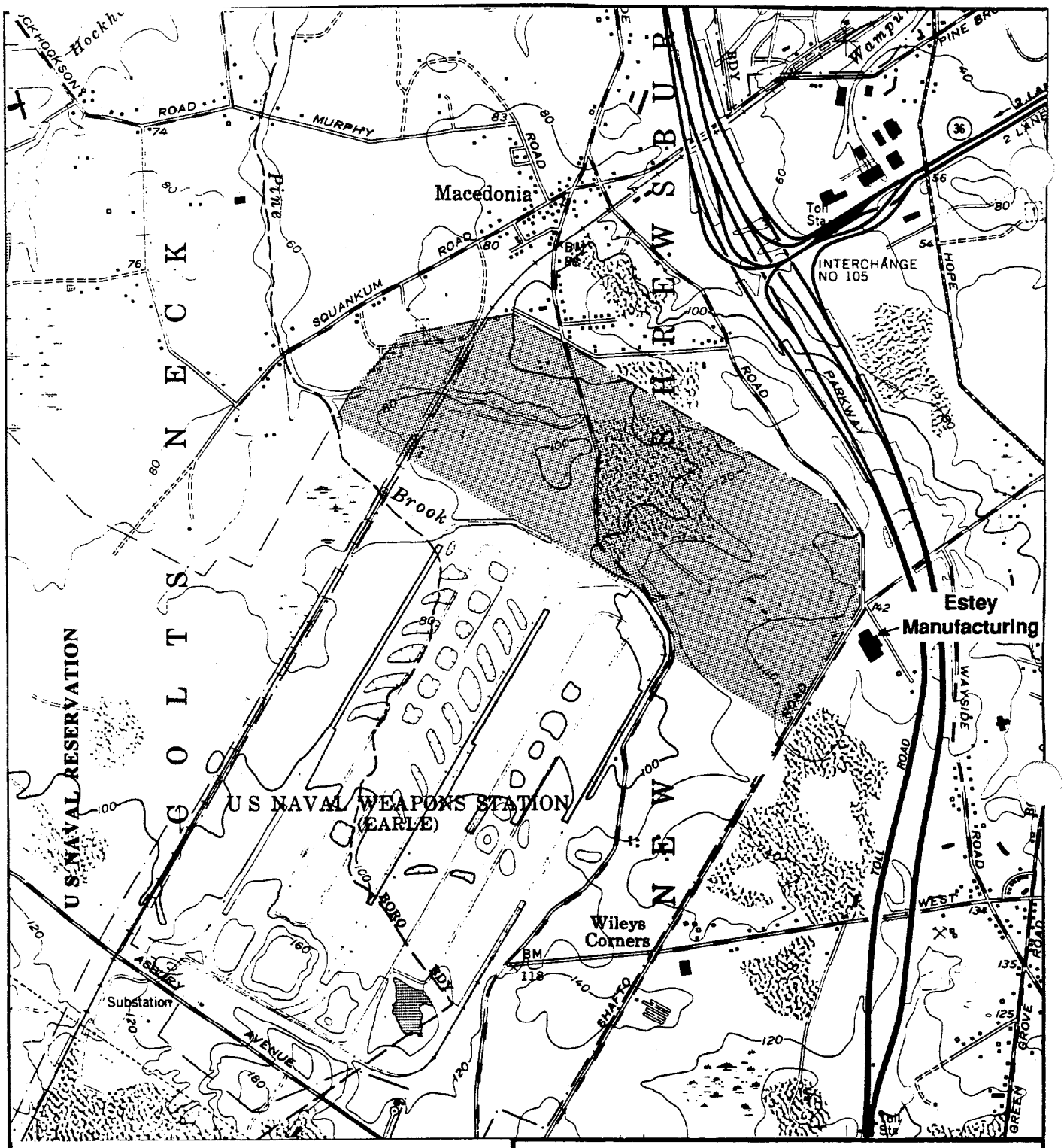
1.2 ENVIRONMENTAL SETTING

1.2.1 General Facility Description

The Wayside Area of Naval Weapons Station (NWS) Earle is located in the east central portion of Monmouth County, New Jersey, in the Town of Colts Neck. The area consists of approximately 440 acres of partially developed land located in the northeast corner of the main part of the Naval Weapons Station. The tract is bounded on the southeast by Shafto Road, on the east by Wayside Road, to the northeast, north and northwest by Stavola Construction Company and residential areas, and to the southwest by ordinance railroad barricades on NWS Earle. The Central New Jersey Railroad runs through the western section of the Wayside Area, and represents the northwestern boundary of the area that has been used by the Army. The area to the northwest of the railroad tracks is not easily accessible at the present time. Figure 1-1 shows the location of the Wayside Area, and Figure 1-2 shows the general site map.

1.2.2 Topography

NWS Earle is located in the east-central portion of Monmouth County, New Jersey, approximately 5 miles west of the Atlantic Ocean. The site generally slopes toward the northwest. The elevation ranges from approximately 60 feet above mean sea level (MSL) at the northwest boundary, to greater than 140 feet MSL in the southeast portion of the site. In general, surface water drainage is to the west, toward a small unnamed tributary that eventually discharges to the Navesink River.



SCALE 1:24000

1 MILE ½ 0

1000 0 1000 2000 3000 4000 FEET

CONTOUR INTERVAL 20 FEET

Area of Investigation

ENSR

ENSR Consulting and Engineering

FIGURE 1-1
WAYSIDE AREA, NWS EARLE
MONMOUTH, NJ

DRAWN: SOR	DATE: August 22, 1991	PROJECT NO.:	REV:
FILE NO.:	CHECKED:		

506002B

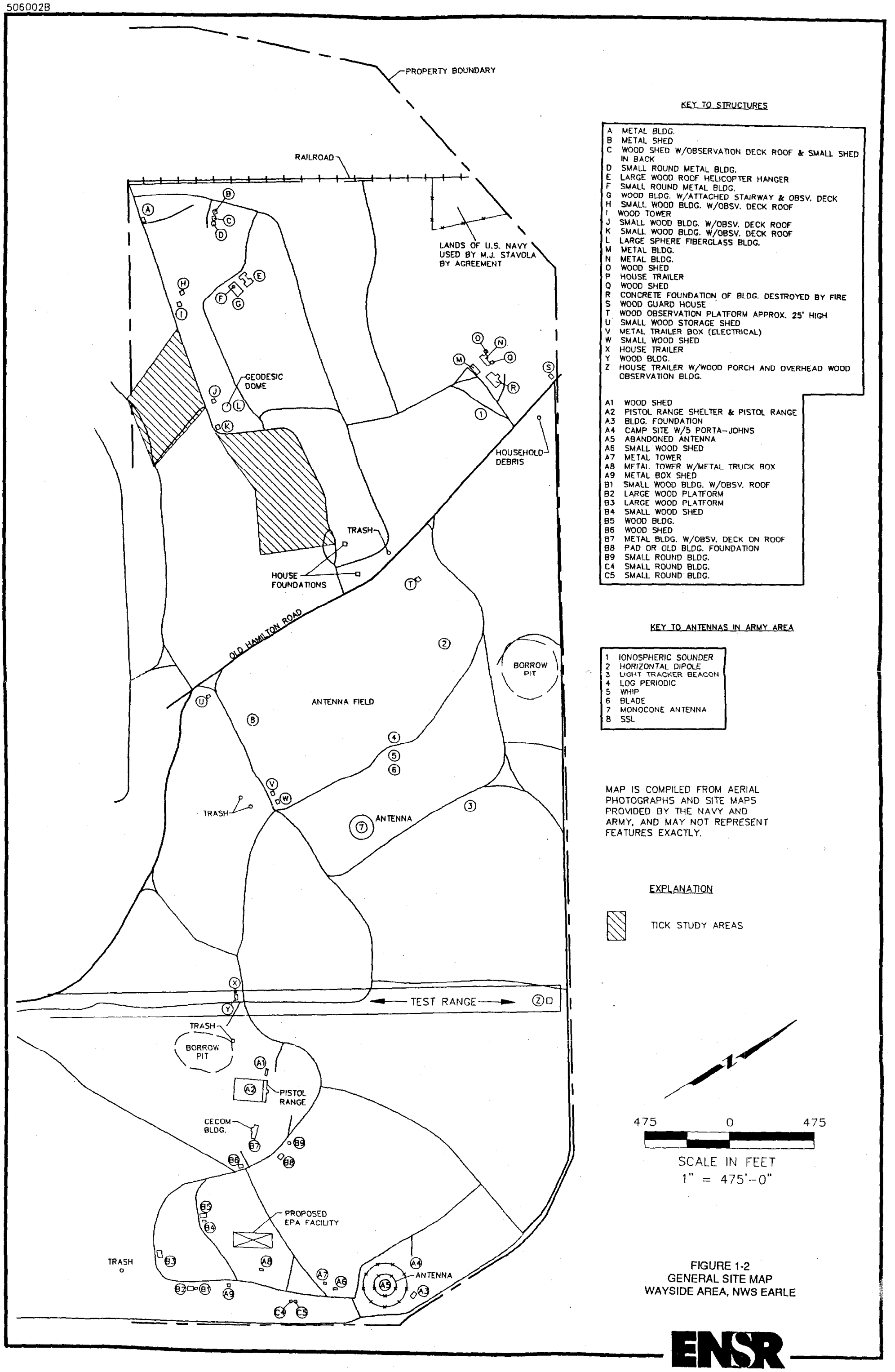


FIGURE 1-2
GENERAL SITE MAP
WAYSIDE AREA, NWS EARLE

ENSR

00238A01Z

The following discussion of the general physical setting has been excerpted from the "Natural Features Study for Monmouth County" (Monmouth County Environmental Council, 1988).

1.2.3 Climate

The temperate humid climate of Monmouth County is characterized by warm summers and moderate winters (Monmouth County Environmental Council, 1988). The mean annual temperature for Monmouth County is 53°F. Precipitation generally ranges from 45 to 47 inches per year, with the heaviest rainfall generally occurring during the summer months.

1.2.4 Geology

The site falls within the Atlantic Coastal Plain Physiographic Province (Monmouth County Environmental Council, 1988), which is characterized by thick deposits of unconsolidated sediments of Mesozoic and Cenozoic age. These coastal plain sediments are composed of sands, silts and clays with interspaced gravel beds that were eroded from the Appalachian Mountains and were subsequently deposited onto a shallow marine shelf. These older coastal plain sediments are overlain by a thin layer of glacial outwash deposits consisting of sand, clay and silt of Quaternary age (less than one million years old).

The southeast portion of the site is underlain by the Kirkwood Formation, which is characterized by a 60-100 foot thick, fine-grained micaceous sand with occasional layers of clay. This formation is composed of two distinct lithological units, or members. The lower member consists of a brown sand with pebbles and some fine-grained glauconite. The upper member is characterized as a yellow sand with some lignite. Groundwater yields range from 15 to 1200 gallons per minute (gpm); however, the water usually contains iron and sulfide and is acidic.

The northwest half of the site is underlain by the Vincentown Formation. This formation ranges in thickness from about 20 to 100 feet and is composed of a fossiliferous calcareous sand and a less fossiliferous quartz sand. It is older in age than the Kirkwood Formation, and is believed to have been deposited during the Paleocene Epoch, approximately 50 to 60 million years ago. Groundwater yields range from 10 to 50 gpm.

1.2.5 Soils

Acidic soil is prevalent in many areas of Monmouth County, and has been found at depths of 50 ft at NWS Earle (Monmouth County Environmental Council, 1988). The acidity is created when the pyrite in the soils is exposed to air and sulfuric acid is formed. Acid formation in the near surface can prevent grass or ornamental plantings from becoming established and can result in serious erosion.

1.3 STUDY BACKGROUND

1.3.1 Site History

The site area has been used by the Army for approximately 45 years for training exercises and testing of communications and electronics equipment. The following site history has been compiled from historical maps and aerial photographs. Photocopies of some of these maps and aerial photographs were provided

in the Environmental Evaluation Report. The site was considered in three sections: northwest, central (antenna field), and southeast.

The area encompassing the subject site was wooded and undeveloped in 1851. The Naval Ammunition Depot (now known as the Naval Weapons Station) was constructed in 1942. In 1943, the subject site was known as the "Intransit Area". Tinton Falls Road bisected the site from north to south, and 10 houses were located along this road. A sand and gravel pit was located in the central section of the site.

By 1947, two large rectangular tracts had been cleared in the northwest section of the site, and the barricade area had been constructed to the southwest of the site. The central section was vegetated, and numerous buildings and a network of dirt roads existed in the southeast section. An agreement between the Navy and the Army was signed in 1947 which permitted the Army use of 91 acres known as the "Wayside Area." The "Wayside Area" was depicted on a 1951 map as an approximately square, 90 acre, fenced parcel located at the east corner of the site.

In 1956, plans were made for construction of an airstrip in the Wayside Area, however, it was never built. The airstrip (2300' x 250') would have been oriented NW-SE, crossing the central and southeast sections of the site. Four test holes were bored in planning for the airstrip; two holes in the central section and two in the southeast section. The test holes showed the subsurface to be composed generally of sand and gravel. Two gravel pits, both located in the central section of the site, were noted on the airstrip plans: one at the southwest border, and one at the northeast fenceline.

1962 aerial photographs of the southeast section of the site show that by this time, the Pistol Range had been constructed, the Communications Electronics Command-Electromagnetic Interference (CECOM-EMI) building, asphalt pad, round metal shed, and miscellaneous adjacent buildings had been installed, and the southeast edge of the site was cleared of trees. The cover for the septic tank located about 200 feet southeast of the CECOM-EMI building was visible. A small pile of what appears to be debris was noted about 200 feet south of the pistol range.

In 1969, the north corner and southeast sections of the site were still cleared and had several buildings. The central section of the site was still vegetated.

Maps and aerial photographs from the period 1976-1978 show the buildings, structures and features of the site to be essentially as they exist today (with the exception of overgrown vegetation). By 1976, the central section of the Wayside area, the antenna field on Figure 1-2, was cleared of vegetation. Also by this time properties adjacent to the Wayside area, north and east of the NWS, had been developed. The Estey building had been constructed and the area northeast of the central section of the site had been cleared for the asphalt batch plant (Figure 1-1). By 1978, the laser test range had been cleared in the southeast section, and all other site features (buildings, observation towers, geodesic dome, antennas, etc.) were present as they exist today.

Aerial photographs from 1969 to 1990 show a circular cleared area in the southern corner of the site, southwest of the dirt road, and just to the northwest of observation tower B3. On a 1978 photograph, something resembling a rectangular structure was located at the edge of this clearing next to the woods. This area was labelled as a helicopter pad on a 1978 Army map. A minor trash disposal area was found

in the woods at the edge of this clearing. Although no other visual evidence of a disposal area was found during the site reconnaissance, the morphology of this area and the fact that it appears that it has been bulldozed suggest that this area could have been used for waste disposal.

1.3.2 Historical Site Uses

The subject site is owned by the U.S. Navy, but was used by the U.S. Army from the 1940's until June, 1991. The site is currently not actively used. Past uses of various areas of the subject site have included military training; testing of communications, use of electronic and electromagnetic equipment; testing of lasers; firearms target practice; a soil washing experiment conducted by EPA; a tick/pesticide study; and hunting and recreation.

The Army used the subject site to conduct field training exercises for soldiers, army reserves, chaplains and chaplain assistants. Numerous camping sites and "fox holes" were noted throughout the site area. The Plans, Training and Mobilization Officer for Fort Monmouth indicated that the army used blank ammunition which left a brass casing, smoke grenades, and noise simulators (similar to firecrackers) on the site.

The CECOM branch of the Army apparently tested various types of equipment on the site. The CECOM-EMI building (B7/T-8006) was relocated to the Wayside Area from the Coles Signal Laboratory in 1955. A sign on the building noted that it was used for "electromagnetic interference testing". Numerous antennae are located throughout the subject site, particularly in the cleared "antenna field" in the central section of the site. A geodesic dome is located in the northwest section of the site. The dome contains a turntable at the center of the dome that was used to orient a vehicle holding radar equipment. There were also several transformers on the site associated with the electrical equipment used with the antennas, radar and other electrical equipment.

The Laser Test Range is a narrow strip (approximately 50 yards wide) cleared of vegetation, which runs from northeast to southwest through the southeast section of the site. At the northeast end of the cleared strip a tall building identified as the laser tower (Building Z) existed until 1991. The building had been dismantled by April, 1992.

The Pistol Range was used by the Army (and later by the Navy) for target practice. Many spent bullets and shells were found on the embankment furthest from the pistol range shelter. Shells were also found throughout the rest of the site area, indicating that firearms were also discharged elsewhere on the site.

In approximately 1982-1983, the U.S. Environmental Protection Agency and its contractor, Mason and Hanger, Inc., planned and initiated a soil washing test program next to building B5 on the southeast section of the subject site (see Figure 1-2). The plans called for the construction of a large concrete tank (the Chemical Additive Treatment, or CAT, tank) in which the soil washing tests would be conducted. A large quantity of clean sand was purchased and stockpiled on the site to be used for the testing program. Two pairs of PVC monitoring wells were installed to the north of building B5, in order to determine depth to groundwater. The project was apparently cancelled due to lack of funding, and the tank was never constructed. The pile of clean sand remains behind building B5 today.

In 1985, EPA conducted an in-situ soil washing test using its mobile In-Situ Containment and Treatment Unit (ISCTU), on a section of the site located just east of observation tower B3. Five monitoring wells and five pumping wells were installed on the 2-acre rectangular section of cleared land. While the wells were pumped and the aquifer was recharged from the surface, a low concentration of a biodegradable fluorescent dye tracer was added to the recharge water. The test was conducted for eight weeks, after which the wells and recharge system were removed, and the site reseeded.

In 1986, the NJ State Department of Health conducted a study of the tick population and effectiveness of two insecticides at the subject site, in response to an outbreak of Lyme disease in an army reserve unit using the area. Insecticides (carbaryl and diazinon) were applied on two 1-hectare treatment blocks in the northwest section of the site. The approximate locations of the study areas are shown on Figure 1-2.

According to a Fort Monmouth newsletter, deer hunting was to be allowed by permit for an unspecified period in the Wayside Area beginning August 21, 1991. In addition, two riders on three-wheelers were seen entering the Wayside Area during HALLIBURTON NUS Team's site visit.

1.3.3 Environmental Evaluation, Fall 1991

An Environmental Evaluation of the Wayside Area (Contract No. N62472-90-D-1298 CTO No. 010) was completed for the Navy in November, 1991 by ENSR Consulting and Engineering under subcontract to HALLIBURTON NUS Environmental Corporation. The objective of the environmental evaluation was to locate areas of known or potential contamination that might render portions of the site unsuitable for housing or schools. The evaluation included a site reconnaissance and review of available historical information. The Environmental Evaluation did not find any areas which would be unsuitable for housing or a school based on the study criteria. However, field testing was recommended at selected locations which may warrant remediation prior to development (Figure 1-3). These areas are summarized in Table 1-1 and are discussed below.

1.3.3.1 Septic Tank at CECOM-EMI Building

A septic tank is located southwest of the CECOM-EMI building. The septic system appeared to have been used for sanitary wastewater, however, since the past uses of the building were not fully determined, it was noted the potential exists that unknown chemicals may have been disposed of through the septic system. Therefore testing for VOCs, SVOCs, Pesticides/PCBs and metals was recommended.

1.3.3.2 Septic Tank at Building N

A septic system is located northwest of and behind building N near the main gate. The septic system appeared to have been used for sanitary wastewater, however, since the past uses of the building were not determined, it was noted the potential exists that unknown chemicals may have been disposed of through the septic system. Therefore testing for VOCs, SVOCs, Pesticides/PCBs and metals was recommended.

506002B

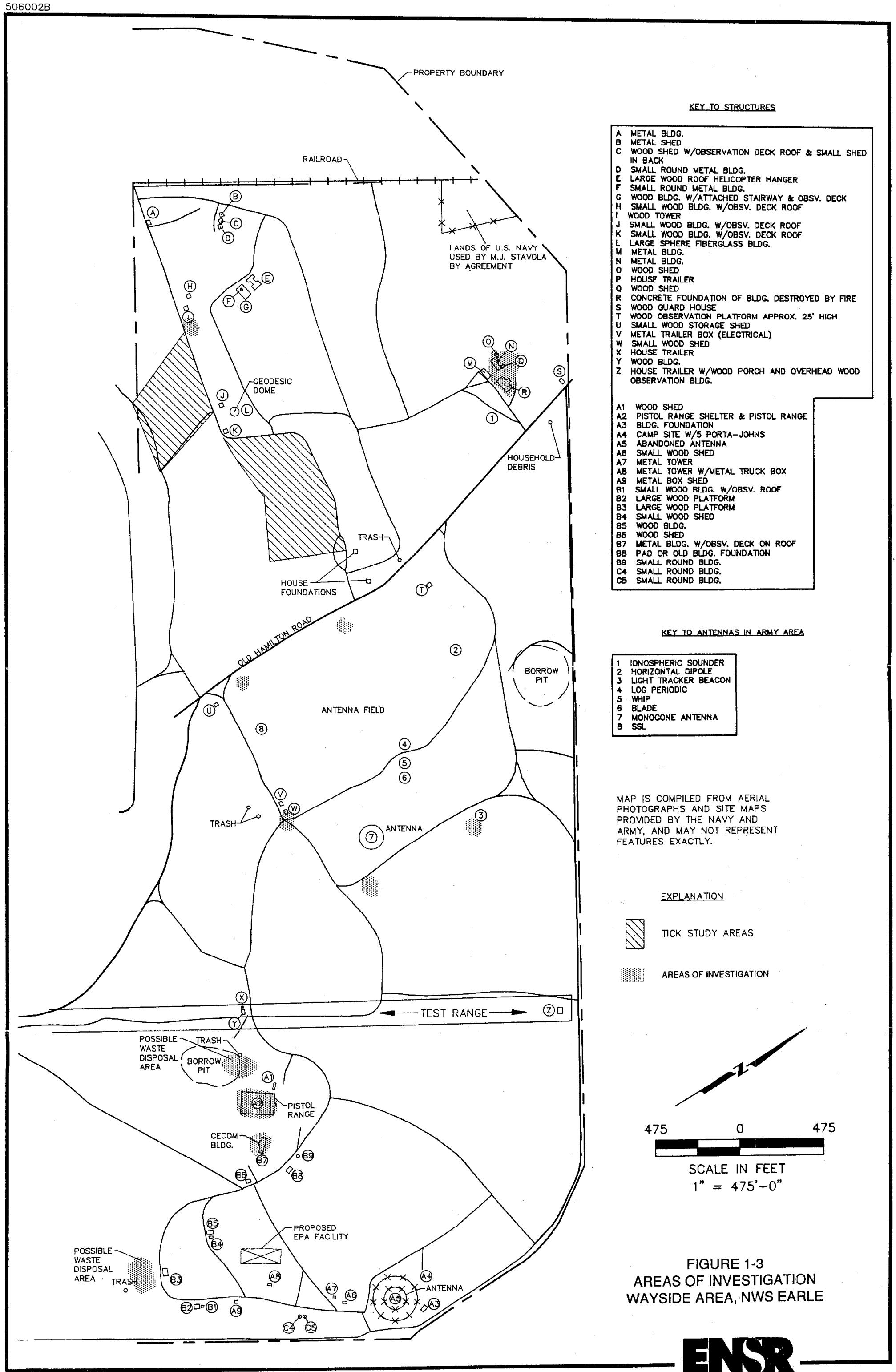


FIGURE 1-3
AREAS OF INVESTIGATION
WAYSIDE AREA, NWS EARLE

ENSR

00238A02Z

TABLE 1-1

AREAS OF INVESTIGATION
WAYSIDE AREA, NWS EARLE

Structure/Area	Recommendations for Sampling/Remediation
CECOM-EMI Building	Sample septic system for VOCs, SVOCs, Pesticides/PCBs, Metals. Army to remove underground storage tank and sample soil beneath tank for petroleum hydrocarbons.
Group of Buildings near former building R (M, N, O, Q, R)	Sample septic system for VOCs, SVOCs, Pesticides/PCBs, Metals. Army to remove underground storage tank and sample soil beneath tank for petroleum hydrocarbons at building N. Install monitoring wells and sample groundwater for petroleum hydrocarbons in vicinity of former underground tank at building R.
Pistol Range	Sample soil for lead.
Potential waste disposal area southwest of Pistol Range	Conduct geophysical investigations and trenching to evaluate the presence or absence of buried materials.
Cleared area in southeastern corner of Wayside Area	Conduct geophysical investigations and trenching to evaluate the presence or absence of buried materials.
Buildings G, D, Z, B5, C4, and C5	Sample insulation materials for asbestos.
Buildings A through D, A1, A2, F, G, M, O, S, Y, and Z	Collect paint chip samples for lead analysis.
Two above ground tanks	Sample soil beneath tanks for petroleum hydrocarbons and lead.
Empty transformer pads WA-007, WA-008, WA-015, WA-016 and WA-045	Sample soil for PCBs.

VOCs - Volatile Organic Compounds

1.3.3.3 Pistol Range

The Pistol Range was used by the Army (and later by the Navy) for target practice. Many spent bullets and shells were found on the embankment furthest from the pistol range shelter. Shells were also found throughout the rest of the site area, indicating that firearms were also discharged elsewhere on the site. Since the bullets and shells would contain lead and other heavy metals, and may transmit these metals to surrounding soils, testing for select metals was recommended.

1.3.3.4 Potential Waste Disposal Area Southwest of Pistol Range

A 1962 aerial photo showed an area southwest of the pistol range which may have been a possible disposal area. Ground reconnaissance did not identify any remains of a disposal area. However, a more positive determination of the presence or absence of any buried material in this area appeared to be warranted, and further investigation was recommended.

1.3.3.5 Cleared Area in Southeastern Corner of Wayside Area

Historical aerial photos and site maps indicate an area in the southeastern corner of the site that was used as a helicopter pad and may have been used as a disposal area. HALLIBURTON NUS Team's field survey located a small amount of trash and debris in this area. A more positive determination of the presence or absence of any buried material in this area appeared to be warranted, and further investigation was recommended.

1.3.3.6 Buildings with Potential Asbestos Insulation

The building insulation in buildings G, D, Z, B5, C4, and C5 may contain asbestos, given the age of the buildings, and the fact that the insulation was marked "Johns-Manville", a known manufacturer of asbestos insulation. Testing for asbestos was therefore recommended at these locations.

1.3.3.7 Buildings with Potential Lead Paint

Peeling paint was observed on the interior and exterior of buildings numbered A, B, C, D, A1, A2, F, G, M, O, S, Y, and Z. Given the age of these buildings, it is possible that this paint contains lead and testing for lead was recommended.

1.3.3.8 Above Ground Fuel Tanks

Two above ground fuel storage tanks were noted on the subject site. No oil stains were observed around either tank. One tank, approximately 275 gallons in size, was located in front of building M (T-8004) in the northwest section of the site. The outside of the tank was rusty and was marked: "haz met oil #2". The tank was empty but it is assumed that it had contained No. 2 fuel oil. The second above ground tank, approximately 550 gallons, was located at the southeastern corner of the antenna field in the central section of the site, next to former building W. The tank appeared to be empty. The outside was rusty, and was marked with a "D", presumably denoting diesel fuel storage. Soil sampling under these tanks was recommended to confirm that there have been no releases from these tanks.

1.3.3.9 Empty Transformer Pads

Five of the empty transformer pads (WA-007, WA-008, WA-015, WA-016, and WA-045) once held PCB-contaminated transformers (50-500 ppm PCBs). No stained soil was observed around these pads; however, since there is a potential for PCB contamination to be present in the soil around these pads, PCB testing was recommended.

1.3.3.10 Observation Towers B2 and B7

The poles used to support these large wooden observation decks were covered with creosote tar and soil staining extended outward to a one foot diameter around the bases. Since children could be potentially exposed to the hardened material at the base of the posts, testing for SVOCs and TPH was proposed.

1.3.3.11 Other Areas

In addition to the areas identified above, three existing or former underground storage tanks remain on the site. One of the tanks is located adjacent to the CECOM-EMI Building at the southeastern corner of the site. This 550-gallon tank stored No. 2 fuel oil and is known to be at least 36 years old. The second tank is located adjacent to Building N (T-8003) in the northwest section of the site. This 1000-gallon tank stored No. 2 fuel oil, and may be at least 40 years old. In the third location, west of former Building R (T-8005), a 1000-gallon tank for No. 2 fuel oil was reportedly removed after building T-8005 burned down around 1984. Personnel from Fort Monmouth indicated that in July, 1991, they dug in this area to try to locate the tank, and discovered free product in the ground. They stopped digging and did not look further for the tank. The Environmental Evaluation concluded that: soil around these tanks should be sampled at the time the tanks are removed; soil and/or ground water samples should be collected in the vicinity of the tank which was removed; and if contamination is identified in any of these areas, they should be remediated. During review of the Environmental Evaluation, the Navy decided that these three existing or former UST areas would be investigated, and remediated if necessary, by the Army. Therefore, these areas were not to be investigated as part of the subsequent field program conducted under contract to the Navy.

1.4 PROJECT DESCRIPTION

In February, 1992, the Navy authorized the HALLIBURTON NUS Team to prepare a Work Plan and to subsequently carry out the field investigations recommended in the Environmental Evaluation (Contract No. N62472-90-D-1298 CTO No. 037)

The objective of this field program is to investigate the potential presence of contamination at the suspect locations identified during the Environmental Evaluation, and to make a preliminary determination of the potential extent of such contamination, based on visual observation and analytical data. The work plan for this investigation was completed on March 31, 1992 and was developed in accordance with the Site Inspection (SI) section of Standard Installation Restoration (IR) Scope of Work, and was based on the detailed recommendations made in the Environmental Evaluation. At the Navy's request, the creosote sampling recommended in the "Environmental Evaluation of Wayside" was not included in the work plan.

The Field Investigation Report discusses the results of the field investigations.

1.5 REPORT ORGANIZATION

Section 2.0 describes the specific field work that was undertaken for this project. The section is organized by the areas that were investigated and by the types of sampling activities that were conducted. Section 3.0 provides a discussion of the results of the geophysical and test pit investigations, and provides summary tables and discussions of the laboratory analytical data. Section 4.0 includes a summary of the field program and conclusions and recommendations. Appendix A contains a list of acronyms used in this report. Appendix B lists references reviewed for preparation of this report. Test pit logs are included in Appendix C and laboratory data are provided in Appendix D.

2.0 FIELD INVESTIGATION PROGRAM

The field investigation was conducted according to the HALLIBURTON NUS Site Investigation Work Plan dated March 31, 1992. The following sections describe the field activities conducted and the samples collected in each area of the site. Any deviations from the sampling program described in the Work Plan are also noted below. Table 2-1 provides a summary of field activities and description of the samples collected during this sampling program. All samples were analyzed by NET Atlantic, Cambridge Division in Bedford, Massachusetts.

2.1 SEPTIC TANK AT CECOM-EMI BUILDING

The septic tank is located approximately 80 feet southwest of the CECOM building (Figure 2-1). The top of the tank was exposed by scraping away the topsoil with a backhoe. The concrete septic tank measured 24 feet long by 7 feet wide by 6 feet deep. The tank was partitioned crosswise into two sections (7' x 12'), each with its own 1½ foot square manway. Tank section no. 1 was furthest from the CECOM building and was dry. Tank section no. 2 contained 1 foot of water underlain by 2 feet of sludge material.

Four samples were collected from the septic tank: one sample and one field duplicate of the water inside the tank (B7STAQ and B7STAQ-D); and one sample and one field duplicate of the sludge from the bottom of the tank (B7STSL and B7STSL-D). A field blank sample from the contractor's water supply used for steam cleaning was also collected (FB-BH-1). All samples were analyzed for VOC, SVOC, Pesticides/PCBs, and TAL Metals. After sample collection, the top of the tank was backfilled to the original grade.

Three test pits were excavated, on the north, west, and east sides of the septic tank (Figure 2-1). Each test pit was 4 feet wide and 10 feet deep, and 10-15 feet long. All three test pits contained 0.5 feet of brown loam underlain by 9.5 feet of tan medium sand. No test pits showed any evidence of stained soil. Headspace readings were zero units on soil collected from each of the three test pits. Three soil samples were collected from test pit TP-1: B7TP1-1 (6-8 feet); B7TP1-2 (10 feet), and field duplicate B7TP1-2-D (10 feet). Blanks collected included an equipment rinsate blank (EBTP-1) collected over the test pit sampler, a field blank (FB-2), and a trip blank (TB-1). All samples were analyzed for VOC, SVOC, Pesticides/PCBs, and TAL Metals. The trip blank was analyzed for VOC only.

2.2 SEPTIC TANK AT BUILDING N

In the northwest section of the site, behind (northwest) of Building N, a backhoe was used to determine the location of the septic tank (Figure 2-2). The septic pipe was traced 66 feet west of the building, by scraping off the top two feet of soil with the backhoe. No septic tank was encountered at the end of the pipe. The pipe ended within a bed of coarse black fill composed of brick, concrete, ash-like material, and clinker-like material. The extent of the fill material was delineated by excavating a test pit (TP-1) with the backhoe. The fill extended over an area of 7 feet by 9 feet at the end of the pipe, to a depth of 6 feet. Natural sand and gravel was present below the fill material. Two samples were collected from TP-1: one

TABLE 2-1

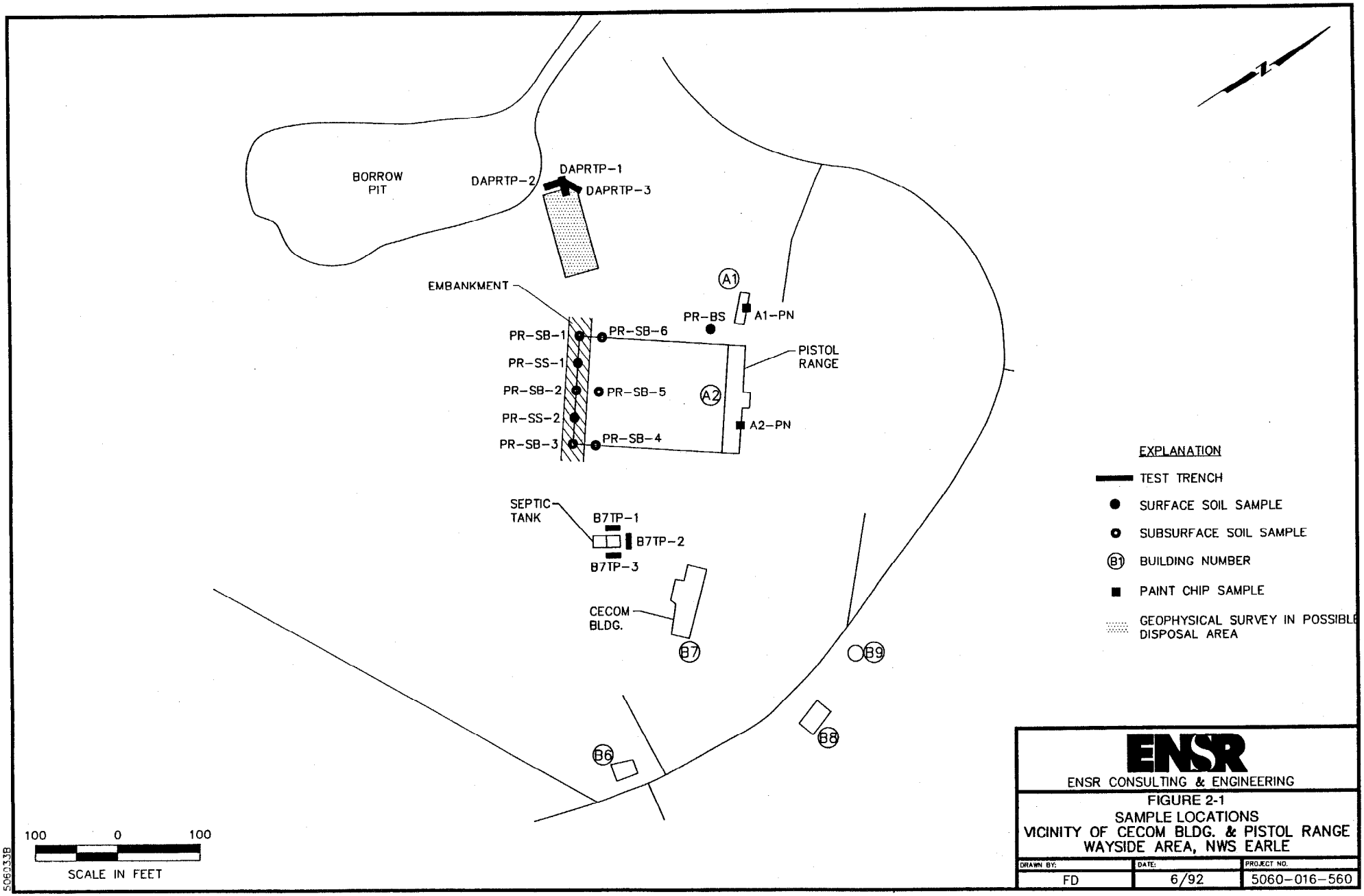
SAMPLE COLLECTION SUMMARY
WAYSIDE AREA, NWS EARLE

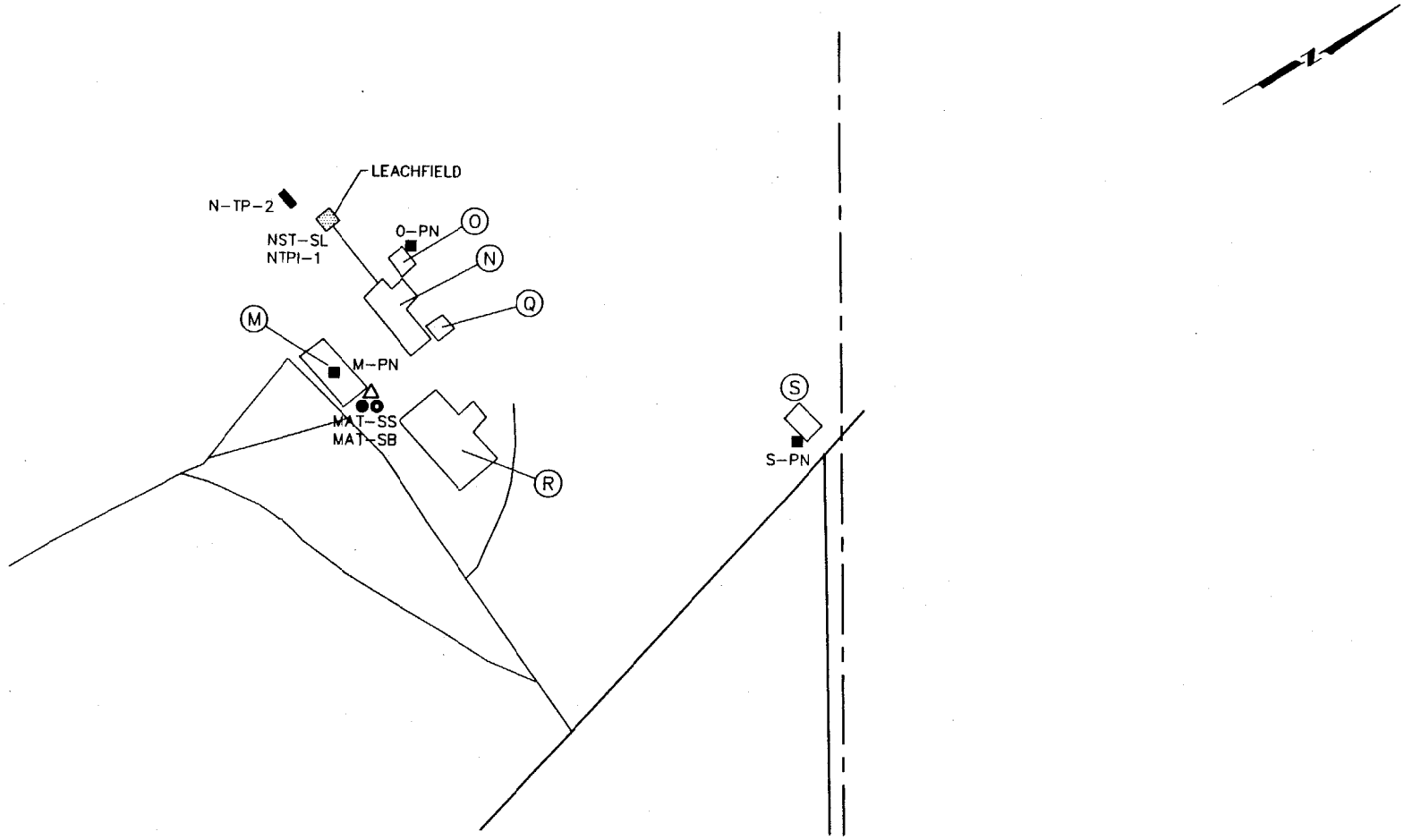
Location	Samples Collected	Sample Number	Analyses[1]
Septic tank near CECOM-EMI Building	1 water from septic tank 1 duplicate water 1 sludge from septic tank 1 duplicate sludge 2 test pit soil samples from TP-1: (6-8', 10') 1 duplicate soil sample 1 equipment rinsate blank over test pit sampler	B7ST-AQ B7ST-AQ-D B7ST-SL B7ST-SL-D B7TP1-1 B7TP1-2 B7TP1-2-D EB-TP-1	TCL/TAL
Septic tank near Building N, NW corner of site (No tank present; found leachfield)	1 sample of fill material from leachfield 1 sample of clean sand from bottom of leachfield	NST-SL NTP1-1	TCL/TAL
Pistol Range	2 surface soil 1 surface soil duplicate 6 subsurface soil 1 equipment rinsate blank over trowel	PRSS-1 PRSS-2 PRSB-1,2,3,4,5,6 EB-TR-1	Select metals (Zn, Pb, Cu, Cd, Cr)
Potential waste disposal area southwest of pistol range	No samples collected (No waste material found)		TCL/TAL
Potential waste disposal area in cleared area in southwestern corner of Wayside area	No samples collected (No waste material found)		TCL/TAL
Buildings B5, C4, C5, D, G and Z Insulation material	4 samples and 2 duplicates collected: Bldgs B5, C5, D and G No samples collected from Bldgs C4 (locked) and Z (torn down)	B5-BI, B5-BI-D C5-BI, C5-BI-D D-BI G-BI	Asbestos
Buildings A, A1, A2, B, C, D, F, G, M, O, S, Y, and Z	13 paint chips 2 duplicates	[Bldg.No.]-PN B-PN-D, C-PN-D	Lead

TABLE 2-1
SAMPLE COLLECTION SUMMARY
WAYSIDE AREA, NWS EARLE
PAGE 2

Location	Samples Collected	Sample Number	Analyses[1]
Empty transformer pads WA-007, WA-008, WA-015, WA-016 and WA-045	5 composite surface soils 1 duplicate 1 equip. rinsate blank over hand auger, trowel and bowl	TF-7,TF-8,TF-15, TF-16, TF-45, TF-45-D EB-HA-3	PCBs
Former above ground storage tank at Building M	1 composite surface soil 1 surface soil duplicate 1 subsurface soil	MAT-SS MAT-SS-D MAT-SB	TPH, Lead TPH, Lead
Former above ground storage tank in antenna field	1 composite surface soil 1 subsurface soil 1 equip. rinsate blank over hand auger, trowel and bowl	AFAT-SS AFAT-SB EB-HA-2	TPH, Lead TPH, Lead TPH, Lead
Background soil samples - Antenna field - near Pistol Range	2 surface soil grab samples	 AF-BS PR-BS	 TCL/TAL TCL/TAL
QA/QC Samples	2 Field blanks (1 DI water, 1 tap water for backhoe) 2 Trip blanks for VOC (1/cooler with VOC samples) Total of 4 equipment rinsate blanks (listed individually above)	FB-BH-1 FB-2 TB-1, TB-2	TCL/TAL VOC

[1]TCL/TAL includes TCL organics (VOCs, SVOCs, Pesticides/PCBs) and TAL inorganics and cyanide (March 1990).


BORROW PIT
DAPRTP-2
DAPRTP-1
DAPRTP-3
EMBANKMENT
A1
PR-BS
A1-PN
PR-SB-1
PR-SB-6
PR-SS-1
PR-SB-2
PR-SB-5
PR-SS-2
PR-SB-3
PR-SB-4
A2
A2-PN
PISTOL RANGE
SEPTIC TANK
B7TP-1
B7TP-2
B7TP-3
CECOM BLDG.
B7
B9
B8
B6
EXPLANATION
TEST TRENCH
SURFACE SOIL SAMPLE
SUBSURFACE SOIL SAMPLE
BUILDING NUMBER
PAINT CHIP SAMPLE
GEOPHYSICAL SURVEY IN POSSIBLE DISPOSAL AREA
100 0 100
SCALE IN FEET
ENSR
ENSR CONSULTING & ENGINEERING
FIGURE 2-1
SAMPLE LOCATIONS
VICINITY OF CECOM BLDG. & PISTOL RANGE
WAYSIDE AREA, NWS EARLE
DRAWN BY: FD
DATE: 6/92
PROJECT NO. 5060-016-560
5060338



EXPLANATION

- TEST TRENCH
- ● SURFACE SOIL SAMPLE
- △ ABOVE GROUND TANK
- ⊙ SUBSURFACE SOIL SAMPLE
- (B1) BUILDING NUMBER
- ■ PAINT CHIP SAMPLE

100 0 100

SCALE IN FEET

ENSR

ENSR CONSULTING & ENGINEERING

FIGURE 2-2
SAMPLE LOCATIONS
VICINITY OF BUILDING N
WAYSIDE AREA, NWS EARLE

DRAWN BY:	DATE:	PROJECT NO.
FD	6/92	5060-016-560

5060108

of the black fill from a depth of 4 feet (NST-SL), and one of the natural sand beneath the fill from a depth of 7-8 feet (NTP1-1).

A second test pit (TP-2) was excavated to a depth of 10 feet in an area of bright green grass, approximately 30 feet west of test pit TP-1, to determine if this area contained an additional leachfield. Test pit TP-2 contained only native sand, silt and gravel, with no fill material present. No samples were collected from this test pit.

Headspace (HNu) readings of zero units were obtained on samples of the black fill and native sand from TP-1, and the native sand from TP-2. The samples from TP-1 were analyzed for VOC, SVOC, Pesticides/PCBs, and TAL Metals.

2.3 PISTOL RANGE

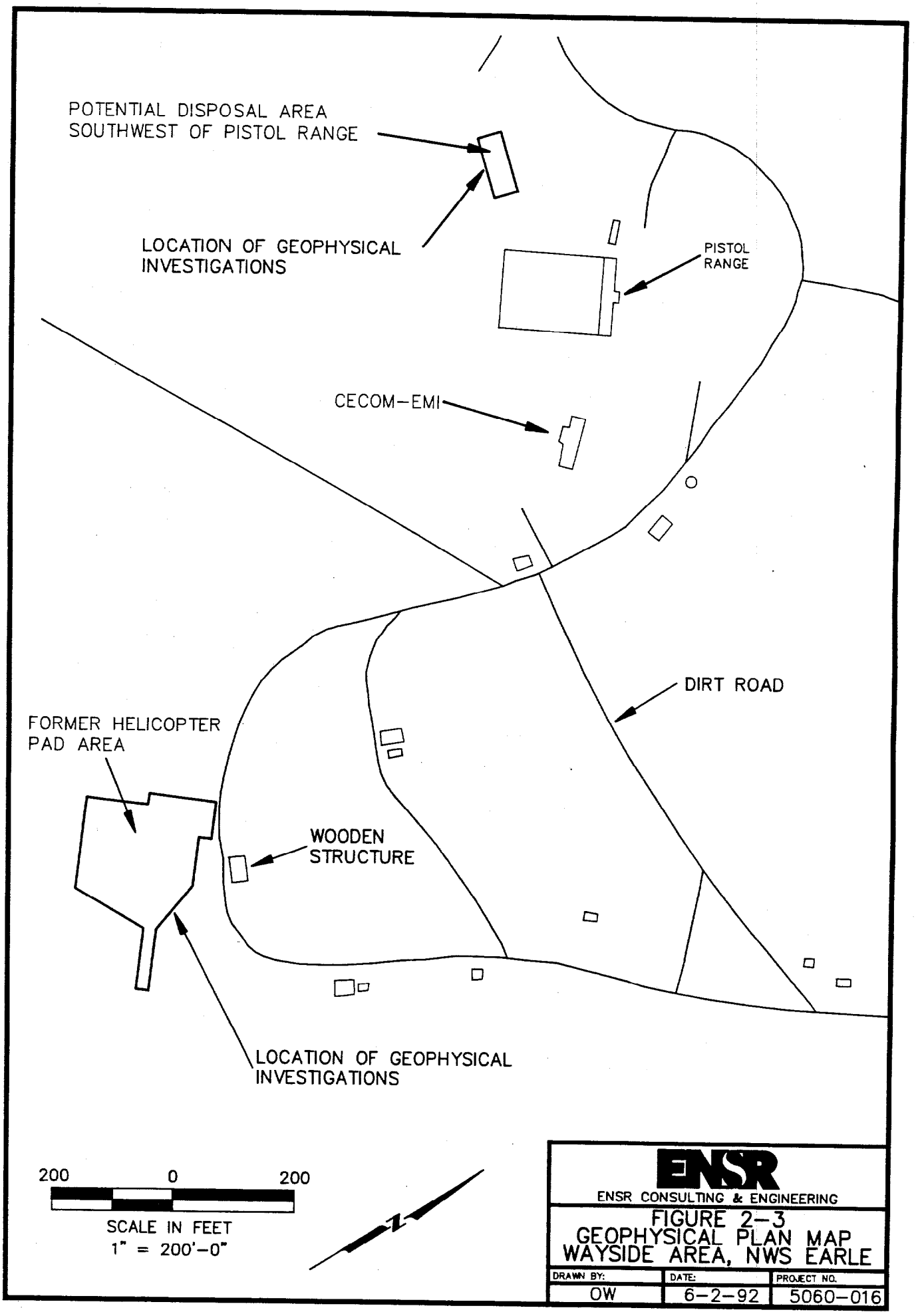
Soil samples were collected from the base of and halfway up the embankment opposite the firing shelter in the Pistol Range, in order to determine if the shells and bullets present had leached any metals into the soil (Figure 2-1). Two (2) surface soil samples were collected from a depth of 0-6 inches, and six (6) subsurface soil samples were collected from a depth of 2 feet. All soil samples were analyzed for selected metals: cadmium, chromium, copper, lead and zinc.

2.4 POTENTIAL DISPOSAL AREA SOUTHWEST OF PISTOL RANGE

A geophysical investigation was conducted in this area to determine the presence or absence of any buried metal (possible drums) or anomalous soil conditions. Results were used to guide subsequent test trenching activities. The geophysical investigation used the electromagnetic induction (EM) and magnetometry methods. Figure 2-3 shows the location of geophysical coverage.

A Geonics EM31 Ground Conductivity meter coupled with an OMNI digital datalogger were used to acquire quadrature and inphase EM data. EM data were acquired at less than 3-foot intervals on lines spaced 5 feet apart. EM data were transferred from the datalogger to a personal computer using the Geonics DAT31 program. An EG&G Geometries 856 Proton Precession magnetometer was used to acquire total magnetic field data. Magnetic data were acquired at 10-foot intervals on lines spaced 10 feet apart. Magnetic data were transferred from the magnetometer to a personal computer using the EG&G Geometries MAGPAC program.

Three test pits were excavated in the area where an anomaly was indicated by the geophysical survey (Figure 2-1). Each test pit was 4 feet deep, 4 feet wide, and 8 to 12 feet long. The material observed in the test pits consisted of 0.5 foot of loam mixed with metal and wood debris, underlain by tan sand with some gravel. Headspace readings of zero units were obtained on soil from a depth of 1 foot in test pit TP-1. No samples were collected from the test pits, since no waste material was encountered other than the metal and wood debris on the surface.


POTENTIAL DISPOSAL AREA
SOUTHWEST OF PISTOL RANGE
LOCATION OF GEOPHYSICAL
INVESTIGATIONS
PISTOL
RANGE
CECOM-EMI
DIRT ROAD
FORMER HELICOPTER
PAD AREA
WOODEN
STRUCTURE
LOCATION OF GEOPHYSICAL
INVESTIGATIONS
200
0
200
SCALE IN FEET
1" = 200'-0"
ENSR
ENSR CONSULTING & ENGINEERING
FIGURE 2-3
GEOPHYSICAL PLAN MAP
WAYSIDE AREA, NWS EARLE
DRAWN BY:
OW
DATE:
6-2-92
PROJECT NO.
5060-016
50602A

2.5 POTENTIAL DISPOSAL AREA IN SOUTHEAST CORNER OF WAYSIDE AREA

Because aerial photographs and morphology indicated a potential waste disposal area in this portion of Wayside, a geophysical investigation was conducted in this area to determine the presence or absence of any buried metal (possible drums) or anomalous soil conditions. Results were used to guide subsequent test trenching activities. The geophysical investigation used the electromagnetic induction (EM) and magnetometry methods. Figure 2-3 shows the location of geophysical coverage.

A Geonics EM31 Ground Conductivity meter coupled with an OMNI digital datalogger were used to acquire quadrature and inphase EM data. EM data were acquired at less than 3-foot intervals on lines spaced 5 feet apart. EM data were transferred from the datalogger to a personal computer using the Geonics DAT31 program. An EG&G Geometries 856 Proton Precession magnetometer was used to acquire total magnetic field data. Magnetic data were acquired at 10-foot intervals on lines spaced 10 feet apart. Magnetic data were transferred from the magnetometer to a personal computer using the EG&G Geometries MAGPAC program.

Two test pits were excavated within the cleared area. Test pit locations were selected based on the anomalies identified by the geophysical survey (Figure 2-4). Test pit TP-1 was 25 feet long by 16 feet wide. Test pit TP-2 was 10 feet long by 8 feet wide. No waste material was observed in either test pit. Both test pits contained only natural material: 0.5 foot of brown loam underlain by tan medium sand with some gravel. The headspace reading was zero units on soil from both test pits. No samples were collected from the test pits, since no waste material was encountered.

2.6 BUILDINGS WITH POTENTIAL ASBESTOS INSULATION

Samples of building insulation material were collected from buildings B5, C5, D, and G. Duplicate samples were collected from buildings B5 and C5. The samples were labelled as [Building No.]-BI, (e.g., B5-BI) and analyzed for asbestos. No insulation samples were collected from buildings C4 and Z. Access could not be gained to building C4, a round metal shed, because it was padlocked with an old rusted lock. Building Z (the laser test range shelter) had been dismantled, and all of the insulation had been stripped and placed into clear plastic bags. The insulation visible in the bags consisted of pink fiberglass.

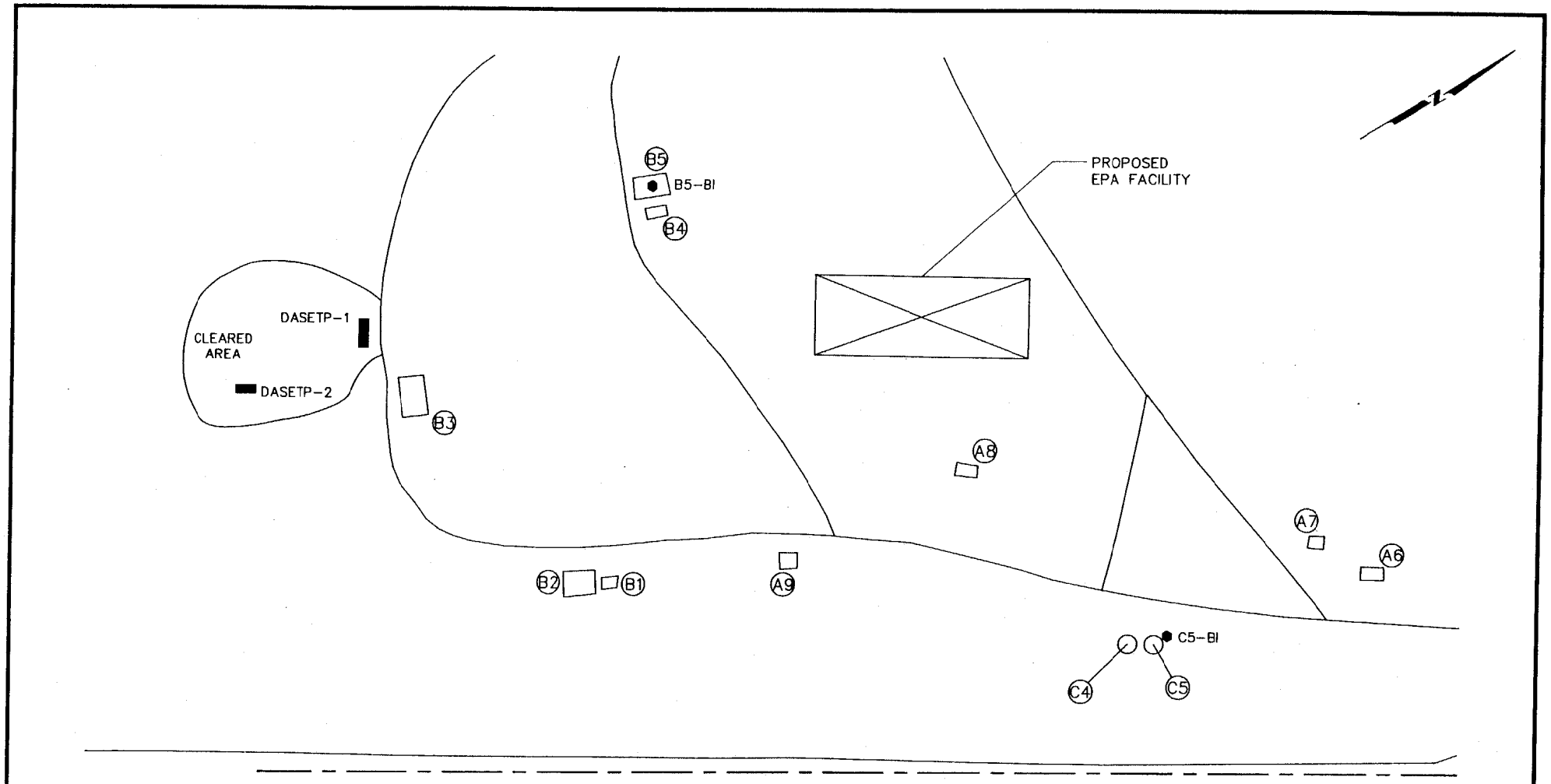
2.7 BUILDINGS WITH POTENTIAL LEAD PAINT

Samples of exterior paint were scraped from buildings A, A1, A2, B, C, D, F, G, M, O, S, Y, and Z. Duplicate samples were collected from buildings B and C. The paint chip samples were labelled as [Building No.]-PN, (e.g., A-PN) and analyzed for total lead.

2.8 ABOVE GROUND FUEL TANKS

Two above ground fuel tanks had been observed on the site during the Environmental Evaluation conducted in August, 1991. Both tanks had been removed by the time of the Site Inspection in April, 1992.

One tank, approximately 275 gallons in size, had been located in front of building M in the northwest section of the site (Figure 2-2). One surface soil composite sample and a field duplicate sample (MAT-SS



EXPLANATION

- TEST TRENCH
- SURFACE SOIL SAMPLE
- BUILDING INSULATION SAMPLE
- GEOPHYSICAL SURVEY IN POSSIBLE DISPOSAL AREA
- (B1) BUILDING NUMBER

100 0 100

SCALE IN FEET

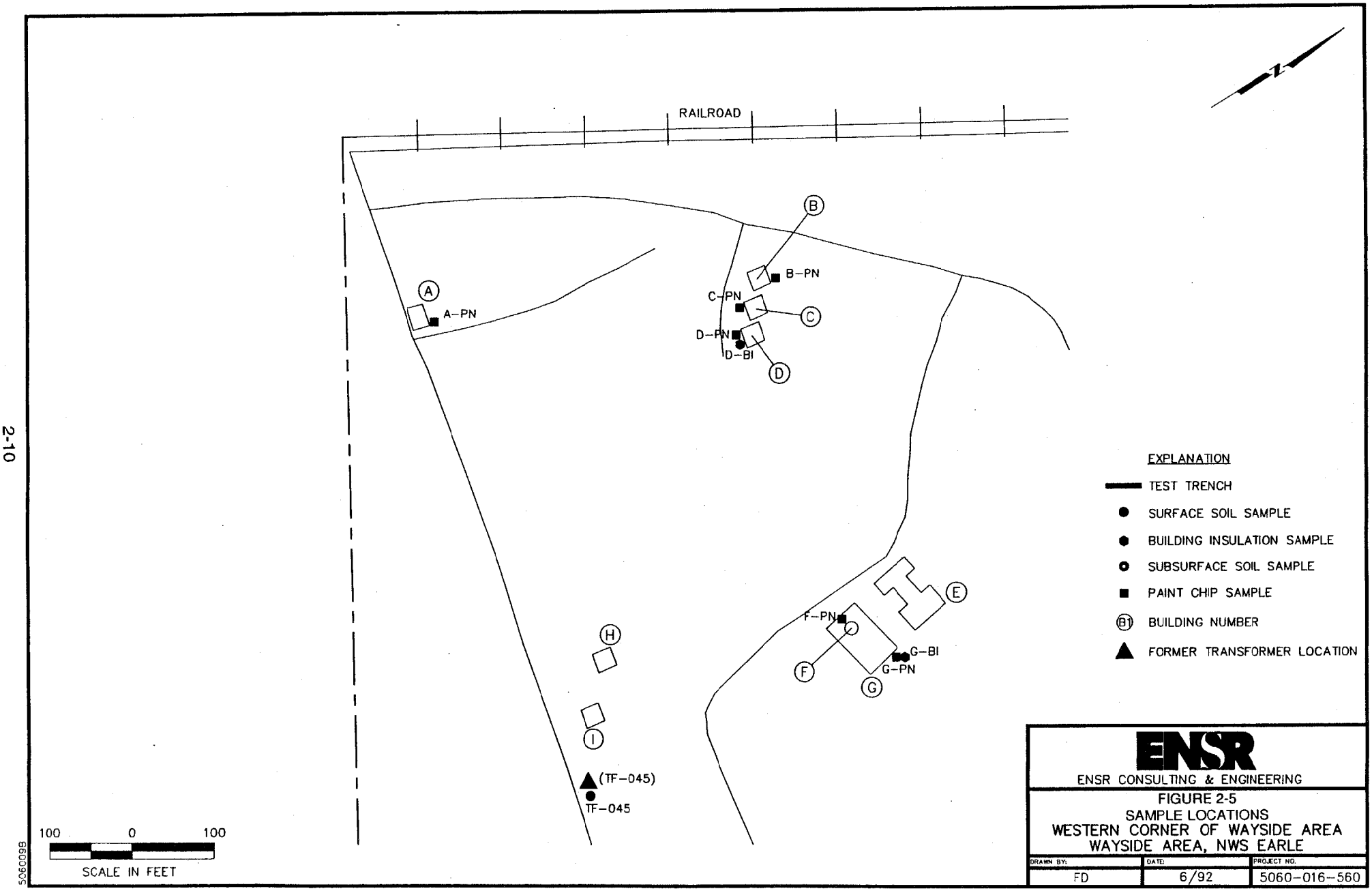
ENSR

ENSR CONSULTING & ENGINEERING

FIGURE 2-4
SAMPLE LOCATIONS
SOUTHEASTERN CORNER OF WAYSIDE AREA
WAYSIDE AREA, NWS EARLE

DRAWN BY:	DATE:	PROJECT NO.
FD	6/92	5060-016-560

5060128


RAILROAD
A
A-PN
B
B-PN
C-PN
C
D-PN
D-BI
D
E
F-PN
F
G-BI
G-PN
G
H
I
(TF-045)
TF-045
100 0 100
SCALE IN FEET
EXPLANATION
TEST TRENCH
SURFACE SOIL SAMPLE
BUILDING INSULATION SAMPLE
SUBSURFACE SOIL SAMPLE
PAINT CHIP SAMPLE
BUILDING NUMBER
FORMER TRANSFORMER LOCATION
ENSR
ENSR CONSULTING & ENGINEERING
FIGURE 2-5
SAMPLE LOCATIONS
WESTERN CORNER OF WAYSIDE AREA
WAYSIDE AREA, NWS EARLE
DRAWN BY: FD
DATE: 6/92
PROJECT NO. 5060-016-560

5060098

and MATSS-D) were collected beneath the former tank location. The sample was composed of soil collected from four points at a depth of 0 to 6 inches. No staining or odor was observed in the surface soil. One subsurface soil sample (MAT-SB) was also collected beneath the former tank location, from a depth of 2 to 2.5 feet. This sample consisted of medium brown sandy soil, with a strong odor of petroleum hydrocarbons, but no staining. All samples were analyzed for total petroleum hydrocarbons (TPH) and lead.

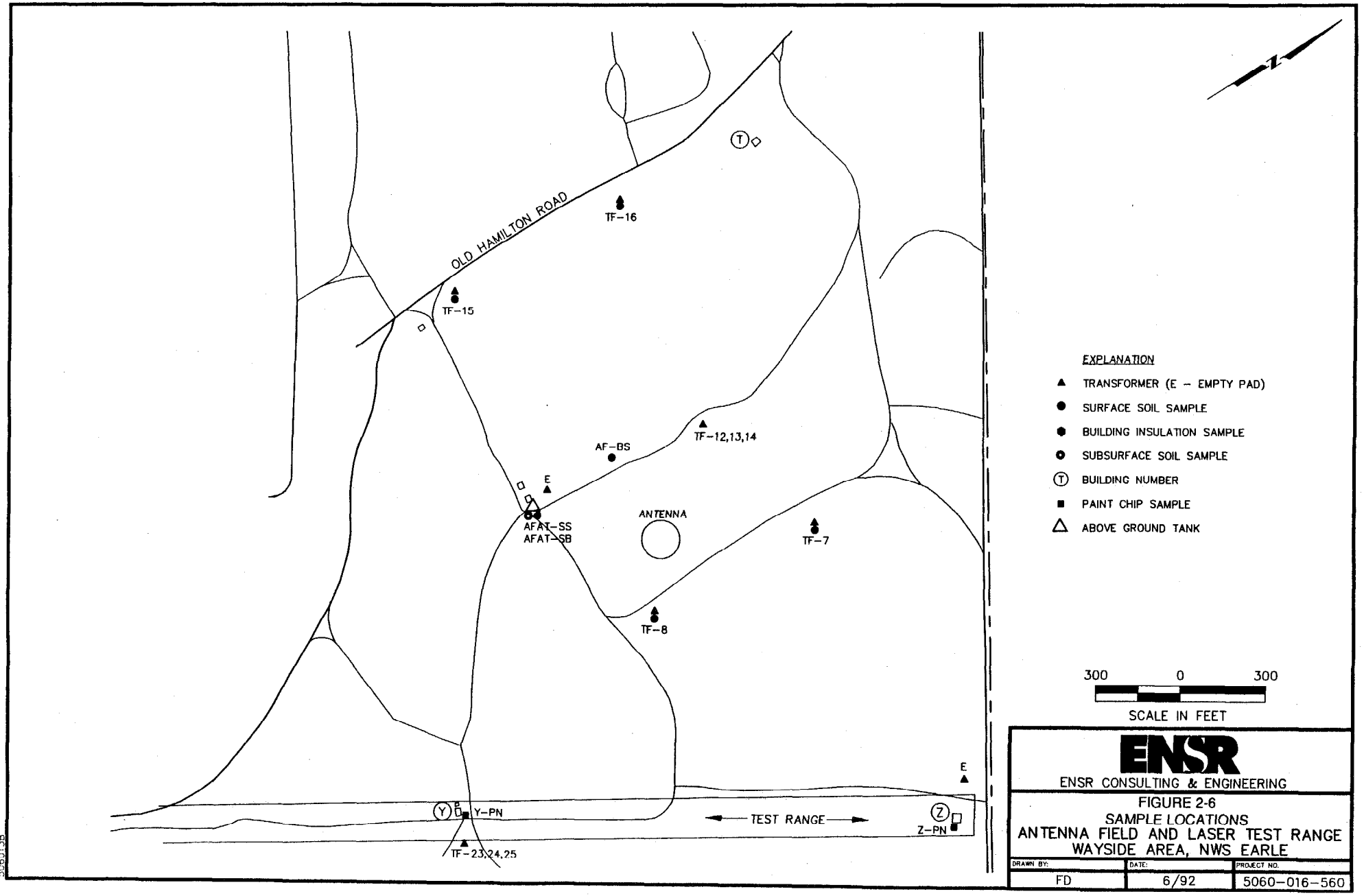
The second tank, approximately 550 gallons, had been located at the southeastern corner of the antenna field in the central section of the site, next to former building W (Figure 2-6). One surface soil composite sample (AFAT-SS) was collected beneath the former tank location. The sample was composed of soil collected from four points at a depth of 0 to 6 inches. No staining or odor was observed in the surface soil. One subsurface soil sample (AFAT-SB) was also collected beneath the former tank location, from a depth of 2 to 2.5 feet. This sample consisted of medium brown sandy soil, with no odor. All samples were analyzed for total petroleum hydrocarbons (TPH) and lead.

2.9 EMPTY TRANSFORMER PADS

Five empty transformer pads (WA-007, WA-008, WA-015, WA-016, and WA-045) once held PCB-contaminated transformers (50-500 ppm PCBs) (Figures 2-5, 2-6). One composite surface soil sample was collected from around each pad. A duplicate sample was collected at WA-045. No stained soil was observed at any of the pads. These six samples (TF-7, TF-8, TF-015, TF-016, TF-045, and TF-045-D) were analyzed for PCBs to determine if any transformer fluid had leaked into the surrounding soil.

2.10 BACKGROUND SOIL SAMPLES

In order to obtain data on background soil conditions, two surface soil grab samples were collected from two different areas of the site which appeared to be undisturbed and free of potential contamination. One sample (AF-BS) was collected along the dirt road in the center of the antenna field, between the location of the former above ground tank and transformer nos. 12, 13, 14 (Figure 2-6). The second sample (PR-BS) was collected from the top of the embankment on the west side of the Pistol Range (Figure 2-1). These two samples were analyzed for VOC, SVOC, Pesticides/PCBs, and TAL Metals.


OLD HAMILTON ROAD
TF-16
TF-15
T
AF-BS
TF-12,13,14
E
AFAT-SS
AFAT-SB
ANTENNA
TF-7
TF-8
E
Y
Y-PN
TF-23,24,25
TEST RANGE
Z
Z-PN
EXPLANATION
TRANSFORMER (E – EMPTY PAD)
SURFACE SOIL SAMPLE
BUILDING INSULATION SAMPLE
SUBSURFACE SOIL SAMPLE
BUILDING NUMBER
PAINT CHIP SAMPLE
ABOVE GROUND TANK
300 0 300
SCALE IN FEET
ENSR
ENSR CONSULTING & ENGINEERING
FIGURE 2-6
SAMPLE LOCATIONS
ANTENNA FIELD AND LASER TEST RANGE
WAYSIDE AREA, NWS EARLE
DRAWN BY: FD
DATE: 6/92
PROJECT NO. 5060-016-560
5060138

3.0 RESULTS

The results of the field investigation, including field observations and analytical results, are discussed below by Area of the site. All samples collected at NWS Earle were analyzed by NET Atlantic, Cambridge Division in Bedford, MA. NET was given site specific approval by the Navy to perform the analytical testing for this site investigation. All analyses were performed according to US EPA CLP protocol. In accordance with the Navy Statement of Work, data validation was not included in the scope of work for this project.

VOCs and SVOCs were detected in several samples. The majority of these compounds appear to be due to laboratory contamination. Low levels of pesticides were reported in several of the samples (AF-BS, B7STAQ-D, B7STSL-COMP, B7TP1-1, B7TP1-2, B7TP1-2D, NST-SL, FB-2 and FB-BH-1). Many of the reported pesticides were qualified with "P", indicating that there is a greater than 25 percent difference for detected concentrations between the two (analytical and confirmation) GC columns. Also, many reported pesticides were qualified with "J", indicating that the reported concentration is less than the sample's contract required quantitation limit. Without data validation, all reported pesticide results should be considered estimated values and should be used with caution in evaluating the site.

3.1 SEPTIC TANK AT CECOM-EMI BUILDING

3.1.1 VOC

VOC results are presented in Table 3-1. A sludge sample and duplicate (B7ST-SL and B7ST-SL-D) from the bottom of the septic tank were analyzed for VOC. A total of five blank samples were analyzed for VOC along with these samples. Blank samples collected along with the samples at the CECOM-EMI building included the equipment rinsate blank poured over the test pit sampler (EBTP-1), the field blank of deionized distilled water (FB-2), and the trip blank (TB-1). Two additional blanks submitted with this batch of samples were the trip blank for the second cooler (TB-2), and a sample of the water used to steam clean the backhoe (FB-BH-1).

Methylene chloride was detected in blanks EBTP-1 (8J µg/l), FB-2 (10 µg/l), and TB-2 (2B µg/l). Acetone was detected in TB-1 (5J µg/l) and TB-2 (13B µg/l), and in the laboratory method blank. The presence of these two compounds in the field QC samples is most likely due to laboratory contamination, as these two compounds are common laboratory contaminants. Trace levels (<10 ppb) of other VOCs were detected in the blank samples, including carbon disulfide, chloroform, 1,1,1-trichloroethane, toluene, ethylbenzene, and xylenes.

Samples B7ST-SL and B7ST-SL-D were sludge-like and were analyzed as solid samples. No VOC were detected in sample B7ST-SL. VOCs detected in the duplicate sample included methylene chloride (38J µg/kg), acetone (2000 µg/kg), carbon disulfide (42J µg/kg), 2-butanone (690 µg/kg), toluene (660 µg/kg), and chlorobenzene (170J µg/kg). The compound 2-butanone is also a common laboratory contaminant along with acetone and methylene chloride as noted above. The poor agreement between the sample and

TABLE 3-1
VOLATILE ORGANIC COMPOUNDS - SOIL, SLUDGE, AND WATER
(SAMPLED APRIL 1992)
WAYSIDE AREA, NWS EARLE

	AREA:	Background		Bldg. N Leachfield		CECOM Bldg Septic Tank				
06/03/92	FIELD ID:	PR-BS	AF-BS	NST-SL	NTP1-1	B7TP1-1	B7TP1-2	B7TP1-2-D	B7STSL	B7STSL-D
	MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SLUDGE	SLUDGE
METHOD 8240	UNITS:	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
METHYLENE CHLORIDE		1 J	1 J		1 J	1 J	1 J	1 J		38 J
ACETONE		3 B	2 J		2 J	2 J		3 J		2000
CARBON DISULFIDE										42 J
CHLOROFORM										
1,2-DICHLOROETHANE										
2-BUTANONE										690
1,1,1-TRICHLOROETHANE										
TOLUENE										660
CHLOROBENZENE										170 J
ETHYLBENZENE										
TOTAL XYLENES										

	AREA:	CECOM Bldg Septic Tank		Blanks				
06/03/92	FIELD ID:	B7ST-AQ	B7ST-AQ-D	EBTP-1	FB-2	FB-BH-1	TB-1	TB-2
	MATRIX:	AQUEOUS	AQUEOUS	AQUEOUS	AQUEOUS	AQUEOUS	AQUEOUS	AQUEOUS
METHOD 8240	UNITS:	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
METHYLENE CHLORIDE				8 J	10			2 B
ACETONE		23	15				5 J	13 B
CARBON DISULFIDE				3 J				
CHLOROFORM				8 J	9 J			
1,2-DICHLOROETHANE								
2-BUTANONE								
1,1,1-TRICHLOROETHANE								1 J
TOLUENE				2 J	2 J		2 B	2 B
CHLOROBENZENE								
ETHYLBENZENE					2 J			
TOTAL XYLENES				9 J	10			

NOTE: TABLE INCLUDES ONLY THOSE
COMPOUNDS DETECTED IN AT LEAST ONE SAMPLE
B - FOUND IN METHOD BLANK
J - BELOW DETECTION LIMIT; ESTIMATED VALUE
U - NOT DETECTED AT SPECIFIED DETECTION LIMIT

the duplicate may be due to sample heterogeneity, matrix interferences, or laboratory contamination; the results should therefore be considered estimated values.

Acetone was the only VOC detected in the water sample (B7ST-AQ) and duplicate (B7ST-AQ-D) collected from the septic tank, at 23 and 15 µg/l respectively.

Only trace levels (1-3 µg/kg) of methylene chloride and acetone were detected in the two soil samples plus a duplicate soil (B7TP1-1, B7TP1-2, B7TP1-2-D) collected from test pit TP-1 located southwest of the septic tank.

3.1.2 SVOC

SVOC results are presented in Table 3-2. Upon examination of the samples B7ST-SL and B7ST-SL-D at the laboratory, it was discovered that there were very distinct differences between the aliquots for the volatiles, metals and extractables. The sludge samples for extractables analysis were almost completely a black opaque liquid with very little silty material on the bottom. The liquid portion of this sample was not viscous. Because of the liquid nature of these samples and the limited volume, ENSR instructed the laboratory to composite the sludge and duplicate sludge samples for extractable analysis. The composite sample was then relabeled, and re-logged in as B7STSL-COMP. The sample was then split into two aliquots for SVOC and Pesticide/PCB analysis. For these two analyses, the "sludge" sample was analyzed as an aqueous sample. SVOCs detected in the sludge sample from the bottom of the tank (B7ST-SL) included 1,4-dichlorobenzene (860 µg/l).

No SVOCs were detected in the septic tank water sample (B7ST-AQ) or its field duplicate (B7ST-AQ-D).

SVOCs detected in the two soil samples plus a duplicate soil (B7TP1-1, B7TP1-2, B7TP1-2-D) collected from test pit TP-1 included di-n-butylphthalate (2500B to 2700B µg/kg), butylbenzylphthalate (100J to 520 µg/kg), and bis-2-ethylhexylphthalate (ND and 970B µg/kg). These compounds were also detected in one of the background soil sample (AF-BS) at 1900 µg/kg, 38 µg/kg and 67 µg/kg, respectively. Phthalates are common laboratory contaminants, and their presence in these samples is most likely attributable to laboratory contamination.

Field blanks EB-TP-1 and FB-2 did not contain SVOCs. Blank FB-BH-1 contained 3J µg/l di-n-butylphthalate.

3.1.3 Pesticides/PCBs

Pesticides/PCB results are presented in Table 3-3. Pesticides detected in the sludge and sludge duplicate samples (B7ST-SL, B7ST-SL-D) included beta-BHC (1.9 and 0.67 µg/l) and gamma-BHC (not detected and 0.32 J µg/l). No PCBs were detected in these samples.

No pesticides were detected in the water sample (B7ST-AQ). The duplicate sample (B7ST-AQ-D) contained alpha-BHC at 0.0039J µg/l. No PCBs were detected in these samples.

TABLE 3-2
SEMIVOLATILE ORGANIC COMPOUNDS - SOIL, SLUDGE AND WATER
(SAMPLED APRIL 1992)
WAYSIDE AREA, NWS EARLE

	AREA:	Background Soil		Leachfield at Building N		Septic Tank at CECOM Building						Blanks		
06/04/92	FIELD ID:	PR-BS	AF-BS	NST-SL	NTP1-1	B7TP1-1	B7TP1-2	B7TP1-2-D	B7ST-SL-COMP	B7ST-AQ	B7ST-AQ-D	EB-TP1-1	FB-2	FB-BH-1
	MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	AQUEOUS	AQUEOUS	AQUEOUS	AQUEOUS	AQUEOUS	AQUEOUS
COMPOUND	UNITS:	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
1,4-DICHLOROBENZENE									860					
DI-N-BUTYLPHTHALATE		2000 B	1900 B	4400 B	1900 B	2700 B	2600 B	2500 B						3 J
BUTYLBENZYLPHTHALATE			38 J			100 J	230 J	520						
BIS(2-ETHYLHEXYL)PHTHALATE			67 BJ					970 B						

NOTE: TABLE LISTS ONLY COMPOUNDS DETECTED IN AT LEAST ONE SAMPLE

B - DETECTED IN THE ASSOCIATED METHOD BLANK

J - ESTIMATED VALUE

TABLE 3-3
PESTICIDES AND PCBs - SOIL, SLUDGE, AND WATER
(SAMPLED APRIL 1992)
WAYSIDE AREA, NWS EARLE

	AREA:	Background		Bldg. N Leachfield		CECOM Bldg Septic Tank							Blanks		
06/03/92	FIELD ID:	PR-BS	AF-BS	NST-SL	NTP1-1	B7TP1-1	B7TP1-2	B7TP1-2-D	B7STSL	B7STSL-D	B7ST-AQ	B7ST-AQ-D	EBTP-1	FB-2	FB-BH-1
	MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SLUDGE	SLUDGE	AQUEOUS	AQUEOUS	AQUEOUS	AQUEOUS	AQUEOUS
	UNITS:	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/l	µg/l	µg/l	µg/l	µg/l
PESTICIDES															
alpha-BHC												0.0039 JP			
beta-BHC									1.9	0.67 JP					
gamma-BHC										0.32 JP					
Heptachlor														0.0097 JP	0.015 JP
Aldrin															0.048 JP
Dieldrin			0.43 J												
4,4'-DDE			0.78 J	5.7		25 P	2.0 JP	1.2 JP							
4,4'-DDD				1.7 JP											
4,4'-DDT			2.6 JP	17		62 P	4.5 P	3.3 J							
PCBs		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Note: Table lists only those compounds detected in at least one sample.
B - FOUND IN METHOD BLANK
J - ESTIMATED VALUE
U - NOT DETECTED AT SPECIFIED DETECTION LIMIT
P - The quantitated value differs by more than 25% on the two GC columns that were reported.
ND - Not detected

The test pit soil samples (B7TP1-1, B7TP1-2, B7TP1-2-D) contained 4,4'-DDE at concentrations ranging from 1.2J to 25 µg/kg, and 4,4'-DDT at concentrations ranging from 3.3J to 62 µg/kg. Sample B7TP1-1 contained the higher concentrations of these two compounds, and was collected from a depth of 6-8 feet; B7TP1-2 was collected from a depth of 10 feet. These compounds were also detected in the background soil sample (AF-BS) at 0.78 µg/kg and 2.6 µg/kg, respectively. The levels detected are well below the proposed New Jersey Soil Cleanup Standards for residential soil (see Table 3-4). No PCBs were detected in these samples.

Field blank FB-2 contained Heptachlor (0.0097J µg/l). FB-BH-1 contained Heptachlor (0.015J µg/l) and Aldrin (0.048J µg/l). No PCBs were detected in these samples.

Since different pesticide compounds were detected in the septic tank water and sludge than in the test pit soil, it is unlikely that a leak in the septic tank is the source of the pesticides in the subsurface soil.

3.1.4 Metals

TAL metals data is presented in Table 3-5. The sludge samples for metals analysis consisted mainly of a black opaque liquid with approximately one centimeter of a fine silty layer on the bottom. The silty material from the bottom of the jar was collected and analyzed as a solid. Metals results from the sludge and sludge duplicate samples (B7ST-SL, B7ST-SL-D) were compared to the metals found in the background soil samples (PR-BS and AF-BS). Compared to background, the sludge contained elevated levels of barium, cadmium, cobalt, copper, lead, nickel, silver, vanadium, and zinc, however, these levels are well within typical ranges for sewage sludges (see Table 3-6).

Metals were detected in the aqueous samples from the septic tank (B7ST-AQ and field duplicate B7ST-AQ-D) at relatively low concentrations.

Metals found in the soil samples collected from the test pit (B7TP1-1, B7TP1-2, B7TP1-2-D) were not significantly elevated compared with metals concentrations in the background soil samples.

3.2 SEPTIC TANK AT BUILDING N

The sample of black fill material (NST-SL) collected from a depth of 4 feet in the leachfield contained methylene chloride at 2J µg/kg (Table 3-1). The sample of natural sand (NTP1-1) collected below the fill from a depth of 7-8 feet contained methylene chloride (1J µg/kg) and acetone (2J µg/kg). These compounds are most likely attributable to laboratory contamination.

Di-n-butylphthalate was detected in sample NST-SL (4400B µg/kg) and NTP1-1 (1900B µg/kg), however, this compound was also present in the associated laboratory method blank at 1500 µg/kg, therefore its presence in these samples is attributed to laboratory contamination (Table 3-2).

Three pesticides were detected in the sample of black fill material (NST-SL) collected from a depth of 4 feet in the leachfield: 4,4'-DDE (5.7 µg/kg), 4,4'-DDD (1.7J µg/kg), and 4,4-DDT (17 µg/kg) (Table 3-3). These compounds were also detected in the background soil sample (AF-BS) at 0.78 µg.kg and 2.6 µg/kg, respectively. The levels detected are well below the proposed New Jersey Soil Cleanup Standards for

TABLE 3-4
BACKGROUND CONCENTRATIONS AND
PROPOSED NEW JERSEY CLEANUP STANDARDS FOR ORGANIC COMPOUNDS
WAYSIDE AREA, NWS EARLE

Compound	Background Soil Samples (µg/kg)	Proposed NJ Cleanup Standards Residential Subsurface Soils[1] (µg/kg)	Proposed NJ Cleanup Standards Residential Surface Soils[1,2] (µg/kg)	Proposed NJ Class IIA Groundwater Cleanup Standards[1,4] (µg/L)
VOLATILE ORGANIC COMPOUNDS (VOCS)				
Methylene Chloride	1	10,000	49,000	3
Acetone	2-3	50,000	1,000,000	700
Carbon Disulfide				
Chloroform		1,000	19,000	6
1,2-Dichloroethane		1,000	6,000	2
2-Butanone		50,000	1,000,000	300
1,1,1-Trichloroethane		50,000	210,000	30
Toluene		500,000	1,000,000	1,000
Chlorobenzene		1,000	37,000	5
Ethylbenzene		100,000	1,000,000	700
Total Xylenes		10,000	360,000	40
SEMIVOLATILE ORGANIC COMPOUNDS (SVOCS)				
1,4-Dichlorobenzene		100,000	280,000	70
Di-N-Butylphthalate	1900-2000	100,000	5,700,000	900
Butylbenzylphthalate	38	100,000	10,000,000	100
Bis(2-ethylhexyl)phthalate	67	100,000	49,000	30
PESTICIDES/PCBS				
alpha-BHC				0.02
beta-BHC				0.2
gamma-BHC				0.2
Heptachlor		500,000	150	0.4
Adrin		50,000	40	0.04
Deildrin	0.43	50,000	42	0.03
4,4'-DDE	0.78	100,000	2,000	0.1
4,4'-DDD		100,000	3,000	0.1
4,4'DDT	2.6	100,000	2,000	0.1
PCBs		100,000	450	0.5
TPH (mg/kg)		10,000[3]	10,000[3]	

[1]Site Remediation Program Cleanup Standards for Contaminated Sites Proposed New Rules: N.J.A.C.7:26D, New Jersey Register, Monday, February 3,1992 (CITE 24 N.J.R.373).
[2]If the subsurface soil standard is lower than the surface soil, than the subsurface standard would apply to both surface and subsurface soils.
[3]TPH proposed standard is mg/kg.
[4]Groundwater standards are provided for information purposes only, no groundwater samples were collected during this investigation.

TABLE 3-5
TAL METALS - SOIL, SLUDGE, AND WATER
(SAMPLED APRIL 1992)
WAYSIDE AREA, NWS EARLE

	AREA:	Background		Bldg. N Leachfield		CECOM Bldg Septic Tank							Blanks		
06/03/92	FIELD ID:	PR-BS	AF-BS	NST-SL	NTP1-1	B7TP1-1	B7TP1-2	B7TP1-2-D	B7ST-SL	B7ST-SL-D	B7ST-AQ	B7ST-AQ-D	EB-TP-1	FB-BH-1	FB-2
	LAB ID:	398768	398918	398988	398998	399008	399018	399025	399088	399098	399078	399068	399038	399048	399058
	MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SLUDGE	SLUDGE	AQUEOUS	AQUEOUS	AQUEOUS	AQUEOUS	AQUEOUS
	UNITS:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/l	µg/l	µg/l	µg/l	µg/l
ALUMINUM		8070	795	6990	2700	8840	14200	11800	7930	7830	114 B	72.8 B	20 U	25.2 B	20 U
ANTIMONY		12.3 B	8.5 U	23.1	14.9	14.5	10.9 B	10.3 B	258 U	231 U	41 B	40 U	40 U	54.5 B	40 U
ARSENIC		3.3	1.5 B	8.4	4.7	3.5	3.4	2.9	19.4 U	17 U	3 U	3 U	3 U	3 U	3 U
BARIUM		10 B	2.7	28.5 B	4.8 B	15 B	25.3 B	22.5 B	262 B	202 B	5 U	5 U	5 U	138 B	5 U
BERYLLIUM		0.44 U	0.5 B	0.52 B	0.42 U	0.44 U	0.44 U	0.44 U	12.9 U	11.5 U	2 U	2 U	2 U	2 U	2 U
CADMIUM		2.2	1.1 U	3.8	2.4	2.3	2.9	2.1	68.2	70.3	5 U	5 U	5 U	5 U	5 U
CALCIUM		41 B	68.8 B	395 B	327 B	82.7 B	113 B	155 B	32100 B	23700 B	84100	83400	86 U	66300	100 B
CHROMIUM		28	17.8	37.4	26.3	27.5	30.5	24.5	35 B	37.6 B	5 U	5 U	5 U	5 U	5 U
COBALT		3.8 B	5.6 B	6.3 B	3 B	4.2 B	4.4 B	3.8 B	34.8 B	28.8 U	15.7 B	13.7 B	5 U	12.3 B	5 U
COPPER		4 B	6.5	15.8	1.1 B	4.1 B	6	4.6 B	12400	10800	72	76	5 U	6.8 B	5.6 B
IRON		12400	3450	20700	15000	13300	14800	11800	26200	29100	984	858	33.7 B	42.1 B	26.2 B
LEAD		5.8	10.6	10.5	1.9	4.6	7.7	4.5	261	255	3.3	2 U	19.4	56.8	7.7
MAGNESIUM		746 B	172 B	1050	728 B	850 B	1000 B	790 B	1090 B	857 B	4160 B	4090 B	30 U	15800	30 U
MANGANESE		37.8	11.3	65.7	22.2	45	51.7	36.6	250	174	80.2	77.4	5 U	5 U	5 U
MERCURY		0.11 U	0.11 U	0.12 U	0.1 U	0.11 U	0.11 U	0.11 U	7.3	2.9 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
NICKEL		4.5 B	5.5 B	5.7 B	2 B	4.4 B	6.6 B	5.8 B	116 B	113 B	6 U	7.3 B	6 U	6 U	6 U
POTASSIUM		1080 B	393 B	1660	2040	1320	1530	1190	3230 U	2880 U	7600	7750	500 U	1060 B	500 U
SELENIUM		0.44 U	0.43 U	0.48 U	0.42 U	0.44 U	0.44 U	0.44 U	12.9 U	11.3 U	2 U	2 U	2 U	2 U	2 U
SILVER		1.1 U	1.1 U	1.2 U	1 U	1.1 U	1.1 U	1.1 U	45 B	48.3 B	5 U	5 U	5 U	5 U	5 U
SODIUM		23.2 B	40.9 B	67.1 B	18.1 U	22.7 B	25 B	22.3 B	954 B	504 B	10200	10200	85.3 U	20300	101 B
THALLIUM		0.44 U	0.43 U	0.48 U	0.42 U	0.44 U	0.44 U	0.44 U	12.9 U	11.3 U	2 U	2 U	2 U	2 U	2 U
VANADIUM		31	22.1	44.6	27.6	31.5	34.7	27	140 B	87.3 B	5 U	5.5 B	5 U	12.1 B	5 U
ZINC		16.5	10.5	49.6	15.3	17.5	22	18	7360.0	6490	157	162	20.7	309	17.4 B

B - ESTIMATED VALUE; BELOW CONTRACT REQUIRED DETECTION LIMIT, BUT ABOVE INSTRUMENT DETECTION LIMIT.

U - NOT DETECTED AT SPECIFIED DETECTION LIMIT

TABLE 3-6

TYPICAL BACKGROUND CONCENTRATIONS AND
PROPOSED NEW JERSEY CLEANUP STANDARDS FOR INORGANICS
WAYSIDE AREA, NWS EARLE

Element	Site Background (mg/kg)	Concentration Ranges in Soils, Eastern US[1] (mg/kg)	Typical Range in Sewage Sludges[2] (mg/kg)	Proposed NJ Cleanup Standards Residential Surface Soils[5,7] (mg/kg)	Proposed NJ Cleanup Standards Nonresidential Surface Soils[5,7] (mg/kg)	Proposed NJ Class 11A Groundwater Cleanup Standards[5,6,7] (µg/L)
Aluminum	795 - 8070	7,000 - >100,000				20
Antimony	<8.5 - 12.3	<1 - 8.8		14	340	8
Arsenic	1.5 - 3.3	<0.1 - 73	2 - 26	20	20	2,000
Barium	2.7 - 10	10 - 1,500	150 - 4,000	600	26,000	20
Beryllium	<.44 - .5	<1 - 7	4 - 13	2	2	4
Cadmium	<1.1 - 2.2	0.01 - 7[4]	2 - 1,500	1	100	
Calcium	41 - 68.8	100 - 280,000				
Chromium	17.8 - 28	1 - 1,000	20 - 40,600			100
Cobalt	3.8 - 5.6	<0.3 - 70	2 - 260			
Copper	4 - 6.5	<1 - 700	50 - 3,300	600	600	
Iron	3,450 - 12,400	100 - >100,000				
Lead	5.8 - 10.6	<10 - 300	50 - 3,000	100	600	10
Magnesium	172 - 746	50 - 50,000				
Manganese	11.3 - 37.8	<2 - 7,000	60 - 3,900			
Mercury	<0.11	0.01 - 3.4	0.1 - 55	14	260	2
Nickel	4.5 - 5.5	<5 - 700	16 - 5,300	250	2,400	100
Potassium	393 - 1080	50 - 37,000				
Selenium	<.44	<0.1 - 3.9	2 - 9	1	1,000	50
Silver	<1.1	0.01 - 5[3]		40	2,000	20
Sodium	23.2 - 40.9	<500 - 50,000				
Thallium	<.44	2.2 - 23		2	2	10
Vanadium	22.1 - 31	<7 - 300	20 - 400	380	7,000	
Zinc	10.5 - 16.5	<5 - 2,900	700 - 49,000	1,500	1,500	5,000

[1]Shacklette, H.T., and J.G. Boerngen, 1984. Element Concentrations in Soils and Other Surficial Materials of the Conterminous United States, Geological Survey Prof. Paper 1270, Alexandria
[2]Kabata - Pendias, A., and H. Pendias, 1984. Trace Elements in Soils and Plants, CRC Press, Inc. Boca Raton.
[3]Lindsay, 1979. Chemical Equilibria in Soils. John Wiley and Sons, New York.
[4]Dragun, J., 1988. The Soil Chemistry of Hazardous Materials, Hazardous Materials Control Research Institute, Silver Spring.
[5]Site Remediation Program Cleanup Standards for Contaminated Sites Proposed New Rules: N.J.A.C.7:26D, New Jersey Register, Monday, February 3, 1992 (CITE 24 N.J.R.373).
[6]Groundwater standards are provided for information purposes only; no groundwater samples were collected during this investigation.
[7]When naturally occurring concentrations are greater than proposed clean-up standards, only substances which result from a discharge are subject to those cleanup standards.

R:\PUBS\PROJECTS\5060016\510.3T

residential soil (Table 3-6). No pesticides were detected in the sample of natural sand (NTP1-1) collected below the fill from a depth of 7-8 feet. No PCBs were detected in these samples.

Metals levels in the soil samples (NST-SL and NTP1-1) were not significantly elevated compared with metals concentrations in the background soil samples (Table 3-5).

3.3 PISTOL RANGE

Two surface soil samples, one surface soil field duplicate, and six subsurface soil samples were collected from the Pistol Range. These samples were analyzed for five selected metals (cadmium, chromium, copper, lead and zinc) to determine if the soil has been contaminated by the presence of bullets and shells. In addition, a background surface soil sample (PR-BS) was collected from the top of the embankment on the west side of the Pistol Range, to provide data for comparison with the Pistol Range samples. The select metals data are presented in Table 3-7.

Surface soil samples (PRSS-1, PRSS-1-D, PRSS-2) were collected from a depth of 0 to 8 inches. They contained cadmium and chromium at levels below the background sample. Copper, lead, and zinc were present in the surface soil at levels above background. Only the lead concentrations were above the proposed New Jersey Residential Soil Cleanup Standard (100 mg/kg) (Table 3-6).

Subsurface soil samples (PRSB-1 to -6) were collected from a depth of 2 feet. These samples contained cadmium (1.2 to 3.6 mg/kg), chromium (16.6 to 36.8 mg/kg), copper (4.7 to 12.4 mg/kg), lead (21.2 to 162 mg/kg), and zinc (8.7 to 22.9 mg/kg). Cadmium and zinc levels were similar in the surface and subsurface soil. Chromium levels were slightly higher in the subsurface soil. Copper levels in subsurface soil were substantially lower than in surface soil, and similar to the background concentration. Lead levels were also much lower in subsurface soil than in surface soil, however, they were still above background. Only the lead concentrations were above the proposed New Jersey Residential Soil Cleanup Standard (100 mg/kg) (Table 3-6).

Based on the data above it appears that the surface soil (0-8 inches) on the embankment opposite the Pistol Range shelter (an area approximately 115 feet long by 30 feet wide) contains elevated levels of copper and lead, probably as a result of leaching from the bullets and shells that have been fired into the embankment in the past.

3.4 POTENTIAL WASTE DISPOSAL AREA SOUTHWEST OF PISTOL RANGE

A total of 52 magnetic and 99 EM readings were acquired in this area. Magnetic data are shown contoured in Figure 3-1. Quadrature EM data were manually smoothed to remove data affected by buried or surficial metal. The resultant data were contoured and are shown as a soil conductivity map in Figure 3-2. Anomalies in this figure indicate anomalously conductive or resistive soil which could indicate contamination. EM inphase and quadrature phase data were combined to generate a metal amplitude map (Figure 3-3). Non-zero values on this figure indicate the probable presence of metal.

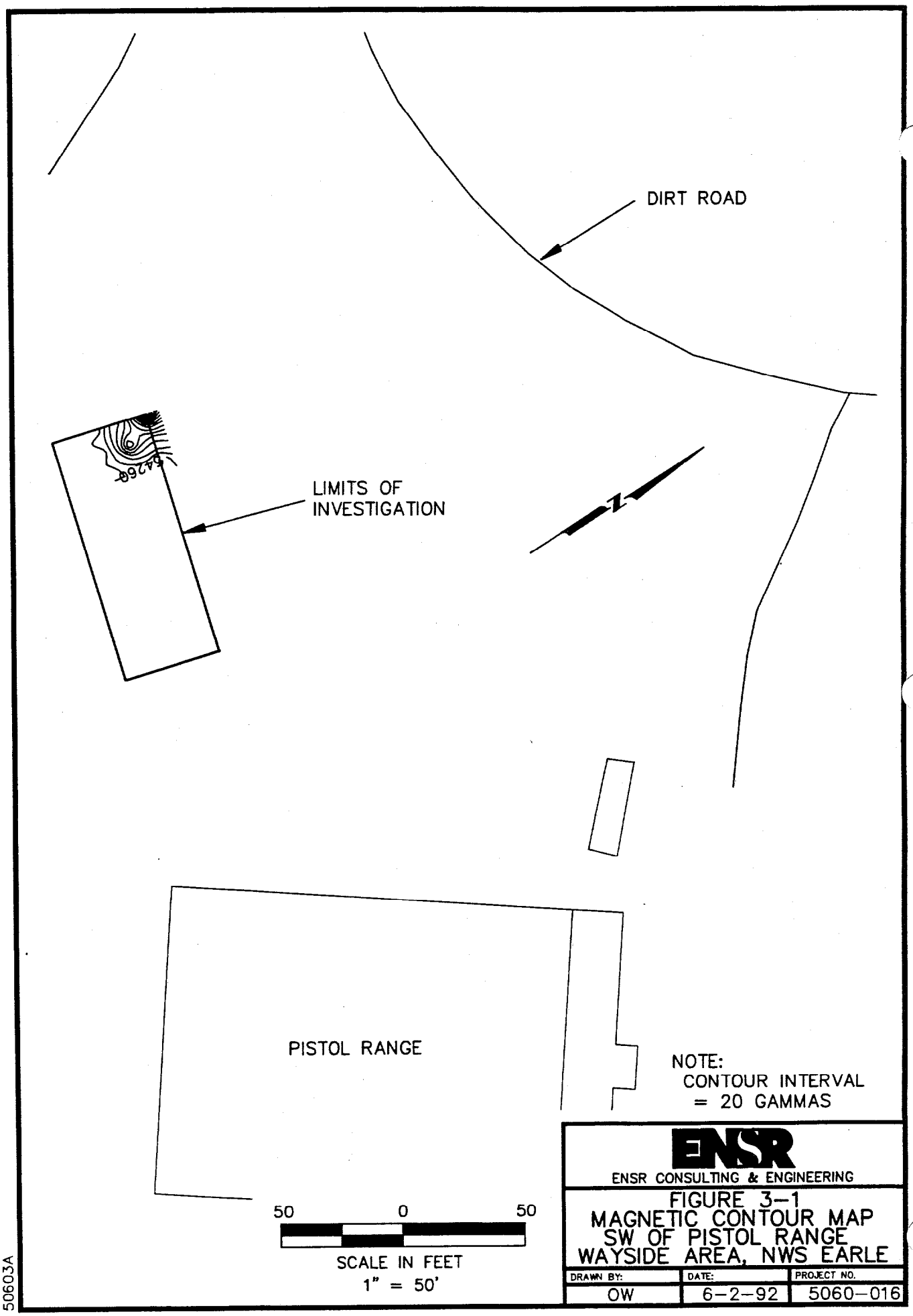
Only one anomalous location (designated as anomaly 1) was detected with the geophysical instruments as shown in Figure 3-4. It is located in the northeast corner of the area of investigation. Metallic trash and

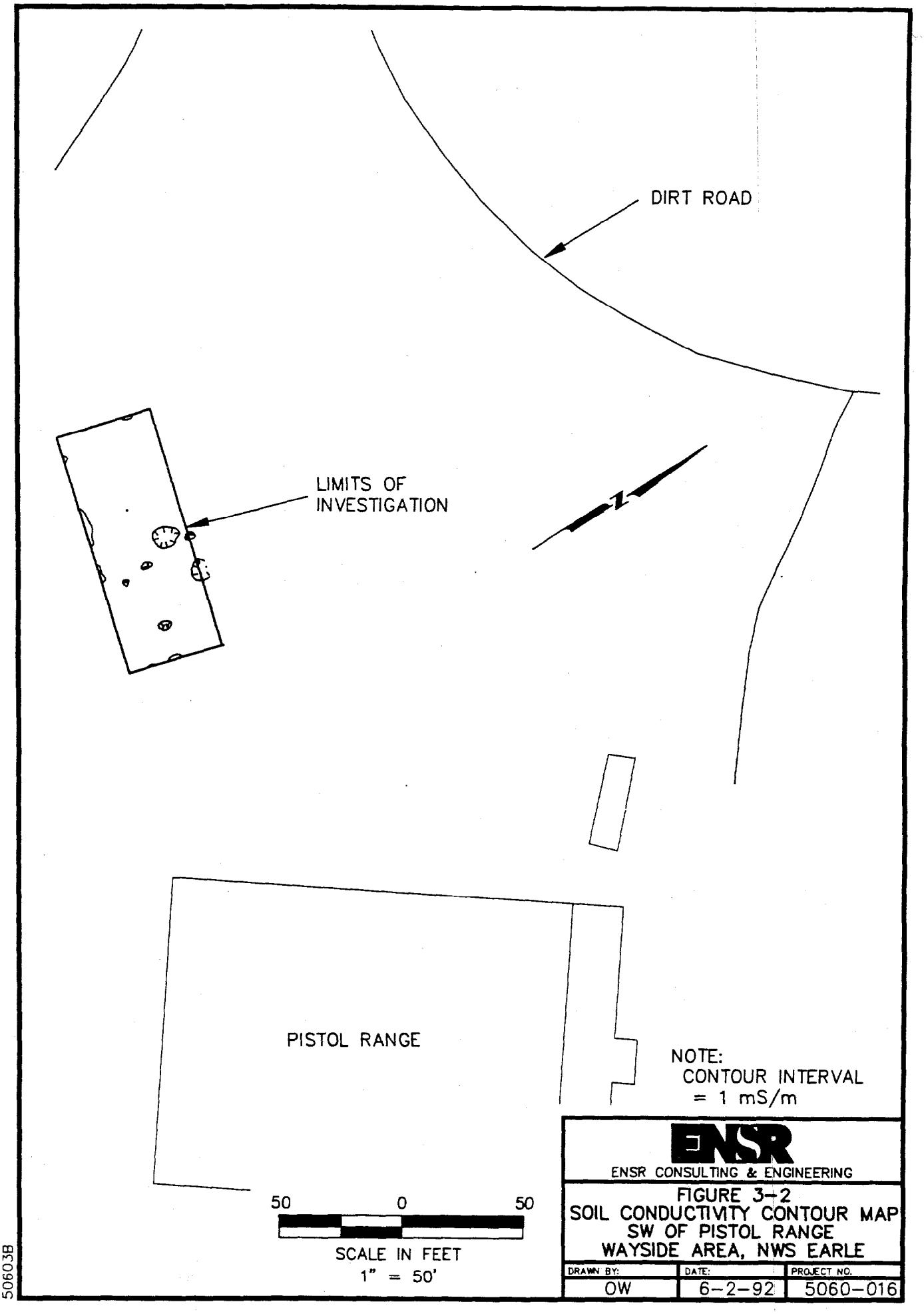
TABLE 3-7
SELECT METALS IN SOIL
(SAMPLED APRIL 1992)
WAYSIDE AREA, NWS EARLE

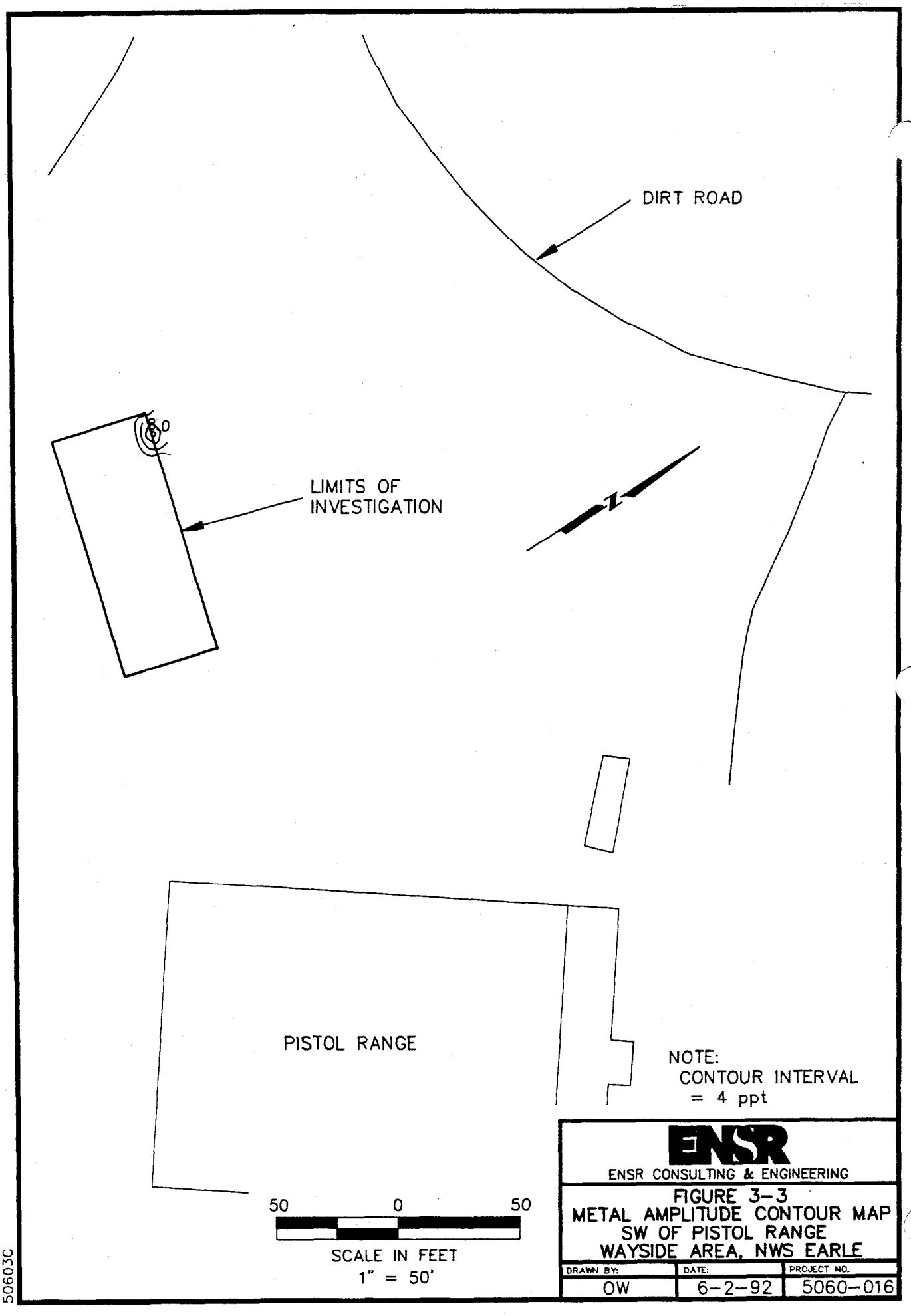
		Background	Subsurface Soil						Surface Soil			Blank
06/03/92	FIELD ID:	PR-BS	PRSB-1	PRSB-2	PRSB-3	PRSB-4	PRSB-5	PRSB-6	PRSS-1	PRSS-1-D	PRSS-2	EBTR-1
	LAB ID:	398768	402865	402878	40288S	40289S	402908	402828	402888	402849	402858	402918
	UNITS:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/l
CADMIUM		2.2	1.2	3.6	1.5	2	2.8	2.5	1.3	1.2 U	1.2	5 U
CHROMIUM		28	16.6	36.8	21.9	26.7	31.5	21.8	8.7	8.4	11.3	5 U
COPPER		4 B	5.3	8	5.8	7	4.7 B	12.4	219	74.1	100	5 U
LEAD		5.8	21.2	23.8	24.2	92.6	56	162	17800	1680	1140	2 U
ZINC		16.5	9	22.9	8.7	14.3	19.6	15.3	44	29.7	24.7	9.5 B

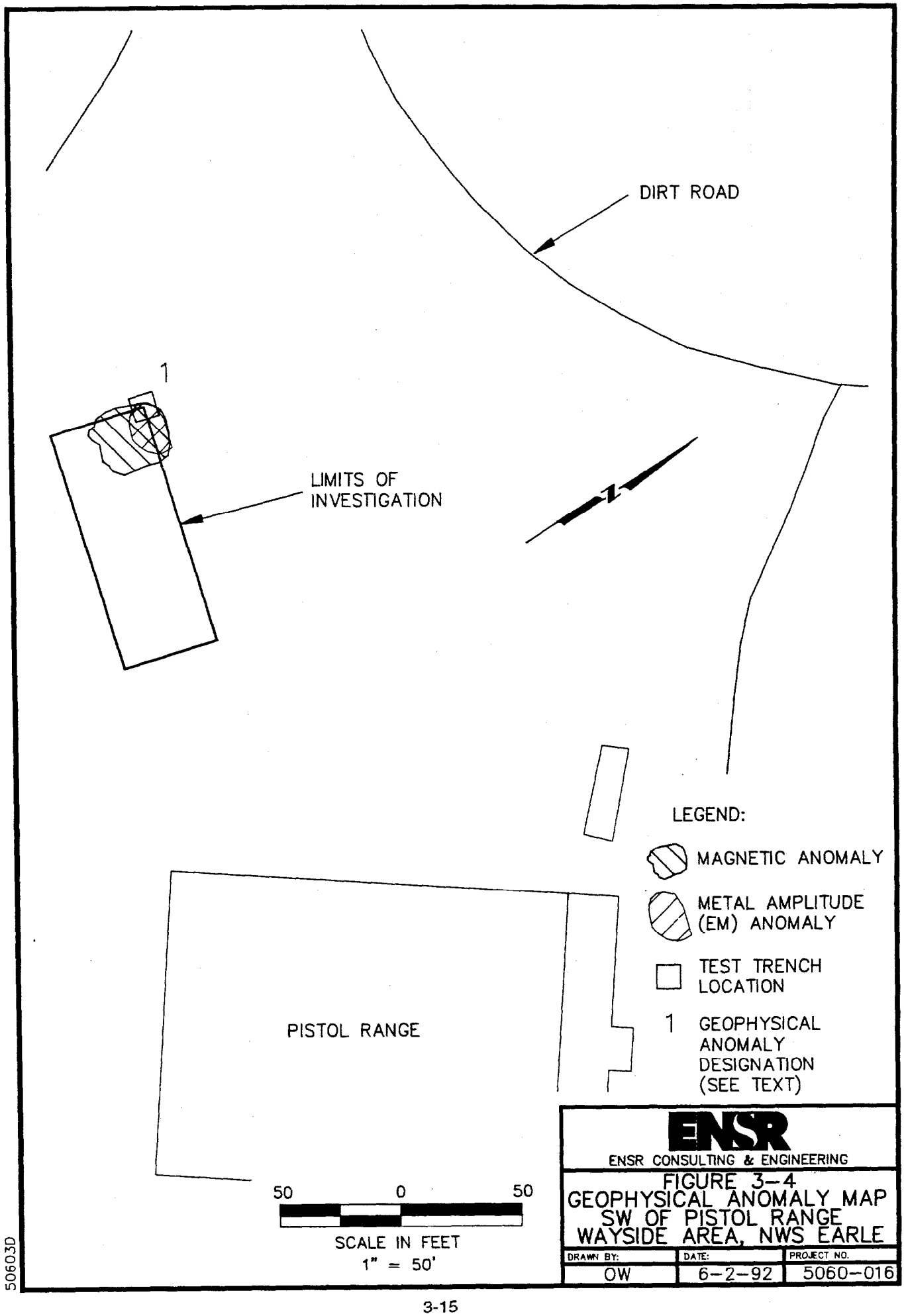
B - BELOW DETECTION LIMIT; ESTIMATED VALUE

U - NOT DETECTED AT SPECIFIED DETECTION LIMIT


DIRT ROAD
LIMITS OF
INVESTIGATION
N
PISTOL RANGE
NOTE:
CONTOUR INTERVAL
= 20 GAMMAS
50
0
50
SCALE IN FEET
1" = 50'
ENSR
ENSR CONSULTING & ENGINEERING
FIGURE 3-1
MAGNETIC CONTOUR MAP
SW OF PISTOL RANGE
WAYSIDE AREA, NWS EARLE
DRAWN BY:
OW
DATE:
6-2-92
PROJECT NO.
5060-016
50603A


DIRT ROAD
LIMITS OF
INVESTIGATION
N
PISTOL RANGE
NOTE:
CONTOUR INTERVAL
= 1 mS/m
50
0
50
SCALE IN FEET
1" = 50'
ENSR
ENSR CONSULTING & ENGINEERING
FIGURE 3-2
SOIL CONDUCTIVITY CONTOUR MAP
SW OF PISTOL RANGE
WAYSIDE AREA, NWS EARLE
DRAWN BY:
OW
DATE:
6-2-92
PROJECT NO.
5060-016
50603B


DIRT ROAD
LIMITS OF
INVESTIGATION
PISTOL RANGE
NOTE:
CONTOUR INTERVAL
= 4 ppt
50 0 50
SCALE IN FEET
1" = 50'
ENSR
ENSR CONSULTING & ENGINEERING
FIGURE 3-3
METAL AMPLITUDE CONTOUR MAP
SW OF PISTOL RANGE
WAYSIDE AREA, NWS EARLE
DRAWN BY:
OW
DATE:
6-2-92
PROJECT NO.
5060-016
50603C


DIRT ROAD
1
LIMITS OF
INVESTIGATION
N
LEGEND:
MAGNETIC ANOMALY
METAL AMPLITUDE
(EM) ANOMALY
TEST TRENCH
LOCATION
1 GEOPHYSICAL
ANOMALY
DESIGNATION
(SEE TEXT)
PISTOL RANGE
50 0 50
SCALE IN FEET
1" = 50'
ENSR
ENSR CONSULTING & ENGINEERING
FIGURE 3-4
GEOPHYSICAL ANOMALY MAP
SW OF PISTOL RANGE
WAYSIDE AREA, NWS EARLE
DRAWN BY: OW
DATE: 6-2-92
PROJECT NO. 5060-016
50603D

debris was observed on the surface at this location. Three test trenches were conducted to evaluate the vertical extent of debris. The test trenches indicated that debris is limited to the surface, therefore no subsurface soil samples were collected from the trenches. The geophysical anomaly was therefore attributed soley to the surficial metallic debris. Table 3-8 summarizes the results of the geophysical investigation.

3.5 CLEARED AREA IN SOUTHEAST CORNER OF WAYSIDE AREA

A total of 396 magnetic and 1769 EM readings were acquired in this area. Magnetic data are shown contoured in Figure 3-5. Quadrature EM data were manually smoothed to remove data affected by buried or surficial metal. The resultant data were contoured and are shown as a soil conductivity map in Figure 3-6. Anomalies in this figure indicate anomalously conductive or resistive soil which could indicate contamination. EM inphase and quadrature phase data were combined to generate a metal amplitude map (Figure 3-7). Non-zero values on this figure indicate the probable presence of metal.

Five (5) geophysical anomalies were detected with the geophysical instruments in this area as shown in Figure 3-8. Two (2) of these anomalies (designated as anomalies 5 and 6) appear to be directly attributable to observed metallic debris on the surface. One (1) anomaly (designated as anomaly 4) appears to be caused by electrical wires crossing underneath the dirt road and a steel housing associated with the wires. Two (2) other anomalies (designated as anomalies 2 and 3) could not readily be attributed to surface metal features. Two (2) test trenches were conducted to investigate the cause of these anomalies. No waste material was encountered in the test pits excavated in this area, therefore no samples were collected. Table 3-8 summarizes the results of the geophysical investigation.

3.6 BUILDINGS WITH POTENTIAL ASBESTOS INSULATION

No asbestos was detected in the insulation samples collected from buildings B5, C5, D and G. The analyses indicated that all insulation samples consisted primarily of fibrous glass (Table 3-9).

3.7 BUILDINGS WITH POTENTIAL LEAD PAINT

All of the paint samples from the thirteen buildings tested contained lead, at concentrations ranging from 1,620 ppm to 165,000 ppm (Table 3-10). These data indicate that lead paint is present on the exterior of buildings A, A1, A2, B, C, D, F, G, M, O, S, Y, and Z. If any of these buildings are to be demolished, the presence of the lead paint should be taken into account when determining an appropriate disposal method and location for the demolition debris.

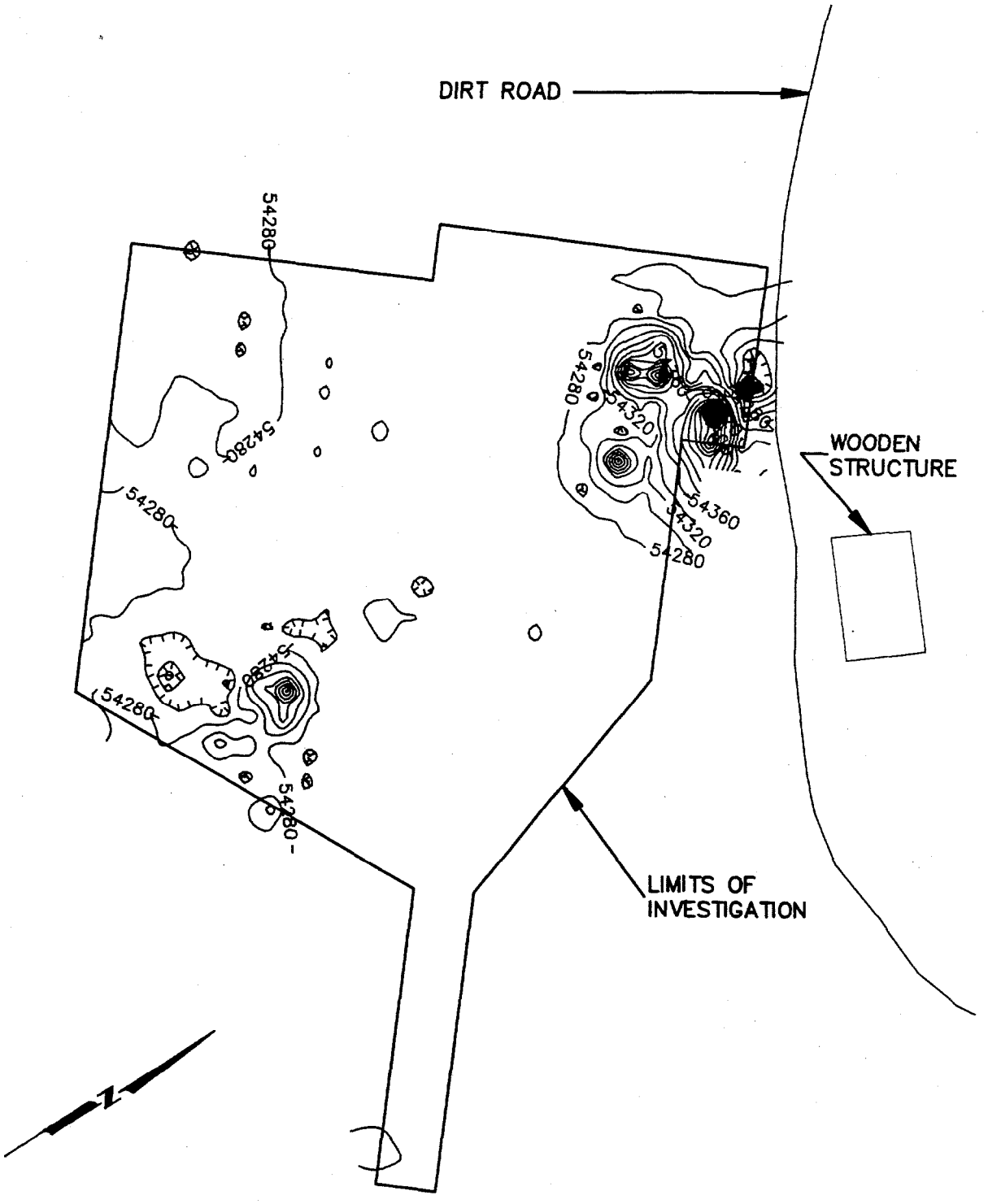
3.8 ABOVE GROUND TANK AT BUILDING M

Petroleum hydrocarbons (TPH) were detected in soil samples collected beneath the former above ground fuel tank located in front of building M, in the northwest section of the site (Table 3-11). The surface soil composite (MAT-SS) and duplicate (MAT-SS-D), collected from a depth of 0 to 6 inches, contained 870 and 980 mg/kg TPH, respectively. The subsurface soil sample (MAT-SB), collected at a depth of 2-3 feet, (which had a petroleum hydrocarbon odor) contained 2500 mg/kg TPH, which is below the proposed New

TABLE 3-8

GEOPHYSICAL INVESTIGATION SUMMARY
WAYSIDE AREA, NWS EARLE

Anomaly Designation	Location	Magnetic Anomaly (Gammas)	Metal Amplitude Anomaly (ppt)	Anomalous Soil Condition	Observation or Test Trench Results	Interpretation
1	SW of Pistol Range	300	16	--	Metallic debris at the surface	Anomalies caused by metallic debris
2	SE Corner of Wayside Area (near former helipad)	175	--	--	Wire buried at 1 to 2 feet	Anomalies probably caused by shallow buried wire
3	SE Corner of Wayside Area (near former helipad)	125	--	--	Metal on surface (helicopter tie-down fixtures)	Anomalies caused by surface metal
4	SE Corner of Wayside Area (near former helipad)	350	0.8	--	Pipe locator detected electric lines under road; observed other wires going under road which have a steel housing for support	Anomalies caused by steel housing and wires going under road
5	SE Corner of Wayside Area (near former helipad)	20	0.6	--	Observed metallic debris on ground surface	Anomalies probably caused by metal at the surface
6	SE Corner of Wayside Area (near former helipad)	--	0.6	--	Scattered, small amounts of metallic debris on the surface	Anomalies probably caused by small amounts of scattered metallic debris on the surface



NOTE:
CONTOUR INTERVAL = 20 GAMMAS

50 0 50

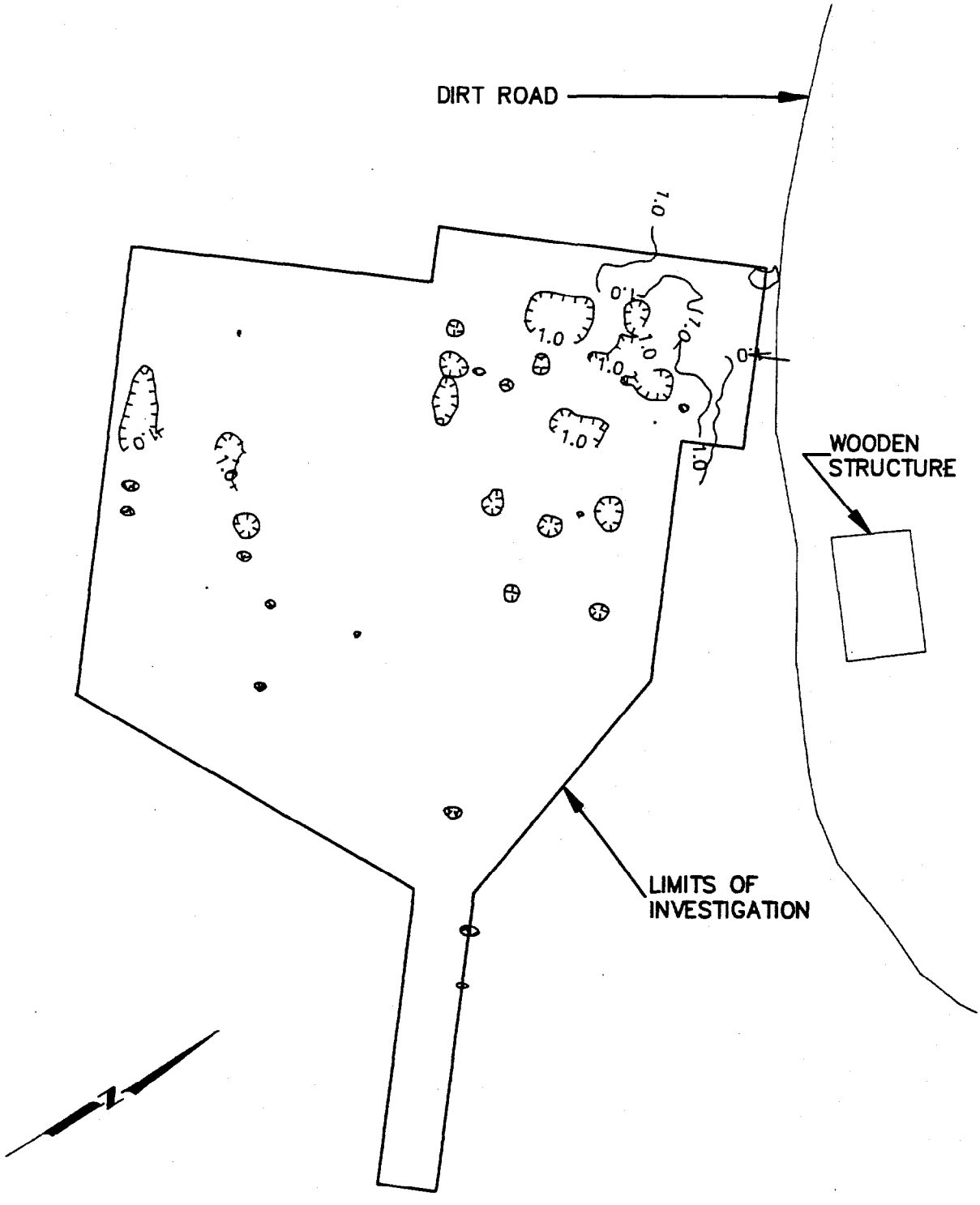
SCALE IN FEET
1" = 50'

ENSR
ENSR CONSULTING & ENGINEERING

FIGURE 3-5
MAGNETIC CONTOUR MAP
SE CORNER OF WAYSIDE
WAYSIDE AREA, NWS EARLE

DRAWN BY:	DATE:	PROJECT NO.
OW	6-1-92	5060-016

50603E



NOTE:
CONTOUR INTERVAL = 1 mS/m

50 0 50

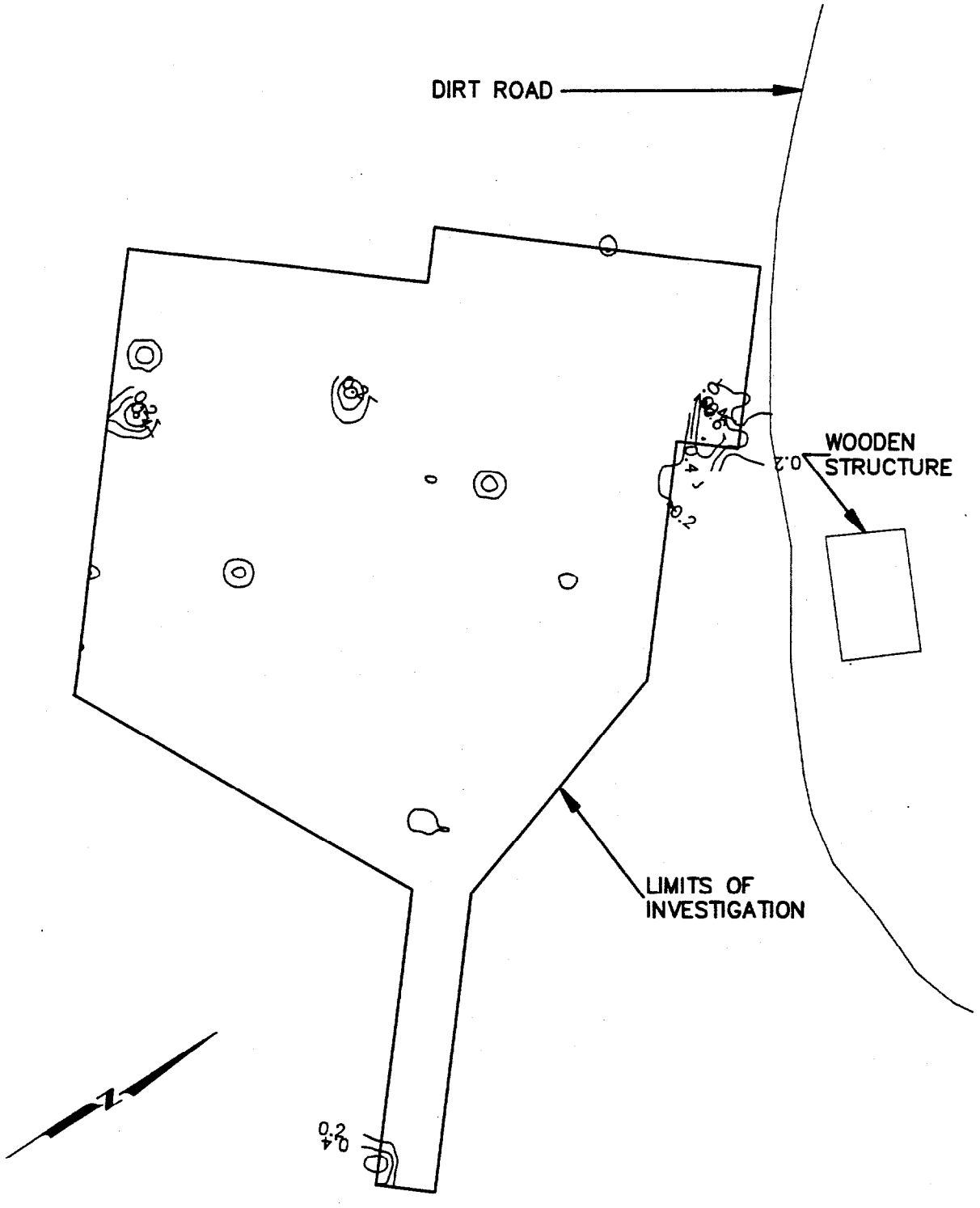
SCALE IN FEET
1" = 50'

ENSR CONSULTING & ENGINEERING

FIGURE 3-6
SOIL CONDUCTIVITY CONTOUR MAP
SE CORNER OF WAYSIDE
WAYSIDE AREA, NWS EARLE

DRAWN BY:	DATE:	PROJECT NO.
OW	6-1-92	5060-016

50603F



NOTE:
CONTOUR INTERVAL = 0.2 ppt

50 0 50

SCALE IN FEET
1" = 50'

ENSR CONSULTING & ENGINEERING

FIGURE 3-7
METAL AMPLITUDE CONTOUR MAP
SE CORNER OF WAYSIDE
WAYSIDE AREA, NWS EARLE

DRAWN BY:	DATE:	PROJECT NO.
OW	6-1-92	5060-016

5060JG

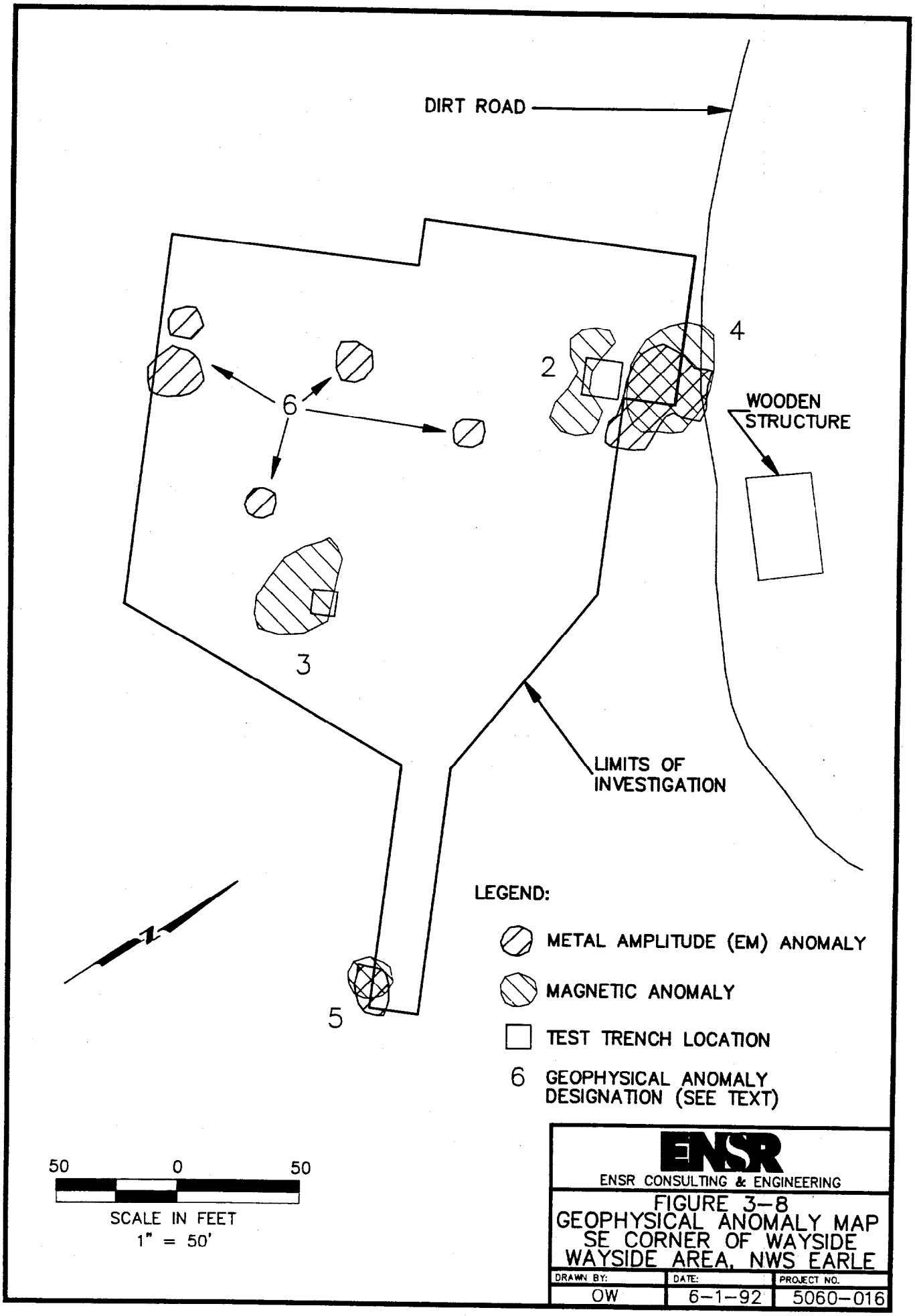

DIRT ROAD
4
2
6
WOODEN STRUCTURE
3
LIMITS OF INVESTIGATION
5
LEGEND:
METAL AMPLITUDE (EM) ANOMALY
MAGNETIC ANOMALY
TEST TRENCH LOCATION
6 GEOPHYSICAL ANOMALY DESIGNATION (SEE TEXT)
50 0 50
SCALE IN FEET
1" = 50'
ENSR
ENSR CONSULTING & ENGINEERING
FIGURE 3-8
GEOPHYSICAL ANOMALY MAP
SE CORNER OF WAYSIDE
WAYSIDE AREA, NWS EARLE
DRAWN BY: OW
DATE: 6-1-92
PROJECT NO. 5060-016
50603H

TABLE 3-9
ASBESTOS ANALYSIS
BUILDING INSULATION SAMPLES
WAYSIDE AREA, NWS EARLE

BUILDING NO.	SAMPLE NO.	ASBESTOS (%)	FIBROUS GLASS (%)	CELLULOSE (%)
B5	B5-BI	ND	97	ND
field dup	B5-BI-D	ND	97	ND
C5	C5-BI	ND	97	ND
field dup	C5-BI-D	ND	95	2
D	D-BI	ND	97	ND
G	G-BI	ND	86	10

ND - NO FIBROUS ASBESTIFORMS DETECTED:
Total fibrous asbestiforms reported as <1%.

FIBROUS ASBESTIFORMS ANALYZED FOR:
Actinolite/Tremolite
Amosite
Anthophylite
Chrysotile
Crocidolite

TABLE 3-10
LEAD ANALYSIS
BUILDING PAINT SAMPLES
WAYSIDE AREA, NWS EARLE

BUILDING NO.	SAMPLE NO.	TOTAL LEAD (mg/kg, ppm)
A	A-PN	113,000
A1	A1-PN	66,900
A2	A2-PN	77,200
B	B-PN	165,000
B-field dup	B-PN-D	152,000
C	C-PN	142,000
C-field dup	C-PN-D	135,000
D	D-PN	103,000
F	F-PN	111,000
G	G-PN	88,700
M	M-PN	1,620
O	O-PN	44,000
S	S-PN	98,900
Y	Y-PN	11,500
Z	Z-PN	9,220

TABLE 3-11
SOIL SAMPLES COLLECTED NEAR
FORMER ABOVE GROUND TANKS
WAYSIDE AREA, NWS EARLE

SAMPLE NO.	LOCATION	DEPTH (ft)	TPH (mg/kg)	LEAD (mg/kg)
MAT-SS	Building M, NW section of site	0-0.5	870	98.1
MAT-SS-D	Field duplicate	0-0.5	980	NA
MAT-SB	Subsurface soil	2-3	2500	6.3
AFAT-SS	SE corner of antenna field	0-0.5	<78	17
AFAT-SB	Subsurface soil	2-3	<72	1.6
EB-HA-2 *	Equipment Rinsate Blank over Hand Auger		<2	2

* EB-HA-2: TPH result in mg/l, Lead result in μg/l.
NA: Not analyzed

Jersey Cleanup Standard (see Table 3-6). The presence of petroleum hydrocarbons in the surface and subsurface soil at this location may be due to a past surface spill which has since seeped down into the subsurface. A former underground fuel storage tank is known to have leaked in the vicinity of former building R which is within approximately 100 feet of this above ground tank. The medium sand noted in the subsurface may be conducive to lateral migration of hydrocarbons.

Lead was detected in soil samples collected beneath the above ground fuel tank located in front of building M (Table 3-11). The surface soil composite (MAT-SS) contained 98.1 mg/kg lead, and the subsurface soil (MAT-SB) contained 6.3 mg/kg lead. It was noted during sampling that the surface soil contained tiny paint chips which had flaked off the building. An effort was made not to include paint chips in the sample. Since the paint on building M contained 1,620 ppm lead, the presence of paint chips in the surface soil sample probably accounts for the difference in lead concentrations between the surface and subsurface soil.

3.9 ABOVE GROUND TANK IN ANTENNA FIELD

TPH were not detected in the surface and subsurface soil sample collected beneath the former above ground fuel tank located at the southeastern corner of the antenna field (AFAT-SS and AFAT-SB) (Table 3-11).

Beneath the former above ground fuel tank located at the southeastern corner of the antenna field, lead was detected at 17 mg/kg in the surface soil, and 1.6 mg/kg in the subsurface soil (Table 3-11). These levels were similar to the lead level (10.6 mg/kg) in the background soil sample collected in the antenna field (AF-BS).

3.10 EMPTY TRANSFORMER PADS

PCB results are presented in Table 3-12. No PCBs were detected in any of the surface soil composite samples collected from around five empty transformer pads (WA-007, WA-008, WA-015, WA-016, and WA-045) which had once held PCB-contaminated transformers (50-500 ppm PCBs). These data indicate that it is unlikely that any transformer fluid has leaked into the surrounding soil.

3.11 BACKGROUND SOIL SAMPLES

The two background soil samples, PR-BS and AF-BS, contained methylene chloride (1J and 1J µg/kg) and acetone (3B and 2J µg/kg) (Table 3-1). The presence of these two compounds is attributed to laboratory contamination, due to their presence in several samples and blanks.

Di-n-butylphthalate, a blank contaminant, was detected in PR-BS (2000B µg/kg) and AF-BS (1900B µg/kg) (Table 3-2). Sample AF-BS also contained butylbenzylphthalate (38J µg/kg), and bis-2-ethylhexylphthalate (67BJ µg/kg). The presence of phthalates is attributed to laboratory contamination.

No pesticides were detected in the background soil sample collected from the top of the embankment south of the pistol range (PR-BS) (Table 3-3). Trace concentrations for pesticides detected in the background soil sample collected from the antenna field (AF-BS) included Dieldrin (0.43J µg/kg), 4,4'-DDE (0.78J µg/kg) and 4,4'-DDT (2.6J µg/kg). These levels are well below the proposed New Jersey Soil Cleanup Standards for residential soil. No PCBs were detected in either soil sample.

TABLE 3-12
COMPOSITE SOIL SAMPLES COLLECTED
AROUND EMPTY TRANSFORMER PADS
WAYSIDE AREA, NWS EARLE

Sample No.	Transformer No.	Location	PCBs (μg/kg)
TF-7	WA-007	E edge of Antenna Field	ND
TF-8	WA-008	E edge of Antenna Field	ND
TF-15	WA-015	W edge of Antenna Field	ND
TF-16	WA-016	W edge of Antenna Field	ND
TF-45	WA-045	W end of site, near "I"	ND
TF-45-D	WA-045	Field Duplicate	ND
EB-HA-3		Equipment Rinsate Blank over Hand Auger (μg/l)	ND

ND - Not Detected

PCBs Analyzed	Detection Limit (μg/kg)
Aroclor-1016	36
Aroclor-1221	74
Aroclor-1232	36
Aroclor-1242	36
Aroclor-1248	36
Aroclor-1254	36
Aroclor-1260	36

TAL metals detected in the two background soil samples are presented in Table 3-5. These levels are well within the normal range of naturally occurring soils.

4.0 CONCLUSIONS AND RECOMMENDATIONS

In general, the field investigations support the original conclusions of the Environmental Evaluation of Wayside and have not identified any areas of environmental concern which would be unsuitable for housing and schools.

Most of the areas investigated were not found to be significantly contaminated.

- There is no evidence that hazardous compounds have been released from the septic systems at the CECOM Building and building N.
- No asbestos was found in the building insulation of the four buildings tested.
- No petroleum hydrocarbons were found beneath the former above ground tank at the southeastern corner of the antenna field.
- No PCBs were detected in the surface soil around the five empty transformer pads which had once held PCB-contaminated transformers.

Only the debris observed on the ground surface during the Environmental Evaluation was found at the potential waste disposal areas located southwest of the Pistol Range and in the southeast corner of Wayside. Removal of this debris to a solid waste disposal site should be considered prior to development of these two areas.

As anticipated, elevated concentrations of lead and copper (compared to background) were found in surface soil on the embankment in the Pistol Range; however, only the lead levels exceeded the proposed New Jersey Residential Soil Cleanup Standard (100 mg/kg). The contaminated surface soil on the embankment opposite the Pistol Range shelter is estimated to cover an area of approximately 3,500 square feet (115 feet long by 30-40 feet wide). If this area is to be used for housing and/or schools, the surface soil may require further testing or some type of remediation, i.e., excavation of the top two feet of soil.

The investigations also confirmed that lead paint has been used on the exterior of the thirteen buildings tested. Presumably, it was also used on the untested buildings. If and when the buildings are removed or demolished, provisions should be made for the proper collection and disposal of the lead paint and/or demolition debris, in accordance with applicable Federal and New Jersey guidelines.

Elevated levels of total petroleum hydrocarbons (TPH) were found in the surface and subsurface soil beneath the former above ground tank located in front of building M, in the northwest section of the site. Although the TPH concentrations are below the proposed New Jersey Cleanup Standards, the source and extent of this contamination has not been identified. The contamination may be due to a surface spill from the above ground tank; however, a former underground fuel storage tank located nearby former building R, is also known to have leaked. Additional investigation should be performed in this area by either the Army or the Navy to determine the source and extent of hydrocarbon contamination. The investigation should include collection of surface soil samples, and installation of soil borings and groundwater monitoring wells.

APPENDIX A
LIST OF ABBREVIATIONS/ACRONYMS

APPENDIX A
LIST OF ABBREVIATIONS/ACRONYMS

ACGIH	American Conference of Governmental Hygienists
BOA	Basic Ordering Agreement
CAT	Chemical Additive Tank
CHSM	CLEAN Health and Safety Manager
CECOM-EMI	Communications Electronics Command-Electromagnetic Interference
CHSO	Company Health and Safety Officer
CLP	Contract Laboratory Program
COC	Chain-of-custody
CRZ	Contamination Reduction Zone
DQO	data quality objectives
EM	Electromagnetic Induction
FTL	Field Team Leader
FSP	Field Sampling Plan
HASP	Health and Safety Plan
HEPA	high efficiency particulate air
IR	Installation Restoration
ISCTV	In-Situ Containment and Treatment Unit
LEL	Lower Explosive Limit
MSDS	material safety data sheet
NEESA	Naval Energy and Environmental Support Activity
NIST	National Institute of Standards and Technology
NJDEP	New Jersey Department of Environmental Protection
NORTHDIV	Navy Northern Division
NVLAP	National Voluntary Laboratory Accreditation Program
NWS	Naval Weapons Station
PARCC	precision, accuracy, representativeness, completeness, and comparability
PCB	polychlorinated biphenyls
PEL	Permissible Exposure Limit
PID	photoionization detector
PM	Project Manager
POC	Point of Contact
PPE	personal protective equipment
ppm	parts per million
PVC	polyvinyl chloride
QA/QC	Quality Assurance/Quality Assurance

RPD	relative percent difference
RPM	Remedial Project Manager
SI	Site Inspection
SMP	Site Management Plan
SOP	standard operating procedure
SSO	Site Safety Officer
SVOC	semi-volatile organic compounds
TAL	target analyte list
TCL	target compound list
TCLP	toxicity characteristic leaching procedure
TMR	Task Modification Request
TPH	Total Petroleum Hydrocarbons
UST	underground storage tank
VOC	volatile organic compounds

APPENDIX B
DOCUMENTS REVIEWED

APPENDIX B
DOCUMENTS REVIEWED

- Environmental Evaluation of "Wayside" Naval Weapons Station Earle Colts Neck, New Jersey, HALLIBURTON NUS Corporation November 7, 1991.

- Natural Features Study for Monmouth County, Monmouth County Environmental Council, April 1975, Reprinted January 1988.

- Wayside Area Naval Weapons Station Earle Colts Neck, New Jersey, Site Investigation Work Plan, HALLIBURTON NUS Corporation, March 31, 1992.

- Shacklette, H.T. and J.G. Boerngen, 1984. Element Concentrations in Soils and Other Surficial Materials of the Conterminous United States, Geological Survey Prof. Paper 1270, Alexandria.

- Kabata - Pendias, A., and H. Pendias, 1984. Trace Elements in Soils and Plants, CRC Press, Inc. Boca Raton.

- Lindsay, 1979. Chemical Equilibria in Soils. John Wiley and Sons, New York.

- Dragun, J., 1988. The Soil Chemistry of Hazardous Materials, Hazardous Materials Control Research Institute, Silver Spring.

- Site Remediation Program Cleanup Standards for Contaminated Sites Proposed New Rules: N.J.A.C.7:26D, New Jersey Register, Monday, February 3, 1992 (CITE 24 N.J.R.373).

APPENDIX C
TEST PIT LOGS

Project NWS EARLE Site COLT'S NECK, NJ **TEST PIT** NTP1 Sh 1 of 1

Date 4/21/92 Location BUILDING N Ground Elevation

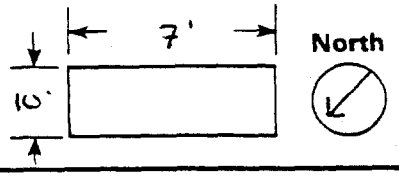
Total Depth 8' Contractor SCHAAL Construction

Equipment Used BACKHOE Logged by J. POWERS

Remarks Collect Samples NST-SL and NTP1-1 for VOC, SVOC, Pesticide, PCB and TAL Metals analysis.

Elev. Feet	Depth Feet	Sample Type & No.	Sample Depth Range	Soil & Rock Description & Comments
		NST-SL	4'	black/gray FILL (brick, concrete, Ash-like material, Clinker-like material)
	5			
		NTP1-1	7'-8'	tan medium SAND, Some Silt and gravel
				END OF TEST PIT AT 8'
	10			

Test Pit Plan



Groundwater		
Date	Time (Hours After Completion)	Depth (Feet)

913(1/81)

ENSR

Project NWS EARLE Site COLT'S NECK, NJ **TEST PIT** NTP2 Sh 1 of 1

Date 4/21/92 Location BUILDING N Ground Elevation

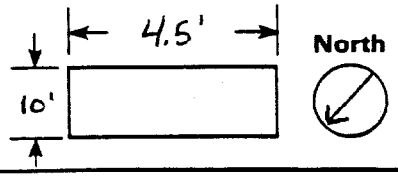
Total Depth 3.5' Contractor SCHAAL CONSTRUCTION

Equipment Used BACKHOE Logged by J. POWERS

Remarks No Samples Submitted for chemical analysis.

Elev. Feet	Depth Feet	Sample Type & No.	Sample Depth Range	Soil & Rock Description & Comments
				brown LOAM
				tan medium SAND, some silt and gravel
				END OF TEST PIT AT 3.5'
	5			
	10			

Test Pit Plan



Groundwater		
Date	Time (Hours After Completion)	Depth (Feet)

ENSR

.913 (1/81)

Project NWS EARLE Site COLT'S NECK, NJ **TEST PIT** B7TP1 Sh 1 of 1

Date 4/21/92 Location CECOM BUILDING Ground Elevation

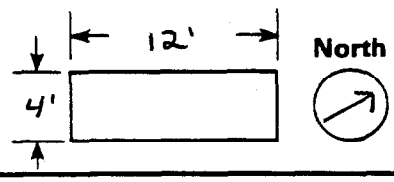
Total Depth 10' Contractor SCHAAL CONSTRUCTION

Equipment Used BACKHOE Logged by J. POWERS

Remarks Collect Samples B7TP1-1, B7TP1-2 and B7TP1-2-D for VOC, SVOC, Pesticides, PCB and TAL Metals analysis.

Elev. Feet	Depth Feet	Sample Type & No.	Sample Depth Range	Soil & Rock Description & Comments
				brown LOAM, some roots
	5			tan medium SAND, some silt and gravel
		B7TP1-1	6'-8'	
		B7TP1-2 B7TP1-2-D	10'	
	10			END OF TEST PIT AT 10'

Test Pit Plan



Groundwater

Date	Time (Hours After Completion)	Depth (Feet)

ENSR

.913 (1/81)

Project NWS Earle Site Colt's Neck, NJ **TEST PIT** B7TP2 Sh 1 of 1

Date 4/21/92 Location CECOM Building Ground Elevation

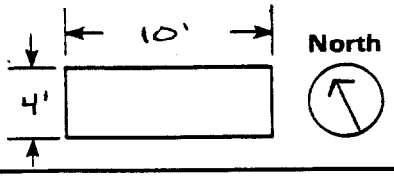
Total Depth 10' Contractor Schaal Construction

Equipment Used Backhoe Logged by J. Powers

Remarks No samples submitted for chemical analysis.

Elev. Feet	Depth Feet	Sample Type & No.	Sample Depth Range	Soil & Rock Description & Comments
				brown LOAM, some roots
	5			tan medium SAND, some silt and gravel
	10			END OF TEST PIT AT 10'

Test Pit Plan



Groundwater		
Date	Time (Hours After Completion)	Depth (Feet)

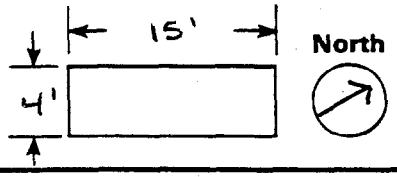
ENSR

.913 (1/81)

Project NWS EARLE Site COLT'S NECK, NJ **TEST PIT** B7TP3 Sh 1 of 1
Date 4/21/92 Location CECOM BUILDING Ground Elevation
Total Depth 10' Contractor SCHABL CONSTRUCTION
Equipment Used BACKHOE Logged by J. POWERS
Remarks NO SAMPLES SUBMITTED FOR CHEMICAL ANALYSIS.

Elev. Feet	Depth Feet	Sample Type & No.	Sample Depth Range	Soil & Rock Description & Comments
				brown LOAM, Some roots
	5			tan medium SAND, Some Silt and gravel
	10			END OF TEST PIT AT 10'

Test Pit Plan



Groundwater		
Date	Time (Hours After Completion)	Depth (Feet)

ENSR

.913 (1/81)

Project NWS EARLE Site Colt's NECK, NJ **TEST PIT** DAPRTP1 Sh 1 of 1

Date 4/22/92 Location Potential Dis. Area SW P.R. Ground Elevation

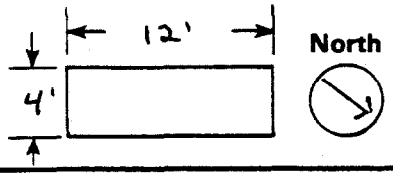
Total Depth 4' Contractor SCHAAL CONSTRUCTION

Equipment Used BACKHOE Logged by J. POWERS

Remarks NO SAMPLES SUBMITTED FOR CHEMICAL ANALYSIS.

Elev. Feet	Depth Feet	Sample Type & No.	Sample Depth Range	Soil & Rock Description & Comments
				brown LOAM, some roots, trace metal
				tan/white medium SAND, some gravel
	5			END OF TEST PIT AT 4'
	10			

Test Pit Plan



Groundwater		
Date	Time (Hours After Completion)	Depth (Feet)

ENSR

.913 (1/81)

Project NWS EARLE Site Colts Neck, NJ **TEST PIT** DAPRTP2 Sh 1 of 1

Date 4/22/92 Location Potential Dis. Area SW. PR. Ground Elevation

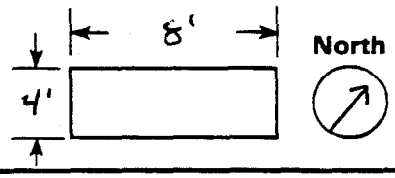
Total Depth 4' Contractor SCHAAL CONSTRUCTION

Equipment Used BACKHOE Logged by J. POWERS

Remarks No Samples Submitted for Chemical Analysis

Elev. Feet	Depth Feet	Sample Type & No.	Sample Depth Range	Soil & Rock Description & Comments
				brown LOAM, Some roots, trace metal
				tan/white medium SAND, Some gravel
	5			END OF TEST PIT AT 4'
	10			

Test Pit Plan



Groundwater		
Date	Time (Hours After Completion)	Depth (Feet)

ENSR

.913 (1/81)

Project NWS EARLE Site Colt's NECK, NJ **TEST PIT** DAPRTP3 Sh 1 of 1

Date 4/22/92 Location Potential Dis. Area SW PR. Ground Elevation

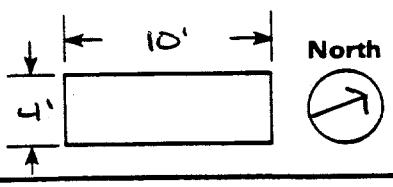
Total Depth 4' Contractor SCHAAL CONSTRUCTION

Equipment Used BACKHOE Logged by J. POWERS

Remarks NO SAMPLES Submitted for Chemical Analysis.

Elev. Feet	Depth Feet	Sample Type & No.	Sample Depth Range	Soil & Rock Description & Comments
				brown LOAM, Some roots, trace metal
				tan/white medium SAND, Some gravel
	5			END OF TEST PIT AT 4'
	10			

Test Pit Plan



Groundwater		
Date	Time (Hours After Completion)	Depth (Feet)

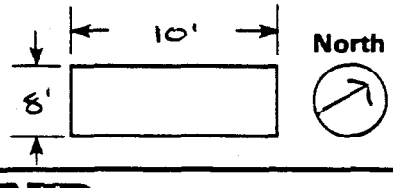
913 (1/81)

ENSR

Project NWS EARLE Site Colts NECK, NJ **TEST PIT** DASETP2 Sh 1 of 1
Date 4/22/92 Location Potential Dis. Area SE WAY Ground Elevation
Total Depth 5' Contractor SCHAAL CONSTRUCTION
Equipment Used BACKHOE Logged by J. POWERS
Remarks NO Samples submitted for chemical analysis.

Elev. Feet	Depth Feet	Sample Type & No.	Sample Depth Range	Soil & Rock Description & Comments
				brown LOAM
				tan medium SAND, some gravel and Cobbles
	5			END OF TEST PIT AT 5'
	10			

Test Pit Plan



Groundwater		
Date	Time (Hours After Completion)	Depth (Feet)

ENSR

1913 (1/81)

Project NWS EARLE Site Colt's Neck, NJ **TEST PIT** DASETP1 Sh 1 of 1

Date 4/22/92 Location Potential Dis. Area SE WAY. Ground Elevation

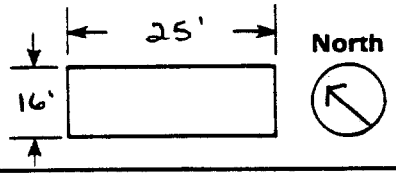
Total Depth 7' Contractor SCHAAL CONSTRUCTION

Equipment Used BACKHOE Logged by J. POWERS

Remarks NO Samples Submitted for Chemical Analysis.

Elev. Feet	Depth Feet	Sample Type & No.	Sample Depth Range	Soil & Rock Description & Comments
				brown LOAM
	5			tan medium SAND, Some gravel
	10			END OF TEST PIT AT 7'

Test Pit Plan



Groundwater		
Date	Time (Hours After Completion)	Depth (Feet)

ENSR

(913 (1/81)

APPENDIX D
LABORATORY DATA

VOLATILE ORGANIC COMPOUNDS

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF-BS

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39891

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L9765

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. 6 Date Analyzed: 04/29/92

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	1	J
67-64-1	Acetone	2	J
75-15-0	Carbon Disulfide	11	U
75-35-4	1,1-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	11	U
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Xylene (total)	11	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

AF-BS

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39891

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L9765

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. 6 Date Analyzed: 04/29/92

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

3016

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PR-BS

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: F0611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39876

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L9786

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. 9 Date Analyzed: 04/30/92

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	Q	
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	1	J
67-64-1	Acetone	3	BJ
75-15-0	Carbon Disulfide	11	U
75-35-4	1,1-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	11	U
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Xylene (total)	11	U

30164

EPA SAMPLE NO.

PR-BS

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39876

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L9786

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. 9 Date Analyzed: 04/30/92

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 556672	Cyclotetrasiloxane,octamethy	23.87	7	BJ
2.	Unknown	28.84	5	J
3.	Unknown	32.31	35	J

30156

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NTP1-1

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39899

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L9767

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. 2 Date Analyzed: 04/29/92

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	1	J
67-64-1	Acetone	2	J
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

30157

EPA SAMPLE NO.

NTP1-1

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39899

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L9767

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. 2 Date Analyzed: 04/29/92

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7TP1-1

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39900

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L9768

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. 8 Date Analyzed: 04/29/92

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	1	J
67-64-1	Acetone	2	J
75-15-0	Carbon Disulfide	11	U
75-35-4	1,1-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	11	U
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Xylene (total)	11	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B7TP1-1

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39900

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L9768

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. 8 Date Analyzed: 04/29/92

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7TP1-2

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39901

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L9769

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. 10 Date Analyzed: 04/29/92

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	1	J
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	11	U
75-35-4	1,1-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	11	U
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Xylene (total)	11	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B7TP1-2

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39901

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L9769

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. 10 Date Analyzed: 04/29/92

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7TP1-2-D

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39902

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L9770

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. 6 Date Analyzed: 04/29/92

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	1	J
67-64-1	Acetone	3	J
75-15-0	Carbon Disulfide	11	U
75-35-4	1,1-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	11	U
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Xylene (total)	11	U

30116

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B7TP1-2-D

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39902

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L9770

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. 6 Date Analyzed: 04/29/92

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7STSL

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39908

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L9771

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. 96 Date Analyzed: 04/29/92

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	250	U
74-83-9	Bromomethane	250	U
75-01-4	Vinyl Chloride	250	U
75-00-3	Chloroethane	250	U
75-09-2	Methylene Chloride	24	J
67-64-1	Acetone	1300	
75-15-0	Carbon Disulfide	32	J
75-35-4	1,1-Dichloroethene	250	U
75-34-3	1,1-Dichloroethane	250	U
540-59-0	1,2-Dichloroethene (total)	250	U
67-66-3	Chloroform	250	U
107-06-2	1,2-Dichloroethane	250	U
78-93-3	2-Butanone	430	
71-55-6	1,1,1-Trichloroethane	250	U
56-23-5	Carbon Tetrachloride	250	U
75-27-4	Bromodichloromethane	250	U
78-87-5	1,2-Dichloropropane	250	U
10061-01-5	cis-1,3-Dichloropropene	250	U
79-01-6	Trichloroethene	250	U
124-48-1	Dibromochloromethane	250	U
79-00-5	1,1,2-Trichloroethane	250	U
71-43-2	Benzene	250	U
10061-02-6	trans-1,3-Dichloropropene	250	U
75-25-2	Bromoform	250	U
108-10-1	4-Methyl-2-Pentanone	250	U
591-78-6	2-Hexanone	250	U
127-18-4	Tetrachloroethene	250	U
79-34-5	1,1,2,2-Tetrachloroethane	250	U
108-88-3	Toluene	460	
108-90-7	Chlorobenzene	120	J
100-41-4	Ethylbenzene	250	U
100-42-5	Styrene	250	U
1330-20-7	Xylene (total)	250	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B7STSL

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39908

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L9771

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. 96 Date Analyzed: 04/29/92

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown alkane	21.44	1900	J
2.	C10H16 isomer	23.99	14000	J
3.	Unknown alkane	24.22	1800	J
4.	Unknown	25.96	12000	J
5.	Unknown alkane	26.64	4400	J
6.	Unknown	27.19	2400	J
7.	C10H18 isomer	27.37	12000	J
8.	C10H18 isomer	27.74	1600	J
9.	C10H14 isomer	28.14	10000	J

30073

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7STSL-D

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39909

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L9772

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. 97 Date Analyzed: 04/29/92

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	330	U
74-83-9	Bromomethane	330	U
75-01-4	Vinyl Chloride	330	U
75-00-3	Chloroethane	330	U
75-09-2	Methylene Chloride	38	J
67-64-1	Acetone	2000	
75-15-0	Carbon Disulfide	42	J
75-35-4	1,1-Dichloroethene	330	U
75-34-3	1,1-Dichloroethane	330	U
540-59-0	1,2-Dichloroethene (total)	330	U
67-66-3	Chloroform	330	U
107-06-2	1,2-Dichloroethane	330	U
78-93-3	2-Butanone	690	
71-55-6	1,1,1-Trichloroethane	330	U
56-23-5	Carbon Tetrachloride	330	U
75-27-4	Bromodichloromethane	330	U
78-87-5	1,2-Dichloropropane	330	U
10061-01-5	cis-1,3-Dichloropropene	330	U
79-01-6	Trichloroethene	330	U
124-48-1	Dibromochloromethane	330	U
79-00-5	1,1,2-Trichloroethane	330	U
71-43-2	Benzene	330	U
10061-02-6	trans-1,3-Dichloropropene	330	U
75-25-2	Bromoform	330	U
108-10-1	4-Methyl-2-Pentanone	330	U
591-78-6	2-Hexanone	330	U
127-18-4	Tetrachloroethene	330	U
79-34-5	1,1,2,2-Tetrachloroethane	330	U
108-88-3	Toluene	660	
108-90-7	Chlorobenzene	170	J
100-41-4	Ethylbenzene	330	U
100-42-5	Styrene	330	U
1330-20-7	Xylene (total)	330	U

U: undet
J: estimate

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
B7STSL-D

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39909

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L9772

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. 97 Date Analyzed: 04/29/92

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	C10H16 isomer	23.97	14000	J
2.	Unknown alkane	24.20	1300	J
3.	C10H16 isomer	24.79	1300	J
4.	Unknown	25.39	2700	J
5.	Unknown	25.94	15000	J
6.	Unknown alkane	26.62	4700	J
7.	C10H18 isomer	27.36	15000	J
8.	C10H18 isomer	27.72	4500	J
9.	C10H14 isomer	28.14	13000	J
10.	C10H14 isomer	29.09	2500	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7STAQ

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: F0611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39907

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: K3730

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. Date Analyzed: 04/30/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	23	
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B7STAQ

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39907

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: K3730

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. Date Analyzed: 04/30/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (ul.) Soil Aliquot Volume: (ul.)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

30039

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7STAQ-D

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39906

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: K3727

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. Date Analyzed: 04/30/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (ul.) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	15	
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B7STAQ-D

.ab Name: CAMBRG Contract: ENSR

ab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39906

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: K3727

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. Date Analyzed: 04/30/92

Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

122

30127

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBTP-1

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39903

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: K3724

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. Date Analyzed: 04/30/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	8	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	3	J
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	8	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	2	J
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	9	JY

123

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EBTP-1

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39903

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: K3724

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. Date Analyzed: 04/30/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

124

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB-2

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39905

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: K3726

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. Date Analyzed: 04/30/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	9	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2 Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	2	J
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	2	J
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	Y

125

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FB-2

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39905

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: K3726

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. Date Analyzed: 04/30/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 30

FB-BH-1

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39904

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: K3725

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. Date Analyzed: 04/30/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

827

3014

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
FB-BH-1

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39904

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: K3725

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. Date Analyzed: 04/30/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

128

30175

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-1

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39910

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: E8333

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. Date Analyzed: 05/01/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	5	J
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	2	BJ
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

dz9

30176

EPA SAMPLE NO.

TB-1

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 3991D

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: E8333

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. Date Analyzed: 05/01/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-2

ab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39877

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: E8283

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. Date Analyzed: 04/29/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	2	BJ
67-64-1	Acetone	13	E
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	1	J
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	2	BJ
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

631

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB-2

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39877

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: E8283

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: not dec. Date Analyzed: 04/29/92

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7STAG-DMSD

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39906MSD

Sample wt/vol: 980 (g/mL) ML Lab File ID: F0177

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: decanted: (Y/N) Date Extracted: 04/24/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/21/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	26	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	26	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	26	U
83-32-9	Acenaphthene	10	U

833

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

87STAQ-DMSD

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39906MSD

Sample wt/vol: 980 (g/mL) ML Lab File ID: FU177

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: decanted: (Y/N) Date Extracted: 04/24/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/21/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND		
51-28-5	2,4-Dinitrophenol	26	U
100-02-7	4-Nitrophenol	26	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	26	U
534-52-1	4,6-Dinitro-2-Methylphenol	26	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	26	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

d34

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7TP1-2-DMSD

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39902MSD

Sample wt/vol: 30.4 (g/mL) G Lab File ID: F0170

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: 10 decanted: (Y/N) N Date Extracted: 05/01/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/20/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)Ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2'-oxybis(1-Chloropropane)	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-Di-n-Propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
111-91-1	bis(2-Chloroethoxy)Methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-Methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	880	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	880	U
131-11-3	Dimethyl Phthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	880	U
83-32-9	Acenaphthene	360	U

135

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7TP1-2-DMSD

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39902MSD

Sample wt/vol: 30.4 (g/mL) G Lab File ID: FD170

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: 10 decanted: (Y/N) N Date Extracted: 05/01/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/20/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	880	U
100-02-7	4-Nitrophenol	880	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-10-6	4-Nitroaniline	880	U
534-52-1	4,6-Dinitro-2-Methylphenol	880	U
86-30-6	N-Nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	880	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-Butylphthalate	1000	B
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	360	U
85-68-7	Butylbenzylphthalate	410	
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)Anthracene	360	U
218-01-9	Chrysene	360	U
117-81-7	bis(2-Ethylhexyl)Phthalate	39	BJ
117-84-0	Di-n-Octyl Phthalate	360	U
205-99-2	Benzo(b)Fluoranthene	360	U
207-08-9	Benzo(k)Fluoranthene	360	U
50-32-8	Benzo(a)Pyrene	360	U
193-39-5	Indeno(1,2,3-cd)Pyrene	360	U
53-70-3	Dibenz(a,h)Anthracene	360	U
191-24-2	Benzo(g,h,i)Perylene	360	U

(1) - Cannot be separated from Diphenylamine

136

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7S1A0-DMS

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: F0611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39906MS

Sample wt/vol: 980 (g/ml.) ML Lab File ID: F0184

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: decanted: (Y/N) Date Extracted: 04/24/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/21/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	26	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	26	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	26	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7STAQ-DMS

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39906MS

Sample wt/vol: 980 (g/mL) ML Lab File ID: F0184

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: decanted: (Y/N) Date Extracted: 04/24/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/21/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	26	U
100-02-7	4-Nitrophenol	26	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	26	U
534-52-1	4,6-Dinitro-2-Methylphenol	26	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	26	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7TP1-2-DMS

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39902MS

Sample wt/vol: 30.9 (g/mL) G Lab File ID: FD169

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: 10 decanted: (Y/N) N Date Extracted: 05/01/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/20/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)Ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2'-oxybis(1-Chloropropane)	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-Di-n-Propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
111-91-1	bis(2-Chloroethoxy)Methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-Methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	860	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	860	U
131-11-3	Dimethyl Phthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	860	U
83-32-9	Acenaphthene	360	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7TP1-2-DMS

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39902MS

Sample wt/vol: 30.9 (g/mL) G Lab File ID: F0169

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: 10 decanted: (Y/N) N Date Extracted: 05/01/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/20/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	860	U
100-02-7	4-Nitrophenol	860	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-10-6	4-Nitroaniline	860	U
534-52-1	4,6-Dinitro-2-Methylphenol	860	U
86-30-6	N-Nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	860	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-Butylphthalate	1700	B
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	360	U
85-68-7	Butylbenzylphthalate	430	
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)Anthracene	360	U
218-01-9	Chrysene	360	U
117-81-7	bis(2-Ethylhexyl)Phthalate	360	U
117-84-0	Di-n-Octyl Phthalate	360	U
205-99-2	Benzo(b)Fluoranthene	360	U
207-08-9	Benzo(k)Fluoranthene	360	U
50-32-8	Benzo(a)Pyrene	360	U
193-39-5	Indeno(1,2,3-cd)Pyrene	360	U
53-70-3	Dibenz(a,h)Anthracene	360	U
191-24-2	Benzo(g,h,i)Perylene	360	U

(1) - Cannot be separated from Diphenylamine

140

SEMIVOLATILE ORGANIC COMPOUNDS

R:\PUBS\PROJECTS\5060016\510.APA

d4'

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7STSLCOMP

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 41252

Sample wt/vol: 500 (g/mL) ML Lab File ID: FD234

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: decanted: (Y/N) Date Extracted: 05/01/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/26/92

Injection Volume: 2.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	200	U
111-44-4	bis(2-Chloroethyl)Ether	200	U
95-57-8	2-Chlorophenol	200	U
541-73-1	1,3-Dichlorobenzene	200	U
106-46-7	1,4-Dichlorobenzene	860	
95-50-1	1,2-Dichlorobenzene	200	U
95-48-7	2-Methylphenol	200	U
108-60-1	2,2'-oxybis(1-Chloropropane)	200	U
106-44-5	4-Methylphenol	200	U
621-64-7	N-Nitroso-Di-n-Propylamine	200	U
67-72-1	Hexachloroethane	200	U
98-95-3	Nitrobenzene	200	U
78-59-1	Isophorone	200	U
88-75-5	2-Nitrophenol	200	U
105-67-9	2,4-Dimethylphenol	200	U
111-91-1	bis(2-Chloroethoxy)Methane	200	U
120-83-2	2,4-Dichlorophenol	200	U
120-82-1	1,2,4-Trichlorobenzene	200	U
91-20-3	Naphthalene	200	U
106-47-8	4-Chloroaniline	200	U
87-68-3	Hexachlorobutadiene	200	U
59-50-7	4-Chloro-3-Methylphenol	200	U
91-57-6	2-Methylnaphthalene	200	U
77-47-4	Hexachlorocyclopentadiene	200	U
88-06-2	2,4,6-Trichlorophenol	200	U
95-95-4	2,4,5-Trichlorophenol	500	U
91-58-7	2-Chloronaphthalene	200	U
88-74-4	2-Nitroaniline	500	U
131-11-3	Dimethyl Phthalate	200	U
208-96-8	Acenaphthylene	200	U
606-20-2	2,6-Dinitrotoluene	200	U
99-09-2	3-Nitroaniline	500	U
83-32-9	Acenaphthene	200	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7STSLCOMP

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 41252

Sample wt/vol: 500 (g/mL) ML Lab File ID: F0234

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: decanted: (Y/N) Date Extracted: 05/01/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/26/92

Injection Volume: 2.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	500	U
100-02-7	4-Nitrophenol	500	U
132-64-9	Dibenzofuran	200	U
121-14-2	2,4-Dinitrotoluene	200	U
84-66-2	Diethylphthalate	200	U
7005-72-3	4-Chlorophenyl-phenylether	200	U
86-73-7	Fluorene	200	U
100-10-6	4-Nitroaniline	500	U
534-52-1	4,6-Dinitro-2-Methylphenol	500	U
86-30-6	N-Nitrosodiphenylamine (1)	200	U
101-55-3	4-Bromophenyl-phenylether	200	U
118-74-1	Hexachlorobenzene	200	U
87-86-5	Pentachlorophenol	500	U
85-01-8	Phenanthrene	200	U
120-12-7	Anthracene	200	U
86-74-8	Carbazole	200	U
84-74-2	Di-n-Butylphthalate	200	U
206-44-0	Fluoranthene	200	U
129-00-0	Pyrene	200	U
85-68-7	Butylbenzylphthalate	200	U
91-94-1	3,3'-Dichlorobenzidine	200	U
56-55-3	Benzo(a)Anthracene	200	U
218-01-9	Chrysene	200	U
117-81-7	bis(2-Ethylhexyl)Phthalate	200	U
117-84-0	Di-n-Octyl Phthalate	200	U
205-99-2	Benzo(b)Fluoranthene	200	U
207-08-9	Benzo(k)Fluoranthene	200	U
50-32-8	Benzo(a)Pyrene	200	U
193-39-5	Indeno(1,2,3-cd)Pyrene	200	U
53-70-3	Dibenz(a,h)Anthracene	200	U
191-24-2	Benzo(g,h,i)Perylene	200	U

(1) - Cannot be separated from Diphenylamine

d4?

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B79TSLCOMP

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: F0611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 41252

Sample wt/vol: 500 (g/mL) ML Lab File ID: F0234

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: decanted: (Y/N) Date Extracted: 05/01/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/26/92

Injection Volume: 2.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	C10H20 isomer	8.40	820	J
2.	Unknown alkane	9.00	160	J
3.	C10H18 isomer	9.44	160	J
4.	C10H14 isomer	9.49	120	J
5.	Unknown alkane	10.90	340	J
6.	Unknown alkane	11.80	100	J
7.	Unknown	12.40	140	J
8.	Unknown alkane	12.60	800	J
9.	Unknown alkane	12.80	140	J
10.	Unknown alkane	13.50	120	J
11.	Unknown alkane	14.10	540	J
12.	biphenyl-2-ol, chloro isomer	19.50	600	J
13.	biphenyl-2-ol, chloro isomer	19.70	3400	J
14.	biphenyl-ol, dichloro isomer	21.40	280	J
15. 10544500	Molecular sulfur	23.30	260	J
16.	Unknown	32.61	18000	J
17.	Unknown	33.01	8400	J
18.	Unknown	34.61	540	J
19.	Unknown	35.41	2400	J
20.	Unknown	36.11	660	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7STAQ

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39907

Sample wt/vol: 980 (g/mL) ML Lab File ID: FD192

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: decanted: (Y/N) Date Extracted: 04/24/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/21/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	26	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	26	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	26	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7STAQ

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: F0611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39907

Sample wt/vol: 980 (g/mL) ML Lab File ID: F0192

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: decanted: (Y/N) Date Extracted: 04/24/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/21/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CONCENTRATION UNITS: (ug/L or ug/kg) UG/L

CAS NO.	COMPOUND		Q
51-28-5	2,4-Dinitrophenol	26	U
100-02-7	4-Nitrophenol	26	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-Methylphenol	26	U
86-30-6	N-Nitrosodiphenylamine (1)	26	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	26	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

146

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B7STAU

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: F0611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39907

Sample wt/vol: 980 (g/mL) ML Lab File ID: F0192

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: decanted: (Y/N) Date Extracted: 04/24/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/21/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

Number TICs found: 1 CONCENTRATION UNITS: (ug/l or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	5.60	6	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7STAQ-D

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39906

Sample wt/vol: 970 (g/mL) ML Lab File ID: FU175

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: decanted: (Y/N) Date Extracted: 04/24/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/21/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

SPC Cleanup: (Y/N) N pH: 8.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	26	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	26	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	26	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7STAD-D

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39906

Sample wt/vol: 970 (g/mL) ML Lab File ID: F0175

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: decanted: (Y/N) Date Extracted: 04/24/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/21/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	26	U
100-02-7	4-Nitrophenol	26	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	26	U
534-52-1	4,6-Dinitro-2-Methylphenol	26	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	26	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B7STA0-D

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39906

Sample wt/vol: 970 (g/mL) ML Lab File ID: F0175

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: decanted: (Y/N) Date Extracted: 04/24/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/21/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7TP1-1

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39900

Sample wt/vol: 30.6 (g/mL) G Lab File ID: F0166

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: 11 decanted: (Y/N) N Date Extracted: 05/01/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/20/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 4.7

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)Ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2'-oxybis(1-Chloropropane)	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-Di-n-Propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
111-91-1	bis(2-Chloroethoxy)Methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-Methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	880	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	880	U
131-11-3	Dimethyl Phthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	880	U
83-32-9	Acenaphthene	360	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7TP1-1

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39900

Sample wt/vol: 30.6 (g/mL) G Lab File ID: F0166

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: 11 decanted: (Y/N) N Date Extracted: 05/01/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/20/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 4.7

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	880	U
100-02-7	4-Nitrophenol	880	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-10-6	4-Nitroaniline	880	U
534-52-1	4,6-Dinitro-2-Methylphenol	880	U
86-30-6	N-Nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	880	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-Butylphthalate	2700	B
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	360	U
85-68-7	Butylbenzylphthalate	100	J
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)Anthracene	360	U
218-01-9	Chrysene	360	U
117-81-7	bis(2-Ethylhexyl)Phthalate	360	U
117-84-0	Di-n-Octyl Phthalate	360	U
205-99-2	Benzo(b)Fluoranthene	360	U
207-08-9	Benzo(k)Fluoranthene	360	U
50-32-8	Benzo(a)Pyrene	360	U
193-39-5	Indeno(1,2,3-cd)Pyrene	360	U
53-70-3	Dibenz(a,h)Anthracene	360	U
191-24-2	Benzo(g,h,i)Perylene	360	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B7TP1-1

ab Name: CAMBRG Contract: ENSR

ab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

atrix: (soil/water) SOIL Lab Sample ID: 39900

ample wt/vol: 30.6 (g/mL) G Lab File ID: FD166

evel: (low/med) LOW Date Received: 04/22/92

Moisture: 11 decanted: (Y/N) N Date Extracted: 05/01/92

oncentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/20/92

njection Volume: 2.0(uL) Dilution Factor: 1.0

PC Cleanup: (Y/N) Y pH: 4.7

umber TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	2.70	260	J
2.	Unknown	3.40	11000	J
3.	Unknown aldol	5.40	2900	J
4.	Unknown	7.00	180	J
5.	Unknown	23.90	150	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7TP1-2

ab Name: CAMBRG Contract: ENSR

ab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

atrix: (soil/water) SOIL Lab Sample ID: 39901

ample wt/vol: 30.7 (g/mL) G Lab File ID: F0167

evel: (low/med) LOW Date Received: 04/22/92

Moisture: 12 decanted: (Y/N) N Date Extracted: 05/01/92

oncentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/20/92

njection Volume: 2.0(uL) Dilution Factor: 1.0

PC Cleanup: (Y/N) Y pH: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	370	U
111-44-4	bis(2-Chloroethyl)Ether	370	U
95-57-8	2-Chlorophenol	370	U
541-73-1	1,3-Dichlorobenzene	370	U
106-46-7	1,4-Dichlorobenzene	370	U
95-50-1	1,2-Dichlorobenzene	370	U
95-48-7	2-Methylphenol	370	U
108-60-1	2,2'-oxybis(1-Chloropropane)	370	U
106-44-5	4-Methylphenol	370	U
621-64-7	N-Nitroso-Di-n-Propylamine	370	U
67-72-1	Hexachloroethane	370	U
98-95-3	Nitrobenzene	370	U
78-59-1	Isophorone	370	U
88-75-5	2-Nitrophenol	370	U
105-67-9	2,4-Dimethylphenol	370	U
111-91-1	bis(2-Chloroethoxy)Methane	370	U
120-83-2	2,4-Dichlorophenol	370	U
120-82-1	1,2,4-Trichlorobenzene	370	U
91-20-3	Naphthalene	370	U
106-47-8	4-Chloroaniline	370	U
87-68-3	Hexachlorobutadiene	370	U
59-50-7	4-Chloro-3-Methylphenol	370	U
91-57-6	2-Methylnaphthalene	370	U
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	370	U
95-95-4	2,4,5-Trichlorophenol	890	U
91-58-7	2-Chloronaphthalene	370	U
88-74-4	2-Nitroaniline	890	U
131-11-3	Dimethyl Phthalate	370	U
208-96-8	Acenaphthylene	370	U
606-20-2	2,6-Dinitrotoluene	370	U
99-09-2	3-Nitroaniline	890	U
83-32-9	Acenaphthene	370	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7TP1-2

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39901

Sample wt/vol: 30.7 (g/mL) G Lab File ID: FD167

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: 12 decanted: (Y/N) N Date Extracted: 05/01/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/20/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	890	U
100-02-7	4-Nitrophenol	890	U
132-64-9	Dibenzofuran	370	U
121-14-2	2,4-Dinitrotoluene	370	U
84-66-2	Diethylphthalate	370	U
7005-72-3	4-Chlorophenyl-phenylether	370	U
86-73-7	Fluorene	370	U
100-10-6	4-Nitroaniline	890	U
534-52-1	4,6-Dinitro-2-Methylphenol	890	U
86-30-6	N-Nitrosodiphenylamine (1)	370	U
101-55-3	4-Bromophenyl-phenylether	370	U
118-74-1	Hexachlorobenzene	370	U
87-86-5	Pentachlorophenol	890	U
85-01-8	Phenanthrene	370	U
120-12-7	Anthracene	370	U
86-74-8	Carbazole	370	U
84-74-2	Di-n-Butylphthalate	2600	B
206-44-0	Fluoranthene	370	U
129-00-0	Pyrene	370	U
85-68-7	Butylbenzylphthalate	230	J
91-94-1	3,3'-Dichlorobenzidine	370	U
56-55-3	Benzo(a)Anthracene	370	U
218-01-9	Chrysene	370	U
117-81-7	bis(2-Ethylhexyl)Phthalate	370	U
117-84-0	Di-n-Octyl Phthalate	370	U
205-99-2	Benzo(b)Fluoranthene	370	U
207-08-9	Benzo(k)Fluoranthene	370	U
50-32-8	Benzo(a)Pyrene	370	U
193-39-5	Indeno(1,2,3-cd)Pyrene	370	U
53-70-3	Dibenz(a,h)Anthracene	370	U
191-24-2	Benzo(g,h,i)Perylene	370	U

(1) - Cannot be separated from Diphenylamine

55

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B7TP1-2

ab Name: CAMBRG Contract: ENSR

ab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

atrix: (soil/water) SOIL Lab Sample ID: 39901

ample wt/vol: 30.7 (g/mL) G Lab File ID: F0167

evel: (low/med) LOW Date Received: 04/22/92

Moisture: 12 decanted: (Y/N) N Date Extracted: 05/01/92

oncentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/20/92

njection Volume: 2.0(uL) Dilution Factor: 1.0

PC Cleanup: (Y/N) Y pH: 5.0

umber TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	3.20	5200	J
2.	Unknown aldol	5.40	3100	J
3.	Unknown	23.90	150	J
4.	Unknown alkane	26.31	190	J
5.	Unknown	27.41	260	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7TP1-2-D

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39902

Sample wt/vol: 30.4 (g/mL) G Lab File ID: FD183

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: 10 decanted: (Y/N) N Date Extracted: 05/01/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/21/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)Ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2'-oxybis(1-Chloropropane)	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-Di-n-Propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
111-91-1	bis(2-Chloroethoxy)Methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-Methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	880	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	880	U
131-11-3	Dimethyl Phthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	880	U
83-32-9	Acenaphthene	360	U

d57

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7TP1-2-D

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39902

Sample wt/vol: 30.4 (g/mL) G Lab File ID: F0183

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: 10 decanted: (Y/N) N Date Extracted: 05/01/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/21/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	880	U
100-02-7	4-Nitrophenol	880	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-10-6	4-Nitroaniline	880	U
534-52-1	4,6-Dinitro-2-Methylphenol	880	U
86-30-6	N-Nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	880	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-Butylphthalate	2500	B
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	360	U
85-68-7	Butylbenzylphthalate	520	
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)Anthracene	360	U
218-01-9	Chrysene	360	U
117-81-7	bis(2-Ethylhexyl)Phthalate	970	B
117-84-0	Di-n-Octyl Phthalate	360	U
205-99-2	Benzo(b)Fluoranthene	360	U
207-08-9	Benzo(k)Fluoranthene	360	U
50-32-8	Benzo(a)Pyrene	360	U
193-39-5	Indeno(1,2,3-cd)Pyrene	360	U
53-70-3	Dibenz(a,h)Anthracene	360	U
191-24-2	Benzo(g,h,i)Perylene	360	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B7TP1-2-D

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: F0611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39902

Sample wt/vol: 30.4 (g/mL) G Lab File ID: F0183

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: 10 decanted: (Y/N) N Date Extracted: 05/01/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/21/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.4

Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	2.60	220	J
2.	Unknown	3.30	14000	J
3.	Unknown aldol	5.40	2600	J
4.	Unknown	7.00	180	J
5.	Unknown	23.40	580	J
6.	Unknown	23.90	220	J
7.	Unknown alkane	25.41	220	J
8.	Unknown alkane	26.31	180	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NST-SL

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39898

Sample wt/vol: 21.8 (g/mL) G Lab File ID: FD133

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: 20 decanted: (Y/N) N Date Extracted: 05/01/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/18/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	570	U
111-44-4	bis(2-Chloroethyl)Ether	570	U
95-57-8	2-Chlorophenol	570	U
541-73-1	1,3-Dichlorobenzene	570	U
106-46-7	1,4-Dichlorobenzene	570	U
95-50-1	1,2-Dichlorobenzene	570	U
95-48-7	2-Methylphenol	570	U
108-60-1	2,2'-oxybis(1-Chloropropane)	570	U
106-44-5	4-Methylphenol	570	U
621-64-7	N-Nitroso-Di-n-Propylamine	570	U
67-72-1	Hexachloroethane	570	U
98-95-3	Nitrobenzene	570	U
78-59-1	Isophorone	570	U
88-75-5	2-Nitrophenol	570	U
105-67-9	2,4-Dimethylphenol	570	U
111-91-1	bis(2-Chloroethoxy)Methane	570	U
120-83-2	2,4-Dichlorophenol	570	U
120-82-1	1,2,4-Trichlorobenzene	570	U
91-20-3	Naphthalene	570	U
106-47-8	4-Chloroaniline	570	U
87-68-3	Hexachlorobutadiene	570	U
59-50-7	4-Chloro-3-Methylphenol	570	U
91-57-6	2-Methylnaphthalene	570	U
77-47-4	Hexachlorocyclopentadiene	570	U
88-06-2	2,4,6-Trichlorophenol	570	U
95-95-4	2,4,5-Trichlorophenol	1400	U
91-58-7	2-Chloronaphthalene	570	U
88-74-4	2-Nitroaniline	1400	U
131-11-3	Dimethyl Phthalate	570	U
208-96-8	Acenaphthylene	570	U
606-20-2	2,6-Dinitrotoluene	570	U
99-09-2	3-Nitroaniline	1400	U
83-32-9	Acenaphthene	570	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NST-SL

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39898

Sample wt/vol: 21.8 (g/mL) G Lab File ID: F0133

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: 20 decanted: (Y/N) N Date Extracted: 05/01/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/18/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1400	U
100-02-7	4-Nitrophenol	1400	U
132-64-9	Dibenzofuran	570	U
121-14-2	2,4-Dinitrotoluene	570	U
84-66-2	Diethylphthalate	570	U
7005-72-3	4-Chlorophenyl-phenylether	570	U
86-73-7	Fluorene	570	U
100-10-6	4-Nitroaniline	1400	U
534-52-1	4,6-Dinitro-2-Methylphenol	1400	U
86-30-6	N-Nitrosodiphenylamine (1)	570	U
101-55-3	4-Bromophenyl-phenylether	570	U
118-74-1	Hexachlorobenzene	570	U
87-86-5	Pentachlorophenol	1400	U
85-01-8	Phenanthrene	570	U
120-12-7	Anthracene	570	U
86-74-8	Carbazole	570	U
84-74-2	Di-n-Butylphthalate	4400	B
206-44-0	Fluoranthene	570	U
129-00-0	Pyrene	570	U
85-68-7	Butylbenzylphthalate	570	U
91-94-1	3,3'-Dichlorobenzidine	570	U
56-55-3	Benzo(a)Anthracene	570	U
218-01-9	Chrysene	570	U
117-81-7	bis(2-Ethylhexyl)Phthalate	570	U
117-84-0	Di-n-Octyl Phthalate	570	U
205-99-2	Benzo(b)Fluoranthene	570	U
207-08-9	Benzo(k)Fluoranthene	570	U
50-32-8	Benzo(a)Pyrene	570	U
193-39-5	Indeno(1,2,3-cd)Pyrene	570	U
53-70-3	Dibenz(a,h)Anthracene	570	U
191-24-2	Benzo(g,h,i)Perylene	570	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

NST-SL

.ab Name: CAMBRG Contract: ENSR

.ab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

latrix: (soil/water) SOIL Lab Sample ID: 39898

ample wt/vol: 21.8 (g/mL) G Lab File ID: F0133

evel: (low/med) LOW Date Received: 04/22/92

Moisture: 20 decanted: (Y/N) N Date Extracted: 05/01/92

oncentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/18/92

njection Volume: 2.0(uL) Dilution Factor: 1.0

PC Cleanup: (Y/N) Y pH: 5.3

umber TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	3.40	15000	J
2.	Unknown aldol	5.40	4700	J
3.	Unknown	7.10	290	J
4.	Unknown alkane	25.41	230	J

62

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NTP1-1

ab Name: CAMBRG Contract: ENSR

ab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

atrix: (soil/water) SOIL Lab Sample ID: 39899

ample wt/vol: 30.4 (g/mL) G Lab File ID: F0134

evel: (low/med) LOW Date Received: 04/22/92

Moisture: 5 decanted: (Y/N) N Date Extracted: 05/01/92

oncentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/19/92

njection Volume: 2.0(uL) Dilution Factor: 1.0

PC Cleanup: (Y/N) Y pH: 6.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)Ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	2,2'-oxybis(1-Chloropropane)	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-Di-n-Propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)Methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-Methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	830	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	830	U
131-11-3	Dimethyl Phthalate	340	U
208-96-8	Acenaphthylene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
99-09-2	3-Nitroaniline	830	U
83-32-9	Acenaphthene	340	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NTP1-1

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39899

Sample wt/vol: 30.4 (g/mL) G Lab File ID: F0134

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: 5 decanted: (Y/N) N Date Extracted: 05/01/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/19/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	830	U
100-02-7	4-Nitrophenol	830	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-10-6	4-Nitroaniline	830	U
534-52-1	4,6-Dinitro-2-Methylphenol	830	U
86-30-6	N-Nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	830	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
86-74-8	Carbazole	340	U
84-74-2	Di-n-Butylphthalate	1900	B
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	340	U
56-55-3	Benzo(a)Anthracene	340	U
218-01-9	Chrysene	340	U
117-81-7	bis(2-Ethylhexyl)Phthalate	340	U
117-84-0	Di-n-Octyl Phthalate	340	U
205-99-2	Benzo(b)Fluoranthene	340	U
207-08-9	Benzo(k)Fluoranthene	340	U
50-32-8	Benzo(a)Pyrene	340	U
193-39-5	Indeno(1,2,3-cd)Pyrene	340	U
53-70-3	Dibenz(a,h)Anthracene	340	U
191-24-2	Benzo(g,h,i)Perylene	340	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

NTP1-1

ab Name: CAMBRG Contract: ENSR

.ab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

latrix: (soil/water) SOIL Lab Sample ID: 39899

ample wt/vol: 30.4 (g/ml) G Lab File ID: FO134

evel: (low/med) LOW Date Received: 04/22/92

Moisture: 5 decanted: (Y/N) N Date Extracted: 05/01/92

oncentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/19/92

njection Volume: 2.0(uL) Dilution Factor: 1.0

PC Cleanup: (Y/N) Y pH: 6.2

umber TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	3.10	1600	J
2.	Unknown aldol	5.40	3100	J

165

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK050192F

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 92_1585-BK2A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: F0123

Level: (low/med) LOW Date Received:

% Moisture: decanted: (Y/N) Date Extracted: 05/01/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/18/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	25	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethyl Phthalate	25	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	25	U
		10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK050192F

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 92_1585-BK2A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: F0123

Level: (low/med) LOW Date Received:

% Moisture: decanted: (Y/N) Date Extracted: 05/01/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/18/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-Methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	2	J
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

367

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK050192F

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 92_1585-BK2A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: F0123

Level: (low/med) LOW Date Received:

% Moisture: decanted: (Y/N) Date Extracted: 05/01/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/18/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK042492F

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 92_1502-BK1A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: FD171

Level: (low/med) LOW Date Received:

% Moisture: decanted: (Y/N) Date Extracted: 04/24/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/20/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK042492F

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: F0611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 92_1502-BK1A

Sample wt/vol: 1000 (g/ml) ML Lab File ID: F0171

Level: (low/med) LOW Date Received:

% Moisture: decanted: (Y/N) Date Extracted: 04/24/92

Concentrated Extract Volume: 1000 (ul.) Date Analyzed: 05/20/92

Injection Volume: 2.0(ul.) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-Methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK042492F

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 92_1502-BK1A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: F0171

Level: (low/med) LOW Date Received:

% Moisture: decanted: (Y/N) Date Extracted: 04/24/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/20/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	3.17	24	J
2.	Unknown aldol	5.48	95	J
3.	Unknown	7.13	4	J
4.	Unknown	26.39	4	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK050192F

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 92_15D2-BK1S

Sample wt/vol: 31.2 (g/mL) G Lab File ID: FO130

Level: (low/med) LOW Date Received:

% Moisture: decanted: (Y/N) N Date Extracted: 05/01/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/18/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	320	U
111-44-4	bis(2-Chloroethyl)Ether	320	U
95-57-8	2-Chlorophenol	320	U
541-73-1	1,3-Dichlorobenzene	320	U
106-46-7	1,4-Dichlorobenzene	320	U
95-50-1	1,2-Dichlorobenzene	320	U
95-48-7	2-Methylphenol	320	U
108-60-1	2,2'-oxybis(1-Chloropropane)	320	U
106-44-5	4-Methylphenol	320	U
621-64-7	N-Nitroso-Di-n-Propylamine	320	U
67-72-1	Hexachloroethane	320	U
98-95-3	Nitrobenzene	320	U
78-59-1	Isophorone	320	U
88-75-5	2-Nitrophenol	320	U
105-67-9	2,4-Dimethylphenol	320	U
111-91-1	bis(2-Chloroethoxy)Methane	320	U
120-83-2	2,4-Dichlorophenol	320	U
120-82-1	1,2,4-Trichlorobenzene	320	U
91-20-3	Naphthalene	320	U
106-47-8	4-Chloroaniline	320	U
87-68-3	Hexachlorobutadiene	320	U
59-50-7	4-Chloro-3-Methylphenol	320	U
91-57-6	2-Methylnaphthalene	320	U
77-47-4	Hexachlorocyclopentadiene	320	U
88-06-2	2,4,6-Trichlorophenol	320	U
95-95-4	2,4,5-Trichlorophenol	770	U
91-58-7	2-Chloronaphthalene	320	U
88-74-4	2-Nitroaniline	770	U
131-11-3	Dimethyl Phthalate	320	U
208-96-8	Acenaphthylene	320	U
606-20-2	2,6-Dinitrotoluene	320	U
99-09-2	3-Nitroaniline	770	U
83-32-9	Acenaphthene	320	U

172

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK050192F

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 92_1502-BK1S

Sample wt/vol: 31.2 (g/mL) G Lab File ID: F0130

Level: (low/med) LOW Date Received:

% Moisture: decanted: (Y/N) N Date Extracted: 05/01/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/18/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	770	U
100-02-7	4-Nitrophenol	770	U
132-64-9	Dibenzofuran	320	U
121-14-2	2,4-Dinitrotoluene	320	U
84-66-2	Diethylphthalate	320	U
7005-72-3	4-Chlorophenyl-phenylether	320	U
86-73-7	Fluorene	320	U
100-10-6	4-Nitroaniline	770	U
534-52-1	4,6-Dinitro-2-Methylphenol	770	U
86-30-6	N-Nitrosodiphenylamine (1)	320	U
101-55-3	4-Bromophenyl-phenylether	320	U
118-74-1	Hexachlorobenzene	320	U
87-86-5	Pentachlorophenol	770	U
85-01-8	Phenanthrene	320	U
120-12-7	Anthracene	320	U
86-74-8	Carbazole	320	U
84-74-2	Di-n-Butylphthalate	1500	
206-44-0	Fluoranthene	320	U
129-00-0	Pyrene	320	U
85-68-7	Butylbenzylphthalate	320	U
91-94-1	3,3'-Dichlorobenzidine	320	U
56-55-3	Benzo(a)Anthracene	320	U
218-01-9	Chrysene	320	U
117-81-7	bis(2-Ethylhexyl)Phthalate	130	J
117-84-0	Di-n-Octyl Phthalate	320	U
205-99-2	Benzo(b)Fluoranthene	320	U
207-08-9	Benzo(k)Fluoranthene	320	U
50-32-8	Benzo(a)Pyrene	320	U
193-39-5	Indeno(1,2,3-cd)Pyrene	320	U
53-70-3	Dibenz(a,h)Anthracene	320	U
191-24-2	Benzo(g,h,i)Perylene	320	U

(1) - Cannot be separated from Diphenylamine

d73

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK050192F

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 92_1502-BK1S

Sample wt/vol: 31.2 (g/mL) G Lab File ID: FD130

Level: (low/med) LOW Date Received:

% Moisture: decanted: (Y/N) N Date Extracted: 05/01/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/18/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PR-BS

ab Name: CAMBRG Contract: ENSR

ab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

atrix: (soil/water) SOIL Lab Sample ID: 39876

ample wt/vol: 30.0 (g/mL) G Lab File ID: FD131

evel: (low/med) LOW Date Received: 04/22/92

Moisture: % decanted: (Y/N) N Date Extracted: 05/01/92

oncentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/18/92

njection Volume: 2.0(uL) Dilution Factor: 1.0

PC Cleanup: (Y/N) Y pH: 4.5

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG 0

CAS NO.	COMPOUND		
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)Ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2'-oxybis(1-Chloropropane)	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-Di-n-Propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
111-91-1	bis(2-Chloroethoxy)Methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-Methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	880	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	880	U
131-11-3	Dimethyl Phthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	880	U
83-32-9	Acenaphthene	360	U

175

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PR-BS

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39876

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F0131

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: 9 decanted: (Y/N) N Date Extracted: 05/01/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/18/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 4.5

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG 0

CAS NO.	COMPOUND		
51-28-5	2,4-Dinitrophenol	880	U
100-02-7	4-Nitrophenol	880	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-10-6	4-Nitroaniline	880	U
534-52-1	4,6-Dinitro-2-Methylphenol	880	U
86-30-6	N-Nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	880	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-Butylphthalate	2000	B
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	360	U
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)Anthracene	360	U
218-01-9	Chrysene	360	U
117-81-7	bis(2-Ethylhexyl)Phthalate	360	U
117-84-0	Di-n-Octyl Phthalate	360	U
205-99-2	Benzo(b)Fluoranthene	360	U
207-08-9	Benzo(k)Fluoranthene	360	U
50-32-8	Benzo(a)Pyrene	360	U
193-39-5	Indeno(1,2,3-cd)Pyrene	360	U
53-70-3	Dibenz(a,h)Anthracene	360	U
191-24-2	Benzo(g,h,i)Perylene	360	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

PR-BS

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39876

Sample wt/vol: 30.0 (g/mL) G Lab File ID: FD131

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: 9 decanted: (Y/N) N Date Extracted: 05/01/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/18/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 4.5

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	3.30	6600	J
2.	Unknown aldol	5.40	3000	J
3.	Unknown	7.10	150	J

d77

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF-B9

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39891

Sample wt/vol: 30.7 (g/mL) G Lab File ID: FD132

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: 8 decanted: (Y/N) N Date Extracted: 05/01/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/18/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350	U
111-44-4	bis(2-Chloroethyl)Ether	350	U
95-57-8	2-Chlorophenol	350	U
541-73-1	1,3-Dichlorobenzene	350	U
106-46-7	1,4-Dichlorobenzene	350	U
95-50-1	1,2-Dichlorobenzene	350	U
95-48-7	2-Methylphenol	350	U
108-60-1	2,2'-oxybis(1-Chloropropane)	350	U
106-44-5	4-Methylphenol	350	U
621-64-7	N-Nitroso-Di-n-Propylamine	350	U
67-72-1	Hexachloroethane	350	U
98-95-3	Nitrobenzene	350	U
78-59-1	Isophorone	350	U
88-75-5	2-Nitrophenol	350	U
105-67-9	2,4-Dimethylphenol	350	U
111-91-1	bis(2-Chloroethoxy)Methane	350	U
120-83-2	2,4-Dichlorophenol	350	U
120-82-1	1,2,4-Trichlorobenzene	350	U
91-20-3	Naphthalene	350	U
106-47-8	4-Chloroaniline	350	U
87-68-3	Hexachlorobutadiene	350	U
59-50-7	4-Chloro-3-Methylphenol	350	U
91-57-6	2-Methylnaphthalene	350	U
77-47-4	Hexachlorocyclopentadiene	350	U
88-06-2	2,4,6-Trichlorophenol	350	U
95-95-4	2,4,5-Trichlorophenol	850	U
91-58-7	2-Chloronaphthalene	350	U
88-74-4	2-Nitroaniline	850	U
131-11-3	Dimethyl Phthalate	350	U
208-96-8	Acenaphthylene	350	U
606-20-2	2,6-Dinitrotoluene	350	U
99-09-2	3-Nitroaniline	850	U
83-32-9	Acenaphthene	350	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF-BS

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39891

Sample wt/vol: 30.7 (g/mL) G Lab File ID: F0132

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: 8 decanted: (Y/N) N Date Extracted: 05/01/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/18/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	850	U
100-02-7	4-Nitrophenol	850	U
132-64-9	Dibenzofuran	350	U
121-14-2	2,4-Dinitrotoluene	350	U
84-66-2	Diethylphthalate	350	U
7005-72-3	4-Chlorophenyl-phenylether	350	U
86-73-7	Fluorene	350	U
100-10-6	4-Nitroaniline	850	U
534-52-1	4,6-Dinitro-2-Methylphenol	850	U
86-30-6	N-Nitrosodiphenylamine (1)	350	U
101-55-3	4-Bromophenyl-phenylether	350	U
118-74-1	Hexachlorobenzene	350	U
87-86-5	Pentachlorophenol	850	U
85-01-8	Phenanthrene	350	U
120-12-7	Anthracene	350	U
86-74-8	Carbazole	350	U
84-74-2	Di-n-Butylphthalate	1900	B
206-44-0	Fluoranthene	350	U
129-00-0	Pyrene	350	U
85-68-7	Butylbenzylphthalate	38	J
91-94-1	3,3'-Dichlorobenzidine	350	U
56-55-3	Benzo(a)Anthracene	350	U
218-01-9	Chrysene	350	U
117-81-7	bis(2-Ethylhexyl)Phthalate	67	BJ
117-84-0	Di-n-Octyl Phthalate	350	U
205-99-2	Benzo(b)Fluoranthene	350	U
207-08-9	Benzo(k)Fluoranthene	350	U
50-32-8	Benzo(a)Pyrene	350	U
193-39-5	Indeno(1,2,3-cd)Pyrene	350	U
53-70-3	Dibenz(a,h)Anthracene	350	U
191-24-2	Benzo(g,h,i)Perylene	350	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

AF-BS

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39891

Sample wt/vol: 30.7 (g/mL) G Lab File ID: F0132

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: 8 decanted: (Y/N) N Date Extracted: 05/01/92

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/18/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.2

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	3.10	2000	J
2.	Unknown aldol	5.40	2600	J
3.	Unknown	10.30	180	J
4.	Unknown	26.31	140	J
5.	Unknown	41.21	210	J

dec

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EB_TP-1

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39903

Sample wt/vol: 1000 (g/mL) ML Lab File ID: FD172

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: decanted: (Y/N) Date Extracted: 04/24/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/20/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

dEI

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EB_TP-1

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39903

Sample wt/vol: 1000 (g/mL) ML Lab File ID: FD172

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: decanted: (Y/N) Date Extracted: 04/24/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/20/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-Methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

d82

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EB TP-1

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: F0611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39903

Sample wt/vol: 1000 (g/mL) ML Lab File ID: F0172

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: decanted: (Y/N) Date Extracted: 04/24/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/20/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 5.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

d83

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB-2

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39905

Sample wt/vol: 1000 (g/mL) ML Lab File ID: F0174

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: decanted: (Y/N) Date Extracted: 04/24/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/20/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 4.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB-2

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39905

Sample wt/vol: 1000 (g/mL) ML Lab File ID: FD174

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: decanted: (Y/N) Date Extracted: 04/24/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/20/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 4.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-Methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FB-2

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39905

Sample wt/vol: 1000 (g/mL) ML Lab File ID: F0174

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: decanted: (Y/N) Date Extracted: 04/24/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/20/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 4.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	5.70	5	J

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB-BH-1

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39904

Sample wt/vol: 950 (g/ml) ML Lab File ID: FU173

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: decanted: (Y/N) Date Extracted: 04/24/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/20/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	26	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	26	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	26	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB-BH-1

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39904

Sample wt/vol: 950 (g/ml.) ML Lab File ID: FD173

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: decanted: (Y/N) Date Extracted: 04/24/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/20/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	26	U
100-02-7	4-Nitrophenol	26	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	26	U
534-52-1	4,6-Dinitro-2-Methylphenol	26	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	26	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	3	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FB-BH-1

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39904

Sample wt/vol: 950 (g/mL) ML Lab File ID: F0173

Level: (low/med) LOW Date Received: 04/22/92

% Moisture: decanted: (Y/N) Date Extracted: 04/24/92

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 05/20/92

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

PESTICIDES/PCBs

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AF-BS

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39891

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 8 decanted: (Y/N) N Date Received: 04/22/92

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/29/92

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 05/17/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 5.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.8	PU
319-85-7	beta-BHC	1.8	PU
319-86-8	delta-BHC	1.8	PU
58-89-9	gamma-BHC (Lindane)	1.8	PU
76-44-8	Heptachlor	1.8	PU
309-00-2	Aldrin	1.8	PU
1024-57-3	Heptachlor epoxide	1.8	U
959-98-8	Endosulfan I	1.8	PU
60-57-1	Dieldrin	0.43	J
72-55-9	4,4'-DDE	0.78	J
72-20-8	Endrin	3.6	PU
33213-65-9	Endosulfan II	3.6	U
72-54-8	4,4'-DDD	3.6	U
1031-07-8	Endosulfan sulfate	3.6	U
50-29-3	4,4'-DDT	2.4	JP
72-43-5	Methoxychlor	18	U
53494-70-5	Endrin ketone	3.6	U
7421-36-3	Endrin aldehyde	3.6	U
5103-71-9	alpha-Chlordane	1.8	PU
5103-74-2	gamma-Chlordane	1.8	PU
8001-35-2	Toxaphene	180	U
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	73	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	36	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PR-BS

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39876

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 9 decanted: (Y/N) N Date Received: 04/22/92

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/29/92

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 05/17/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 4.5 Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG 0

CAS NO.	COMPOUND		
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	PU
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.6	U
72-55-9	4,4'-DDE	3.6	U
72-20-8	Endrin	3.6	U
33213-65-9	Endosulfan II	3.6	U
72-54-8	4,4'-DDD	3.6	U
1031-07-8	Endosulfan sulfate	3.6	U
50-29-3	4,4'-DDT	3.6	U
72-43-5	Methoxychlor	19	U
53494-70-5	Endrin ketone	3.6	U
7421-36-3	Endrin aldehyde	3.6	U
5103-71-9	alpha-Chlordane	1.9	PU
5103-74-2	gamma-Chlordane	1.9	PU
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	74	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	36	U

192

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NTP1-1

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39899

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 5 decanted: (Y/N) N Date Received: 04/22/92

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/29/92

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 05/16/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 6.2 Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG 0

CAS NO.	COMPOUND		
319-84-6	alpha-BHC	1.8	U
319-85-7	beta-BHC	1.8	PU
319-86-8	delta-BHC	1.8	U
58-89-9	gamma-BHC (Lindane)	1.8	PU
76-44-8	Heptachlor	1.8	PU
309-00-2	Aldrin	1.8	PU
1024-57-3	Heptachlor epoxide	1.8	PU
959-98-8	Endosulfan I	1.8	U
60-57-1	Dieldrin	3.5	U
72-55-9	4,4'-DDE	3.5	U
72-20-8	Endrin	3.5	U
33213-65-9	Endosulfan II	3.5	U
72-54-8	4,4'-DDD	3.5	U
1031-07-8	Endosulfan sulfate	3.5	U
50-29-3	4,4'-DDT	3.5	U
72-43-5	Methoxychlor	18	U
53494-70-5	Endrin ketone	3.5	PU
7421-36-3	Endrin aldehyde	3.5	U
5103-71-9	alpha-Chlordane	1.8	U
5103-74-2	gamma-Chlordane	1.8	U
8001-35-2	Toxaphene	180	U
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	71	U
11141-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	35	U
11096-82-5	Aroclor-1260	35	U

d93

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NST-SL

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39898

Sample wt/vol: 30.5 (g/mL) G Lab File ID:

% Moisture: 20 decanted: (Y/N) N Date Received: 04/22/92

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/29/92

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 05/17/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 5.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) UG/KG	Q
319-84-6	alpha-BHC	2.1	PU
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC (Lindane)	2.1	PU
76-44-8	Heptachlor	2.1	PU
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.1	PU
72-55-9	4,4'-DDE	5.7	
72-20-8	Endrin	4.1	PU
33213-65-9	Endosulfan II	4.1	PU
72-54-8	4,4'-DDD	[illegible]	
1031-07-8	Endosulfan sulfate	4.1	U
50-29-3	4,4'-DDT	[illegible]	
72-43-5	Methoxychlor	21	U
53494-70-5	Endrin ketone	4.1	PU
7421-36-3	Endrin aldehyde	4.1	U
5103-71-9	alpha-Chlordane	2.1	PU
5103-74-2	gamma-Chlordane	2.1	PU
8001-35-2	Toxaphene	210	U
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	82	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	41	U
11096-82-5	Aroclor-1260	41	U

5004

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7TP1-2

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39901

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 12 decanted: (Y/N) N Date Received: 04/22/92

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/29/92

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 05/17/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 5.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	PU
76-44-8	Heptachlor	1.9	PU
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.7	U
72-55-9	4,4'-DDE	2.0	JP
72-20-8	Endrin	3.7	U
33213-65-9	Endosulfan II	3.7	U
72-54-8	4,4'-DDD	3.7	PU
1031-07-8	Endosulfan sulfate	3.7	U
50-29-3	4,4'-DDT	4.5	P
72-43-5	Methoxychlor	19	U
53494-70-5	Endrin ketone	3.7	U
7421-36-3	Endrin aldehyde	3.7	U
5103-71-9	alpha-Chlordane	1.9	PU
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	76	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	37	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7TP1-2-D

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39902

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 10 decanted: (Y/N) N Date Received: 04/22/92

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/29/92

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 05/17/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 5.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	PU
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.7	U
72-55-9	4,4'-DDE	[illegible]	[illegible]
72-20-8	Endrin	3.7	U
33213-65-9	Endosulfan II	3.7	U
72-54-8	4,4'-DDD	3.7	U
1031-07-8	Endosulfan sulfate	3.7	U
50-29-3	4,4'-DDT	3.3	J
72-43-5	Methoxychlor	19	U
53494-70-5	Endrin ketone	3.7	U
7421-36-3	Endrin aldehyde	3.7	U
5103-71-9	alpha-Chlordane	1.9	PU
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	74	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	37	U

197

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7STSL-COMP

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 41252

Sample wt/vol: 500.0 (g/mL) ML Lab File ID:

% Moisture: decanted: (Y/N) Date Received: 04/22/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 05/01/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.10	U
319-85-7	beta-BHC	1.9	
319-86-8	delta-BHC	0.10	PU
58-89-9	gamma-BHC (Lindane)	0.51	P
76-44-8	Heptachlor	0.10	PU
309-00-2	Aldrin	0.10	PU
1024-57-3	Heptachlor epoxide	0.10	PU
959-98-8	Endosulfan I	0.10	U
60-57-1	Dieldrin	0.20	U
72-55-9	4,4'-DDE	0.20	PU
72-20-8	Endrin	0.20	U
33213-65-9	Endosulfan II	0.20	U
72-54-8	4,4'-DDD	0.20	PU
1031-07-8	Endosulfan sulfate	0.20	U
50-29-3	4,4'-DDT	0.20	PU
72-43-5	Methoxychlor	1.0	PU
53494-70-5	Endrin ketone	0.20	U
7421-36-3	Endrin aldehyde	0.20	U
5103-71-9	alpha-Chlordane	0.10	U
5103-74-2	gamma-Chlordane	0.10	PU
8001-35-2	Toxaphene	10	U
12674-11-2	Aroclor-1016	2.0	U
11104-28-2	Aroclor-1221	4.0	U
11141-16-5	Aroclor-1232	2.0	U
53469-21-9	Aroclor-1242	2.0	U
12672-29-6	Aroclor-1248	2.0	U
11097-69-1	Aroclor-1254	2.0	U
11096-82-5	Aroclor-1260	2.0	U

198

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7STSL-COMPD

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 41252DIL

Sample wt/vol: 500.0 (g/ml) ML Lab File ID:

% Moisture: decanted: (Y/N) Date Received: 04/22/92

Extraction: (SepF/Cont/Sono) CONT Date Extracted: 05/01/92

Concentrated Extract Volume: 10000 (ul) Date Analyzed: 05/18/92

Injection Volume: 1.00 (ul) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	1.0	U
319-85-7	beta-BHC	0.67	JB
319-86-8	delta-BHC	1.0	PU
58-89-9	gamma-BHC (Lindane)	0.37	JB
76-44-8	Heptachlor	1.0	U
309-00-2	Aldrin	1.0	U
1024-57-3	Heptachlor epoxide	1.0	U
959-98-8	Endosulfan I	1.0	U
60-57-1	Dieldrin	2.0	U
72-55-9	4,4'-DDE	2.0	PU
72-20-8	Endrin	2.0	U
33213-65-9	Endosulfan II	2.0	U
72-54-8	4,4'-DDD	2.0	U
1031-07-8	Endosulfan sulfate	2.0	U
50-29-3	4,4'-DDT	2.0	U
72-43-5	Methoxychlor	10	PU
53494-70-5	Endrin ketone	2.0	U
7421-36-3	Endrin aldehyde	2.0	U
5103-71-9	alpha-Chlordane	1.0	U
5103-74-2	gamma-Chlordane	1.0	PU
8001-35-2	Toxaphene	100	U
12674-11-2	Aroclor-1016	20	U
11104-28-2	Aroclor-1221	40	U
11141-16-5	Aroclor-1232	20	U
53469-21-9	Aroclor-1242	20	U
12672-29-6	Aroclor-1248	20	U
11097-69-1	Aroclor-1254	20	U
11096-82-5	Aroclor-1260	20	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.: 50020

B7STAQ

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39907

Sample wt/vol: 950.0 (g/mL) ML Lab File ID:

% Moisture: decanted: (Y/N) Date Received: 04/22/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/24/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.052	PU
319-85-7	beta-BHC	0.052	U
319-86-8	delta-BHC	0.052	U
58-89-9	gamma-BHC (Lindane)	0.052	PU
76-44-8	Heptachlor	0.052	PU
309-00-2	Aldrin	0.052	U
1024-57-3	Heptachlor epoxide	0.052	U
959-98-8	Endosulfan I	0.052	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	PU
72-43-5	Methoxychlor	0.52	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.052	U
5103-74-2	gamma-Chlordane	0.052	PU
8001-35-2	Toxaphene	5.2	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.1	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

100

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7S1A0-D

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39906

Sample wt/vol: 1000 (g/mL) ML Lab File ID:

% Moisture: decanted: (Y/N) Date Received: 04/22/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/24/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.0039	JP
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	PU
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	PU
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	PU
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	PU
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

c101

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TF-7

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39893

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 12 decanted: (Y/N) N Date Received: 04/22/92

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/29/92

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 05/17/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 5.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	[redacted]	
319-85-7	beta-BHC	[redacted]	
319-86-8	delta-BHC	[redacted]	
58-89-9	gamma-BHC (Lindane)	[redacted]	
76-44-8	Heptachlor	[redacted]	
309-00-2	Aldrin	[redacted]	
1024-57-3	Heptachlor epoxide	[redacted]	
959-98-8	Endosulfan I	[redacted]	
60-57-1	Dieldrin	[redacted]	
72-55-9	4,4'-DDE	[redacted]	
72-20-8	Endrin	[redacted]	
33213-65-9	Endosulfan II	[redacted]	
72-54-8	4,4'-DDD	[redacted]	
1031-07-8	Endosulfan sulfate	[redacted]	
50-29-3	4,4'-DDT	[redacted]	
72-43-5	Methoxychlor	[redacted]	
53494-70-5	Endrin ketone	[redacted]	
7421-36-3	Endrin aldehyde	[redacted]	
5103-71-9	alpha-Chlordane	[redacted]	
5103-74-2	gamma-Chlordane	[redacted]	
8001-35-2	Toxaphene	[redacted]	
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	76	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	37	U

102

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TF-8

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39894

Sample wt/vol: 30.0 (g/ml.) G Lab File ID:

% Moisture: 11 decanted: (Y/N) N Date Received: 04/22/92

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/29/92

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 05/17/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 5.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC (Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
7421-36-3	Endrin aldehyde		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	75	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	37	U

103

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TF-15

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39895

Sample wt/vol: 30.0 (g/ml.) G Lab File ID:

% Moisture: 9 decanted: (Y/N) N Date Received: 04/22/92

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/29/92

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 05/17/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 5.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC (Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
7421-36-3	Endrin aldehyde		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	74	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	36	U

109

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TF-16

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 39896

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 11 decanted: (Y/N) N Date Received: 04/22/92

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/29/92

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 05/17/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 4.8 Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG 0

CAS NO.	COMPOUND		
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC (Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
7421-36-3	Endrin aldehyde		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	75	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	37	U

dio5..

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TF-45

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD613 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 40071

Sample wt/vol: 30.3 (g/mL) G Lab File ID:

% Moisture: 7 decanted: (Y/N) N Date Received: 04/23/92

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/30/92

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 05/18/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 5.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC (Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
7421-36-3	Endrin aldehyde		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	71	U
11141-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	35	U
11096-82-5	Aroclor-1260	35	U

106

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TF-45-D

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD613 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 40072

Sample wt/vol: 30.3 (g/mL) G Lab File ID:

% Moisture: 7 decanted: (Y/N) N Date Received: 04/23/92

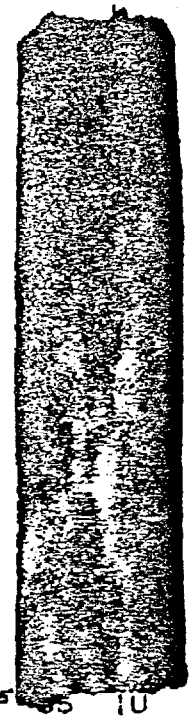
Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 04/30/92

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 05/18/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 5.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC (Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
7421-36-3	Endrin aldehyde		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	71	U
11141-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	35	U
11096-82-5	Aroclor-1260	35	U



mrc SPO R2

1 of

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EB-TP-1

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39903

Sample wt/vol: 950.0 (g/mL) ML Lab File ID:

% Moisture: decanted: (Y/N) Date Received: 04/22/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/24/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.052	U
319-85-7	beta-BHC	0.052	U
319-86-8	delta-BHC	0.052	U
58-89-9	gamma-BHC (Lindane)	0.052	PU
76-44-8	Heptachlor	0.052	PU
309-00-2	Aldrin	0.052	PU
1024-57-3	Heptachlor epoxide	0.052	U
959-98-8	Endosulfan I	0.052	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.52	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.052	U
5103-74-2	gamma-Chlordane	0.052	U
8001-35-2	Toxaphene	5.2	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.1	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

d/08

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB-2

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39905

Sample wt/vol: 1000 (g/mL) ML Lab File ID:

% Moisture: decanted: (Y/N) Date Received: 04/22/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/24/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	PU
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	PU
76-44-8	Heptachlor	0.0097	JP
309-00-2	Aldrin	0.050	PU
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

d109

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB-BH-1

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39904

Sample wt/vol: 950.0 (g/mL) ML Lab File ID:

% Moisture: decanted: (Y/N) Date Received: 04/22/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/24/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.052	PU
319-85-7	beta-BHC	0.052	PU
319-86-8	delta-BHC	0.052	PU
58-89-9	gamma-BHC (Lindane)	0.052	PU
76-44-8	Heptachlor	0.015	JP
309-00-2	Aldrin	0.048	JP
1024-57-3	Heptachlor epoxide	0.052	PU
959-98-8	Endosulfan I	0.052	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	PU
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.52	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.052	U
5103-74-2	gamma-Chlordane	0.052	PU
8001-35-2	Toxaphene	5.2	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.1	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

dup

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EB-HA-3

Lab Name: CAMBRG Contract: ENSR

Lab Code: CAMBRG Case No.: FD611 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 39597

Sample wt/vol: 950.0 (g/ml) ML Lab File ID:

% Moisture: decanted: (Y/N) Date Received: 04/22/92

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 04/24/92

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/16/92

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC		
319-85-7	beta-BHC		
319-86-8	delta-BHC		
58-89-9	gamma-BHC (Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin		
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT		
72-43-5	Methoxychlor		
53494-70-5	Endrin ketone		
7421-36-3	Endrin aldehyde		
5103-71-9	alpha-Chlordane		
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene		
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.1	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

INORGANICS

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

AFBS

Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2405CS

Matrix (soil/water): SOIL Lab Sample ID: 398913

Level (low/med): LOW Date Received: 04/22/90

Solids: 93.8

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	795.00			P
7440-36-0	Antimony	5.50	U	N	P
7440-38-2	Arsenic	1.50	B	N	P
7440-39-3	Barium	2.70	B		P
7440-41-7	Beryllium	0.50	B		P
7440-43-9	Cadmium	1.10	U		P
7440-70-2	Calcium	68.80	B		P
7440-47-3	Chromium	17.80			P
7440-48-4	Cobalt	5.60	B		P
7440-50-8	Copper	6.50			P
7439-89-6	Iron	3450.00			P
7439-92-1	Lead	10.60		*	P
7439-95-4	Magnesium	172.00	B		P
7439-96-5	Manganese	11.30			P
7439-97-6	Mercury	0.11	U		CV
7440-02-0	Nickel	5.50	B		P
7440-09-7	Potassium	393.00	B		P
7782-49-2	Selenium	0.43	U	WN	P
7440-22-4	Silver	1.10	U		P
7440-23-5	Sodium	40.90	B		P
7440-28-0	Thallium	0.43	U		P
7440-62-2	Vanadium	22.10			P
7440-66-6	Zinc	10.50			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR Artifacts: YES

Comments:
This sample contained roots as artifacts.

4/13

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PRBS

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2405CS

Matrix (soil/water): SOIL Lab Sample ID: 398765

Level (low/med): LOW Date Received: 04/22/92

% Solids: 91.1

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8070.00			P
7440-36-0	Antimony	12.30	B	N	P
7440-38-2	Arsenic	3.30		N	F
7440-39-3	Barium	10.00	B		P
7440-41-7	Beryllium	0.44	U		P
7440-43-9	Cadmium	2.20			P
7440-70-2	Calcium	41.00	B		P
7440-47-3	Chromium	28.00			P
7440-48-4	Cobalt	3.80	B		P
7440-50-8	Copper	4.00	B		P
7439-89-6	Iron	12400.00			P
7439-92-1	Lead	5.80		*	F
7439-95-4	Magnesium	746.00	B		P
7439-96-5	Manganese	37.80			P
7439-97-6	Mercury	0.11	U		CV
7440-02-0	Nickel	4.50	B		P
7440-09-7	Potassium	1080.00	B		P
7782-49-2	Selenium	0.44	U	N	F
7440-22-4	Silver	1.10	U		P
7440-23-5	Sodium	23.20	B		P
7440-28-0	Thallium	0.44	U		F
7440-62-2	Vanadium	31.00			P
7440-66-6	Zinc	16.50			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR Artifacts: YES

Comments:

This sample contained leaves and grass as artifacts.

114

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

NTP11

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2405CS

Matrix (soil/water): SOIL Lab Sample ID: 39899S

Level (low/med): LOW Date Received: 04/22/92

% Solids: 96.1

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2700.00			P
7440-36-0	Antimony	14.90		N	P
7440-38-2	Arsenic	4.70		N	P
7440-39-3	Barium	4.80	B		P
7440-41-7	Beryllium	0.42	U		P
7440-43-9	Cadmium	2.40			P
7440-70-2	Calcium	327.00	B		P
7440-47-3	Chromium	26.30			P
7440-48-4	Cobalt	3.00	B		P
7440-50-8	Copper	1.10	B		P
7439-89-6	Iron	15000.00			P
7439-92-1	Lead	1.90		*	P
7439-95-4	Magnesium	726.00	B		P
7439-96-5	Manganese	22.20			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.00	B		P
7440-09-7	Potassium	2040.00			P
7782-49-2	Selenium	0.42	U	N	P
7440-22-4	Silver	1.00	U		P
7440-23-5	Sodium	18.10	B		P
7440-28-0	Thallium	0.42	U		P
7440-62-2	Vanadium	27.60			P
7440-66-6	Zinc	15.30			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:
NTP1-1

115

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

NSTSL

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2405C5

Matrix (soil/water): SOIL Lab Sample ID: 398985

Level (low/med): LOW Date Received: 04/22/92

Solids: 84.2

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6990.00			P
7440-36-0	Antimony	23.10		N	P
7440-38-2	Arsenic	8.40		N	P
7440-39-3	Barium	28.50	B		P
7440-41-7	Beryllium	0.52	B		P
7440-43-9	Cadmium	3.80			P
7440-70-2	Calcium	395.00	B		P
7440-47-3	Chromium	37.40			P
7440-48-4	Cobalt	6.30	B		P
7440-50-8	Copper	15.80			P
7439-89-6	Iron	20700.00			P
7439-92-1	Lead	10.50		*	P
7439-95-4	Magnesium	1050.00	B		P
7439-96-5	Manganese	65.70			P
7439-97-6	Mercury	0.12	U		CV
7440-02-0	Nickel	5.70	B		P
7440-09-7	Potassium	1660.00			P
7782-49-2	Selenium	0.48	U	WN	P
7440-22-4	Silver	1.20	U		P
7440-23-5	Sodium	67.10	B		P
7440-28-0	Thallium	0.48	U		P
7440-62-2	Vanadium	44.60			P
7440-66-6	Zinc	49.60			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: YES

Comments:
This sample contained rocks as artifacts.

16

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7TP11

Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2405CS

Matrix (soil/water): SOIL Lab Sample ID: 39900S

Level (low/med): LOW Date Received: 04/22/92

Solids: 91.7

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8840.00			P
7440-36-0	Antimony	14.50		N	P
7440-38-2	Arsenic	3.50		N	P
7440-39-3	Barium	15.00	B		P
7440-41-7	Beryllium	0.44	U		P
7440-43-9	Cadmium	2.30			P
7440-70-2	Calcium	82.70	B		P
7440-47-3	Chromium	27.50			P
7440-48-4	Cobalt	4.20	B		P
7440-50-8	Copper	4.10	B		P
7439-89-6	Iron	13300.00			P
7439-92-1	Lead	4.60		*	P
7439-95-4	Magnesium	850.00	B		P
7439-96-5	Manganese	45.00			P
7439-97-6	Mercury	0.11	U		CV
7440-02-0	Nickel	4.40	B		P
7440-09-7	Potassium	1320.00			P
7782-49-2	Selenium	0.44	U	N	P
7440-22-4	Silver	1.10	U		P
7440-23-5	Sodium	22.70	B		P
7440-28-0	Thallium	0.44	U		P
7440-62-2	Vanadium	31.50			P
7440-66-6	Zinc	17.50			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR Artifacts: YES

Comments:

This sample contained rocks as artifacts.

1n7

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7TP12

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2405DS

Matrix (soil/water): SOIL Lab Sample ID: 399018

Level (low/med): LOW Date Received: 04/22/92

Solids: 91.1

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14200.00			P
7440-36-0	Antimony	10.90	B	N	P
7440-38-2	Arsenic	3.40		N	F
7440-39-3	Barium	25.30	B		F
7440-41-7	Beryllium	0.44	U		P
7440-43-9	Cadmium	2.90			P
7440-70-2	Calcium	113.00	B		P
7440-47-3	Chromium	30.50			P
7440-48-4	Cobalt	4.40	B		P
7440-50-8	Copper	6.00			F
7439-89-6	Iron	14800.00			P
7439-92-1	Lead	7.70		*	F
7439-95-4	Magnesium	1000.00	B		F
7439-96-5	Manganese	51.70			P
7439-97-6	Mercury	0.11	U		CV
7440-02-0	Nickel	6.60	B		P
7440-09-7	Potassium	1530.00			P
7782-49-2	Selenium	0.44	U	N	F
7440-22-4	Silver	1.10	U		P
7440-23-5	Sodium	25.00	B		P
7440-28-0	Thallium	0.44	U		F
7440-62-2	Vanadium	34.70			P
7440-66-6	Zinc	22.00			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR Artifacts: YES

Comments:

This sample contained rocks as artifacts.

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

7TP12D

Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 240505

Matrix (soil/water): SOIL Lab Sample ID: 399025

Level (low/med): LOW Date Received: 04/22/92

Solids: 91.7

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	11800.00			P
7440-36-0	Antimony	10.30	B	N	P
7440-38-2	Arsenic	2.90		N	P
7440-39-3	Barium	22.50	B		P
7440-41-7	Beryllium	0.44	U		P
7440-43-9	Cadmium	2.10			P
7440-70-2	Calcium	155.00	B		P
7440-47-3	Chromium	24.50			P
7440-48-4	Cobalt	3.80	B		P
7440-50-8	Copper	4.60	B		P
7439-89-6	Iron	11800.00			P
7439-92-1	Lead	4.50		*	P
7439-95-4	Magnesium	790.00	B		P
7439-96-5	Manganese	36.60			P
7439-97-6	Mercury	0.11	U		CV
7440-02-0	Nickel	5.80	B		P
7440-09-7	Potassium	1190.00			P
7782-49-2	Selenium	0.44	U	N	P
7440-22-4	Silver	1.10	U		P
7440-23-5	Sodium	22.30	B		P
7440-28-0	Thallium	0.44	U		P
7440-62-2	Vanadium	27.00			P
7440-66-6	Zinc	18.00			P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR Artifacts: YES

Comments:
This sample contained rocks as artifacts.

409

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7STSL

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2405CS

Matrix (soil/water): SOIL Lab Sample ID: 399085

Level (low/med): LOW Date Received: 04/22/92

Solids: 3.1

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7930.00			P
7440-36-0	Antimony	258.00	U	N	P
7440-38-2	Arsenic	19.40	U	N	F
7440-39-3	Barium	262.00	B		P
7440-41-7	Beryllium	12.90	U		P
7440-43-9	Cadmium	68.20			P
7440-70-2	Calcium	32100.00	B		P
7440-47-3	Chromium	35.00	B		P
7440-48-4	Cobalt	34.80	B		P
7440-50-8	Copper	12400.00			P
7439-89-6	Iron	26200.00			P
7439-92-1	Lead	261.00		*	F
7439-95-4	Magnesium	1090.00	B		P
7439-96-5	Manganese	250.00			P
7439-97-6	Mercury	7.30			CV
7440-02-0	Nickel	116.00	B		P
7440-09-7	Potassium	3230.00	U		P
7782-49-2	Selenium	12.90	U	WN	F
7440-22-4	Silver	45.00	B		P
7440-23-5	Sodium	954.00	B		P
7440-28-0	Thallium	12.90	U		F
7440-62-2	Vanadium	140.00	B		P
7440-66-6	Zinc	7360.00			P
	Cyanide				NR

Color Before: BLACK Clarity Before: Texture: FINE

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

B7STSL SLUDGE

FORM I - IN ILM02.0

d120

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7STSLD

Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2405C9

Matrix (soil/water): SOIL Lab Sample ID: 399095

Level (low/med): LOW Date Received: 04/22/92

% Solids: 3.4

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7830.00			P
7440-36-0	Antimony	231.00	U	N	P
7440-38-2	Arsenic	17.00	U	N	P
7440-39-3	Barium	202.00	B		P
7440-41-7	Beryllium	11.50	U		P
7440-43-9	Cadmium	70.30			P
7440-70-2	Calcium	23700.00	B		P
7440-47-3	Chromium	37.60	B		P
7440-48-4	Cobalt	28.80	U		P
7440-50-8	Copper	10800.00			P
7439-89-6	Iron	29100.00			P
7439-92-1	Lead	255.00		*	P
7439-95-4	Magnesium	857.00	B		P
7439-96-5	Manganese	174.00			P
7439-97-6	Mercury	2.90	U		CV
7440-02-0	Nickel	113.00	B		P
7440-09-7	Potassium	2880.00	U		P
7782-49-2	Selenium	11.30	U	WN	P
7440-22-4	Silver	48.30	B		P
7440-23-5	Sodium	504.00	B		P
7440-28-0	Thallium	11.30	U	W	P
7440-62-2	Vanadium	87.30	B		P
7440-66-6	Zinc	6490.00			P
	Cyanide				NR

Color Before: BLACK Clarity Before: Texture: FINE

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

B7STSL-D SLUDGE

FORM I - IN ILM02.0

1121

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B7STA0

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 240505

Matrix (soil/water): WATER Lab Sample ID: 399075

Level (low/med): LOW Date Received: 04/22/90

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	114.00	B		P
7440-36-0	Antimony	41.00	B		P
7440-38-2	Arsenic	3.00	U	WN	P
7440-39-3	Barium	5.00	U		P
7440-41-7	Beryllium	2.00	U		P
7440-43-9	Cadmium	5.00	U		P
7440-70-2	Calcium	84100.00			P
7440-47-3	Chromium	5.00	U		P
7440-48-4	Cobalt	15.70	B		P
7440-50-8	Copper	72.00			P
7439-89-6	Iron	984.00			P
7439-92-1	Lead	3.30			P
7439-95-4	Magnesium	4160.00	B		P
7439-96-5	Manganese	80.20			P
7439-97-6	Mercury	0.20	U	N	CV
7440-02-0	Nickel	6.00	U		P
7440-09-7	Potassium	2600.00			P
7782-49-2	Selenium	2.00	U	WN	P
7440-22-4	Silver	5.00	U		P
7440-23-5	Sodium	14900.00			P
7440-28-0	Thallium	2.00	U	N	P
7440-62-2	Vanadium	5.00	U		P
7440-66-6	Zinc	157.00			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:
B7STA0

1/22

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

7STA0D

Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 240505

Matrix (soil/water): WATER Lab Sample ID: 399068

Level (low/med): LOW Date Received: 04/22/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	72.80	B		P
7440-36-0	Antimony	40.00	U		P
7440-38-2	Arsenic	5.00	U	WN	P
7440-39-3	Barium	5.00	U		P
7440-41-7	Beryllium	2.00	U		P
7440-43-9	Cadmium	5.00	U		P
7440-70-2	Calcium	33400.00			P
7440-47-3	Chromium	5.00	U		P
7440-48-4	Cobalt	13.70	B		P
7440-50-8	Copper	76.00			P
7439-89-6	Iron	858.00			P
7439-92-1	Lead	2.00	U		P
7439-95-4	Magnesium	4090.00	B		P
7439-96-5	Manganese	77.40			P
7439-97-6	Mercury	0.27	U	N	CV
7440-02-0	Nickel	7.30	B		P
7440-09-7	Potassium	7750.00			P
7782-49-2	Selenium	2.00	U	WN	P
7440-22-4	Silver	5.00	U		P
7440-23-5	Sodium	17800.00			P
7440-28-0	Thallium	2.00	U		P
7440-62-2	Vanadium	5.50	B		P
7440-66-6	Zinc	162.00			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:
BTSTA0-D

123

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PRSS1

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2404C9

Matrix (soil/water): SOIL Lab Sample ID: 402839

Level (low/med): LOW Date Received: 04/22/92

% Solids: 85.8

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium	1.30			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	8.70			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	219.00		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	17800.00		*	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc	44.00		*	P
	Cyanide				NR

Color Before: BLACK Clarity Before: Texture: COARSE

Color After: COLORLESS Clarity After: CLEAR Artifacts: YES

Comments:
PR-SS-1
There were roots present as artifacts.

A124

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

DPRSS1

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2404CS

Matrix (soil/water): SOIL Lab Sample ID: 40284S

Level (low/med): LOW Date Received: 04/22/92

% Solids: 84.7

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium	1.20	U		P
7440-70-2	Calcium				NR
7440-47-3	Chromium	8.40			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	74.10		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	1680.00		*	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc	29.70		*	P
	Cyanide				NR

Color Before: BLACK Clarity Before: Texture: COARSE

Color After: COLORLESS Clarity After: CLEAR Artifacts: YES

Comments:
PR-SS-1-D
There were roots present as artifacts.

3125

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PRSS2

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 24040

Matrix (soil/water): SOIL Lab Sample ID: 402858

Level (low/med): LOW Date Received: 04/22/92

% Solids: 90.2

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium	1.20			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	11.30			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	100.00		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	1140.00		S*	F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc	24.70		*	P
	Cyanide				NR

Color Before: BLACK Clarity Before: Texture: COARSE

Color After: COLORLESS Clarity After: CLEAR Artifacts: YES

Comments:
PR-SS-2
There were roots and reeds present as artifacts.

126

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PRSB1

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2404CS

Matrix (soil/water): SOIL Lab Sample ID: 402865

Level (low/med): LOW Date Received: 04/22/92

% Solids: 95.1

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium	1.20			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	16.60			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	5.30		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	21.20		*	F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc	9.00		*	P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: COARSE

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:
PR-SB-1

d127

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PRSB2

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NA5 SAS No.: SDG No.: 2404C

Matrix (soil/water): SOIL Lab Sample ID: 402875

Level (low/med): LOW Date Received: 04/22/92

% Solids: 88.5

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium	3.60			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	36.80			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	8.00		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	23.80		S*	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc	22.90		*	P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: COARSE

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:
PR-SB-2

d128

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PRSB3

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2404CS

Matrix (soil/water): SOIL Lab Sample ID: 402888

Level (low/med): LOW Date Received: 04/22/92

% Solids: 93.5

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium	1.50			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	21.90			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	5.80		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	24.20		*	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc	8.70		*	P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: COARSE

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:
PR-SB-3

3129

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PRSB4

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2404CS

Matrix (soil/water): SOIL Lab Sample ID: 402895

Level (low/med): LOW Date Received: 04/22/92

% Solids: 90.8

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium	2.00			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	26.70			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	7.00		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	92.60		*	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc	14.30		*	P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: COARSE

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:
PR-SB-4

130

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PRSB5

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2404CS

Matrix (soil/water): SOIL Lab Sample ID: 40290S

Level (low/med): LOW Date Received: 04/22/92

% Solids: 91.3

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium	2.80			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	31.50			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	4.70	B	N	P
7439-89-6	Iron				NR
7439-92-1	Lead	56.00		*	F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc	19.60		*	P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: COARSE

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:
PR-SB-5

1(3)

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

PRSB6

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2404CS

Matrix (soil/water): SOIL Lab Sample ID: 402828

Level (low/med): LOW Date Received: 04/22/92

% Solids: 89.6

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium	2.50			P
7440-70-2	Calcium				NR
7440-47-3	Chromium	21.80			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	12.40		N	P
7439-89-6	Iron				NR
7439-92-1	Lead	162.00		*	F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc	15.30		*	P
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: COARSE

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:
PR-SB-6

132

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

AFAT9S

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2402CS

Matrix (soil/water): SOIL Lab Sample ID: 40294S

Level (low/med): LOW Date Received: 04/22/92

% Solids: 86.2

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	17.00			F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: CLEAR Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: YES

Comments:

AFAT-SS

This sample contains rocks and roots as artifacts.

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

AFATSB

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2402CS

Matrix (soil/water): SOIL Lab Sample ID: 402955

Level (low/med): LOW Date Received: 04/22/92

% Solids: 93.7

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	1.60			F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: CLEAR Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: YES

Comments:

AFAT-SB

This sample contains rocks as artifacts.

-434

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MATSS

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2402CS

Matrix (soil/water): SOIL Lab Sample ID: 402928

Level (low/med): LOW Date Received: 04/22/92

% Solids: 89.3

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	98.10		S	F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: CLEAR Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR Artifacts: YES

Comments:
MAT-SS
This sample contains rocks as artifacts.

4135

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MATSB

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2402CS

Matrix (soil/water): SOIL Lab Sample ID: 402936

Level (low/med): LOW Date Received: 04/22/92

% Solids: 88.7

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	6.30			F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: CLEAR Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR Artifacts: YES

Comments:
MAT-SB
This sample contains rocks as artifacts.

136

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

APN

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2402C5

Matrix (soil/water): SOIL Lab Sample ID: 400798

Level (low/med): LOW Date Received: 04/23/92

% Solids: 100.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	113000.00			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: GRAY Clarity Before: CLEAR Texture: CHIPS

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

A-PN

This sample consists of paint chips and is multi-colored, gray/white

137

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

20005

EPA SAMPLE NO.

A1PN

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2402CS

Matrix (soil/water): SOIL Lab Sample ID: 40080S

Level (low/med): LOW Date Received: 04/23/92

% Solids: 100.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	66900.00			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: GRAY/YELL Clarity Before: CLEAR Texture: CHIPS

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

A1-PN

This sample consists of paint chips and is multi-colored, gray/yellow.

U.S. EPA - CLP

20006

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

A2PN

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2402CS

Matrix (soil/water): SOIL Lab Sample ID: 400815

Level (low/med): LOW Date Received: 04/23/92

% Solids: 100.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	77200.00			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: GRAY/WHT Clarity Before: CLEAR Texture: CHIPS

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:
A2-PN
This sample consists of paint chips and is multi-colored, gray/white

FORM I - IN ILM02.0

139

U.S. EPA - CLP

20007

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPN

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 240208

Matrix (soil/water): SOIL Lab Sample ID: 400828

Level (low/med): LOW Date Received: 04/23/92

% Solids: 100.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	165000.00			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: RED/GREEN Clarity Before: CLEAR Texture: CHIPS

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:
B-PN
This sample consists of paint chips and is multi-colored, red/green.

FORM I - IN ILM02.0

d140

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

20008

EPA SAMPLE NO.

BPND

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2402CS

Matrix (soil/water): SOIL Lab Sample ID: 400835

Level (low/med): LOW Date Received: 04/23/92

% Solids: 100.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	152000.00			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: RED/GREEN Clarity Before: CLEAR Texture: CHIPS

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:
B-PN-D
This sample consists of paint chips and is multi-colored, red/green.

U.S. EPA - CLP

20009

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

CPN

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2402CS

Matrix (soil/water): SOIL Lab Sample ID: 40084S

Level (low/med): LOW Date Received: 04/23/92

% Solids: 100.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	142000.00			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: GRY/GREEN Clarity Before: CLEAR Texture: CHIPS

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:
C-PN
This sample consists of paint chips and is multi-colored, gray/green/yellow.

FORM I - IN ILM02.0

d42

U.S. EPA - CLP

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

20010

CPND

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2402CS

Matrix (soil/water): SOIL Lab Sample ID: 40085S

Level (low/med): LOW Date Received: 04/23/92

% Solids: 100.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	135000.00			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: GRY/GREEN Clarity Before: CLEAR Texture: CHIPS

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:
C-PN-D
This sample consists of paint chips and is multi-colored, gray/green/yellow.

AH3

U.S. EPA - CLP

20011

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

DPN

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2402CS

Matrix (soil/water): SOIL Lab Sample ID: 40086S

Level (low/med): LOW Date Received: 04/23/92

% Solids: 100.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	103000.00			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: GRY/GRLEN Clarity Before: CLEAR Texture: CHIPS

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:
D-PN
This sample consists of paint chips and is multi-colored, gray/green/pink.

4149

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

20012

EPA SAMPLE NO.

FPN

Lab Name: NEI-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 240208

Matrix (soil/water): SOIL Lab Sample ID: 400878

Level (low/med): LOW Date Received: 04/23/92

% Solids: 100.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	111000.00			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: GRY/GREEN Clarity Before: CLEAR Texture: CHIPS

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

F-PN

This sample consists of paint chips and is multi-colored, gray/green/yellow.

d145

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

20013
EPA SAMPLE NO.

GPN

Lab Name: NCT-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRO Case No.: NAS SAS No.: SDG No.: 2402CS

Matrix (soil/water): SOIL Lab Sample ID: 400888

Level (low/med): LOW Date Received: 04/23/92

% Solids: 100.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	88700.00			F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: GREEN/BGE Clarity Before: CLEAR Texture: CHIPS

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:
G-PN
This sample consists of paint chips and is multi-colored, green/beige.

146

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO. 20014

MPN

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2402CS

Matrix (soil/water): SOIL Lab Sample ID: 40089S

Level (low/med): LOW Date Received: 04/23/90

% Solids: 100.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	1620.00			F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: GRY/WHT Clarity Before: CLEAR Texture: CHIPS

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:
M-PN
This sample consists of paint chips and is multi-colored, gray/white.

FORM I - IN ILM02.0

147

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

OPN

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2402C6

Matrix (soil/water): SOIL Lab Sample ID: 400905

Level (low/med): LOW Date Received: 04/23/92

% Solids: 100.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	44000.00			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: WHITE Clarity Before: CLEAR Texture: CHIPS

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

Q-PN

This sample consists of paint chips and is multi-colored, mostly white

48

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SPN

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: E4020S

Matrix (soil/water): SOIL Lab Sample ID: 40091S

Level (low/med): LOW Date Received: 04/23/92

% Solids: 100.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	98900.00			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: GREEN/BRN Clarity Before: CLEAR Texture: CHIPS

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:
S-PN
This sample consists of paint chips and is multi-colored, green/brown.

1/49

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

YPN

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 240205

Matrix (soil/water): SOIL Lab Sample ID: 400926

Level (low/med): LOW Date Received: 04/23/92

% Solids: 100.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	11500.00			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: GREEN Clarity Before: CLEAR Texture: CHIPS

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

YPN

This sample consists of paint chips and is multi-colored, mostly green

d150

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ZPN

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2402CS

Matrix (soil/water): SOIL Lab Sample ID: 400705

Level (low/med): LOW Date Received: 04/23/92

% Solids: 100.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	9220.00			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: CLEAR Texture: CHIPS

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

ZPN

This sample consists of chips of paint.

451

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBTP1

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 24050S

Matrix (soil/water): WATER Lab Sample ID: 399035

Level (low/med): LOW Date Received: 04/28/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	20.00	U		P
7440-36-0	Antimony	40.00	U		P
7440-38-2	Arsenic	3.00	U	N	P
7440-39-3	Barium	5.00	U		P
7440-41-7	Beryllium	2.00	U		P
7440-43-9	Cadmium	5.00	U		P
7440-70-2	Calcium	86.00	B		P
7440-47-3	Chromium	5.00	U		P
7440-48-4	Cobalt	5.00	U		P
7440-50-8	Copper	5.00	U		P
7439-89-6	Iron	33.70	B		P
7439-92-1	Lead	15.40		S	P
7439-95-4	Magnesium	30.00	U		P
7439-96-5	Manganese	5.00	U		P
7439-97-6	Mercury	0.20	U	N	CV
7440-02-0	Nickel	6.00	U		P
7440-09-7	Potassium	500.00	U		P
7782-49-2	Selenium	2.00	U	N	P
7440-22-4	Silver	5.00	U		P
7440-23-5	Sodium	25.30	B		P
7440-28-0	Thallium	2.00	U		P
7440-62-2	Vanadium	5.00	U		P
7440-66-6	Zinc	20.70			P
	Cyanide				P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:
EBTP-1

d152

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

FBBH1

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 240503

Matrix (soil/water): WATER Lab Sample ID: 399-48

Level (low/med): LOW Date Received: 04/29/92

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	25.20	B		P
7440-36-0	Antimony	54.50	B		P
7440-38-2	Arsenic	3.00	U	N	P
7440-39-3	Barium	138.00	B		P
7440-41-7	Beryllium	2.00	U		P
7440-43-9	Cadmium	5.00	U		P
7440-70-2	Calcium	66300.00			P
7440-47-3	Chromium	5.00	U		P
7440-48-4	Cobalt	12.30	B		P
7440-50-8	Copper	6.80	B		P
7439-89-6	Iron	42.10	B		P
7439-92-1	Lead	56.80			P
7439-95-4	Magnesium	15600.00			P
7439-96-5	Manganese	5.00	U		P
7439-97-6	Mercury	0.20	U	N	CV
7440-02-0	Nickel	6.00	U		P
7440-09-7	Potassium	1160.00	B		P
7782-49-2	Selenium	2.00	U	N	P
7440-22-4	Silver	5.00	U		P
7440-23-5	Sodium	20300.00			P
7440-28-0	Thallium	2.00	U		P
7440-62-2	Vanadium	12.10	B		P
7440-66-6	Zinc	309.00			P
	Cyanide				NA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FB-BH-1

FORM I - IN

ILM03.0

d153

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB2

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2405CS

Matrix (soil/water): WATER Lab Sample ID: 399055

Level (low/med): LOW Date Received: 04/22/92

Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	20.00	U		P
7440-36-0	Antimony	40.00	U		P
7440-38-2	Arsenic	3.00	U	N	P
7440-39-3	Barium	5.00	U		P
7440-41-7	Beryllium	2.00	U		P
7440-43-9	Cadmium	5.00	U		P
7440-70-2	Calcium	100.00	B		P
7440-47-3	Chromium	5.00	U		P
7440-48-4	Cobalt	5.00	U		P
7440-50-8	Copper	5.60	B		P
7439-89-6	Iron	86.20	B		P
7439-92-1	Lead	7.70		+	P
7439-95-4	Magnesium	30.00	U		P
7439-96-5	Manganese	5.00	U		P
7439-97-6	Mercury	0.20	U	N	CV
7440-02-0	Nickel	6.00	U		P
7440-09-7	Potassium	500.00	U		P
7782-49-2	Selenium	2.00	U	N	P
7440-22-4	Silver	5.00	U		P
7440-23-5	Sodium	101.00	B		P
7440-28-0	Thallium	2.00	U		P
7440-62-2	Vanadium	5.00	U		P
7440-66-6	Zinc	17.40	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:
FB-2

6154

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBTR1

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2404CS

Matrix (soil/water): WATER Lab Sample ID: 40291S

Level (low/med): LOW Date Received: 04/22/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium	5.00	U		P
7440-70-2	Calcium				NR
7440-47-3	Chromium	5.00	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	5.00	U		P
7439-89-6	Iron				NR
7439-92-1	Lead	2.00	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc	9.50	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:
EB-TR-1

155

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHA2

Lab Name: NET-CAMBRIDGE DIVISION Contract:

Lab Code: CAMBRG Case No.: NAS SAS No.: SDG No.: 2402CS

Matrix (soil/water): WATER Lab Sample ID: 402975

Level (low/med): LOW Date Received: 04/22/92

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:
EB-HA-2

-156

TOTAL PETROLEUM HYDROCARBONS

R:\PUBS\PROJECTS\5060016\510.APA

d57

NET Cambridge Division
ANALYTICAL REPORT

Report Date: 05/27/1992

Report To: ENSR Consulting and

NET Job No: 92.1577

Project: NAS Earl, NJ

Date Rec'd: 04/22/1992

Sample ID: AFAT-99

NET Sample No: 40294

Parameter	Result	Units	Analyst
EX Petroleum Hydrocarbon,TPH S	05/14/1992	date	ask
Petroleum Hydrocarbons, TPH S	<78	mg/Kg	ask

~1,58

NET Cambridge Division
ANALYTICAL REPORT

Report Date: 05/27/1992

Report To: ENSR Consulting and

NET Job No: 92.1577

Project: NAS Earl, NJ

Date Rec'd: 04/22/1992

Sample ID: AFAT-SS

NET Sample No: 40295

Parameter	Result	Units	Analyst
EX Petroleum Hydrocarbon,TPH S	05/14/1992	date	ask
Petroleum Hydrocarbons, TPH S	<72	mg/Kg	ask

λ59

NET Cambridge Division
ANALYTICAL REPORT

Report Date: 05/27/1992

Report To: ENSR Consulting and

NET Job No: 92.1577

Project: NAS Earl, NJ

Date Rec'd: 04/22/1992

Sample ID: MAT-88

NET Sample No: 40292

Parameter	Result	Units	Analyst
EX Petroleum Hydrocarbon,TPH S	05/14/1992	date	ask
Petroleum Hydrocarbons, TPH S	870	mg/Kg	ask

160

NET Cambridge Division
ANALYTICAL REPORT

Report Date: 05/27/1992

Report To: ENSR Consulting and

NET Job No: 92.1377

Project: NAS Earl, NJ

Date Rec'd: 04/22/1992

Sample ID: MAT-SB Lead Only Soil

NET Sample No: 40293

Parameter	Result	Units	Analyst
EX Petroleum Hydrocarbon,TPH S	05/14/1992	date	ask
Petroleum Hydrocarbons, TPH S	2500	mg/Kg	ask

#161

NET Cambridge Division

Report Date: 05/27/1992

Report To: ENSR Consulting and

NET Job No: 92.1577

Project: NAS Earl, NJ

Date Rec'd: 04/22/1992

Sample ID: EB-HA-2

NET Sample No: 40297

Parameter	Result	Units	Analyst
EX Petroleum Hydro., TPH AQ	05/05/1992	date	jlh
Petroleum Hydrocarbons, TPH AQ	<2	mg/L	esk

162

NET Cambridge Division
ANALYTICAL REPORT

Report Date: 05/27/1992

Report To: ENSR Consulting and

NET Job No: 92.1502

Project: NAS Earle, NJ

Date Rec'd: 04/22/1992

Sample ID: FB-2

NET Sample No: 39905

Parameter	Result	Units	Analyst
EX Petroleum Hydro., TPH AQ	05/05/1992	date	jlh
Petroleum Hydrocarbons, TPH AQ	<2	mg/L	ask

1163

NET Cambridge Division
ANALYTICAL REPORT

Report Date: 05/27/1992

Report To: ENSR Consulting and

NET Job No: 92.1577

Project: NAS Earl, NJ

Date Rec'd: 04/22/1992

Sample ID: MAT-SS-D MS/MSD

NET Sample No: 40296

Parameter	Result	Units	Analyst
EX Petroleum Hydrocarbon,TPH S	05/14/1992	date	ssk
Petroleum Hydrocarbons, TPH S	980	mg/Kg	ssk

PRELIMINARY REPORT

d164

ASBESTOS

R:\PUBS\PROJECTS\5060016\510.APA

d165

NET NATIONAL ENVIRONMENTAL TESTING, INC.

NET Midwest, Inc.
Cedar Falls Division
704 Enterprise Drive
P.O. Box 625
Cedar Falls, IA 50613
Tel: (319) 277-2401
Fax: (319) 277-2425

Dear Client:

Analysis of floor tile and other nonfriable asbestos-containing materials by polarized light microscopy (EPA 40 CFR Part 763, Appendix A to Subpart F) can yield false negative results because of method limitations in separating encapsulated fibers and in detecting fibers with small lengths and diameters. When the analysis of these types of materials by the EPA polarized light microscopy method yields negative results for the presence of asbestos, NET recommends using alternative methods of analysis, such as transmission electron microscopy or x-ray diffraction.

If your asbestos bulk sample contained more than one (1) layer, then you'll notice a different format for reporting asbestos bulk sample results. Reports have been changed to conform to the requirements of the NVLAP Certification Program outlined in the AHERA regulations.

If the sample contains more than one layer, the report will show the percent (by volume) of asbestos or other fibers in each layer. The report will also list the percent (by volume) of asbestos or other fibers in the entire sample, as COMBINED LAYERS. Unless you are interested in a specific layer, the COMBINED LAYERS percentages are probably the most relevant results to consider.

The color of each layer is also reported as an abbreviation. Reporting the color of each layer is intended to allow you to correlate the data reported to each layer of the sample. The color abbreviations we utilize are listed below:

BG - beige
BK - black
BL - blue
BR - brown
DK - dark
GD - gold
GR - grey
GN - green
LT - light
OL - olive
OR - orange
OW - off white
PK - pink
PR - purple
RED - red
RST - rust
SL - silver
TAN - tan
YL - yellow

Please don't hesitate to contact us if you have any questions regarding your report.

d166

NET NATIONAL ENVIRONMENTAL TESTING, INC.

NET Midwest, Inc.
Cedar Falls Division
704 Enterprise Drive
P.O. Box 625
Cedar Falls, IA 50613
Tel: (319) 277-2401
Fax: (319) 277-2425

ANALYTICAL REPORT

Wes Miller
NET ATLANTIC, INC.
Syracuse Division
5854 Butternut Drive
East Syracuse, NY 13057

05/04/1992

Sample No.: 167524
Job Number: 92.3245

SAMPLE DESCRIPTION: #40073 B5-B1

Date Taken: 04/22/1992

Date Received: 04/25/1992

ASBESTOS IDENTIFICATION

BULK SAMPLE ANALYSIS

	% By Visual Estimation
Sample Color	BR
FIBROUS ASBESTIFORMS	
Actinolite/Tremolite	ND
Amosite	ND
Anthophylite	ND
Chrysotile	ND
Crocidolite	ND
Total Fibrous Asbestiforms	<1.
OTHER FRIBROUS COMPONENTS	
Cellulose	ND
Fibrous Glass	97.
Synthetics	ND
Other	ND
NONFIBROUS COMPONENTS	3.

The Cedar Falls laboratory is accredited by the National Institute of Standards and Technology for polarized light microscopy analysis under NVLAP. Analytical Method: EPA-600/M4-82-020.
ND means less than 1%, and % refers to percent by volume.

Linda Cmelik
Linda Cmelik
Analyst

5/2/92
Date of Analysis

Michael K. McGee, CIH
Division Manager

167

NATIONAL ENVIRONMENTAL TESTING, INC.

NET Midwest, Inc.
Cedar Falls Division
704 Enterprise Drive
P.O. Box 625
Cedar Falls, IA 50613
Tel: (319) 277-2401
Fax: (319) 277-2425

ANALYTICAL REPORT

Wes Miller
NET ATLANTIC, INC.
Syracuse Division
5854 Butternut Drive
East Syracuse, NY 13057

05/04/1992

Sample No.: 167525
Job Number: 92.3245

SAMPLE DESCRIPTION: #40074 B5-BI-D

Date Taken: 04/22/1992

Date Received: 04/25/1992

ASBESTOS IDENTIFICATION

BULK SAMPLE ANALYSIS

	% By Visual Estimation
Sample Color	BR
FIBROUS ASBESTIFORMS	.
Actinolite/Tremolite	ND
Amosite	ND
Anthophylite	ND
Chrysotile	ND
Crocidolite	ND
Total Fibrous Asbestiforms	<1.
OTHER FRIBROUS COMPONENTS	.
Cellulose	ND
Fibrous Glass	97.
Synthetics	ND
Other	ND
NONFIBROUS COMPONENTS	3.

The Cedar Falls laboratory is accredited by the National Institute of Standards and Technology for polarized light microscopy analysis under NVLAP. Analytical Method: EPA-600/M4-82-020.
ND means less than 1%, and % refers to percent by volume.

Linda Cmelik
Linda Cmelik
Analyst

5/2/92
Date of Analysis

Michael K. McGee, CIH
Division Manager

OCEAN GROUP

168

NET NATIONAL ENVIRONMENTAL TESTING, INC.

NET Midwest, Inc.
Cedar Falls Division
704 Enterprise Drive
P.O. Box 625
Cedar Falls, IA 50613
Tel: (319) 277-2401
Fax: (319) 277-2425

ANALYTICAL REPORT

Wes Miller
NET ATLANTIC, INC.
Syracuse Division
5854 Butternut Drive
East Syracuse, NY 13057

05/04/1992

Sample No.: 167526
Job Number: 92.3245

SAMPLE DESCRIPTION: #40075 C5-BI

Date Taken: 04/22/1992

Date Received: 04/25/1992

ASBESTOS IDENTIFICATION

BULK SAMPLE ANALYSIS

	% By Visual Estimation
Sample Color	OW&YL
FIBROUS ASBESTIFORMS	.
Actinolite/Tremolite	ND
Amosite	ND
Anthophylite	ND
Chrysotile	ND
Crocidolite	ND
Total Fibrous Asbestiforms	<1.
OTHER FRIBROUS COMPONENTS	.
Cellulose	ND
Fibrous Glass	97.
Synthetics	ND
Other	ND
NONFIBROUS COMPONENTS	3.

The Cedar Falls laboratory is accredited by the National Institute of Standards and Technology for polarized light microscopy analysis under NVLAP. Analytical Method: EPA-600/M4-82-020.
ND means less than 1%, and % refers to percent by volume.

Linda Cmelik
Linda Cmelik
Analyst

5/2/92
Date of Analysis

Michael K. McGee, CIH
Division Manager

69

NATIONAL ENVIRONMENTAL TESTING, INC.

NET Midwest, Inc
Cedar Falls Division
704 Enterprise Drive
P.O. Box 625
Cedar Falls, IA 50613
Tel: (319) 277-2401
Fax: (319) 277-2425

ANALYTICAL REPORT

Wes Miller
NET ATLANTIC, INC.
Syracuse Division
5854 Butternut Drive
East Syracuse, NY 13057

05/04/1992

Sample No.: 167527
Job Number: 92.3245

SAMPLE DESCRIPTION: #40076 C5-BI-D

Date Taken: 04/22/1992

Date Received: 04/25/1992

ASBESTOS IDENTIFICATION

BULK SAMPLE ANALYSIS

	% By Visual Estimation
Sample Color	OW&YL
FIBROUS ASBESTIFORMS	.
Actinolite/Tremolite	ND
Amosite	ND
Anthophylite	ND
Chrysotile	ND
Crocidolite	ND
Total Fibrous Asbestiforms	<1.
OTHER FRIBROUS COMPONENTS	.
Cellulose	2.
Fibrous Glass	95.
Synthetics	ND
Other	ND
NONFIBROUS COMPONENTS	3.

The Cedar Falls laboratory is accredited by the National Institute of Standards and Technology for polarized light microscopy analysis under NVLAP. Analytical Method: EPA-600/M4-82-020.
ND means less than 1%, and % refers to percent by volume.

Linda Cmelik
Linda Cmelik
Analyst

5/2/92
Date of Analysis

Michael K. McGee, CIH
Division Manager

1170

NET NATIONAL ENVIRONMENTAL TESTING, INC.

NET Midwest, Inc.
Cedar Falls Division
704 Enterprise Drive
P.O. Box 625
Cedar Falls, IA 50613
Tel: (319) 277-2401
Fax: (319) 277-2425

ANALYTICAL REPORT

Wes Miller
NET ATLANTIC, INC.
Syracuse Division
5854 Butternut Drive
East Syracuse, NY 13057

05/04/1992

Sample No.: 167528
Job Number: 92.3245

SAMPLE DESCRIPTION: #40077 D-BI

Date Taken: 04/22/1992

Date Received: 04/25/1992

ASBESTOS IDENTIFICATION

BULK SAMPLE ANALYSIS

	% By Visual Estimation
Sample Color	BR
FIBROUS ASBESTIFORMS	.
Actinolite/Tremolite	ND
Amosite	ND
Anthophylite	ND
Chrysotile	ND
Crocidolite	ND
Total Fibrous Asbestiforms	<1.
OTHER FRIBROUS COMPONENTS	.
Cellulose	ND
Fibrous Glass	97.
Synthetics	ND
Other	ND
NONFIBROUS COMPONENTS	3.

The Cedar Falls laboratory is accredited by the National Institute of Standards and Technology for polarized light microscopy analysis under NVLAP. Analytical Method: PEA-600/M4-82-020.
ND means less than 1%, and % refers to percent by volume.

Linda Cmelik
Linda Cmelik
Analyst

5/2/92
Date of Analysis

Michael K. McGee, CIH
Michael K. McGee, CIH
Division Manager

171

NET NATIONAL ENVIRONMENTAL TESTING, INC.

NET Midwest, Inc.
Cedar Falls Division
704 Enterprise Drive
P.O. Box 625
Cedar Falls, IA 50613
Tel: (319) 277-2401
Fax: (319) 277-2425

ANALYTICAL REPORT

Wes Miller
NET ATLANTIC, INC.
Syracuse Division
5854 Butternut Drive
East Syracuse, NY 13057

05/04/1992

Sample No.: 167529
Job Number: 92.3245

SAMPLE DESCRIPTION: #40078 6-BI

Date Taken: 04/22/1992

Date Received: 04/25/1992

ASBESTOS IDENTIFICATION

BULK SAMPLE ANALYSIS

	% By Visual Estimation
Sample Color	YL&SL
FIBROUS ASBESTIFORMS	.
Actinolite/Tremolite	ND
Amosite	ND
Anthophylite	ND
Chrysotile	ND
Crocidolite	ND
Total Fibrous Asbestiforms	<1.
OTHER FRIBROUS COMPONENTS	.
Cellulose	10.
Fibrous Glass	86.
Synthetics	ND
Other	ND
NONFIBROUS COMPONENTS	4.

The Cedar Falls laboratory is accredited by the National Institute of Standards and Technology for polarized light microscopy analysis under NVLAP. Analytical Method: EPA-600/M4-82-020.
ND means less than 1%, and % refers to percent by volume.

Linda Cmelik
Linda Cmelik
Analyst

5/2/92
Date of Analysis

Michael K. McGee, CIH
Division Manager

HALLIBURTON NUS
Environmental Corporation