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FIELD INVESTIGATION TEAM ACTIVITIES AT UNCONTROLLED HAZARDOUS SUBSTANCES FACILITIES — ZONE I

NUS CORPORATION
SUPERFUND DIVISION

ORIGINAL
(Red)

R-585-12-9-5

SITE INSPECTION OF
PLASTI-SEAL CORPORATION
PREPARED UNDER

TDD NO. F3-8906-08
EPA NO. PA-272
CONTRACT NO. 68-01-7346

FOR THE

HAZARDOUS SITE CONTROL DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY

MARCH 30, 1990

NUS CORPORATION
SUPERFUND DIVISION

SUBMITTED BY	REVIEWED BY	APPROVED BY
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Not responsive due to revised scope

Site Name: Plasti-Seal Corporation
TDD No.: F3-8906-08

ORIGINAL (Red)

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1. FOUR-MILE-RADIUS MAP

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SECTION 1

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1.0 INTRODUCTION

1.1 Authorization

NUS Corporation performed this work under Environmental Protection Agency Contract No. 68-01-7346. This specific report was prepared in accordance with Technical Directive Document No. F3-8906-08 for the Plasti-Seal site, located in Montgomery County, Pennsylvania.

1.2 Scope of Work

NUS FIT 3 was tasked to conduct a site inspection for the subject site.

1.3 Summary

Plasti-Seal Corporation is a small-scale, active metals impregnation and pressure-testing company located in Huntingdon Valley, Pennsylvania. Five people are employed by the company. The facility has operated in this capacity since 1976. Prior to 1980, Plasti-Seal Corporation operated a facility at 1325 Industrial Highway. The former Industrial Highway site is approximately 1.5 miles east of the current Republic Road site. The site consists of one large building with a dual garage/work area and offices. A six-feet-high chain-link fence comprises the northern property line. There were no other access restrictions to the site.

In the late 1970s, an Upper Southampton public supply well (no. 10) was discovered to be contaminated with trichloroethene (TCE: 44 ppb) and was subsequently shut down. The suspected source of contamination was the Plasti-Seal facility, which is located approximately 2,000 feet southwest of the well. EPA drilled five wells (one located on site) in January 1981 to delineate the extent of the contamination. It was later determined that Plasti-Seal only uses 1,1,1-trichloroethane (1,1,1-TCEA) as its degreasing solvent. Reportedly, no TCE has ever been used on site.

Currently, containment of the waste by Plasti-Seal is adequate: the waste is drummed and reclaimed for recycling by Detrex Chemical. A resin, diethyl phthalate (Dapon), is used to seal porous metal parts. This resin is also reclaimed by Detrex.

EPA conducted an investigation in January 1980 to determine the source of the TCE contamination in Southampton's public supply wells.

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The Pennsylvania Department of Environmental Resources (PA DER) conducted a RCRA inspection of the site in December 1982. PA DER conducted a preliminary assessment of the site in February 1985. NUS FIT 3 visited the site in January 1989 to conduct a non-sampling site reconnaissance.

Residents within the three-mile radius of the site obtain their water from eight public water systems, two private water systems, or domestic wells. Site surface water drainage flows overland to Republic Road. The drainage flows to the west into a storm sewer and discharges into an unnamed perennial tributary approximately 1,200 feet southwest of the site.

In June 1989, NUS FIT 3 conducted a site inspection. Home well samples, soil samples, monitoring well samples, and stream samples were taken during the site inspection. The Quality Assurance Review and the Toxicological Evaluation can be found in sections 7.0 and 8.0, respectively.

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SECTION 2

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2.0 THE SITE

2.1 Location

Plasti-Seal Corporation is located on the northern side of Republic Road and south of the Pennsylvania Turnpike in Montgomery County, Pennsylvania (see figure 2.1, page 2-2). The site can be located at the intersection of 40° 09' 45" north latitude and 75° 03' 47" west longitude on the United States Geological Survey (U.S.G.S.) 7.5 minute series topographic map of the Hatboro, Pennsylvania quadrangle. The site may also be located on the same quadrangle by measuring from the southeastern corner 8-3/4 inches west and 6-3/4 inches north.[1]

2.2 Site Layout

The subject site consists of a nearly square plot of land that measures approximately 200 by 200 feet in size. The property is bordered on the north by the Pennsylvania Turnpike, on the south by Republic Road, and on the east and west by private industries. The Plasti-Seal facility is approximately 100 by 100 feet in size and is situated centrally on the property (see figure 2.2, page 2-3). A six-feet-high chain-link fence comprised the northern property line. There were no other access restrictions to the site. Driveways and parking areas are located on the western and northern sides of the on-site building.[2]

A monitoring well, installed in January 1981, is located at the northeastern corner of the site.[2]

Garage doors are located at the building's northeastern corner. The doors are used to receive shipments of raw solvents and to send out shipments of waste solvents.[2]

The site slopes gradually to the south. All surface drainage will flow along the paved areas of the property and onto Republic Road. Drainage on Republic Road will travel to the west and collect in a storm drain. From the storm drain, the water will flow to the west, then to the southwest, and will discharge into an unnamed tributary to Southampton Creek.[2]

2.3 Ownership History

Since 1980, Ann C. Keyser, of Huntingdon Valley, Pennsylvania, has owned the Plasti-Seal Corporation. From 1976 to 1980, the Hankin Management Company, of Elkins Park, Pennsylvania, owned the property. Ownership prior to 1976 is unknown, but the property was reportedly owned by a farmer.[3]

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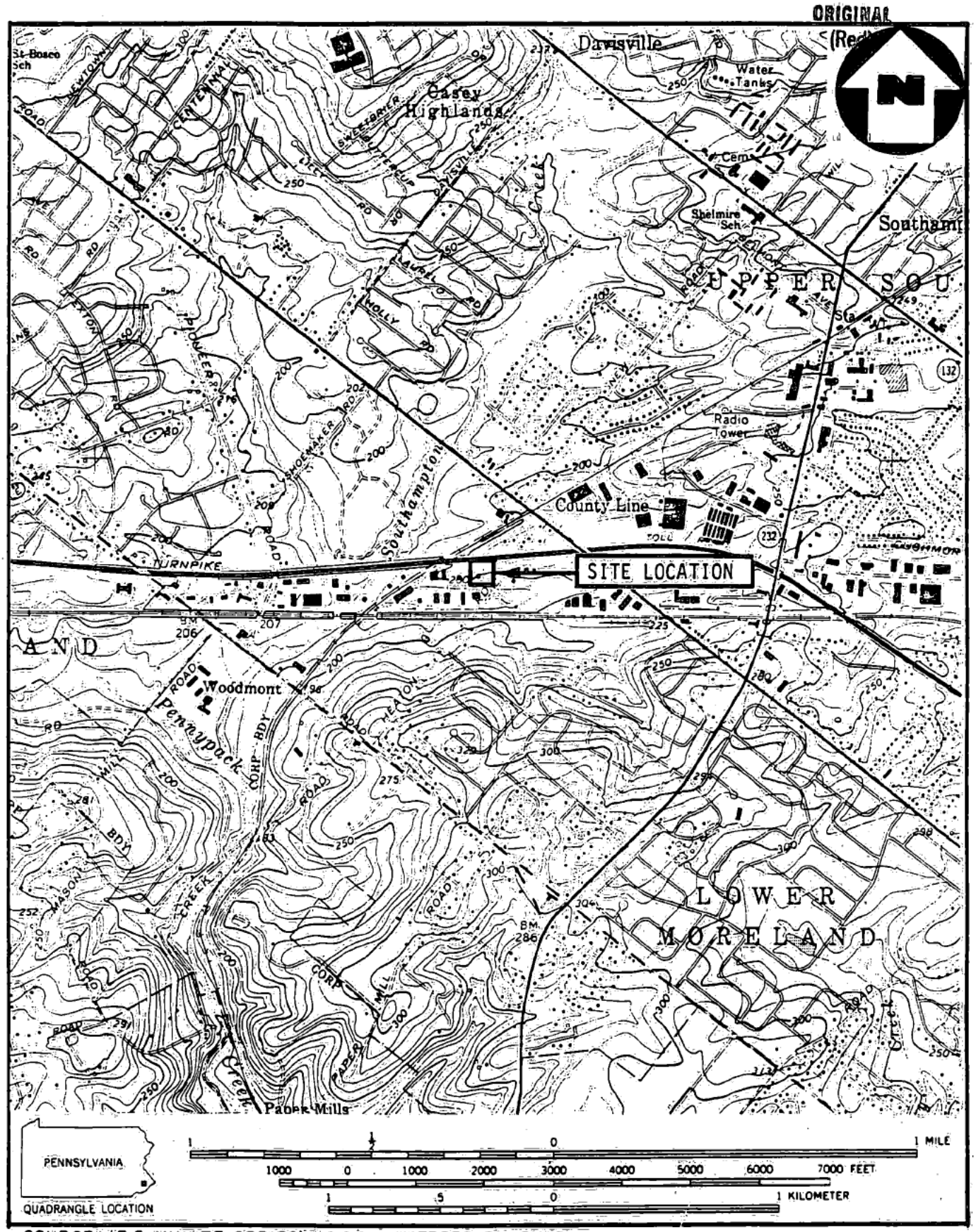

SOURCE: (7.5 MINUTE SERIES) U.S.G.S. HATBORO, PA., QUAD.

FIGURE 2-1

SITE LOCATION MAP
PLASTI-SEAL CORPORATION
SCALE 1:24000

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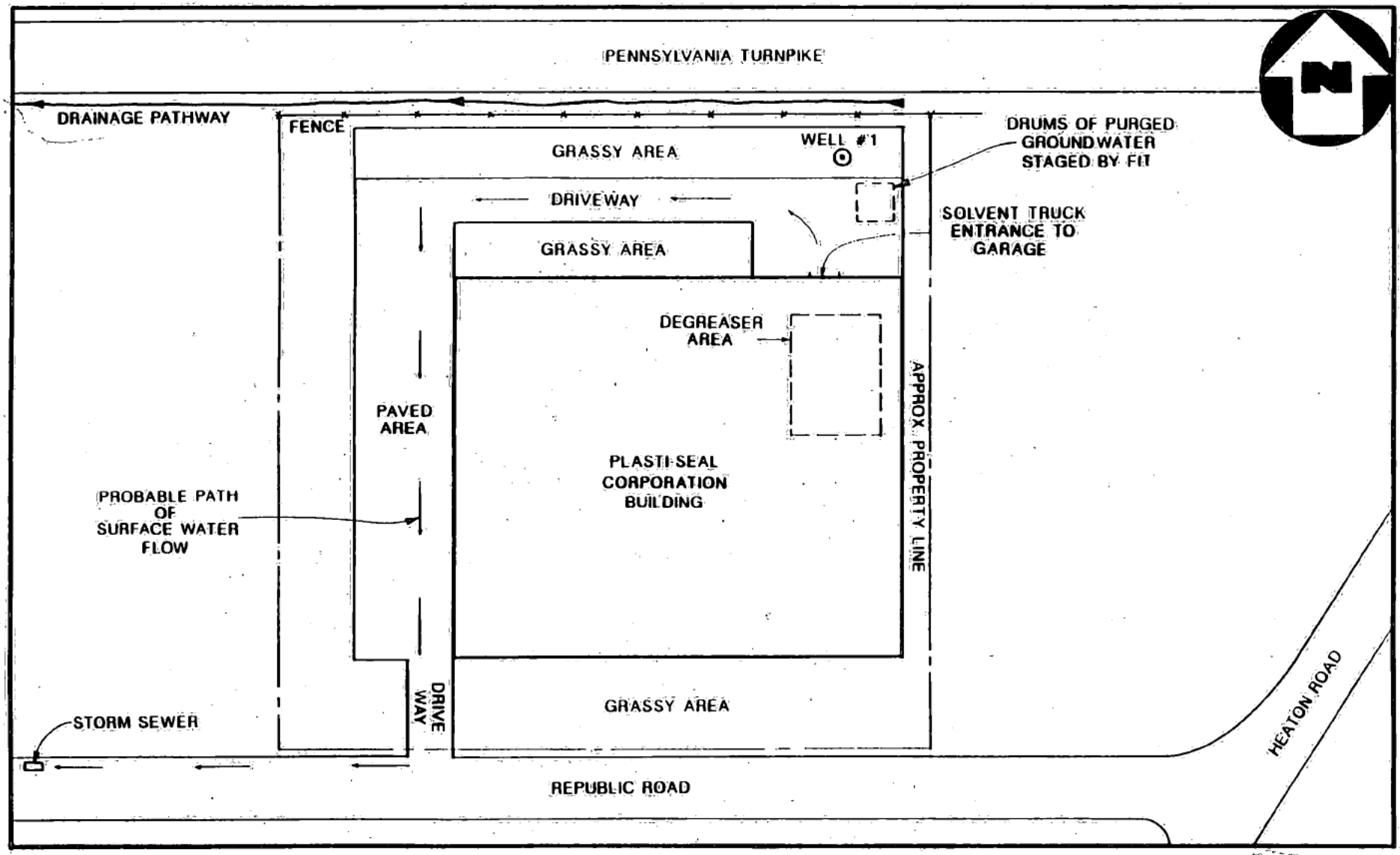

FIGURE 2.2

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SITE SKETCH
PLASTI-SEAL CORPORATION

(NO SCALE)

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2.4 Site Use History

The site has been used by the Plasti-Seal Corporation, a small-scale metals impregnation and pressure-testing facility, since 1976.[3,4] The building on site was constructed in 1976 specifically for the Plasti-Seal Corporation.[3] For an unknown period prior to 1980, the Plasti-Seal Corporation operated a facility at 1325 Industrial Highway, approximately 1.5 miles east of the current Republic Road site.[5] Site use prior to 1976 is unknown; however, the site is reported to have been used for farming.[6]

2.5 Permit and Regulatory Action History

On September 5, 1979, tests conducted by the Upper Southampton Township Authority indicated the presence of TCE in three township wells.[7,8] Well no. 10, which was one of the most highly used water sources for the township, is located 2,000 feet northeast of the site.[1,7] Test results indicated that well no. 10 had a TCE concentration of 44 ppb, the highest concentration of the three wells.[7]

On September 6, 1979, tests taken by PA DER for the Bucks County Health Department confirmed the presence of TCE in well nos. 2, 8, and 10. Well no. 8 is rarely used. Well nos. 2 and 10 were taken out of service on September 6, 1979.[7] On September 11, 1979, well no. 8 was shut down.[9]

From November 13 to November 15, 1979, the Office of Water and Waste Management, a technical support division of EPA, conducted sampling for halocarbons in Southampton well no. 10. Eighteen samples were taken from well no. 10. Results of this sampling indicated 2 to 7 ppb of 1,1,1-TCEA and 3 to 19 ppb of TCE.[10]

On November 14, 1979, six samples taken from residences near well no. 10 were analyzed for halocarbons. The results of the residential sampling indicated levels from nondetectable to 3 ppb of 1,1,1-TCEA and nondetectable levels of TCE.[10]

In late January 1980, an investigation was conducted by EPA to determine the source of the TCE contamination.[11] On Thursday, January 24, 1980, Michael Musheno, from EPA's Groundwater Protection Section, conducted inquiries into solvent usage at businesses along Industrial Highway near well no. 10. During the investigation, it was learned that the Plasti-Seal Corporation operated a TCE vapor degreaser at its old Industrial Highway location.[12] Plasti-Seal had moved from its Industrial Highway to a facility on Republic Road in 1976.[3]

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On Thursday, January 24, 1980, Michael Musheno visited the Plasti-Seal Corporation on Republic Road. Raymond Keyser, vice president of Plasti-Seal, stated that Plasti-Seal uses approximately 200 gallons per month of 1,1,1-TCEA in a vapor degreaser at the Republic Road location. TCE was reportedly never used at this facility by Plasti-Seal.[11]

On June 22, 1980, EPA tasked FIT 3 (Ecology and Environment, Incorporated) to conduct a site inspection of the Plasti-Seal (Republic Road) facility. The inspection included the installation of five monitoring wells in the vicinity of the facility and the collection of samples from these wells and the soil.[13] The FIT supervised the drilling of the 5 six-inch monitoring wells; this drilling was subcontracted to A.C. Schultes and Sons, Incorporated on January 5, 1981 (see appendix D).[13]

In order to perform the on-site phase of the site inspection, a warrant was required. The United States District Court for the Eastern District of Pennsylvania issued a warrant for inspection (Magistrate No. Miscellaneous 81-005), served through EPA representative Robin M. Aitken, to the Plasti-Seal Corporation. The warrant authorized entrance to the premises of the Plasti-Seal well site on January 12 through 15, 1981. In addition, the warrant authorized permission to drill a six-inch monitoring well at the site and to sample the groundwater.[13] The results of the sampling are not available.[14]

In or around 1980, the Plasti-Seal Corporation filed for small-quantity generator status (identification no. PAD002265213) for 1,1,1-TCEA, as specified by RCRA.[15]

In December 1982, PA DER conducted a RCRA inspection of the site. The company was found to be in compliance with applicable regulations.[15] However, a Hazardous Waste Inspection Report, prepared by Robert Allen, of PA DER, reveals that Plasti-Seal misunderstood the regulations regarding a generator and a storer; more than 1,000 kilograms of waste had accumulated on site before the waste was properly disposed. Plasti-Seal Corporation is currently a small-quantity generator of 1,1,1-TCEA.[15]

On February 6, 1985, PA DER conducted a preliminary assessment of the site.[15] In January 1989, NUS FIT 3, as tasked by EPA, conducted a non-sampling site reconnaissance.[16]

On July 10, 1989, NUS FIT 3, as tasked by EPA, conducted a site inspection of the site.[2]

2.6 Remedial Action to Date

There has been no known remedial action to date.

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SECTION 3

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3.0 ENVIRONMENTAL SETTING

3.1 Water Supply

Residents within the three-mile radius of the site obtain their water from eight public water systems, two private water systems, or domestic wells.

The Philadelphia Suburban Water Company (PSWC) supplies water to the townships of Lower Moreland, Upper Moreland, and Abington, including the towns of Willow Grove, Bryn Athyn, and Abington.[17] PSWC obtains water from 6 surface locations, 1 reservoir, and 39 groundwater wells. The six surface intakes are the Schuylkill River and Perkiomen Creek in Montgomery County, Pickering Creek in Chester County, Crum Creek in Delaware County, and the Neshaminy and Ironworks Creeks in Bucks County.[18] The (b) (9) [redacted] of the site. The other surface intakes are all well outside the 4-mile radius and are not within 15 downstream miles.[1,19,20] Neither the wells nor the reservoir are located within the four-mile radius of the site.[17] PSWC serves approximately 833,997 people (219,473 service connections times 3.8 persons per connection) and has an average daily sendout of 88 million gallons.[18] PSWC's water system is totally integrated.[20] In addition, PSWC supplies water to several utilities in or adjacent to Montgomery County at the rate of one million gallons per day (mgd).[21]

The Warminster Township Municipal Authority (WMTMA) supplies water to approximately 38,000 persons in Warminster Township, Warwick Township, and Ivyland Borough. WMTMA utilizes 16 groundwater wells, 6 of which are located (b) (9) [redacted] t of the site.[22] The wells (all completed in the (b) (9) [redacted]) are 10 to 12 inches in diameter, range in total depth from (b) (9) [redacted], and are cased (b) (9) [redacted] Average well yields range between 61 to 335 gallons per minute (gpm). WMTMA's system is totally integrated, and there are interconnections with PSWC and the Warrington Township Municipal Authority (WTMA). WMTMA purchases water from PSWC during times of low supply and could supply WTMA (approximate population of 10,700 persons) with water in an emergency.[22,24]

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The Horsham Township Authority (HTA) has 4,800 connections serving approximately 16,300 persons in Horsham Township (Horsham and Maple Glen), except for the Willow Grove United States Naval Air Station. HTA utilizes 14 groundwater wells, 4 of which are located (b) (9) [redacted] of the site.[25] The wells (all completed in the (b) (9) [redacted]) range in depth from (b) (9) [redacted] and have well yields ranging from 130 to 250 gpm.[23,25]

The Hatboro Borough Authority (HBA) supplies water to approximately 19,000 persons in Hatboro and small sections of Horsham and Lower Moreland Township. HBA utilizes 16 wells, all of which are located (b) (9) [redacted] of the site.[17,26] The wells (all completed in the (b) (9) [redacted]) have a total safe yield of 1.1 mgd and a maximum pumping capacity of 2.91 mgd. The HBA system is totally integrated.[23,26]

The Warminster Heights Water Company (WHWC) supplies water to approximately 2,450 persons in Warminster Heights.[27] WHWC utilizes two groundwater wells, both completed in the (b) (9) [redacted] of the site.[18,23,27] The wells are (b) (9) [redacted] in depth, are cased to (b) (9) [redacted], respectively, and have an average current yield of 300 gpm.[28]

The United States Naval Air Development Center (USNADC) supplies water to approximately 2,900 persons at the center.[28] USNADC utilizes three groundwater wells completed in the (b) (9) [redacted] Wells no. 3 and no. 4 are 8 inches in diameter and (b) (9) [redacted] in depth and are located (b) (9) [redacted] of the site. Well no. 10 is 10 inches in diameter and (b) (9) [redacted] in depth and is located (b) (9) [redacted] of the site.[28]

The Philadelphia Water Company (PWC) supplies water to all residents of Philadelphia County. PWC utilizes three surface water intakes to obtain its water. The Baxter Treatment Plant (formerly the Torresdale Treatment Plant) on the Delaware River and the Queenlane Treatment Plant and the Belmont Treatment Plant on the Schuylkill River are not located within 15 downstream miles of the site. The combined intake of these plants is approximately 310 mgd. An estimated 1.7 million inhabitants of Philadelphia County receive water from PWC.[29]

The Upper Southampton Township Municipal Authority (USTMA) supplies water to approximately 11,085 persons in Upper Southampton Township in Bucks County and Upper Moreland Township in Montgomery County. USTMA utilizes five wells, located (b) (9) [redacted] of the site. The wells are 10 inches in diameter, range in depth from (b) (9) [redacted], and are cased between (b) (9) [redacted] All are completed in the (b) (9) [redacted] The wells have an average current yield of 35 to 90 gpm and a pumping water level range of 135 to 245 feet.[30]

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The Northampton Bucks County Municipal Authority (NBCMA) supplies water to approximately 20,000 persons in Northampton Township. NBCMA utilizes seven groundwater wells, all completed in (b) (9) [redacted] Three of these wells are located between (b) (9) [redacted] of the site. NBCMA wells are 8 to 12 inches in diameter, range in depth from (b) (9) [redacted], and are cased between (b) (9) [redacted]. The wells have an average current yield of 38 to 210 gpm and a pumping water level of 66 to 141 feet. The NBCMA system is totally integrated.[31]

The Bucks County Water and Sewer Authority (BCWSA) supplies water to approximately 10,820 persons in Lower Southampton Township (including Trevose Heights and Feasterville) and Neshaminy Junior High School in Middletown Township. BCWSA utilizes one well, completed in the (b) (9) [redacted], to supply the school with water.[23,32] This well, located outside the 4-mile radius of the site, is 10 inches in diameter, is (b) (9) [redacted] deep, has a (b) (9) [redacted] casing, and has an average yield of 104 gpm. BCWSA receives the rest of its water (approximately 20 mgd) from PWC, whose sources are not within 15 downstream miles of the site. BCWSA also supplies water to PSWC, USTMA, NBCMA, Bensalem Township Municipal Authority (BTMA), Middletown Township, and the Newtown Artesian Water Company (NAWC).[32]

Private well supplies are also used in the area. The nearest home well is (b) (9) [redacted] of the site.[2] Because the study area is served by public water supply, it is not known how many home wells exist in the study area.

A total of 12 representative wells completed in the Stockton Formation are located in Upper Southampton Township, Bucks County (see appendix C). These wells are 6 inches in diameter, range in total depth from 65 to 143 feet (median depth of 115 feet), and are cased to a depth of 30 to 80 feet (median cased depth of 40 feet). This casing seals off surface sediment from the underlying bedrock (found 7 to 50 feet below surface). Static water level ranges from 4 to 45 feet (median static water level is 25 feet), and well yields range from 5 to 70 gpm, with a median yield of 25 gpm.[33]

3.2 Surface Waters

All site surface water drainage flows overland to Republic Road. Continuing to the west, the drainage flows into a storm sewer and discharges into an unnamed perennial tributary approximately 1,200 feet southwest of the site.[1] The unnamed tributary is approximately one foot deep and five feet wide.[2] The stream discharges into the Southampton Creek approximately 0.4 stream mile from the site.[1]

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Southampton Creek, a perennial body of water, flows southwestwardly for approximately 0.7 stream mile before emptying into Pennypack Creek.[1] From this point, Pennypack Creek flows southwardly and then eastwardly, where it empties into the Delaware River.[1,19]

Pennypack Creek, within the study area, has been designated for protection for trout stocking under the Pennsylvania Clean Stream Law.[34] There are no known uses for Southampton Creek.

A wetland approximately 7 acres in size is located 2,200 feet downstream of the site on Southampton Creek. The palustrine wetland consists of emergent vegetation, broad-leaved deciduous, and narrow-leaved persistent.[35]

3.3 Hydrogeology

The geologic and hydrogeologic conditions in the study area were researched as part of the site inspection. A preliminary literature review was conducted to determine surface and subsurface geologic conditions, soil character, and the status of groundwater transport and storage.

3.3.1 Geology

The Plasti-Seal site is situated within the Triassic Lowlands Section of the Piedmont Physiographic Province.[36] The rocks of this Triassic Section are more commonly known as the Newark Group, a 16,000- to 20,000-foot section of nonmarine sedimentary rocks and associated intrusive and extrusive basic rocks.[37] The Newark Group was deposited in the Newark Basin, which was part of a fracture system initiated by the widening of the Atlantic Basin and separation of the continents in Mesozoic time.[37,38] The Piedmont Uplands Section of the Piedmont Physiographic Province is located 200 feet south of the site and consists of Precambrian to Ordovician age metamorphic and igneous rocks. Faulting, particularly 2.3 and 2.8 miles south-southeast of the site, has exposed younger Cambrian age quartzites and limestones between Precambrian age gneiss and schist.[23] The site area has a dendritic geomorphic drainage pattern and a topography of broad, shallow valleys and rolling hills.[39]

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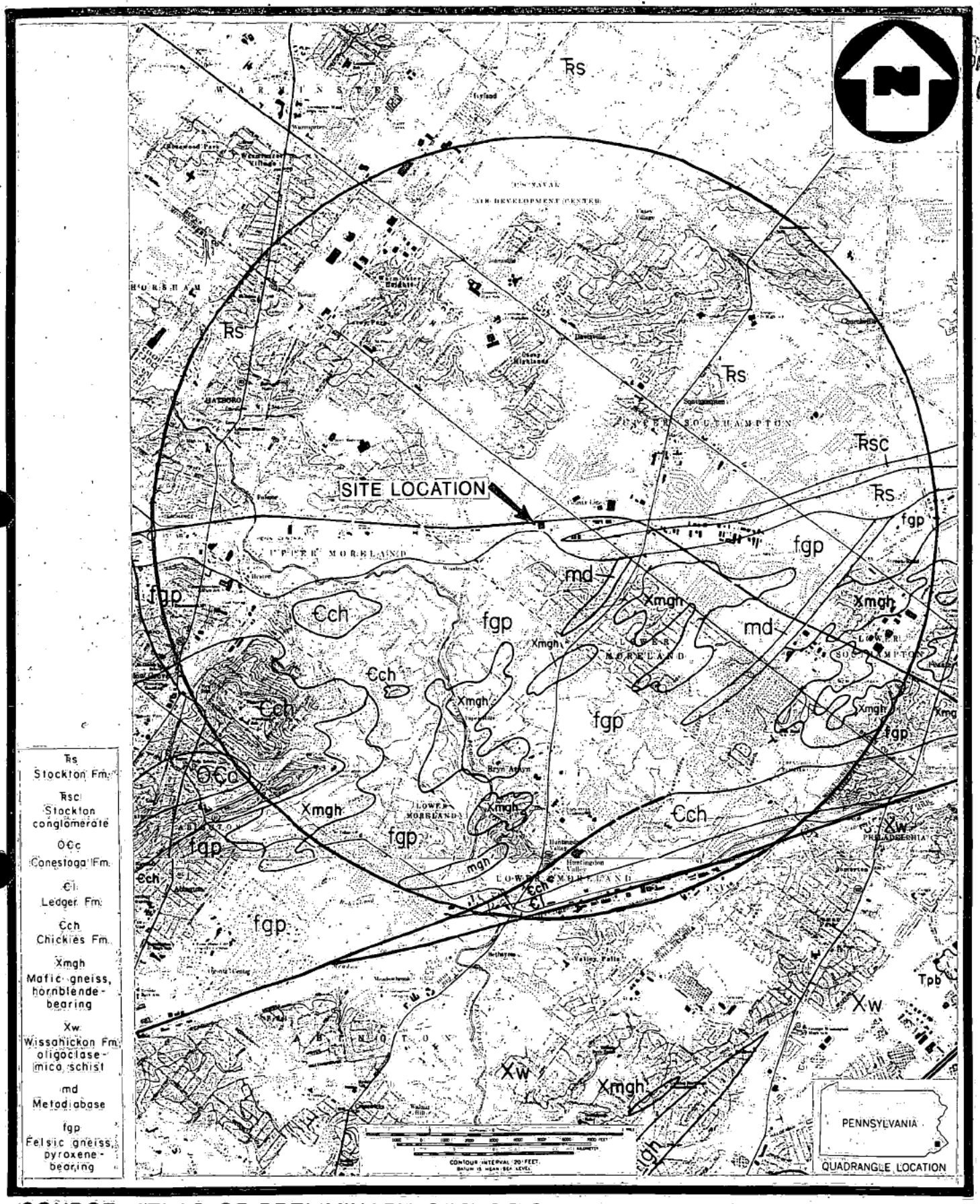
The structural history of the Newark Basin can be applied to all six Triassic rift valleys that stretch from Nova Scotia to North Carolina. These half-graben basins were created during the Palisade Disturbance, the orogenic event that ended the Appalachian Orogeny in late Triassic time. The Newark Basin lies unconformably upon a structural complex of lower Paleozoic quartzites/carbonates and Precambrian granite/gneiss. It is bordered on the north-northwest by the granitic-gneissic complex of the Reading Prong and on the south-southwest by lower Paleozoic and Precambrian rocks of the Piedmont Province. The shape and extent of the original depositional basin were very similar to the present form of the outcrop belt and closely follow the regional grain of Appalachian structures.[37] Continuous downfaulting along the northwestern border has produced a regional dip of 10 to 20 degrees northwest.[39]

The site is entirely underlain by the Triassic age Stockton Formation (see figure 3.1, see page 3-6).[23] The Stockton Formation consists of a lower conglomerate arkose member, a middle arkosic sandstone member, and an upper mudstone member.[37] The lower yellow-gray conglomerate deposits, mapped separately 0.2 mile southeast of the site, consist of relatively dispersed, moderately rounded clasts of quartz, quartzite, limestone, and feldspar.[23,37] These clasts, averaging one inch in diameter, are set in a poorly sorted arkosic matrix. The middle sandstone member is a fine- to medium-grained, light yellowish-gray to pale reddish-brown, fairly well-sorted arkosic sandstone. The upper mudstone is reddish brown in color and is feldspathic. The abundant feldspar in the Stockton Formation implies a continuous supply from a soda-rich, metamorphosed Paleozoic source east and south of the Newark Basin. The erosion of these crystalline eastern and southern highlands spread Stockton sediments across the basin, forming extensive flood-plain deposits. Fossil flora and fauna such as ferns, conifers, gingkos, mollusks, labyrinthodont amphibians, and phytosaur reptiles suggest an extensive fluvial and flood-plain paleoenvironment for the Stockton. The thickness of the formation reaches a maximum of 6,000 feet approximately 6.0 miles northwest of the site at the Montgomery-Bucks County line.[37]

Stratigraphically older than the Stockton Formation and cropping out 2.9 miles southwest of the site is the Cambrian age Conestoga Formation.[23] The Conestoga Formation consists of medium gray, fine-to coarse-grained crystalline limestone with commonly occurring clay laminae. Much of the formation also contains thin micaceous beds. The base of the formation is usually marked by beds of conglomerate containing carbonate clasts. These clasts can range in size from pebbles to boulders and can be of similar or different lithology than the matrix. Coarsely crystalline, silty, and sandy limestones also occur near the base of the formation. The maximum thickness of the Conestoga Formation is not known since multiple folding makes accurate measurement very difficult. However, a good estimate would be approximately 1,000 feet.[40]



SOURCE: ATLAS OF PRELIMINARY GEOLOGIC QUADRANGLE MAPS OF PENNSYLVANIA

FIGURE 3-1

GEOLOGIC MAP

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PLASTI-SEAL SITE

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Stratigraphically older than the Conestoga Formation and cropping out 2.7 miles southeast of the site is the Cambrian age Ledger Formation.[23] The Ledger Formation is a massive, very light gray to light gray, medium to coarsely crystalline, sparkling dolomite. The formation is estimated to be 1,000 feet thick.[40]

Stratigraphically older than the Ledger Formation and cropping out 2.5 miles southeast of the site is the Cambrian age Chickies Formation.[23] The Chickies Formation consists of a thick-bedded, light gray to white, hard quartzite and quartz schist that is thin bedded in the upper part and locally disintegrates into a fine white siliceous clay. The basal Hellam Conglomerate Member consists of a coarse cobble conglomerate composed of well-rounded cobbles (three to six inches in diameter) and milky white quartz pebbles (up to 0.5 inch in diameter) in a finer quartz matrix that firmly cements them.[41,42] The formation contains fossil Scolithus tubes, a trace fossil formed by burrowing annelid worms.[43] Their presence usually indicates a shelfal paleoenvironment.[40] The thickness of the formation is about 400 feet.[41]

Stratigraphically older than the Chickies Formation and cropping out 2.9 miles southeast of the site is the Precambrian or Lower Paleozoic age (actual age is uncertain) Wissahickon Formation.[23] The facies present in the study area is an oligoclase-mica schist, a finely plicated, medium-grained dark gray rock composed of biotite, muscovite, and quartz with a variable amount of feldspar and chlorite. Distinct veins of quartz are interbanded in the schist, and cleavage/jointing are conspicuous.[41,42] Because of the intense folding and lack of recognizable recurrent beds, the thickness of the Wissahickon is not known (estimated thickness ranges from 8,000 to 10,000 feet).[41]

Two species of medium-grained, crystalline aggregates of quartz, feldspar, and iron-bearing silicate rocks crop out in the study area.[23] The felsic gneiss, pyroxene-bearing species, also known as granitic gneiss, crops out 200 feet south of the site.[23,41] This species is light buff to light pink in color and fine to medium grained and has mineral grains that are approximately one millimeter in diameter. It is composed of quartz, microcline, hornblende, and minor amounts of biotite. The mafic gneiss, hornblende-bearing species, is also known as gabbroic gneiss and gabbro.[41] This species, which crops out throughout the study area, is a dark color and medium to fine grained and contains calcic plagioclase, hypersthene, or augite and up to 30 percent quartz.[23,41] The thickness of these units is unknown.[44]

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A series of intrusive metadiabase dikes crops out 0.7 and 1.9 miles southeast of the site.[23] The metadiabase is a dark greenish-gray to black rock consisting of augite, feldspar, and magnetite. The rock has been extensively altered by metamorphism and typically occurs as thin dikes. Its thickness can vary from a few inches to tens of feet.[41]

3.3.2 Soils

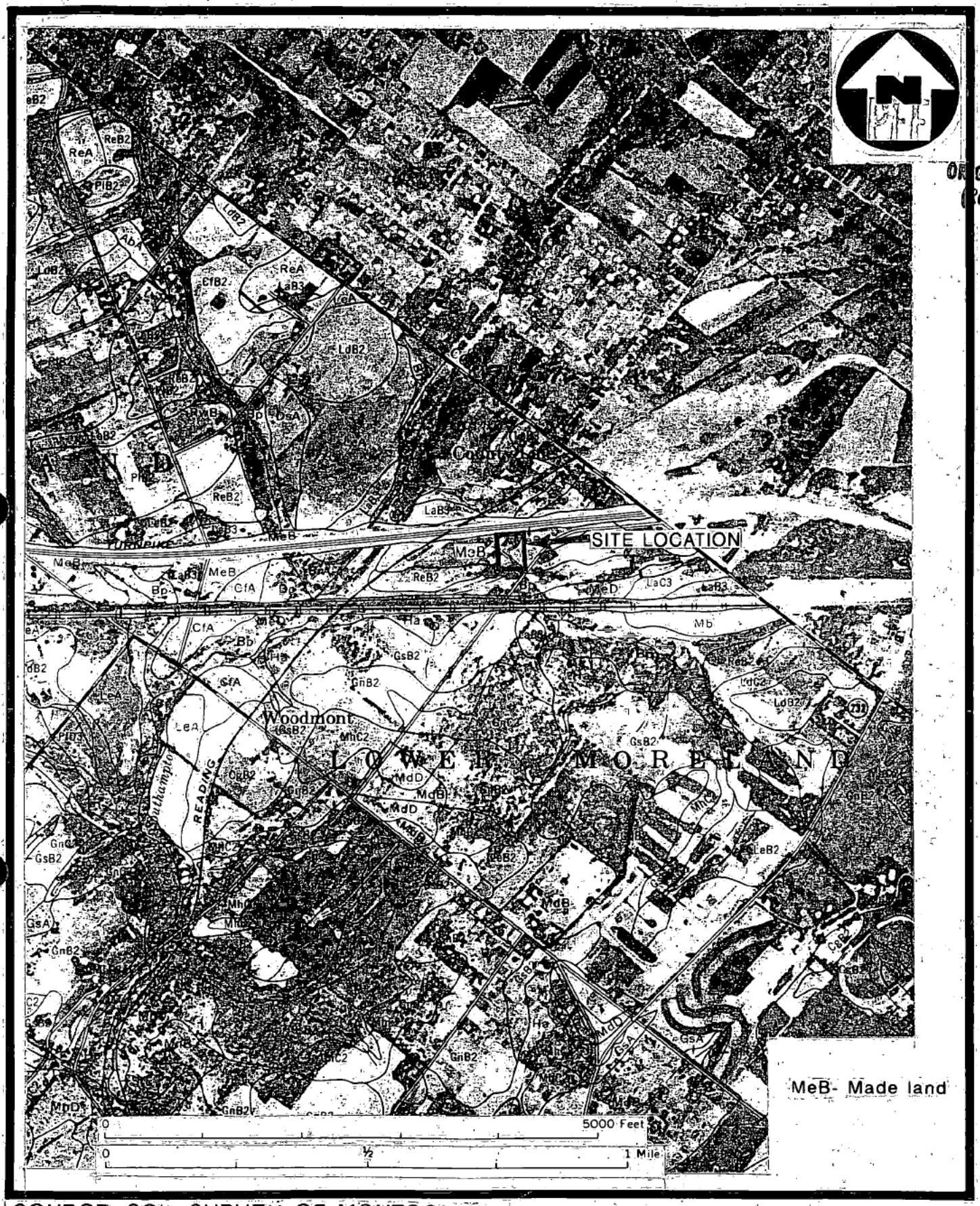
Soil disturbance on site consisted of the destruction of the native soil profile by construction activities. The building of this large industrial park has virtually eliminated any traces of the original soils.[2]

The site is underlain by a Made land soil (see figure 3.2, page 3-9). This soil (MeB - sloping) is a result of altering and mixing soils formed in material weathered from shale and sandstone. This land type is mainly nearly level and gently sloping and is likely to be found on low-lying flats. The soil is a dusky-red to yellowish-brown shaly silt loam to channery sandy loam. The soil has a moderate to very slow permeability, a moderate to very low available moisture capacity, and a pH range of very strongly acid to medium acid (4.5 to 6.0).[46]

3.3.3 Groundwater

The Stockton Formation is the aquifer underlying the site. In the Stockton Formation, the lower conglomerate member and the middle arkosic sandstone member contain both primary and secondary openings that provide a moderate to high total effective porosity and permeability. The middle arkosic sandstone has the highest average reported yield, 131 gpm, and the highest average specific capacity, 4.8 gpm per foot, of any of the formation members. The lower conglomerate member has an average specific capacity of 3.1 gpm per foot. The upper mudstone member is too fine grained to contain a sufficient permeability to permit easy circulation of groundwater. Most wells tapping this member obtain water chiefly from fractures and joints. This upper mudstone has an average reported yield of 19 gpm and an average specific capacity of 0.4 gpm per foot.[47] The Stockton Formation is hydraulically interconnected with the other rock units in the study area via fractures and joints and, in the limestones and dolomites, by fractures and solution cavities.[41]

The Conestoga Formation has a low porosity and moderate to low permeability.[41] In Chester County, a total of 16 wells range in depth from 42 to 200 feet, with a median depth of 90 feet. A total of 8 wells have a cased depth range of 18 to 134 feet, with a median cased depth of 49 feet. A total of 2 wells have a specific capacity range of 0.1 to 0.4 gpm per foot, and a total of 9 wells have a yield range of 7 to 175 gpm, with a median yield of 20 gpm.[44]



ORIGINAL (Red)

SOURCE: SOIL SURVEY OF MONTGOMERY COUNTY, PENNSYLVANIA

FIGURE 3-2

SOILS MAP

NUS CORPORATION

PLASTI-SEAL SITE

PTE ORIGINAL (Red)

The Ledger Formation has a low to high porosity and a low to high permeability.[41] In Chester County, a total of 7 wells have a depth range of 42 to 400 feet, with a median depth of 118 feet. A total of 4 wells have a cased depth range of 5 to 100 feet, with a median cased depth of 40 feet, and a total of 5 wells have a yield range of 7 to 150 gpm, with a median yield of 25 gpm.[44]

The Chickies Formation has a very low porosity and a very low permeability.[41] In Chester County, a total of 11 wells have a depth range of 42 to 222 feet, with a median depth of 112 feet. A total of 9 wells have a cased depth range of 13 to 60 feet, with a median cased depth of 22 feet. A total of 2 wells have a specific capacity of 0.2 gpm per foot, and a total of 6 wells have a yield range of 2 to 20 gpm, with a median yield of 12 gpm.[44]

The oligoclase-mica facies of the Wissahickon Formation has a low porosity and low permeability.[41] In Chester County, a total of 115 wells range in depth from 48 to 400 feet, with a median depth of 112 feet. A total of 67 wells have a cased depth range of 10 to 157 feet, with a median cased depth of 40 feet. A total of 20 wells have a specific capacity range of 0.06 to 8.4 gpm per foot, with a median specific capacity of 0.4 gpm per foot, and 77 wells have a yield range of 0 to 350 gpm, with a median yield of 10.5 gpm.[44]

Gabbroic gneiss and gabbro have a very low porosity and low permeability.[41] In Chester County, a total of 69 wells range in depth from 45 to 265 feet with a median depth of 102 feet. A total of 50 wells have a cased depth range of 14 to 69 feet, with a median cased depth of 39 feet. A total of 9 wells have a specific capacity range of 0.06 to 9.0 gpm per foot, with a median specific capacity of 2.2 gpm per foot, and a total of 55 wells have a yield range of 0.75 to 125 gpm, with a median yield of 11 gpm.[44]

Granitic gneiss has a very low porosity and low permeability. Median yields from this rock unit are typically 20 gpm.[41]

Metadiabase has a low porosity and low permeability.[41] No data are available on its hydrological characteristics since it is not normally utilized as an aquifer.[44]

There are more than five acres of wetlands within the three-mile radius of the site.[34,35] These wetlands are hydraulically interconnected to the shallow groundwater systems of the rock units that underlie them.

PFE ORIGINAL (Red)

The expected direction of shallow groundwater flow is to the south to southwest, toward Southampton Creek, a tributary of Pennypack Creek. Flow direction is based upon topographical observations and the role of streams as discharge points for groundwater.

3.4 Climate and Meteorology

The nearest National Oceanic and Atmospheric Administration climatic data station to the site is located in Phoenixville, Pennsylvania. Phoenixville is located approximately 25 miles west of the site. The climatic data are expected to be similar.[48]

The mean annual temperature for Phoenixville is 53.1°F. The warmest month is July, with an average temperature of 70.5°F, and the coolest month is January, with an average temperature of 30.1°F.[48]

The mean annual precipitation for Phoenixville is 43.55 inches. The wettest month is July, with an average of 4.13 inches, and the driest month is February, with an average of 2.94 inches. A 1-year, 24-hour rainfall will produce 2.75 inches of precipitation.[48,49]

The mean annual lake evaporation for the area is 35 inches. The net annual moisture gain for the area, calculated as the difference between the mean annual precipitation and the mean annual lake evaporation, is 8.55 inches.[50]

3.5 Land Use

The subject site is located in a mixed residential/industrial/agricultural area of Montgomery County. The land immediately north of the site is residential/industrial. To the south, agriculture is the dominant land utilization. Residential and industrial are the primary uses of land east and west of the site. The land within a three-mile radius of the site is a heavily populated suburban Philadelphia community. To the northeast, a United States Naval Air Development Center can be found within three miles of the subject site.[1]

PFE ORIGINAL (Red)

3.6 Population Distribution

Approximately 6,903 persons reside within a 1-mile radius of the site. Approximately 44,967 persons reside within a 2-mile radius of the site. An estimated 76,864 reside within a 3-mile radius of the site. These estimates were calculated by conducting a house count on 7.5 minute series topographic quadrangles of the study area and utilizing the factor of 3.8 persons per house. The Rand McNally Commercial Map and Reference Guide was also utilized.[1,51]

3.7 Critical Environments

The United States Department of the Interior, Fish and Wildlife Service, has no information to indicate that any endangered species or critical environments exist within the three-mile radius of the subject site. Two federally listed birds, the bald eagle (Haliaeetus leucocephalus) and the peregrine falcon (Falcon peregrinus), are expected to be found as transient species in the subject area.[52]

ORIGINAL
(Red)

SECTION 4

ORIGINAL (Red)

4.0 WASTE TYPES AND QUANTITIES

According to Ray Keyser, vice president of Plasti-Seal, approximately 200 gallons per month of 1,1,1-TCEA is used as a degreaser at the facility.[53] Plasti-Seal is classified as a RCRA small-quantity generator of 1,1,1-TCEA.[15] Sludge collected from the bottoms of two 55-gallon drums, which are used in degreasing metal parts, is reclaimed by Detrex Chemical every few months. Porosity of the metal parts is sealed using a resin, diethyl phthalate (Dapon). The resin is reclaimed by Detrex. A 450-gallon, above-ground tank for 1,1,1-TCEA storage is located inside the building. All solvents, resins, and sludges are drummed and eventually reclaimed.[53]

An Upper Southampton public supply well (no. 10) was shut down following the discovery of 44 ppb of TCE.[7] The Plasti-Seal facility, which is located 2,000 feet southwest of the well, was suspected as a potential source of the contamination. To delineate the degree of contamination, EPA drilled five wells in January 1981. One of the wells (MW no. 1) is located on site.[13]

In June 1989, NUS FIT 3 conducted a site inspection of the Plasti-Seal site. The FIT obtained a groundwater sample from the on-site well.[2] Refer to sections 7.0 and 8.0 for the Quality Assurance Review and the Toxicological Evaluation.

BFE ORIGINAL (Red)

SECTION 5

ORIGINAL (Red)

5.0 FIELD TRIP REPORT

5.1 Summary

On Monday, July 10, 1989, NUS personnel [redacted] conducted a site inspection of the Plasti-Seal site in Huntingdon Valley, Montgomery County, Pennsylvania. Weather conditions during the inspection were clear and breezy, with temperatures in the mid-90s.

A total of 13 low-concentration aqueous and 7 low-concentration solid samples, including blanks and duplicates, were obtained during the inspection (see figure 5.1, page 5-4). Photographs were taken at the site (see figure 5.3, page 5-8, and the photograph log, section 5.5).

The site owner did not permit NUS FIT 3 to discharge purged groundwater from an on-site monitoring well onto the subject property. As a result, approximately 700 gallons of purged groundwater were collected into 55-gallon drums and stored at the site. The groundwater was removed from the site on August 31, 1989 by a permitted waste hauler.

5.2 Persons Contacted

5.2.1 Prior to Field Trip

Bernice Pasquini
U.S. EPA
841 Chestnut Building
Ninth and Chestnut Streets
Philadelphia, PA 19107
(215) 597-1268

Mark Hankin
Hankin Management Company
P.O. Box 26767
Elkins Park, PA 19117
(215) 537-8400

Raymond Keyser
Vice President
Plasti-Seal Corporation
Republic Road
Huntingdon Valley Industrial Center
Huntingdon Valley, PA 19006
(215) OR7-4707

Ross Pilling
Pitcairn Incorporated
165 Township Line Road
Jenkintown, PA 19046
(215) 881-6034

ORIGINAL
(Red)

5.2.2 At the Site

Raymond Keyser
Vice President
Plasti-Seal Corporation
Republic Road
Huntingdon Valley Industrial Center
Huntingdon Valley, PA 19006
(215) OR7-4707

5.2.3 Water Supply Well Information

The following off-site home well was sampled during the site inspection. For the location of this well, see figure 5.2 (page 5-5). A well questionnaire was left with the resident but has not been returned.

(b) (6)

TDD NUMBER F3-8906-08

EPA NUMBER PA 272

5.3

SAMPLE LOG

SITE NAME Plasti-Seal

TRAFFIC REPORTS Organic	Inorganic	High Hazard	SAMPLE IDENTIFIER	PHASE	SAMPLE DESCRIPTION	SAMPLE LOCATION	TARGET USE	pH	FIELD MEASUREMENTS Conductivity umhos/cm3
CAP54	MCBX47		SW1	Aqueous	- unnamed perennial tributary to Southampton Creek - upstream sample, aqueous - clear, odorless	- 1000' SW of site - 15' upstream of industrial park's storm sewer discharge to stream		6.75	338.
CAP56	MCBX49		SW2	Aqueous	- Unnamed perennial tributary to Southampton Creek - Downstream sample, aqueous - matrix + QC spike sample - clear, odorless	- 1000' SW of site - 15' downstream of industrial park's storm sewer discharge to stream		6.74	334.
CY225	MCP499		Blank Aq	Aqueous	- Field Blank	- BNA, Pest, PCB - HPLC water filled on site - VOA - HPLC water filled at NJS - Inorganic - Distilled water filled in field		5.92	4.3
—	MCP500		Blank-Filtered	Aqueous	- Field Blank	- Distilled water filled and filtered and spiked in field			
CAP55	MCBX46		SD1	Solid	- Unnamed perennial tributary to Southampton Creek - upstream sediment sample - reddish-black, sandy gravel	- 1000' SW of site - 15' upstream of industrial park's storm sewer discharge to stream			
CAP57	MCBX50		SD2	Solid	- Unnamed perennial tributary to Southampton Creek - downstream sediment sample - reddish-black, sandy gravel	- 1000' SW of site - 15' downstream of industrial park's storm sewer discharge to stream			
CN721	MCN534		S1	Solid	- on-site soil sample - medium brown, sandy loam	- 20' NE of facility's rear garage door - most probable path of drainage from garage door	- unrestricted location industrial park area		
CW766	MCY312		S2	Solid	- on-site soil sample - medium brown, sandy clay	- 50' SW of buildings - 1' W of facility driveway & 1' N of Republic Road - most probable surface drainage pathway from site	- unrestricted location industrial park area		
CP856	MCBX42		S3	Solid	- off-site soil sample - Background soil sample - Dark brown, silty clay	- 6000' E of site, north-east of Byberry Road	- unrestricted location residential area		

PTL

ORIGINAL (Red)

SAMPLE LOG

TDD NUMBER F3-8906-08

EPA NUMBER PA272

SITE NAME [illegible]

TRAFFIC REPORTS Organic	Inorganic	High Hazard	SAMPLE IDENTIFIER	PHASE	SAMPLE DESCRIPTION	SAMPLE LOCATION	TARGET USE	pH	FIELD MEASUREMENTS conductivity, umhos/cm
CP855	MCBX41		HW1	Aqueous	- (b) (6) [redacted] - after softener - clear, odorless	- (b) (6) [redacted]	- Potable water source	6.31	275
CW767	MCY313		MW1	Aqueous	- Unfiltered monitoring well - grey turbidity, odorless	- on-site monitoring well - 100' N of building		6.08	496
CP857	MCBX43		MW2	Aqueous	- Unfiltered monitoring well - slight brown turbidity, odorless	- off site monitoring well - 1700' SW of site - Northernmost corner of tree farm at Ryberry and Heaton Roads		5.82	216
CAP53	MCBX44		MW3	Aqueous	- Unfiltered monitoring well - clear, odorless	- off site monitoring well - 1200' W of site - well located on Hamilton Industrial Park property		6.20	780
CW768	MCQ203		MW4	Aqueous	- Unfiltered monitoring well - Duplicate MW1 - grey turbidity, odorless	- on-site monitoring well - 100' N of building		6.58	484
—	MCQ204		MW1 - Filtered	Aqueous	- Filtered monitoring well - Filtered and spiked at the site	- on site monitoring well - 100' N of building			
—	MCBX45		MW2 - Filtered	Aqueous	- Filtered monitoring well - Filtered and spiked at the site	- off site monitoring well - 1700' SW of site - well located at the N corner of a tree farm property at Ryberry and Heaton Rds			
—	MCBX46		MW3 Filtered	Aqueous	- Filtered monitoring well - Filtered and spiked at the site	- off site monitoring well - 1200' W of site - well located on Hamilton Industrial Park property			
—	MCBX40		MW4 Filtered	Aqueous	- Filtered monitoring well - Filtered and spiked at the site - Duplicate of MW4	- on site monitoring well - 100' N of building			

PFE

ORIGINAL (Red)

TDD NUMBER F3-8906-08

EPA NUMBER PA 272

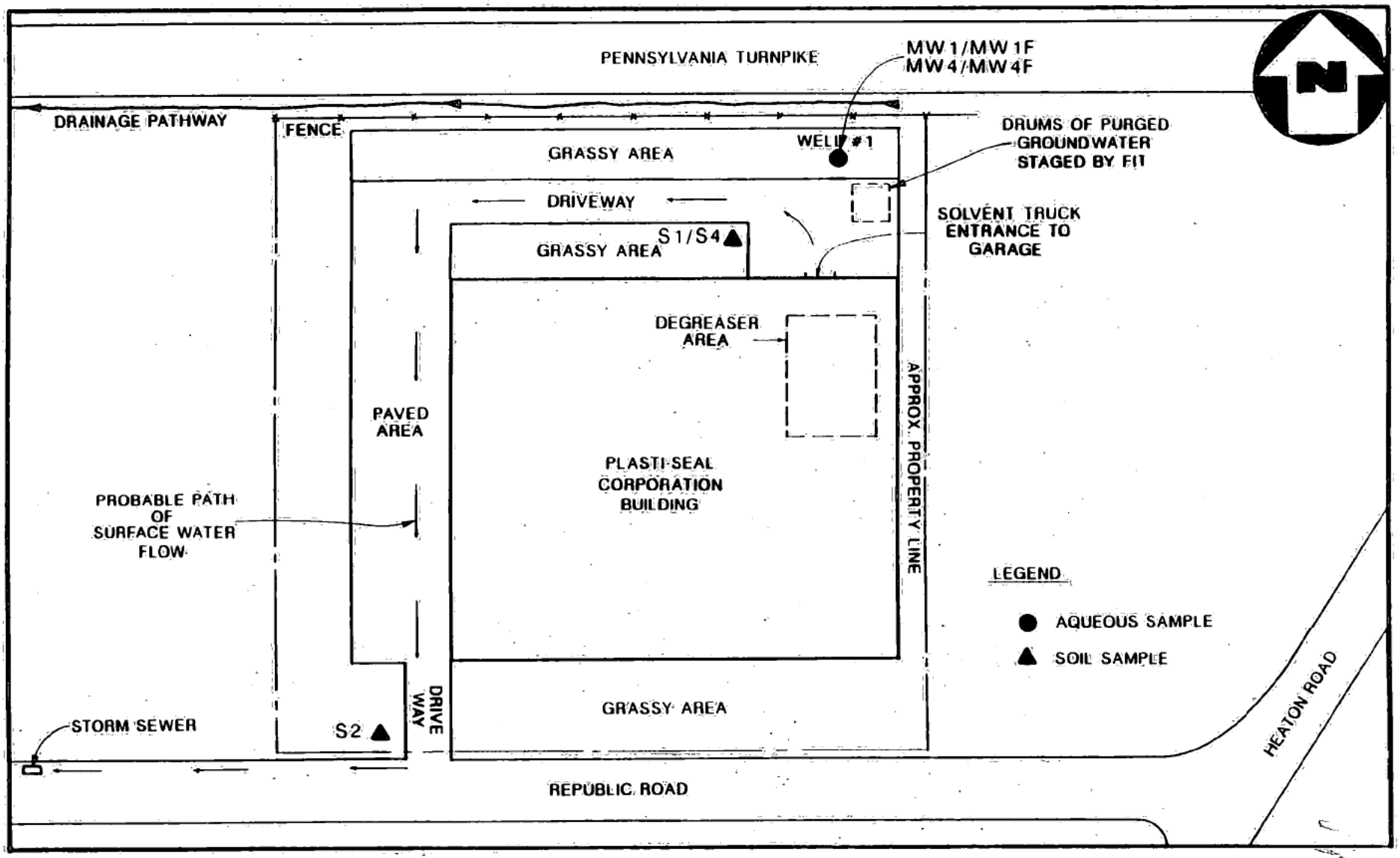
5.3

SAMPLE LOG

SITE NAME Plasti-Seal

TRAFFIC REPORTS Organic	Inorganic	High Hazard	SAMPLE IDENTIFIER	PHASE	SAMPLE DESCRIPTION	SAMPLE LOCATION	TARGET USE	pH	FIELD MEASUREMENTS
CN722	MCN535		S4	Solid	- On-site soil sample - medium brown, sand, loam - Duplicate soil sample (S-1)	- 20' NW of facility's rear garage door. - most probable pathway of drainage from garage door	- unrestricted location industrial park area		
CY256	—		Blank Solid	Aqueous	- Field Blank	VOA only - HPLC water filled at NVS.			

ORIGINAL (Red)



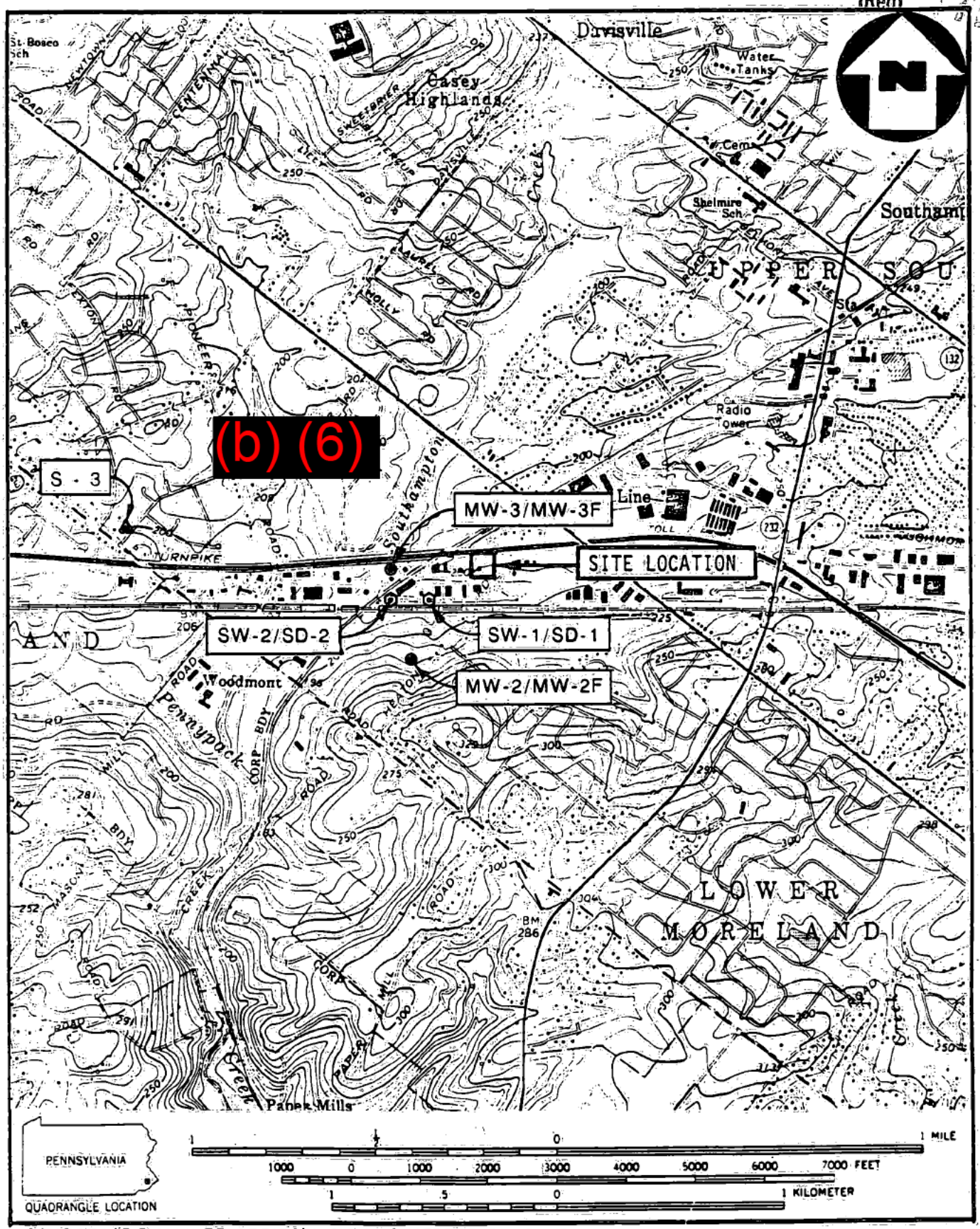
SAMPLE LOCATION MAP
PLASTI-SEAL CORPORATION

(NO SCALE)

FIGURE 5.1

NUS CORPORATION

ORIGINAL (Red)



SOURCE: (7.5 MINUTE SERIES) U.S.G.S. HATBORO, PA., QUAD

FIGURE 5.2

OFF-SITE SAMPLE LOCATIONS
PLASTI-SEAL CORPORATION
SCALE 1: 24000

NUS CORPORATION

ORIGINAL (Red)

5.4 Site Observations

- The HNU was positioned on the 1-to-20 ppm setting, and a background reading of 0.2 ppm was recorded. No readings above background were recorded at the site.

- The OVA was positioned on the X1 setting, and a background reading of 9 ppm was recorded. No readings above background were recorded at the site.

- The radiation mini-alert was positioned on the X1 setting; no readings above background were recorded at the site.

- The subject property consists of a nearly square plot of land that measures approximately 200 by 200 feet. The property is bounded on the north by the Pennsylvania Turnpike, on the south by Republic Road, and on the east and west by private industries.

- The Plasti-Seal facility is approximately 100 by 100 feet in size and is situated centrally on the property.

- A six-feet-high chain-link fence comprised the northern property line. There were no other access restrictions to the site.

- Driveways and parking areas were located on the western and northern sides of the building.

- The site slopes gradually toward the south. All surface drainage will flow along the paved areas of the property and onto Republic Road.

- Drainage on Republic Road will travel to the west and be collected by a storm drain. From the storm drain, the water will flow to the west then to the southwest and will discharge into an unnamed tributary to Southampton Creek.

- At the point of stormwater discharge, the unnamed tributary is westward flowing, approximately five feet across, and one foot deep. The stream runs parallel to and north of a railroad bed.

FIT

ORIGINAL (Red)

- Monitoring well no. 1 is located in the northeastern corner of the subject property. The well, as measured by the FIT from the top of the casing, was 151 feet deep, and the depth to the static water level was 10 feet, 11 inches. The well was constructed of six-inch polyvinyl chloride (PVC) casing within an eight-inch iron outer casing. The well was locked and relocked by the FIT after sampling.

- Monitoring well no. 2 is located at the northernmost corner of a tree farm property located at Byberry and Heaton Roads. The well, as measured by the FIT from the top of the metal casing, was 194 feet deep, and the depth to the static water level was 1 foot. The well was constructed of seven-inch terra cotta casing within an eight-inch iron outer casing. The well was locked, but the latch was broken during the opening of the well and could not be relocked after sampling.

- Monitoring well no. 3 is located at the northwestern corner of the Hankin Industrial Complex property. The well, as measured by the FIT from the top of the outer metal casing, was 198 feet deep, and the depth to the static water level was 1 foot, 10 inches. The well was constructed of six-inch PVC casing within an eight-inch outer casing. An unlocked lock was present on the well, but the latch was broken during the opening of the well and could not be relocked after sampling.

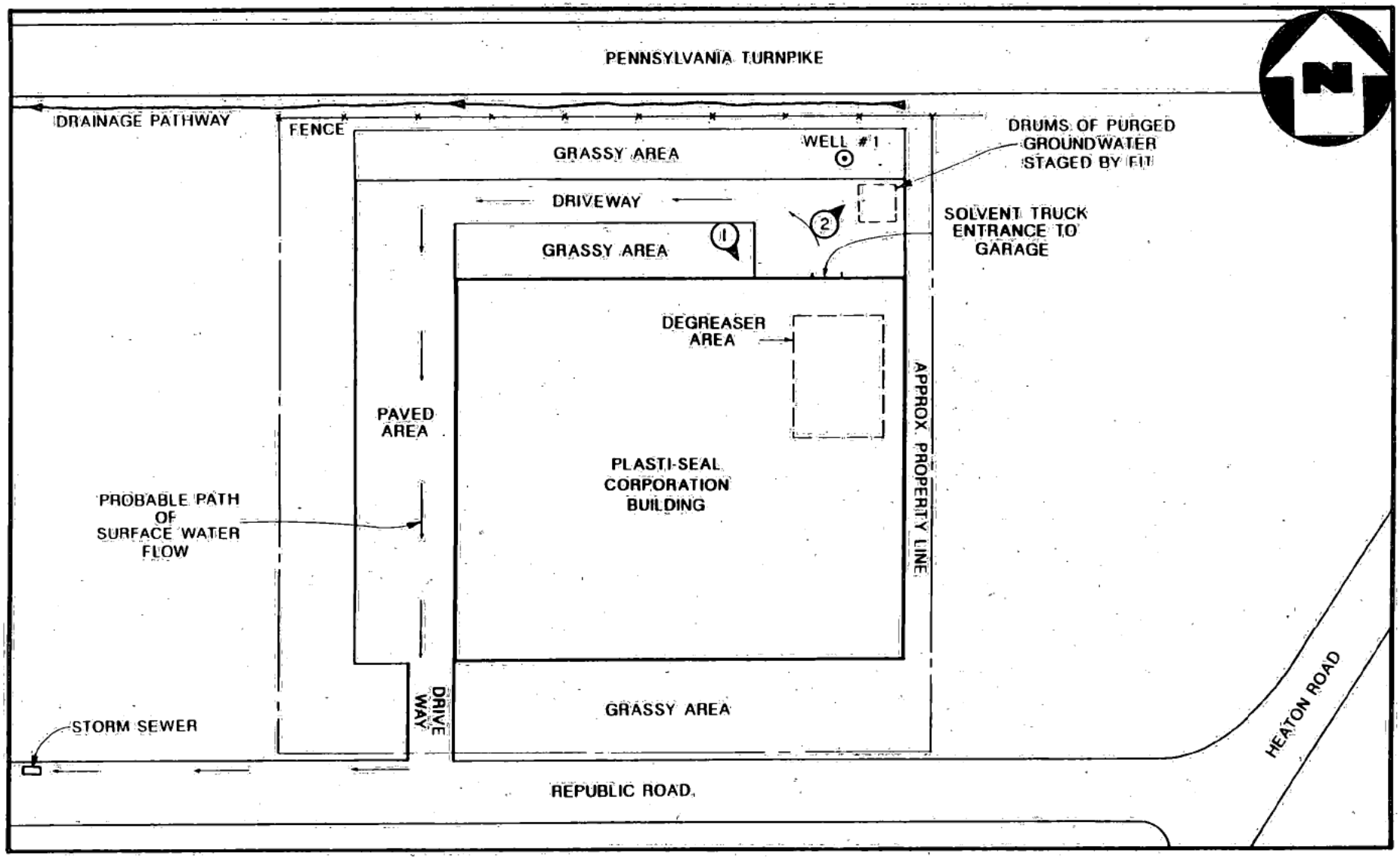


PHOTO LOCATION MAP

PLASTI-SEAL CORPORATION

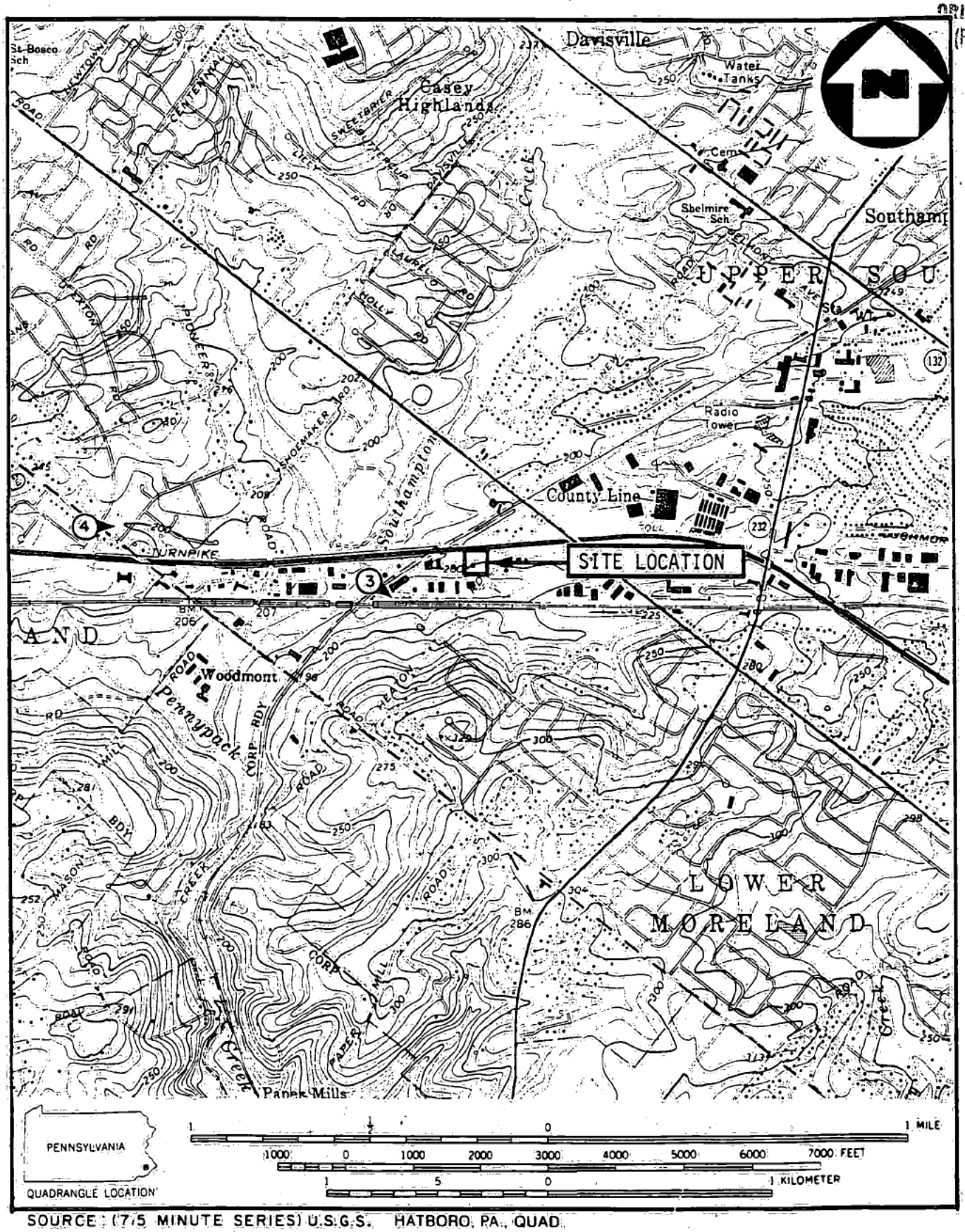
(NO SCALE)

FIGURE 5.3

ORIGINAL (Red)

NUS CORPORATION

ORIGINAL (Red)



SOURCE: (7.5 MINUTE SERIES) U.S.G.S. HATBORO, PA., QUAD.

OFF-SITE PHOTO LOCATION MAP

PLASTI-SEAL CORPORATION

SCALE 1:24000

FIGURE 5.4

NUS CORPORATION

5.5 PHOTOGRAPH LOG

PHOTO # 1-On-site S1 & S4 sample location-SE

PHOTO # 2-MW-1, drums of purged groundwater-N

PHOTO # 3-SW1 & SD1 sample location-SE

PHOTO # 4-Off-site S3 sample location

ORIGINAL (Red)

PFE

F3-8906-08

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
PA	272

II. SITE NAME AND LOCATION

01 SITE NAME	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Plasti-Seal	9 Republic Road

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Huntington Valley	PA	19006	Montgomery	091	08

09 COORDINATES: LATITUDE 40° 09' 45" N; LONGITUDE 75° 03' 47" W

10 TYPE OF OWNERSHIP (Check one): [X] A. PRIVATE [ ] B. FEDERAL ____ [ ] C. STATE [ ] D. COUNTY [ ] E. MUNICIPAL [ ] F. OTHER ____ [ ] G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION: 07 10 89 (MONTH DAY YEAR)

02 SITE STATUS: [X] ACTIVE [ ] INACTIVE

03 YEARS OF OPERATION: 1976 (BEGINNING YEAR) Present (ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply): [ ] A. EPA [X] B. EPA CONTRACTOR NUS Corporation [ ] C. MUNICIPAL [ ] D. MUNICIPAL CONTRACTOR ____ [ ] E. STATE [ ] F. STATE CONTRACTOR ____ [ ] G. OTHER ____

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
[redacted]	Environmental Scientist	NUS FIT 3	215 687-9510

09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
[redacted]	Geologist	NUS FIT 3	215 687-9510
[redacted]	Environmental Scientist	NUS FIT 3	215 687-9510
[redacted]	Environmental Scientist	NUS FIT 3	215 687-9510
[redacted]	Environmental Scientist	NUS FIT 3	215 687-9510
[redacted]	Geologist	NUS FIT 3	215 687-9510

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO.
Raymond Keyser	Vice President	Plasti-Seal 9 Republic Road Huntingdon Valley Industrial Center Huntingdon Valley, PA. 19006	(215) OR7-4707

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
[X] PERMISSION [ ] WARRANT	9:00 A.M.	Sunny and hot; temperature in the 90s.

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Lynette Elser	EPA	215 597-8333

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
[redacted]		NUS Corporation	(215) 687-9510	11 30 89

EPA FORM 2070-13 (7-81)

PE ORIGINAL (Red)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
PA	272

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- ☐ A. SOLID
- ☐ B. POWDER, FINES
- ☒ C. SLUDGE
- ☐ D. OTHER _____ (Specify)
- ☐ E. SLURRY
- ☒ F. LIQUID
- ☐ G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS _____
CUBIC YARDS _____
NO. OF DRUMS 2-4

03 WASTE CHARACTERISTICS (Check all that apply)

- ☒ A. TOXIC
- ☐ B. CORROSIVE
- ☐ C. RADIOACTIVE
- ☐ D. PERSISTENT
- ☐ E. SOLUBLE
- ☐ F. INFECTIOUS
- ☐ G. FLAMMABLE
- ☐ H. IGNITABLE
- ☐ I. HIGHLY VOLATILE
- ☐ J. EXPLOSIVE
- ☐ K. REACTIVE
- ☐ L. INCOMPATIBLE
- ☐ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS	200-800	kg	degreasing sludges
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
SOL	1,1,1-trichloroethane	25323-89-1	drum storage	unknown	unknown
SOL	trichloroethene	79-01-6	detected in groundwater	76	ug/l

V. FEEDSTOCKS (See Appendix for CAS Numbers) N/A

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Pennsylvania Department of Environmental Resources. Potential Hazardous Waste Site. Preliminary Assessment. PA-272, April 1, 1985.

EPA FORM 2070-13 (7-81)

ORIGINAL (Red)

PFE

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
PA	272

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ A. GROUNDWATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 120,435
02 ☒ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

On-site(MW-1) exhibited levels of 76 ppb of TCE during an NUS FIT 3 Site inspection. In 1979, three Upper Southampton public supply wells were discovered to be contaminated with TCE. These facts indicate regional groundwater contamination. TCE is not known to have been used at the subject site.

01 ☒ B. SURFACE WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 6,903/1 mile
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

All site surface water drainage flows overland to Republic Road. Continuing to the west, the drainage flows into a storm sewer and discharges into an unnamed tributary approximately 1,200 feet southwest of the site. Potential releases at the site will be expected to follow the gradient toward the unnamed stream.

01 ☐ C. CONTAMINATION OF AIR
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None reported or observed.

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None reported or observed.

01 ☐ E. DIRECT CONTACT
03 POPULATION POTENTIALLY AFFECTED: 3
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

1,1,1-TCEA is hand-poured from the 450-gallon, above ground storage tank into either two 55-gallon drum "cold" degreasers or one warm vapor degreaser. Potential exposure could occur during this process, as well as during refilling of the tank by the vendor.

01 ☐ F. CONTAMINATION OF SOIL
03 AREA POTENTIALLY AFFECTED: _____ Acres
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None reported or observed.

01 ☐ G. DRINKING WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 120,435
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Residents within the three-mile radius of the site obtain their water from eight public water systems, two private water systems, or domestic wells. An upper Southampton public supply well(No.10) was shut down on September 5, 1979 following the discovery of 44 ppb of TCE. Well no. 10 is located approximately (b) (9) [redacted] of the site. On-site groundwater(MW-1) was observed to be contaminated with 76 ppb of TCE.

01 ☐ H. WORKER EXPOSURE/INJURY
03 WORKERS POTENTIALLY AFFECTED: 3
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

1,1,1-TCEA is hand-poured from the 450-gallon, above-ground storage tank into either two 55-gallon drum, cold degreasers or one warm vapor degreaser. Potential exposure could occur during this process, as well as during refilling of the tank by the vendor.

01 ☐ I. POPULATION EXPOSURE/INJURY
03 POPULATION POTENTIALLY AFFECTED: 120,435
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

The following population group may be potentially affected: those utilizing downstream surface waters, those utilizing groundwater, and the workers at the facility who may be in contact with materials.

ORIGINAL (Red)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: PA
02 SITE NUMBER: 272

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None reported or observed.

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)

None reported or observed.

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None reported or observed.

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES (Spills/Runoff/Standing liquids, Leaking drums) — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

All wastes stored in stabilized areas.

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None reported or observed.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

All site surface water drainage flows overland to Republic Road. The drainage flows west into a storm sewer on Republic Road.

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None reported or observed.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

N/A

III. TOTAL POPULATION POTENTIALLY AFFECTED: 109,735

IV. COMMENTS

N/A

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Keyser, Raymond, Vice-President, Plasti-Seal Corporation, with Thomas Bachovchin, NUS FIT 3. Meeting. January 5, 1989.

NUS Corporation, FIT 3. Non-Sampling Site Reconnaissance Summary Report. TDD No. F3-8912-03, February 27, 1989.

NUS Corporation, FIT 3. Site inspection: site visit. TDD No. F3-8906-08-18, July 25, 1989.

EPA FORM 2070-13 (7-81)

ORIGINAL (Red)

PT

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
PA	272

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☐ C. AIR				
☒ D. RCRA	PAD002265213	1980		
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☐ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☐ A. SURFACE IMPOUNDMENT		
☐ B. PILES		
☒ C. DRUMS, ABOVE GROUND	3	55-gallon drum
☒ D. TANK, ABOVE GROUND	450	gallon
☐ E. TANK, BELOW GROUND		
☐ F. LANDFILL		
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)
☐ A. INCINERATION
☐ B. UNDERGROUND INJECTION
☐ C. CHEMICAL/PHYSICAL
☐ D. BIOLOGICAL
☐ E. WASTE OIL PROCESSING
☐ F. SOLVENT RECOVERY
☐ G. OTHER RECYCLING/RECOVERY
☐ H. OTHER (Specify)

05 OTHER

☒ A. BUILDINGS ON SITE

06 AREA OF SITE

200' X 200' (Acres)

07 COMMENTS

The subject site consists of a nearby square of land that measures 200 by 200 feet in size. The property is bordered on the north by the Pennsylvania Turnpike, on the south by Republic Road, and on the east and west by private industries. The Plasti-Seal facility is approximately 100 by 100 feet in size.

A 450-gallon above-ground tank for 1,1,1-TCEA is located in the facility, as are the 55-gallon drums for degreasing metal parts.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☒ A. ADEQUATE, SECURE ☐ B. MODERATE ☐ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

A 450-gallon above-ground storage tank for 1,1,1-TCEA is located in the facility. The 55-gallon drums that are used for degreasing metal parts are also located in the Plasti-Seal facility.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☐ YES ☒ NO

02 COMMENTS

A six-feet high chain-link fence comprises the northern property line. There were no other access restrictions to the site. However, the 450-gallon above-ground tank and the drums are stored inside the building.

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

Keyser, Raymond, Vice-President, Plasti-Seal Corporation, with Thomas Bachovchin, NUS FIT 3. Meeting. January 5,1989.

NUS Corporation, FIT 3. Non-Sampling Site Reconnaissance Summary report. TDD No. F3-8912-03, February 27,1989.

Pennsylvania Department of Environmental Resources. Potential Hazardous Waste Site Preliminary Assessment. PA-272, April 1,1985.

ORIGINAL
(Red)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
PA	272

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

	SURFACE	WELL
COMMUNITY	A. ☐	B. ☒
NON-COMMUNITY	C. ☐	D. ☒

02 STATUS

ENDANGERED	AFFECTED	MONITORED
A. ☒	B. ☒	C. ☐
D. ☒	E. ☐	F. ☐

03 DISTANCE TO SITE

A. 2000 (ft.)
B. 0.75 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☒ A. ONLY SOURCE FOR DRINKING
☐ B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available)
☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available)
☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER 120,435

03 DISTANCE TO NEAREST DRINKING WATER WELL 0.75 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
4 to 45 (ft)	south to southwest	4 to 45 (ft)	188,640 (gpd)	☐ YES ☒ NO

09 DESCRIPTION OF WELLS (Including useage, depth, and location relative to population and buildings)

Nearby wells serve municipals suppliers and residences.

10 RECHARGE AREA

☒ YES
☐ NO

COMMENTS: Percolation of water from precipitation

11 DISCHARGE AREA

☒ YES
☐ NO

COMMENTS: To Southampton and Pennypack Creeks and palustrine wetlands.

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☒ A. RESERVOIR, RECREATION DRINKING WATER SOURCE
☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES
☐ C. COMMERCIAL, INDUSTRIAL
☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
unnamed perennial tributary to Southampton Creek	☐	1,200 ft southwest (mi)
Southampton Creek	☐	0.4 miles (mi)
Pennypack Creek	☐	1 mile (mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 6,903 NO. OF PERSONS	B. 44,967 NO. OF PERSONS	C. 76,864 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION 500 feet (ft)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE 11,833

04 DISTANCE TO NEAREST OFF-SITE BUILDING 50 feet (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

The subject site is located in a mixed residential/agricultural area of Montgomery County. The land immediately north of the site is residential/industrial. To the south, agriculture is the dominant land utilization. Residential and industrial are the primary uses of land east and west of the site. The land within a 3-mile radius of the site is a heavily populated suburban Philadelphia community. To the northeast, a United States Naval Air Development Center can be found within three miles of the site.

ORIGINAL (Red)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION
01 STATE PA | 02 SITE NUMBER 272

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

10^{-5} to 10^{-7} cm/sec

☐ A. 10^{-6} – 10^{-8} cm/sec ☐ B. 10^{-4} – 10^{-6} cm/sec ☐ C. 10^{-4} – 10^{-3} cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

10^{-3} to 10^{-5} cm/sec

☐ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☐ B. RELATIVELY IMPERMEABLE (10^{-4} – 10^{-6} cm/sec) ☐ C. RELATIVELY PERMEABLE (10^{-2} – 10^{-4} cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
7 to 50 (ft)	none (ft)	4.5 to 6.0

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
43.55 (in)	2.75 (in)	3 %	south	<3 %

09 FLOOD POTENTIAL
SITE IS IN 0 YEAR FLOODPLAIN

10 ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)
ESTUARINE A. >3 (mi)
OTHER Palustrine B. 4.3 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)
>3 (mi)
ENDANGERED SPECIES: none known

13 LAND USE IN VICINITY
DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS, NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS PRIME AG LAND	AG LAND
A. 50 ft (mi)	B. 500 feet (mi)	C. unknown (mi)	D. unknown (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

The site is in a relatively flat, undulating area of Montgomery County. Southampton Creek, 0.4 miles from the site, and Pennypack Creek, located 1 mile from the site, are the dominant topographic features.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

NUS Corporation, FIT 3, Hydrogeology Site Inspection Form
United States Geological Survey. Hatboro, Pennsylvania Quadrangle, 7.5 minute series. Topographic Map. 1966, photorevised, 1983.

ORIGINAL (Red)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
PA	272

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	9	IT Analytical Services; organic Net-Midatlantic; inorganic	11/10/89
SURFACE WATER	2	IT Analytical Services; organic Net-Midatlantic; inorganic	11/10/89
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	4	IT Analytical Services; organic Net-Midatlantic; inorganic	11/10/89
VEGETATION			
OTHER Sediment Blank solid	2 1	same as above same as above	11/10/89

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
HNU: I at 1-20ppm setting	0.2 ppm background - no readings above background were recorded.
OVA; C	9 ppm background - no readings above background were recorded.
Mini-Alert: J	1x setting
pH	surface water - 6.74-6.75 groundwater - 5.82-6.58
conductivity	surface water - 334-338 groundwater - 216-780 Umho/cm^3

IV. PHOTOGRAPHS AND MAPS

01 TYPE X GROUND ☐ AERIAL

02 IN CUSTODY OF NUS/EPA

03 MAPS X YES ☐ NO

04 LOCATION OF MAPS NUS/EPA

V. OTHER FIELD DATA COLLECTED

Well	Depth (ft.)	Distance to static water (feet)	Inner casing material dimension (inches)	Outer Casing materials dimension (inches)
1	151	10 feet, 11 inches	6, PVC	8, iron
2	194	1	7, terra cotta	8, iron
3	198	1	6, PVC	8, unknown

VI. SOURCES OF INFORMATION

NUS Corporation, FIT 3. Site Inspection; site visit. TDD No. F3-8906-08, July 25, 1989.

ORIGINAL (Red)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
PA	272

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER
Mrs. Ann C. Keyser	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE
Huntingdon Valley	PA	19006

PARENT COMPANY (If applicable)

08 NAME	09 D+B NUMBER
N/A	

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME	02 D+B NUMBER
Mark Hankin Hankin Management Company	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
P.O. Box 26767	

05 CITY	06 STATE	07 ZIP CODE
Elkins Park	PA	19117

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

IV. REALTY OWNER(S) (If applicable; list most recent first)

01 NAME	02 D+B NUMBER
N/A	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Keyser, Raymond, Vice President Plasti-Seal Corporation, with [redacted], NUS FIT 3. Telecon November 22, 1989.

EPA FORM 2070-13 (7-81)

ORIGINAL (Red)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
PA	272

II. CURRENT OPERATOR (Provide if different from owner)

01 NAME	02 D+B NUMBER	OPERATOR'S PARENT COMPANY (If applicable) 10 NAME	11 D+B NUMBER
Plasti-Seal Corporation			

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE
9 Republic Road Huntingdon Valley Industrial Center			

05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
Huntingdon Valley	PA	19006			

08 YEARS OF OPERATION	09 NAME OF OWNER
<14	Mrs. Ann C. Keyser

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)

01 NAME	02 D+B NUMBER	PREVIOUS OPERATORS' PARENT COMPANIES (If applicable) 10 NAME	11 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

01 NAME	02 D+B NUMBER	10 NAME	11 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

01 NAME	02 D+B NUMBER	10 NAME	11 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Keyser, Raymond, Vice President Plasti-Seal Corporation, with [redacted], NUS FIT 3. Telecon November 22, 1989.
NUS Corporation, FIT III. Site Inspection, site visit. TDD No. F3-8906-18, July 25, 1989.

ORIGINAL (Red)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
PA	272

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
Plasti-Seal Corporation	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
9 Republic Road Huntingdon Valley Industrial Center	

05 CITY	06 STATE	07 ZIP CODE
Huntingdon Valley	PA	19006

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Pennsylvania Department of Environmental Resources. Potential hazardous waste site preliminary assessment. PA-272, April 1, 1985.

ORIGINAL (Red)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
PA	272

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
An upper Southampton public supply well no. 10 was closed after 44 ppb of TCE was discovered.

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ H. ON SITE BURIAL — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ L. ENCAPSULATION — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ N. CUTOFF WALLS — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

ORIGINAL (Red)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
PA	272

II PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ S. CAPPING/COVERING — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ V. BOTTOM SEALED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ W. GAS CONTROL — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ X. FIRE CONTROL — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ Z. AREA EVACUATED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ 03 AGENCY _____
04 DESCRIPTION
N/A

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Lee, Catherine. "Hunt On For TCE Pollution Source". Today's Spirit, September 21, 1979.

ORIGINAL (Red)

PFE

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
PA	272

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☒ YES ☐ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

September 1979: Tests conducted by the Upper Southampton Township Authority indicated the presence of TCE in three township wells. Tests taken by PA DER confirmed the presence of TCE; all three wells were taken out of service.

November 1979: The Office of Water and Waste Management, a technicial support division of EPA, conducted sampling for halocarbons.

January 1980: EPA conducted an investigation to determine the source of the TCE contamination.

June 1980: EPA tasked FIT 3 (Ecology and Environment, Incorporated) to conduct a site inspection of the Plasti-Seal facility. The inspection included the installation of five monitoring wells in the vicinity of the facility and the collection of samples from the wells and the soil.

January 1981: EPA representative Robin A. Aitken issued a warrant to the Plasti-Seal Corporation authorizing entrance to the premises of the Plasti-Seal well site.

1980: Plasti-Seal Corporation filed for small-quantity generator status.

December 1982: PA DER conducted a RCRA inspection of the site.

February 1985: PA DER conducted a preliminary assessment of the site.

January 1989: NUS FIT 3, as tasked by EPA, conducted a non-sampling site reconnaissance.

July 1989: NUS FIT 3, as tasked by EPA, conducted a site inspection of the site.

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

NUS Corporation, FIT 3. Site Inspection; site visit. TDD No. F3-8906-18, July 25, 1989.
Pennsylvania Department of Environmental Resources. Potential Hazardous Waste Site Preliminary Assessment, PA-272, April 01, 1985.
Ecology and Environment, Incorporated, FIT 3 Field Trip Report. TDD No. F3-8006-11, 1980.

PFL ORIGINAL (Red)

SECTION 6

ORIGINAL (Red)

6.0 REFERENCES FOR SECTIONS 1.0 THROUGH 5.0

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2. NUS Corporation, FIT 3. Site inspection; site visit. TDD No. F3-8906-08-18, July 25, 1989.

3. Keyser, Raymond, Vice President, Plasti-Seal Corporation, with Brooks Mountcastle, NUS FIT 3. Telecon. November 22, 1989.

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5. Musheno, Michael, Groundwater Protection Section, to Files. Correspondence. January 29, 1980.

6. Keyser, Raymond, Vice President, Plasti-Seal Corporation, with Brooks Mountcastle, NUS FIT 3. Telecon. November 17, 1989.

7. Meade, Jeffrey, and Harry Stoffer. "Cancer Agent Found in S'hampton Water." Bucks County Courier Times. September 19, 1979.

8. Lee, Catherine. "Three Wells Shut Down; Tests Reveal TCE in Upper Southampton." Today's Spirit. September 20, 1979.

9. Lee, Catherine. "Hunt On for TCE Pollution Source." Today's Spirit. September 21, 1979.

10. Mello, Jay Wayne, Environmental Engineer, and Richard Reading, Chemist, to Ramon G. Lee, Chief, Region III. Correspondence. December 5, 1979.

11. Musheno, Michael, Groundwater Protection Section, to Files. Correspondence. January 30, 1980.

12. Musheno, Michael, Groundwater Protection Section, to Files. Correspondence. January 29, 1980.

PFE ORIGINAL (Red)

13. Ecology and Environment, Incorporated, FIT 3. Field Trip Report. TDD No. F3-8006-11, 1980.

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22. Pennsylvania Department of Environmental Resources, Bureau of Community Environmental Control. Sanitary Survey Form for Evaluating Public Water Supply for Warminster Municipal Authority. July 22, 1985.

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ORIGINAL (Red)

24. Pennsylvania Department of Environmental Resources, Bureau of Community Environmental Control. Sanitary Survey Form for Evaluating Public Water Supply for Warminster Municipal Authority. December 26, 1985.

25. McQuaid, Ralph, Manager, Horsham Township Authority, to NUS FIT 3. Correspondence. August 1987.

26. Lutz, Dave, Hatboro Borough Water Department, with Roger Zyma, NUS FIT 3. Telecon. April 7, 1986.

27. Pennsylvania Department of Environmental Resources, Bureau of Community Environmental Control. Sanitary Survey Form for Evaluating Public Water Supply for Warminster Heights Water Company. September 20, 1984.

28. Pennsylvania Department of Environmental Resources, Bureau of Community Environmental Control. Sanitary Survey Form for Evaluating Public Water Supply for United States Naval Air Development Center. March 5, 1986.

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PFE ORIGINAL (Red)

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ORIGINAL (Red)

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52. United States Department of the Interior, Fish and Wildlife Service, to Garth Glenn, NUS FIT 3. Correspondence. July 25, 1988.

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ORIGINAL
(Red)

SECTION 7

ORIGINAL (Red)

7.0 LABORATORY DATA

7.1 Sample Data Summary

The attached data summary contains only compounds which were identified as detected in at least one sample. The complete list of compounds analyzed for, their results, and the associated detection limits are located as an appendix. Results for tentatively identified compounds appear following the organic data section of this report.

The following codes are used in the data summary to indicate the confidence in the laboratory results:

CODES RELATING TO IDENTIFICATION
(confidence concerning presence or absence of compounds):

U = Not detected. The associated number indicates approximate sample concentration necessary to be detected.

(NO CODE) = Confirmed identification.

B = Not detected substantially above the level reported in laboratory or field blanks.

R = Unreliable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.

N = Tentative identification. Consider present. Special methods may be needed to confirm its presence or absence in future sampling efforts.

CODES RELATED TO QUANTITATION
(can be used for both positive results and sample quantitation limits):

J = Analyte present. Reported value may not be accurate or precise.

K = Analyte present. Reported value may be biased high. Actual value is expected to be lower.

L = Analyte present. Reported value may be biased low. Actual value is expected to be higher.

UJ = Not detected, quantitation limit may be inaccurate or imprecise.

UL = Not detected, quantitation limit is probably higher.

OTHER CODES

Q = No analytical result.

SELECTED SAMPLE ORDER

SITE NAME: plasti-seal
TDD NUMBER: F3-8906-08
LAB NAMES: ORGANIC: IT analytical services / INORGANIC: Net-Midatlantic

SAMPLING DATE(s): 7/10/89
CASE NUMBER: 12283

STATE/COUNTY CODE: 42/091
EPA NUMBER: PA-272

SAMPLE NUMBER:	CW768	CY225	CN721	CN722	CP856	CW766
SAMPLE ID:	mw4	blank aq	s1	s4	s3	s2
LOCATION:	duplicatemw1 gry tbd odls	aq clear blank drawn on site	on-site soil ind prk acss grass med.brwn.sdy	onsite soil accss ind pk grass duplicate s1	offsite bkg. acss-resdntl grass dk brn/sltcl	on site soil ind pk accss grass md brn sd.cl
PH:	6.6	5.9	5.9	5.9	4.8	7.0
FIELD MEASUREMENTS:						
PERCENT SOLIDS:			88.0%	89.0%	72.0%	84.0%

TYPE OF DATA: ****** VOLATILES **********

DILUTION FACTOR:	1.0	1.0	1.1	1.1	1.4	1.2

DET. LIMIT CRQL (@=IDL)	SAMPLE NUMBER: / UNITS:	CW768 ug/l	CY225 ug/l	CN721 ug/kg	CN722 ug/kg	CP856 ug/kg	CW766 ug/kg
5.00	methylene chloride	2.00 B	2.00 J	77.00 R	63.00 R	6.00 B	26.00 B
10.00	acetone	26.00 B	21.00	20.00 B	20.00 B	42.00 B	17.00 B
5.00	1,1-dichloroethene	3.00 J					
5.00	1,1-dichloroethane	2.00 J					
5.00	1,2-dichloroethene(total)	9.00					
5.00	chloroform						
10.00	2-butanone				21.00 B	24.00 B	23.00 B
5.00	1,1,1-trichloroethane	3.00 J					
5.00	bromodichloromethane						
5.00	trichloroethene	76.00					
5.00	toluene	1.00 J					

TYPE OF DATA: ****** SEMIVOLATILES **********

DILUTION FACTOR:	1.0	1.0	75.7	75.8	93.9	79.4

DET. LIMIT CRQL (@=IDL)	SAMPLE NUMBER: / UNITS:	CW768 ug/l	CY225 ug/l	CN721 ug/kg	CN722 ug/kg	CP856 ug/kg	CW766 ug/kg
10.00	1,3-dichlorobenzene		17.00				
10.00	di-n-butyl phthalate	7.00 B	4.00 J	77.00 B			93.00 B
10.00	pyrene						88.00 J
10.00	bis(2-ethylhexyl) phthalate	26.00 B	5.00 J				
10.00	di-n-octyl phthalate						360.00 J

TYPE OF DATA: ****** PESTICIDES **********

DILUTION FACTOR:	1.0	1.0	360.0	360.0	450.0	380.0

DET. LIMIT CRQL (@=IDL)	SAMPLE NUMBER: / UNITS:	CW768 ug/l	CY225 ug/l	CN721 ug/kg	CN722 ug/kg	CP856 ug/kg	CW766 ug/kg
0.05	alpha-BHC						

DD

ORIGINAL (Red)

SELECTED SAMPLE ORDER

SITE NAME: plasti-seal
TDD NUMBER: F3-8906-08
LAB NAMES: ORGANIC: IT analytical services / INORGANIC: Net-Midatlantic

SAMPLING DATE(s): 7/10/89
CASE NUMBER: 12283

STATE/COUNTY CODE: 42/091
EPA NUMBER: PA-272

SAMPLE NUMBER:	CAP54	CAP56	CP855	CAP53	CP857	CW767
SAMPLE ID:	sw1	sw2	hw1	mw3	mw2	mw1
LOCATION:	trib S.Hampt upstream perennial clear,odorls	trib S.Hamp downstream unn'd peren. clear,odorls	Grimes'hwell fam dkg watr after softnr clear odorls	PVC 198' well unlockd clear,no odr	terra cotta 194'3" locked bwn.tbd.odls	PVC 151 ft. locked gry tbd odls
PH:	6.8	6.7	6.3	6.2	5.8	6.1
FIELD MEASUREMENTS:						
PERCENT SOLIDS:						

TYPE OF DATA: ****** VOLATILES **********

DILUTION FACTOR:	1.0	1.0	1.0	1.0	1.0	1.0
DET. LIMIT CRQL (@=IDL) / SAMPLE NUMBER:	CAP54	CAP56	CP855	CAP53	CP857	CW767
UNITS:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
5.00 methylene chloride	2.00 B	1.00 B	2.00 B	1.00 B	1.00 B	1.00 B
10.00 acetone	21.00 B	30.00 B	25.00 B	16.00 B	5.00 B	31.00 B
5.00 1,1-dichloroethene				1.00 J		3.00 J
5.00 1,1-dichloroethane				3.00 J		2.00 J
5.00 1,2-dichloroethene(total)						10.00
5.00 chloroform	2.00 J	2.00 J				
10.00 2-butanone						
5.00 1,1,1-trichloroethane				4.00 J	3.00 J	2.00 J
5.00 bromodichloromethane	1.00 J	1.00 J				
5.00 trichloroethene				5.00		76.00
5.00 toluene						1.00 J

TYPE OF DATA: ****** SEMIVOLATILES **********

DILUTION FACTOR:	1.0	1.0	1.0	1.0	1.0	1.0
DET. LIMIT CRQL (@=IDL) / SAMPLE NUMBER:	CAP54	CAP56	CP855	CAP53	CP857	CW767
UNITS:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
10.00 1,3-dichlorobenzene			2.00 B	5.00 B	6.00 B	3.00 B
10.00 di-n-butyl phthalate	2.00 B	3.00 B	3.00 B		4.00 B	5.00 B
10.00 pyrene						
10.00 bis(2-ethylhexyl) phthalate			2.00 B	4.00 B	11.00 B	18.00 B
10.00 di-n-octyl phthalate						

TYPE OF DATA: ****** PESTICIDES **********

DILUTION FACTOR:	1.0	1.0	1.0	1.0	1.0	1.0
DET. LIMIT CRQL (@=IDL) / SAMPLE NUMBER:	CAP54	CAP56	CP855	CAP53	CP857	CW767
UNITS:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
0.05 alpha-BHC				0.34 R	0.10 R	

Comments: **********

Conductivity Units: umhos/cm
Organic Duplicates: AQ:CW767;CW768 SOIL:CAP55;CAP57

ORIGINALS (Red)

SELECTED SAMPLE ORDER

SITE NAME: plasti-seal
TDD NUMBER: F3-8906-08
LAB NAMES: ORGANIC: IT analytical services / INORGANIC: Net-Midatlantic

SAMPLING DATE(s): 7/10/89
CASE NUMBER: 12283

STATE/COUNTY CODE: 42/091
EPA NUMBER: PA-272

SAMPLE NUMBER:	CAP55	CAP57	CY256
SAMPLE ID:	sd1	sd2	trip blank
LOCATION:	trib S.Hamp upstream sed matches sw1 red-bk,gravl	trib S. Hamp dnst. sed. matches SW2 red-bk,gravl	field blank VOA anl only
PH:	6.8	7.0	
FIELD MEASUREMENTS:			
PERCENT SOLIDS:	67.0%	87.0%	

TYPE OF DATA: ****** VOLATILES **********

DILUTION FACTOR:	1.5	1.2	1.0
DET. LIMIT / CRQL (@=IDL) — SAMPLE NUMBER:	CAP55	CAP57	CY256
UNITS:	ug/kg	ug/kg	ug/kg
5.00 methylene chloride	3.00 B		3.00 J
10.00 acetone	15.00 B	19.00 B	33.00
10.00 2-butanone		18.00 B	3.00 J

TYPE OF DATA: ****** SEMIVOLATILES **********

DILUTION FACTOR:	75.4	76.6	1.0
DET. LIMIT / CRQL (@=IDL) — SAMPLE NUMBER:	CAP55	CAP57	CY256
UNITS:	ug/kg	ug/kg	ug/kg
10.00 phenanthrene		98.00 J	
10.00 di-n-butyl phthalate	86.00 B	77.00 B	
10.00 fluoranthane		130.00 J	
10.00 pyrene		140.00 J	
10.00 chrysene		110.00 J	

TYPE OF DATA: ****** PESTICIDES **********

DILUTION FACTOR:	360.0	370.0	1.0
DET. LIMIT / CRQL (@=IDL) — SAMPLE NUMBER:	CAP55	CAP57	CY256
UNITS:	ug/kg	ug/kg	ug/kg

Comments: **********

Conductivity Units: umhos/cm
Organic Duplicates: AQ:CW767;CW768 SOIL:CAP55;CAP57

DDD

ORIGINAL (Red)

SELECTED SAMPLE ORDER

SITE NAME: plasti-seal
TDD NUMBER: F3-8906-08
LAB NAMES: ORGANIC: IT analytical services / INORGANIC: Net-Midatlantic

SAMPLING DATE(s): 7/10/89
CASE NUMBER: 12283

STATE/COUNTY CODE: 42/091
EPA NUMBER: PA-272

SAMPLE NUMBER:	MCBX47	MCBX49	MCBX41	MCBX43	MCBX45	MCBX44
SAMPLE ID:	sw1	sw2	hw1	mw2	mw2 filtered	mw3
LOCATION:	trib S.Hampt upstream perennial clear,odorls	trib S.Hamp downstream unn'd peren. clear,odorls	[redacted]'hwell fam dkg watr after softnr clear odorls	terra cotta 194'3" locked bwn tbd,odls	terra cotta 194'3" fltrd	PVC 198' well unlockd clear,no odr
PH:	6.8	6.7	6.3	5.8		6.2
FIELD MEASUREMENTS:						
PERCENT SOLIDS:						

TYPE OF DATA: ****** INORGANICS **********

DILUTION FACTOR:	MCBX47	MCBX49	MCBX41	MCBX43	MCBX45	MCBX44
: GFAA	1.000	1.000	1.000	1.000	1.000	1.000
: ICP	1.000	1.000	1.000	1.000	1.000	1.000
: Hg	1.000	1.000	1.000	1.000	1.000	1.000
: CN	1.000	1.000	1.000	1.000	1.000	1.000

DET. LIMIT CRQL (@=IDL)	SAMPLE NUMBER: UNITS:	MCBX47 ug/l	MCBX49 ug/l	MCBX41 ug/l	MCBX43 ug/l	MCBX45 ug/l	MCBX44 ug/l
@ 11.00	aluminum	43.00 J	37.00 J		41.00 J		26.00 J
@ 19.00	antimony	24.00 B	32.00 B				
@ 4.00	arsenic						
@ 6.00	barium	81.00	81.00		67.00	65.00	158.00
@ 3.00	beryllium						
@ 24.00	calcium	27600.00	28000.00	514.00 B	23400.00	24200.00	56500.00
@ 3.00	chromium						
@ 5.00	cobalt						
@ 3.00	copper	67.00	76.00	66.00	31.00		15.00
@ 27.00	iron	446.00	411.00	102.00 B	4010.00 J	42.00 B	368.00 J
@ 3.00	lead (anal. by GFAA)	4.00 B		4.00 B	35.00		8.00 B
@ 23.00	magnesium	9200.00	9360.00	118.00	8380.00	9120.00	33300.00
@ 2.00	manganese	159.00	148.00		56.00	48.00 K	1210.00
@ 0.20	mercury	0.20		3.70			
@ 5.00	nickel	25.00	24.00				
@ 88.00	potassium	7650.00	7880.00	364.00 B	1730.00	1700.00	3180.00
@ 2.00	selenium		2.00			2.00	
@ 51.00	sodium	23000.00	23000.00	66000.00	12300.00	11700.00	68700.00
@ 2.00	vanadium						
@ 3.00	zinc	10.00 L		16.00 L	43.00 L	12.00 L	35.00 L

Comments: **********

Conductivity Units: umhos/cm
Organic Duplicates: AQ:CW767;CW768 SOIL:CAP55;CAP57

DDD

ORIGINAL

SELECTED SAMPLE ORDER

SITE NAME: plasti-seal
TDD NUMBER: F3-8906-08
LAB NAMES: ORGANIC: IT analytical services / INORGANIC: Net-Midatlantic

SAMPLING DATE(s): 7/10/89
CASE NUMBER: 12283

STATE/COUNTY CODE: 42/091
EPA NUMBER: PA-272

SAMPLE NUMBER:	MCBX46	MCQ263	MCBX40	MCY313	MCQ264	MCP499
SAMPLE ID:	mw3 filtered	mw4	mw4 filtered	mw1	mw1 filtered	blank aq
LOCATION:	PVC 198' fltrd	duplicatemw1 gry tbd odls	Dplcte mw1F	iron casing 151 ft. locked gry tbd odls	PVC 151' filtrd	field blank full scan
PH:		6.6		6.1		6.0
FIELD MEASUREMENTS:						
PERCENT SOLIDS:						

TYPE OF DATA: ****** INORGANICS **********

DILUTION FACTOR:	MCBX46	MCQ263	MCBX40	MCY313	MCQ264	MCP499
: GFAA	1.000	1.000	1.000	1.000	1.000	1.000
: ICP	1.000	1.000	1.000	1.000	1.000	1.000
: Hg	1.000	1.000	1.000	1.000	1.000	1.000
: CN	1.000	1.000	1.000	1.000	1.000	1.000

DET. LIMIT CRQL (@=IDL)	SAMPLE NUMBER: / UNITS:	MCBX46	MCQ263	MCBX40	MCY313	MCQ264	MCP499
		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
@ 11.00	aluminum		430.00 J		649.00 J		
@ 19.00	antimony	21.00 B		24.00 B		16.00 B	21.00
@ 4.00	arsenic						
@ 6.00	barium	168.00	1100.00	379.00	1420.00	376.00	
@ 3.00	beryllium						
@ 24.00	calcium	60800.00	36600.00	40300.00	37000.00	40100.00	218.00
@ 3.00	chromium						
@ 5.00	cobalt						
@ 3.00	copper		52.00	7.00	55.00	6.00	
@ 27.00	iron		737.00 J		1140.00 J		
@ 3.00	lead (anal. by GFAA)		17.00		23.00		3.00
@ 23.00	magnesium	35500.00	20200.00	22200.00	20400.00	22100.00	
@ 2.00	manganese	872.00	290.00	19.00 K	291.00	19.00 K	
@ 0.20	mercury			0.20			
@ 5.00	nickel						
@ 88.00	potassium	3380.00	3550.00	3750.00	3640.00	3690.00	113.00
@ 2.00	selenium						
@ 51.00	sodium	71400.00	30200.00	32500.00	29800.00	32400.00	779.00
@ 2.00	vanadium						
@ 3.00	zinc	8.00 L	13.00 L		28.00 L		

Comments: **********

Conductivity Units: umhos/cm
Organic Duplicates: AQ:CW767;CW768 SOIL:CAP55;CAP57

ORIGINAL (Red)

SELECTED SAMPLE ORDER

SITE NAME: plasti-seal
TDD NUMBER: F3-8906-08
LAB NAMES: ORGANIC: IT analytical services / INORGANIC: Net-Midatlantic

SAMPLING DATE(s): 7/10/89
CASE NUMBER:12283

STATE/COUNTY CODE: 42/091
EPA NUMBER: PA-272

SAMPLE NUMBER:	MCP500	MCBX48	MCBX50	MCBX42	MCY312	MCN534
SAMPLE ID:	blk fltrd	sd1	sd2	s3	s2	s1
LOCATION:	field blank inrgnc only	trib S.Hamp upstream sed matches sw1 red-bk,gravl	trib S. Hamp dnst. sed. matches SW2 red-bk,gravl	offsite bkg. acss-resdntl grass dk brn/sltcl	on site soil ind pk accss grass md brn sd.cl	on-site soil ind prk acss grass med.brwn.sdy
PH:						
FIELD MEASUREMENTS:						
PERCENT SOLIDS:		94.3%	80.2%	72.9%	85.8%	89.4%

TYPE OF DATA: ****** INORGANICS

DILUTION FACTOR:	MCP500	MCBX48	MCBX50	MCBX42	MCY312	MCN534
: GFAA	1.000	0.212	0.249	0.274	0.233	0.224
: ICP	1.000	0.212	0.249	0.274	0.233	0.224
: Hg	1.000	1.010	1.190	1.370	0.897	1.020
: CN	1.000	0.106	0.125	0.137	0.117	0.112

DET. LIMIT CRQL (@=IDL)	SAMPLE NUMBER: / UNITS:	MCP500 ug/l	MCBX48 mg/kg	MCBX50 mg/kg	MCBX42 mg/kg	MCY312 mg/kg	MCN534 mg/kg
@ 11.00	aluminum		2450.00	4380.00	10000.00	7360.00	7560.00
@ 19.00	antimony	46.00	5.50 B	11.00 B	13.70 B	12.30 B	10.50 B
@ 4.00	arsenic		2.30 L	1.20 L	7.70 L	4.90 L	3.60 L
@ 6.00	barium		35.80	45.90	49.40	78.60	72.70
@ 3.00	beryllium			0.75	0.82	0.70	
@ 24.00	calcium	174.00	6150.00 J	873.00 J	385.00	4490.00	1380.00
@ 3.00	chromium		7.00 J	11.00 J	16.20 J	12.80 J	4.00 J
@ 5.00	cobalt		2.50	6.50	6.80	7.00	6.00
@ 3.00	copper		20.90	47.40	21.10	16.50	10.00
@ 27.00	iron		7590.00	13500.00	15200.00 J	12500.00 J	3540.00 J
@ 3.00	lead (anal. by GFAA)		12.10	13.20	90.50 J	44.50 J	16.40 J
@ 23.00	magnesium	33.00	2070.00	1720.00	1300.00	2850.00	2240.00
@ 2.00	manganese		158.00	273.00	489.00	317.00	285.00
@ 5.00	nickel		14.00 J	31.40 J	7.40 J	8.40 J	8.90 J
@ 88.00	potassium		470.00	817.00	374.00	736.00	650.00
@ 2.00	selenium				0.55		
@ 51.00	sodium	316.00	340.00 B	247.00 B	159.00 B	310.00 B	159.00 B
@ 2.00	vanadium		9.50	15.00	26.90 J	18.60 J	2.20 J
@ 3.00	zinc		21.20 L	49.60	41.20	44.30	56.20

Comments: ******

Conductivity Units: umhos/cm
Organic Duplicates: AQ:CW767;CW768 SOIL:CAP55;CAP57

DDD

ORIGINAL (Red)

SELECTED SAMPLE ORDER

SITE NAME: plasti-seal
TDD NUMBER: F3-8906-08
LAB NAMES: ORGANIC: IT analytical services / INORGANIC: Net-Midatlantic

SAMPLING DATE(s): 7/10/89
CASE NUMBER: 12283

STATE/COUNTY CODE: 42/091
EPA NUMBER: PA-272

SAMPLE NUMBER: MCN535
SAMPLE ID: s4
LOCATION: on site
ind acss prk
grass
duplicate s1
PH:
FIELD MEASUREMENTS:
PERCENT SOLIDS: 89.6%

TYPE OF DATA: ****** INORGANICS **********

DILUTION FACTOR: : GFAA 0.223
: ICP 0.223
: Hg 0.859
: CN 0.112

DET. LIMIT CRQL (@=IDL)		SAMPLE NUMBER: UNITS:	MCN535 mg/kg	
@	11.00	aluminum	8440.00	
@	19.00	antimony	11.80	B
@	4.00	arsenic	4.70	L
@	6.00	barium	68.00	
@	3.00	beryllium	0.89	
@	24.00	calcium	1100.00	
@	3.00	chromium	9.40	J
@	5.00	cobalt	5.40	
@	3.00	copper	17.60	
@	27.00	iron	11300.00	J
@	3.00	lead (anal. by GFAA)	41.70	J
@	23.00	magnesium	1830.00	
@	2.00	manganese	256.00	
@	5.00	nickel	6.90	J
@	88.00	potassium	652.00	
@	2.00	selenium		
@	51.00	sodium	172.00	B
@	2.00	vanadium	12.00	J
@	3.00	zinc	52.20	

ORIGINAL (Red)

ORIGINAL (Red)

7.2 Quality Assurance Review

7.2.1 Organic Data: Lab Case 12283

7.2.1.1 Introduction

Six solid samples and nine aqueous samples were analyzed through the EPA Contract Laboratory Program (CLP) for volatile, acid, base-neutral, and pesticide compounds. The sample set included one field duplicate pair and one field blank for each matrix.

The laboratory data have been fully reviewed to determine the usability of the results according to National and Regional Guidelines (areas examined in detail are listed in the Support Documentation appendix). Although several problems were noted during the review of the laboratory data, most did not result in major impacts on the overall data quality/usability. Overall, detection capability for most compounds was acceptable, as demonstrated by meeting criteria for instrument tuning and performance, holding times, and surrogate and matrix spike recoveries. Quantitative accuracy and precision were acceptable for most results.

In general, the principal areas of concern were identified as blank contamination, poor sensitivity for semivolatile samples analyzed on July 28, 1989, two positive results flagged (R) on the data summary, poor surrogate and matrix spike recoveries, and one misidentified semivolatile compound. The following section explains these areas of concern and their associated impacts on the sample results.

7.2.1.2 Qualifiers

- There is evidence to doubt the presence of several compounds, based upon the fact that the concentrations detected in samples were not substantially greater than the level detected in the laboratory and field blanks. Therefore, the following results have been flagged (B) on the sample data summary and are considered undetected due to blank contamination.

ORIGINAL (Red)

Compound	Affected Results
methylene chloride	all positive results except CY225, CY256, CN721, and CN722
acetone	all positive results except CY225 and CY256
2-butanone	all positive results except CY256
1,3-dichlorobenzene	all positive results except CY225
di-n-butyl phthalate	all positive results except CY225
bis(2-ethylhexyl) phthalate	all positive results except CY225

- The positive results for methylene chloride in samples CN721 and CN722 have been flagged (R), unreliable. This is because this compound is an extremely common laboratory contaminant, and the concentration reported in these samples is only slightly greater than the levels flagged (B) due to blank contamination. Further investigation would be necessary to verify the presence of methylene chloride at this sampling location.

- The positive results for toluene in samples CW767 and CW768 have been flagged (J), estimated, on the sample data summary. This is because the instrument levels of toluene found in these samples are not above the contract required limit of quantitation, and the levels found in the laboratory blank VBLKI are not high enough (higher than levels attributable to carry over from the daily standard) to question the levels found in the samples.

- Low recoveries were reported for the two acid surrogates d_5-phenol and 2-fluorophenol in sample CAP53. As a result, detection limits for all acid compounds in this sample may be biased low.

- Low recoveries were reported for the acid surrogate d_5-phenol in all aqueous samples. As a result, the detection limit for phenol in all aqueous samples should be considered biased low.

ORIGINAL (Red)

- In soil sample CN722, low recoveries were reported for two acid surrogate compounds and two base-neutral surrogate compounds. As a result, the detection limits for all semivolatile compounds in sample CN722 may be higher than reported.

- The matrix spike analyses for semivolatile compounds exhibited low recoveries for 4-nitrophenol in aqueous sample CAP56. As a result, the detection limits for this compound in all surface water samples should be considered biased low.

- The positive results for alpha-BHC in samples CAP53 and CP857 have been flagged (R), unreliable, on the sample data summary. This is because alpha-BHC is a single-peak pesticide in which identifications are based on retention-time matching of a single chromatographic peak on two different gas chromatographic columns, and false positives can occur as a result of unrelated compounds that have retention times similar to the target compound. Further information [site-related information or gas chromatography/mass spectrometry (GC/MS) confirmation] would be necessary to confirm the presence of this compound.

- The compound 1,4-dichlorobenzene was misreported by the laboratory in sample CP855. Based upon the comparison of elution times between the sample and daily standard, the reviewer determined that 1,3-dichlorobenzene is actually present instead of 1,4-dichlorobenzene. The correct result for 1,3-dichlorobenzene was entered onto the data summary and flagged (B), undetected, due to blank contamination.

- Semivolatile samples analyzed on July 28, 1989 show poor sensitivity. As seen in the Support Documentation appendix to this report, the chromatograms from the samples analyzed on this day display a substantial level of instrument noise in the later portion of the chromatogram. Consequently, the actual detection limits for compounds eluting beyond pyrene are higher than the reported limits. The following samples are affected: CAP53, CAP54, CAP56, CP855, CP857, CW767, CW768, and CY225.

- Low response factors were observed for 2-butanone in all calibration runs in the volatile analysis. As a consequence, the analysis may not have been capable of detecting 2-butanone at the reported detection limit. The detection limit of this compound should be considered unreliable.

ORIGINAL (Red)

- Sample results displaying instrument levels less than the contract required limit of quantitation have been flagged (J), estimated, on the sample data summary where no other flag exists.

- Tentatively identified compound results that are not demonstrated artifacts or laboratory contaminants are summarized in a tabulation immediately following this report.

7.2.1.3 Support Data

The Support Documentation appendix to this report documents the above findings associated with blank contamination, poor sensitivity in the semivolatile analyses on July 28, 1989, results flagged (R) on the data summary, poor surrogate and matrix spike recoveries, and the misidentification of one semivolatile compound. The text of this report has been formatted to address only those issues affecting the application of the data to the subject investigation. (Issues pertaining to laboratory contractual compliance are addressed on a separate summary directed to the laboratory deputy project officer.)

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SAMPLE DATA SUMMARY: ORGANIC TENTATIVELY IDENTIFIED COMPOUNDS

PFE ORIGINAL (Red)

SAMPLE NUMBER	ANALYSIS FRACTION (VOA/BNA)	ESTIMATED CONCENTRATION VALUE	ESTIMATED CONCENTRATION UNITS	QUALIFIER CODE	COMPOUND NAME
CAP53	VOA				NONE
	BNA	30	ug/L	UNK	Unknown
		29	ug/L	TOT(2) SUS	Instrument Artifact (siloxane)
CAP54	VOA				NONE
	BNA				NONE
CAP55	VOA				NONE
	BNA				NONE
CAP56	VOA				NONE
	BNA	103	ug/L	TOT(2) UNK	Unknown
		37	ug/L	TOT(2) SUS	Instrument Artifact (siloxane)
CAP57	VOA				NONE
	BNA	420	ug/kg	SUS UNK	Unknown
CN721	VOA				NONE
	BNA	12700	ug/kg	TOT(6) UNK	Unknown
		2800	ug/kg	TOT(2)	Saturated Hydrocarbons
CN722	VOA				NONE
	BNA	2460	ug/kg	TOT(4)	Saturated Hydrocarbons
		4390.	↓	TOT(3) UNK	Unknown
CP855	VOA.				NONE
	BNA	730	ug/L	TOT(3) UNK	Unknown

DEFINITIONS OF QUALIFIER CODES:

SUS = SUSPECTED FALSE POSITIVE RESULT: Compound is either a common laboratory contaminant, or else a possible reaction byproduct (artifact) attributable to the chemical reagents used for sample preparation and analysis. This result is suspect even though this compound was not found in any associated blanks.

UNK = UNKNOWN COMPOUND: Library search result unreasonable or of very low matching quality.

TOT = TOTAL CONCENTRATION REPORTED: Represents the sum of several compounds detected all belonging to the same chemical class.

ISO = OR ISOMER: Compound identification is not selective for this isomer only. This result may instead represent the presence of a similar compound comprised of the same atoms bonded together in a different arrangement or substitution pattern.

SAMPLE DATA SUMMARY: ORGANIC TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NUMBER	ANALYSIS FRACTION (VOA/BNA)	ESTIMATED CONCENTRATION VALUE	ESTIMATED CONCENTRATION UNITS	QUALIFIER CODE	COMPOUND NAME
CP856	VOA				NONE
	BNA	13900	ug/kg	TOT(4)	Saturated Hydrocarbons of unknown molecular formulas
		4200	ug/kg	TOT UNK(4)	Unknown
CP857	VOA				NONE
	BNA	386	ug/L	TOT(3) UNK	Unknown
		15	ug/L	SUS	Instrument Artifact (Siloxane)
CW766	VOA				NONE
	BNA	5690	ug/kg	TOT(4) UNK	Unknown
		6440	ug/kg	TOT(6)	Phthalates of unknown molecular formulas
		2920	ug/kg	TOT(3)	Saturated Hydrocarbons of unknown molecular formulas
		870	ug/kg		Phosphoric acid, 2-ethylhexyl diphenyl ester
CW767	VOA				NONE
	BNA	110	ug/L		4,4'-Butylidene bis [2-(1,1-dimethylethyl)-5-methyl phenol]
		100	ug/L		Saturated Hydrocarbon of unknown molecular formula
CW768	VOA				NONE
	BNA	625	ug/L	TOT(2)	Instrument Artifacts (siloxanes)
		14	ug/L	UNK	Unknown

PFE ORIGINAL (Red)

DEFINITIONS OF QUALIFIER CODES:

SUS = SUSPECTED FALSE POSITIVE RESULT: Compound is either a common laboratory contaminant, or else a possible reaction byproduct (artifact) attributable to the chemical reagents used for sample preparation and analysis. This result is suspect even though this compound was not found in any associated blanks.

UNK = UNKNOWN COMPOUND: Library search result unreasonable or of very low matching quality.

TOT = TOTAL CONCENTRATION REPORTED: Represents the sum of several compounds detected all belonging to the same chemical class.

ISO = OR ISOMER: Compound identification is not selective for this isomer only. This result may instead represent the presence of a similar compound comprised of the same atoms bonded together in a different arrangement or substitution pattern.

ORIGINAL (Red)

7.2.2 Inorganic Data: Lab Case 12283

7.2.2.1 Summary

Six solid samples and 13 aqueous samples were analyzed for total metals and cyanide through the EPA CLP under case 12283. Included in the sample set were two duplicate pairs and one field blank.

The laboratory data have been fully reviewed to determine the usability of the results according to National and Regional Guidelines (areas examined in detail are listed in the Support Documentation appendix). Although there were several problems noted during the review of the laboratory data, most did not result in major impacts on the overall data quality/usability. Overall, detection capability was acceptable for most elements, as demonstrated by meeting criteria for holding times, calibration, and instrument detection limits. Blank contamination affected only low-level results for several elements. Where minor problems were noted, data on the sample data summary were flagged with the appropriate qualifiers.

In general, the principal areas of concern were matrix spike recoveries, poor serial dilution results, poor duplicate precision, recoveries out of quality control limits in the analysis of the two-times contract required detection limit (CRDL) standard, calculation and transcription errors, and blank contamination. The following section explains these areas of concern and their associated impacts on the sample results.

7.2.2.2 Qualifiers

- There is evidence to doubt the presence of several elements in the samples, based on the fact that the concentrations reported were not substantially above the levels detected in the laboratory and field blanks. Therefore, the following results have been flagged (B) on the sample data summary and are considered undetected due to blank contamination.

ORIGINAL (Red)

Element	Affected Results
antimony	all positive results except MCP499 and MCP500
calcium	MCBX41
iron	MCBX41 and MCBX45
lead	MCBX41, MCBX44, and MCBX47
potassium	MCBX41
sodium	MCBX48, MCBX50, MCY312, MCBX42, MCN534, and MCN535

- A high recovery was observed for manganese in the analysis of the two-times CRDL standard. For all samples, positive results for manganese with instrument levels up to 55 ug/l have been flagged (K), biased high, on the sample data summary. Similarly, a low recovery was observed for zinc in the analysis of the two-times CRDL standard. All positive results for zinc with instrument levels up to 120 ug/l have been flagged (L), biased low, on the sample data summary. The high relative percent difference for zinc between the serial dilution and initial analysis of sample MCBX48 further supports the conclusion that positive results for zinc at low levels are biased low.

- Matrix spike analysis of solid sample MCBX48 resulted in low recoveries for antimony and arsenic, while post-digestion spike recoveries for arsenic in sample MCBX48 were within the acceptable range. Low recovery for antimony has no effect on any positive results since they are already questioned by the blank. However, the detection limit for antimony in all solid samples should be considered biased low. Digestion loss is the probable cause of poor recovery for arsenic. As a result, all positive results for arsenic in solid samples have been flagged (L), biased low.

- Duplicate imprecision was observed for chromium, iron, lead, and vanadium between field duplicate solid samples CCN534 and MCN535. As a result, positive values for these elements in samples MCN534, MCN535, MCY312, and MCBX42 have been flagged (J), estimated, except where previously flagged.

ORIGINAL (Red)

- Duplicate imprecision was observed for aluminum, iron, and zinc between field duplicate aqueous samples MCQ263 and MCY313. As a result, positive values for these elements in samples MCBX43, MCBX44, MCQ263, and MCY313 have been flagged (J), estimated, except where previously flagged.

- Serial dilution imprecision was observed for chromium and nickel in sample MCBX48. Consequently, positive results for these two elements in all solid samples have been flagged (J), estimated.

- Laboratory duplicate precision was poor for calcium in solid sample MCBX48 and for aluminum in aqueous sample MCBX49. As a result, positive values for calcium in all sediment samples have been flagged (J), estimated, and positive values for aluminum and lead in all aqueous samples have also been flagged (J), estimated.

- Errors were made in the transcription of positive results for samples MCBX40, MCBX47, and MCBX50. The correct values have been entered on the data summary and include results for mercury, nickel, vanadium, and zinc in sample MCBX47, the result for mercury in sample MCBX40, and the not-detected result for mercury in sample MCBX50.

- The presence of mercury at a level of 3.7 ug/l in sample MCBX41 is unusual because this is a home well sample. However, examination of raw data indicates that the result was correctly reported.

- Detection limits for cyanide are biased low in all samples due to exceeded holding times (33 days from sampling until distillation).

- Calculation errors were made for cobalt and copper in sample MCN534. The concentrations have been recalculated by the reviewer and the correct values entered on the data summary.

PFE

ORIGINAL (Red)

7.2.2.3 Support Data

The Support Documentation appendix to this report contains findings regarding blank analyses, matrix spike recoveries, serial dilution results, duplicate imprecision, recoveries out of quality control limits in the analysis of the two-times CRDL standards, and calculation and transcription errors. The text of this report has been formatted to address only those issues affecting the application of the data to the subject investigation. (Issues pertaining to laboratory contractual compliance are addressed on a separate summary directed to the laboratory deputy project officer.)

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ORIGINAL
(Red)

SECTION 8

ORIGINAL (Red)

8.0 TOXICOLOGICAL EVALUATION

8.1 Summary

Groundwater contaminated by volatile solvents is of primary concern in the study area. Sample results revealed the presence of several solvents, including trichloroethene (TCE) dichloroethene isomers, 1,1-dichloroethane, toluene, and 1,1,1-trichloroethane (1,1,1-TCEA), in monitoring well (MW) nos. 1 and 3, located on and around the Plasti-Seal facility. If MW no. 1 and MW no. 3 were to be used as potable sources, ingestion of the reported solvent concentrations may result in increased lifetime cancer risks of 2.9×10^{-5}, for MW no. 1, and 9.5×10^{-6}, for MW no. 3. However, since observed levels for all observed volatiles are within Drinking Water Equivalent Levels (DWELs), no noncarcinogenic effects would be anticipated.

In addition to the solvents detected in MWs, mercury was detected at a concentration of 3.7 ug/l in residential well sample HW (home well) no. 1. No adverse health effects are expected as a result of ingestion of the observed concentration of mercury because the level is within the DWEL.

Surface water samples also revealed levels of mercury (0.2 ug/l) and copper (up to 76 ug/l) that exceed Ambient Water Quality Criteria (AWQCs). It is possible that such levels may pose a threat to aquatic life, especially if methyl mercury is present and Southampton Creek or its tributaries are used for fishing.

8.1.1 Groundwater

Given that public supply wells have been affected, the presence of groundwater contaminated by volatile solvents is of primary concern in the project study area. As a result of their extensive use as industrial solvents, such compounds have been detected in almost all environmental media. Once released to the environment, volatilization and subsequent chemical degradation tend to be the predominant fate processes. Releases of solvents to surface soil, air, and surface water evaporate and degrade in a matter of days or weeks. (Note that solvents were not detected in any soil, sediment, or surface water samples.) However, solvents in subsurface soils and groundwater are not subject to significant volatilization and may persist for months or years. In addition, subsurface soils may act as a long-term source of groundwater contamination if environmental conditions favor leaching. [1]

ORIGINAL (Red)

PEF

8.1.2 Monitoring Well Data

Limited MW data collected in the vicinity of the Hankin Industrial Park revealed the presence of solvents and related breakdown products. TCE was detected at a concentration of 76 ug/l in MW no. 1, located at the northeastern corner of the Plasti-Seal facility, and at a concentration of 5 ug/l in MW no. 3, located approximately 1,200 feet west of the site. TCE breakdown products, 1,1-dichloroethene and 1,2-dichloroethene (total), were also detected in MW no. 1 and MW no. 3. 1,1-Dichloroethene was reported at concentrations of 3 ug/l and 1 ug/l in MW no. 1 and MW no. 3, respectively; 1,2-dichloroethene was detected at concentrations up to 10 ug/l only in MW no. 1. 1,1,1-TCEA and its breakdown product, 1,1-dichloroethane, were detected at trace levels of less than 5 ug/l each in MW no. 2, located approximately 1,700 feet southwest of the site, as well as in MW no. 1 and MW no. 3. In addition, low levels (1 ug/l) of toluene were detected in samples collected from MW no. 1. Although groundwater is expected to flow to the south and southwest, the pumping of public wells, when operational, in the vicinity may influence the direction of local groundwater flow.

If MWs are considered to be representative of potable groundwater in the study area, ingestion of the reported contaminants may be of primary concern. Physiologic responses to high concentrations of the reported solvents are characterized by central nervous system (CNS) depression, eye and skin irritation, incoordination, and cardiac arrythmia. Several of the more toxic compounds, including TCE and 1,1-dichloroethane, have been associated with an increased incidence of cancer of the liver, lung, and kidney in laboratory animals and are regulated as Group B2 (probable) carcinogens by EPA.[2,3]

EPA has promulgated or recommended the following Maximum Contaminant Levels (MCLs) for public water supplies for the contaminants of concern:

Contaminant	MCL (ug/l)[3]
1,1-dichloroethene	7
1,2-dichloroethene	70*
TCE	5
TCEA	200
Toluene	2,000

*The MCL given applies to (cis)1,2-dichloroethene. Note that sample results are given as (total) 1,2-dichloroethene.

ORIGINAL (Red)

PFF

MCLs are enforceable standards based on health considerations and the feasibility and cost of available treatment technologies. EPA has also recommended Maximum Contaminant Level Goals (MCLGs) for these compounds. MCLGs are nonenforceable standards that are based solely on health considerations and provide an adequate margin of safety against any adverse effect. For 1,1-dichloroethene, 1,2-dichloroethene, toluene, and 1,1,1-TCEA, the MCLGs are equal to the MCLs. However, since there is thought to be no safe exposure level for carcinogens, the MCLG for TCE is 0 ug/l.[3]

No MCL or MCLG has been developed for 1,1-dichloroethane; this contaminant's classification as a carcinogen has also recently been changed from C to B2. The B2 classification and the potency factor are based on the similarity of 1,1-dichloroethane to 1,2-dichloroethane, which has been associated with increased incidence of carcinomas in laboratory animals. The MCL and MCLG for 1,2-dichloroethane are 5 ug/l and 0 ug/l, respectively.[3]

Because any chronic exposure to a carcinogen may result in an increased risk of cancer, theoretical ingestion of water from MW no. 1 and MW no. 3 may result in increased cumulative lifetime cancer risks of 2.9×10^{-5} and 9.5×10^{-6}, respectively.[4] These cancer risks were calculated assuming that exposure was limited to ingestion of 2 liters of water per day, over a 70-year lifetime, by a 70-kilogram adult. If such contaminants were present in a potable domestic well, inhalation of vapors during household use may increase the exposure potential and the accompanying carcinogenic risks.

Noncarcinogenic effects would not be anticipated as a result of ingestion of water from the sampled MWs. All reported contaminant levels are within toxicity criteria for long-term consumption, where such criteria exist. These criteria include DWELs, which are media specific for the protection of noncarcinogenic adverse effects over a lifetime.[3]

Dermal contact with solvents at reported concentrations is also not expected to result in any serious adverse effects. Although prolonged or repeated exposure to almost pure concentrations of solvents can lead to dermatitis, absorption through the skin is not considered an important route of exposure.[3]

PFE ORIGINAL (Red)

8.1.3 Home Wells

Mercury was detected at a concentration of 3.7 ug/l in residential well sample HW no. 1, which exceeds the current MCL and the proposed MCLG of 2 ug/l. However, the reported concentration is within the DWEL of 10 ug/l, and adverse health effects are not anticipated if other sources of mercury are not excessive. Note that these criteria are based on the health effects of inorganic mercury, the form most often detected in drinking water. Organic mercury compounds (methyl mercury) are considerably more toxic and may affect the brain and CNS.[6]

In addition, sodium values for all filtered groundwater samples except MW no. 2 exceeded the recommended guidance level of 20,000 ug/l for potable supplies. While elevated sodium concentrations are generally not expected to result in adverse health impacts, such levels may be of concern to anyone following a severely salt-restricted diet.[7] Note that, as with sample HW no. 1, which contained 66,000 ug/l sodium, treatment with a water softener may contribute to elevated sodium levels in drinking water.

It may also be mentioned that pH measurements for all groundwater sample locations were below the Secondary Maximum Contaminant Level recommended range of 6.5 to 8.5.[3] Although this is not a health-based criterion, acidic conditions may promote leaching in soils and may contribute to elevated levels of dissolved metals in groundwater.

8.2 Environmental Samples

8.2.1 Organic Contamination

In general, soil and sediment sample data revealed little of concern. Phthalates, which are reportedly used at the facility, were confidently detected at a concentration of 360 ug/kg in on-site soil sample S-2, and tentatively identified at a concentration of 6480 ug/kg. Dermal contact with high concentrations of some phthalates may produce mild skin and eye irritation; however, occasional contact with the reported on-site concentrations is not expected to produce notable health effects.[8]

Organics were not detected in any surface water samples.

8.2.2 Inorganic Contamination

Surface water samples collected from the unnamed tributary to Southampton Creek revealed concentrations of mercury and copper that exceed AWQCs for the protection of freshwater aquatic life. Mercury was observed at 0.20 ug/l in the upstream sample; copper was observed at 67 ug/l in the upstream sample and 76 ug/l in the downstream sample. The AWQCs for mercury and copper are 0.012 ug/l and 12 ug/l, respectively.[9]

PTE ORIGINAL (Red)

Mercury may pose an environmental threat if methyl mercury is present. (The analysis performed on samples from this site does not distinguish among forms.) Methyl mercury will bioconcentrate to an enormous extent in animal and fish tissues. Contamination of fish by methyl mercury has resulted in Minamata disease in Japan, characterized by mental disturbances, ataxia, slurring of speech, and hearing impairment. Also, it is possible that mercury may be present (but not detected) in other surface water samples at concentrations above the AWQC of 0.012 ug/l but below the laboratory detection limit of 0.20 ug/l. Because of its tendency to bioconcentrate, even trace amounts of methyl mercury in aquatic systems may be significant.[6]

Copper is a minor nutrient for both plants and animals at low levels but is toxic to aquatic life at concentrations not much higher. Note that the level of copper in solution and the compounds present are directly dependent on pH. Cupric ions, although likely to be present at a pH range of 6 to 8, are subject to sorption processes by clays and sediments, which may decrease downstream concentrations.[10] It is unknown if Southampton Creek or its tributaries are used for fishing.

Inorganic contaminant levels were within typically observed ranges for soil and sediment samples.

Report prepared by Not responsive due to revised scope [redacted], Toxicologist

Report reviewed by Not responsive due to revised scope [redacted] Not responsive due to revised scope [redacted] Senior Toxicologist

ORIGINAL (Red)

LIST OF SOURCES

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3. United States Environmental Protection Agency. 1988. Drinking Water Standards and Health Advisories; Quick Look List. Office of Drinking Water, Ground Water Protection Branch, Washington, D.C. December 1988.

4. United States Environmental Protection Agency. 1989. Health Effects Assessment Summary Tables; Second Quarter FY89. Office of Emergency and Remedial Response, Washington, D.C. April 1989.

5. Sax, N.I. 1984. Dangerous Properties of Industrial Materials. Sixth Edition. Von Nostrand Reinhold Company, New York.

6. Technical Resources, Incorporated for United States Department of Health and Human Services. 1988. Toxicological Profile for Mercury. Draft. Agency for Toxic Substances and Disease Registry, Atlanta, Georgia.

7. Federal Register, National Primary Drinking Water Regulations; Volatile Synthetic Organic Chemicals; Final Rule and Proposed Rule. Volume 50, No. 219. November 1985.

8. United States Environmental Protection Agency. 1980. Ambient Water Quality Criteria for Phthalate Esters. Office of Water Regulations and Standards, Criteria and Standards Division, Washington, D.C. EPA 440/5-80-067.

9. United States Environmental Protection Agency. 1986. Quality Criteria for Water. Office of Water Regulations and Standards, Criteria and Standards Division, Washington, D.C. EPA 440/5-86-001.

10. United States Environmental Protection Agency. 1986. Ambient Aquatic Life Water Quality Criteria for Copper. Office of Water Regulations and Standards, Criteria and Standards Division, Washington, D.C. EPA 440/5-80-036.

ORIGINAL
(Red)

APPENDIX A

PROJECT NAME: Plasti-Seal
TDD NO.: F3-8906-08

EPA SITE NO.: PA-272
REGION: 3

ORIGINAL (Red)

PFE

SUPPORT DOCUMENTATION FOR THE REVIEW OF ORGANIC ANALYSIS LAB DATA PACKAGE

CASE/SAS NO.: 12283
TYPE OF ANALYSIS: VOA, BNA, Pest.
CONTRACT LABORATORY: IT Pittsburgh
APPLICABLE IFB OR SOW:
REVIEWER: Not responsive due to revised scope
REVIEW DATE: 1/29/90

APPLICABLE SAMPLE NO's.: CAP53 through CAP57, CP855, CP856, CP857, CN721, CN722, CW766, CW767, CW768, CY225 and CY256

THE FOLLOWING TABLE INDICATES AREAS WHICH WERE EXAMINED IN DETAIL, THE IDENTIFIED PROBLEM AREAS, AND SUPPORT DOCUMENTATION ATTACHMENTS:

	AREAS EXAMINED IN DETAIL — CHECK (✓) IF YES OR FOOTNOTE LETTER FOR COMMENTS BELOW				PROBLEM AREAS IDENTIFIED — CHECK (✓) IF YES OR FOOTNOTE NUMBER FOR COMMENTS BELOW				SUPPORT DOCUMENTATION ATTACHMENTS — CHECK (✓) IF YES OR IDENTIFY ATTACHMENT NO.			
	ALL APPLICABLE ANALYSES	VOA	BNA	PEST/PCB	ALL APPLICABLE ANALYSES	VOA	BNA	PEST/PCB	ALL APPLICABLE ANALYSES	VOA	BNA	PEST/PCB
HOLDING TIMES	✓											
BLANK ANALYSIS RESULTS: TARGET COMPOUNDS	✓					✓	✓			✓	✓	
BLANK ANALYSIS RESULTS: TENTATIVE I.D.s	✓					✓	✓			✓	✓	
SURROGATE SPIKE RESULTS	✓						✓				✓	
MATRIX SPIKE RESULTS	✓						✓				✓	
DUPLICATE ANALYSIS RESULTS	✓											
TARGET COMPOUND MATCHING QUALITY	✓											
TENTATIVELY IDENTIFIED COMPOUNDs	✓											
DFTPP & BFB SPECTRUM TUNE RESULTS	✓											
GC INSTRUMENT PERFORMANCE	✓											
INITIAL CALIBRATIONS	✓											
CONTINUING CALIBRATIONS	✓											
QUANTITATION OF RESULTS	✓											
OTHERS	✓											

COMMENTS:

BLANK ANALYSIS RESULTS FOR TARGET COMPOUNDS

FRACTION	TYPE	CONC	MATRIX	SAMPLE #	SOURCE OF H_2O	CONTAMINANTS (CONCENTRATION / DETECTION LIMIT)
VOA	Lab	Low	Soil	VBLK1	Lab	MeCl2 1.3 ug/L (263)' 1,2 DCEA 0.57 (548)[2] Acetone 9.2 (295)' t-1,3-DCP 0.79 (783)[2] 4-Me-2-P 2.4 (921)' Bromoform 0.8 (902)[2] 2-Hex. 3.0 (992)' Toluene 0.54 (1065)[2] 1,1,2,2- 2. (1008)' Bromodichloromethane (0.36)[2]
VOA	Lab	Low	Aq	VBLK2	Lab	Acetone 11. ug/L (294)' 4-me-2-Pent 0.6 (923)[2] MeCl2 0.76 (264)[2]
VOA	Lab	Low	Aq	VBLK3	Lab	MeCl2 1.2 ug/L (264)' Vinyl Acetate 0.5 (631)[2] Acetone 22. (294)' 1,1,2 - 0.56 (782)[2] 4-me-2-P 2.1 (921)' Styrene -0.87 (1373)[2] 2-Hex. 1.1 (991)' 1,1,2,2 1.1 (1009)' xylenes 1.6 (1427)'
VOA	Field	Low	Aq	CY225	NUS	MeCl2 2.1 ug/L (264)' 2-But 0.5 (545)[2] Acetone 21. (295)' 1,1,2,2- 2.4 (1009)[2]
VOA		Low	Aq	CY256	NUS	MeCl2 3.3 ug/L (261)' 1,1,2,2- 0.74 (1009)[2] Acetone 33. (291)' 2-But. 3.3 (542)'

LABORATORY REPORTED FIELD BLANK DATA IS COMPARED WITH THE SAMPLE DATA IN A TABULATION FORM WITHIN THE SAMPLE ANALYTICAL DATA SUMMARY. TENTATIVELY IDENTIFIED COMPOUNDS IN BLANKS ARE LISTED ON A SEPARATE FORM

COMMENTS:

(1) RESULT REPORTED BY LABORATORY AND CONFIRMED BY REVIEWER.

(2) RESULT INFERRED FROM QUANTITATION LIST, DIAGNOSTICS, CHROMATOGRAM AND/OR SPECTRA.

Note: Number in parenthesis is scan number.
Note: VBLK 1 exhibited nearly all cpds from bromodichloromethane onward at conc. ~ 0.2 to 0.6 ug/L, indicating carryover from standard run beforehand. Therefore, this group of results was not used to question sample results.
VBLK3 was handled in the same manner.

BLANK ANALYSIS RESULTS FOR TARGET COMPOUNDS

FRACTION	TYPE	CONC	MATRIX	SAMPLE #	SOURCE OF H_2O	CONTAMINANTS (CONCENTRATION / DETECTION LIMIT)
BNA	Lab	Low	Aq	SBLK2	Lab	Di-N-Butyl P. 1.28 ug/L (1363)[1] (X2)
BNA	Lab	Low	Soil	SBLK1	Lab	AQ units = X2 1,3-DCB 0.9 ug/L (562)[2] AQ units = X2 Di-N-Butyl P 0.84 (1362)[2] AQ units = X2 Bis-2 0.63 (1696)[2]
BNA	Field	Low	Aq	CY225	NVS	1,3-DCB 8.6 ug/L (570)[1] (X2) Di-n-Butyl Phthalate 2.0 ug/L (1361) (X2) Bis-(2-ethyl hexyl) phthalate 2.7 ug/L (1686) (X2)
Pest	Lab	Low	Aq	PBLK1	Lab	i4.51 18% of DBC
Pest	Lab	Low	Soil	PBLK2	Lab	9.74 33% of DBC
Pest	Field	Low	Aq	CY225	NVS	23.41

ORIGINAL (Red)

LABORATORY REPORTED FIELD BLANK DATA IS COMPARED WITH THE SAMPLE DATA IN A TABULATION FORM WITHIN THE SAMPLE ANALYTICAL DATA SUMMARY. TENTATIVELY IDENTIFIED COMPOUNDS IN BLANKS ARE LISTED ON A SEPARATE FORM

COMMENTS:

(1) RESULT REPORTED BY LABORATORY AND CONFIRMED BY REVIEWER.

(2) RESULT INFERRED FROM QUANTITATION LIST, DIAGNOSTICS, CHROMATOGRAM AND/OR SPECTRA.

BLANK ANALYSIS RESULTS FOR TENTATIVELY IDENTIFIED COMPOUNDS

ALL TENTATIVELY IDENTIFIED COMPOUNDS FOUND IN BLANK ANALYSES ARE LISTED BELOW:

ORIGINAL (Red)

SAMPLE #	FRACTION	SCAN #(S) OR R.T	ESTIMATED CONCENTRATION	COMPOUND NAME	COMMENTS
VBLK1	VOA	65	5% of IS#1	Unk	NLS IS Scan# 415
		103	59% of IS#1	Unk	NLS 887
					1114
VBLK2	VOA	61	10% of IS#1	Unk	NLS IS Scan# 416
		90	79% of IS#1	Unk	NLS 886
		481	2.2% of IS#1	Unk	NLS 1114
VBLK3	VOA	60	3% of IS#1	Unk	NLS IS Scan# 416
		89	33% of IS#1	Unk	NLS 886
		480	4% of IS#1	Unk	NLS 1114
CY225	VOA	91	52% of IS#1	Unk	NLS IS Scan# 417
		480	5% of IS#1	Unk	NLS 888
		601	2% of IS#1	Unk	NLS 1115
CY256	VOA	93	53% of IS#1	Unk	NLS
		478	3% of IS#1	Unk	NLS IS Scan# 413
					883
					1110
SBLK2	BNA	709 ✓	41% of IS at 765	Siloxane	IS Scan# 566
		873 ✓	57% of IS at 765	Siloxane	765
		1019 ✓	19% of IS at 1039	UNK Lab says "Col. bleed"	1039
		1148 ✓	18% of IS at 1039	UNK m/z 73	1269
		1358	4% of IS at 1269	UNK	NLS 1697
		1449	7% of IS at 1269	UNK	NLS 2024
SBLK1	BNA	306	9% of IS at 568	X UNK	IS Scan# 568
		338	13X of IS at 568	X UNK m/z (43, 58, 59, 101)	765
		708	68% of IS at 765	X Siloxane	1038
		810	6% of IS at 765	Unk	NLS 1267
		872	66% of IS at 765	X Siloxane	1696
		1018	19% of IS at 1038	X Unk	2022
		1108	3% of IS at 1038	Unk	NLS
		1147	8% of IS at 1267	Unk	NLS
		1224	3% of IS at 1267	Unk	NLS
		1238	6% of IS at 1267	Unk	NLS
		1258	4% of IS at 1267	Unk	NLS
		1304	1% of IS at 1267	Unk	NLS
		1358	2% of IS at 1267	Unk	NLS
		1605	5% of IS at 1696	Unk	NLS
		1662	20% of IS at 1696	X Unk m/z 91, 207	
		1771	5% of IS at 1696	Unk	NLS
		1800-2500+	Ave = 8% IS at 2023		NLS

NLS = no library search conducted

BLANK ANALYSIS RESULTS FOR TENTATIVELY IDENTIFIED COMPOUNDS

ALL TENTATIVELY IDENTIFIED COMPOUNDS FOUND IN BLANK ANALYSES ARE LISTED BELOW:

ORIGINAL (Red)

SAMPLE #	FRACTION	SCAN #(S) OR R.T	ESTIMATED CONCENTRATION	COMPOUND NAME	COMMENTS
CY225	BNA	304-340	155% of IS at 576	Siloxanes	IS scan # 576
		200-600	AVE 7% of IS at 576	NLS	769
		658	26% of IS at 769	NLS	1039
		720	104% of IS at 769	Siloxanes	1269
		736	26% of IS at 769	NLS	1688
		873	107% of IS at 769	Siloxanes	2018
		600-900	AVE 10% of IS at 769	NLS	
		1018	35% of IS at 1039	Unk	
		900-1130	AVE 8% of IS at 1039	NLS	
		1148	25% of IS at 1269	NLS	
		1130-1450	AVE 5% of IS at 1269	NLS	
		1656	31% of IS at 1688	NLS	
		1450-1800	AVE 13% of IS at 1688	NLS	
		1800-2650	AVE 34% of IS at 2018	NLS	

NLS = no library search conducted

000005

ORIGINAL (Red)

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

	EPA SAMPLE NO.	S1 (TOL)#	S2 (BFB)#	S3 (DCE)#	OTHER	TOT OUT
01	CAP53	102	100	96	0	0
02	CAP54	102	104	98	0	0
03	CAP56	110	109	107	0	0
04	CP855	110	107	108	0	0
05	CP857	99	93	94	0	0
06	CW767	108	108	109	0	0
07	CW768	108	109	104	0	0
08	CY225	108	103	104	0	0
09	CY256	97	90	89	0	0
10	CAP56MS	97	98	99	0	0
11	CAP56MSD	99	101	99	0	0
12	VBLK2	107	110	104	0	0
13	VBLK3	99	102	94	0	0

		QC LIMITS
S1 (TOL)	= Toluene-d8	(88-110)
S2 (BFB)	= Bromofluorobenzene	(86-115)
S3 (DCE)	= 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

FORM II VOA-1 1/87 Rev.

ORIGINAL (Red)

2B
SOIL VOLATILE SURROGATE RECOVERY

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (TOL)#	S2 (BFB)#	S3 (DCE)#	OTHER	TOT OUT
01	CAP55	95	101	94	0	0
02	CAP57	106	108	101	0	0
03	CN721	113	103	100	0	0
04	CN722	113	99	98	0	0
05	CP856	102	92	94	0	0
06	CW766	115	97	96	0	0
07	CAP57MS	111	114	106	0	0
08	CAP57MSD	106	99	100	0	0
09	VBLK1	103	110	100	0	0

		QC LIMITS
S1 (TOL)	= Toluene-d8	(81-117)
S2 (BFB)	= Bromofluorobenzene	(74-121)
S3 (DCE)	= 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

FORM II VOA-2 1/87 Rev.

ORIGINAL (Red)

2C

WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	OTHER	TOT OUT
01	CAP53	76	71	99	12	21	54	0	0
02	CAP54	68	70	93	30	65	78	0	0
03	CAP56	70	69	122	27	68	86	0	0
04	CP855	54	59	99	25	62	81	0	0
05	CP857	69	72	100	26	61	88	0	0
06	CW767	70	69	100	29	66	81	0	0
07	CW768	69	70	108	25	46	88	0	0
08	CY225	73	71	120	29	72	77	0	0
09	CAP56MS	77	75	99	30	55	74	0	0
10	CAP56MSD	64	68	93	17	21	23	0	0
11	SBLK2	78	71	123	31	79	88	0	0

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(35-114)
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)
S3 (TPH)	= Terphenyl	(33-141)
S4 (PHL)	= Phenol-d5	(10-94)
S5 (2FP)	= 2-Fluorophenol	(21-100)
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

2D

SOIL SEMIVOLATILE SURROGATE RECOVERY

000420 (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Level: (low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	OTHER	TOT OUT
01	CAP55	70	63	100	58	83	80	0	0
02	CAP57	84	71	108	68	98	85	0	0
03	CN721	87	76	110	73	99	98	0	0
04	CN722	34	31	48	25	39	41	0	0
05	CP856	77	68	98	68	90	91	0	0
06	CW766	84	78	120	73	99	93	0	0
07	CAP57MS	82	79	95	91	98	96	0	0
08	CAP57MSD	73	71	103	80	81	90	0	0
09	SBLK1	87	76	124	68	93	77	0	0

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(23-120)
S2 (FBP)	= 2-Fluorobiphenyl	(30-115)
S3 (TPH)	= Terphenyl	(18-137)
S4 (PHL)	= Phenol-d5	(24-113)
S5 (2FP)	= 2-Fluorophenol	(25-121)
S6 (TBP)	= 2,4,6-Tribromophenol	(19-122)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

FORM II SV-2 1/87 Rev.

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix Spike - EPA Sample No.: CAP56

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.0	0	51.6	103	61-145
Trichloroethene	50.0	0	51.6	103	71-120
Benzene	50.0	0	53.5	107	76-127
Toluene	50.0	0	52.9	106	76-125
Chlorobenzene	50.0	0	57.6	115	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.0	49.2	98	5	14	61-145
Trichloroethene	50.0	50.9	102	1	14	71-120
Benzene	50.0	51.5	103	4	11	76-127
Toluene	50.0	51.4	103	3	13	76-125
Chlorobenzene	50.0	55.3	111	4	13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: US-EPA CAP56 5MLP&T +10ULEA:1-36-B,4-35-B
FINN METHOD VO USEPA CASE#12283 SDG#CAP53

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix Spike - EPA Sample No.: CAP57 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	57.5 ~~62.5~~	0	49.9 ~~54.3~~	87	59-172
Trichloroethene	57.5 ~~62.5~~	0	52.1 ~~56.7~~	91	62-137
Benzene	57.5 ~~62.5~~	0	59.2 ~~64.4~~	103	66-142
Toluene	57.5 ~~62.5~~	0	55.4 ~~60.2~~	96	59-139
Chlorobenzene	57.5 ~~62.5~~	0	57.9 ~~63.0~~	101	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	57.5 ~~68.5~~	53.5 63.7	93	-7	22	59-172
Trichloroethene	57.5 ~~68.5~~	54.7 65.2	95	-4	24	62-137
Benzene	57.5 ~~68.5~~	61.6 73.4	107	-4	21	66-142
Toluene	57.5 ~~68.5~~	60.6 72.2	105	-9	21	59-139
Chlorobenzene	57.5 ~~68.5~~	61.2 72.9	106	-5	21	60-133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: CAP-57 5.0687G/5MLP&T +10ULEA:4-35-B,1-36-B
FINN METHOD VO USEPA CASE#12283 SDG#CAP53
Recalculated by reviewer

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

PFE ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix Spike - EPA Sample No.: CAP56

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Phenol	200	0	52.8	26	12- 86
2-Chlorophenol	200	0	125	62	27-123
1,4-Dichlorobenzene	100	0	66.2	66	36 97
N-Nitroso-di-n-prop.(1)	100	0	75.6	76	41 116
1,2,4-Trichlorobenzene	100	0	58.4	58	39 98
4-Chloro-3-methylphenol	200	0	112	56	23 97
Acenaphthene	100	0	72.0	72	46-118
4-Nitrophenol	200	0	61.2	31	10- 80
2,4-Dinitrotoluene	100	0	92.2	92	24- 96
Pentachlorophenol	200	0	82.0	41	9-103
Pyrene	100	0	55.6	56	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	200	30.6	15	54 *	42	12- 86
2-Chlorophenol	200	56.2	28	76 *	40	27-123
1,4-Dichlorobenzene	100	66.8	67	-2	28	36 97
N-Nitroso-di-n-prop.(1)	100	62.4	62	20	38	41 116
1,2,4-Trichlorobenzene	100	56.2	56	4	28	39 98
4-Chloro-3-methylphenol	200	98.4	49	13	42	23 97
Acenaphthene	100	66.6	67	7	31	46-118
4-Nitrophenol	200	0	0 *	200 *	50	10- 80
2,4-Dinitrotoluene	100	66.8	67	31	38	24- 96
Pentachlorophenol	200	0	0 *	200 *	50	9-103
Pyrene	100	56.0	56	0	31	26-127

(1) N-Nitroso-di-n-propylamine

The MSD had much worse surr. recs. for acid surrogates than the unspiked sample or other samples. Therefore, only the MS, and not the MSD, had recoveries that may suggest actual samples are also affected.

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 4 out of 11 outside limits
Spike Recovery: 2 out of 22 outside limits

COMMENTS: CAP 56 7/14/89 1:1BN:A TAM
4501 FSCC GCBA USEPA CASE#12283 SDG#CAP53

ORIGINAL (Red)

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix Spike - EPA Sample No.: CAP57 Level:(low/med) LOW

76.6

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	15300	0	10900	71	26- 90
2-Chlorophenol	15300	0	12500	82	25-102
1,4-Dichlorobenzene	7640	0	6110	80	28 104
N-Nitroso-di-n-prop.(1)	7640	0	6860	90	41 126
1,2,4-Trichlorobenzene	7640	0	5170	68	38 107
4-Chloro-3-methylphenol	15300	0	13500	88	26 103
Acenaphthene	7640	0	5590	73	31-137
4-Nitrophenol	15300	0	14400	94	11-114
2,4-Dinitrotoluene	7640	0	7410	97 *	28- 89
Pentachlorophenol	15300	0	9330	61	17-109
Pyrene	7640	141	4590	58	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	15300	9880	65	9	35	26- 90
2-Chlorophenol	15300	11300	74	10	50	25-102
1,4-Dichlorobenzene	7660	5370	70	13	27	28 104
N-Nitroso-di-n-prop.(1)	7660	5620	73	21	38	41 126
1,2,4-Trichlorobenzene	7660	4780	62	9	23	38 107
4-Chloro-3-methylphenol	15300	13000	85	3	33	26 103
Acenaphthene	7660	5260	69	6	19	31-137
4-Nitrophenol	15300	13400	88	7	50	11-114
2,4-Dinitrotoluene	7660	7210	94 *	3	47	28- 89
Pentachlorophenol	15300	10900	71	-15	47	17-109
Pyrene	7660	4580	58	0	36	35-142

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 2 out of 22 outside limits

COMMENTS: CAP 57 7/19/89 GPC BN/A DDC
4501 FSCC GCBA USEPA CASE#12283 SDG#CAP53

2E
WATER PESTICIDE SURROGATE RECOVERY

001180

ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

	EPA SAMPLE NO.	S1 (DBC)#	OTHER
01	CAP53	104	0
02	CAP54	96	0
03	CAP56	96	0
04	CP855	101	0
05	CP857	97	0
06	CW767	104	0
07	CW768	110	0
08	CY225	98	0
09	CAP56MS	102	0
10	CAP56MSD	106	0
11	PBLK1	105	0

ADVISORY QC LIMITS (24-154)

S1 (DBC) = Dibutlychlorendate

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

FORM II PEST-1 1/87 Rev.

2F

SOIL PESTICIDE SURROGATE RECOVERY

001181 ORIGINAL (Red)

PFE

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (DBC)#	OTHER
01	CAP55	93	0
02	CAP57	96	0
03	CN721	98	0
04	CN722	103	0
05	CP856	94	0
06	CW766	93	0
07	CAP57MS	96	0
08	CAP57MSD	101	0
09	PBLK2	98	0

ADVISORY QC LIMITS

S1 (DBC) = Dibutlychlorendate (20-150)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

FORM II PEST-2 1/87 Rev.

3E

WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: IT PITTSBURGH Contract: 68-01-7415M 001182 PFE

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix Spike - EPA Sample No.: CAP56

ORIGINAL (Red)

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
gamma-BHC (Lindane)	0.200	0	0.189	95	56-123
Heptachlor	0.200	0	0.212	106	40-131
Aldrin	0.200	0	0.201	101	40-120
Dieldrin	0.500	0	0.490	98	52-126
Endrin	0.500	0	0.598	120	56-121
4,4'-DDT	0.500	0	0.576	115	38-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	0.200	0.188	94	1	15	56-123
Heptachlor	0.200	0.210	105	1	20	40-131
Aldrin	0.200	0.197	99	2	22	40-120
Dieldrin	0.500	0.493	99	-1	18	52-126
Endrin	0.500	0.569	114	5	21	56-121
4,4'-DDT	0.500	0.582	116	-1	27	38-127

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

COMMENTS:

3F

SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

PFE

001183

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

ORIGINAL (Red)

Matrix Spike - EPA Sample No.: CAP57 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
gamma-BHC (Lindane)	61.4	0	56.4	92	46-127
Heptachlor	61.4	0	53.9	88	35-130
Aldrin	61.4	0	53.6	87	34-132
Dieldrin	153	0	142	93	31-134
Endrin	153	0	154	101	42-139
4,4'-DDT	153	0	159	104	23-134

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	61.7	61.1	99	-7	50	46-127
Heptachlor	61.7	58.3	94	-7	31	35-130
Aldrin	61.7	55.3	90	-3	43	34-132
Dieldrin	154	154	100	-7	38	31-134
Endrin	154	168	109	-8	45	42-139
4,4'-DDT	154	173	112	-7	50	23-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

COMMENTS:

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

000265

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

ORIGINAL (Red)

Instrument ID: FINN Calibration Date(s): 06/21/89 06/21/89

Matrix:(soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) PACK

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = 9616 RRF50 = 9617
RRF100= 9615 RRF150= 9614 RRF200= 9613

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD
Chloromethane #	0.713	0.729	0.872	0.874	0.777	0.793	9.7#
Bromomethane	1.041	1.121	1.294	1.561	1.406	1.285	16.4
Vinyl Chloride *	0.906	0.963	1.210	1.225	1.084	1.078	13.3*
Chloroethane	0.622	0.660	0.790	0.767	0.684	0.705	10.1
Methylene Chloride	1.238	1.229	1.346	1.222	1.151	1.237	5.7
Acetone	0.431	0.243	0.339	0.345	0.321	0.336	20.0
Carbon Disulfide	1.797	1.659	2.224	2.299	2.077	2.011	13.7
1,1-Dichloroethene *	1.017	1.037	1.282	1.284	1.153	1.15[illegible]	11.1*
1,1-Dichloroethane #	2.424	2.527	2.734	2.721	2.486	2.57[illegible]	5.5#
1,2-Dichloroethene (total)	1.144	1.188	1.342	1.357	1.240	1.25[illegible]	7.5
Chloroform *	2.669	2.727	2.964	2.022	2.698	2.616	13.5*
1,2-Dichloroethane	1.386	1.393	1.421	1.356	1.315	1.374	2.9
2-Butanone	0.014	0.013	0.016	0.019	0.019	0.016	17.3
1,1,1-Trichloroethane	0.476	0.493	0.502	0.504	0.463	0.488	3.6
Carbon Tetrachloride	0.391	0.390	0.427	0.440	0.400	0.410	5.5
Vinyl Acetate	0.357	0.359	0.324	0.289	0.304	0.327	9.6
Bromodichloromethane	0.543	0.553	0.516	0.505	0.463	0.516	6.9
1,2-Dichloropropane *	0.358	0.341	0.334	0.315	0.304	0.330	6.5*
cis-1,3-Dichloropropene	0.442	0.439	0.438	0.428	0.404	0.430	3.6
Trichloroethene	0.391	0.374	0.384	0.376	0.355	0.376	3.6
Dibromochloromethane	0.435	0.432	0.405	0.390	0.391	0.411	5.3
1,1,2-Trichloroethane	0.254	0.241	0.219	0.199	0.206	0.224	10.4
Benzene	0.771	0.768	0.798	0.734	0.698	0.754	5.1
Trans-1,3-Dichloropropene	0.286	0.277	0.264	0.255	0.257	0.268	5.0
Bromoform #	0.319	0.316	0.279	0.291	0.298	0.301	5.6#
4-Methyl-2-Pentanone	0.196	0.185	0.175	0.172	0.161	0.178	7.5
2-Hexanone	0.156	0.127	0.128	0.172	0.160	0.149	13.5
Tetrachloroethene	0.423	0.408	0.429	0.446	0.406	0.422	3.9
1,1,2,2-Tetrachloroethane #	0.449	0.395	0.347	0.326	0.339	0.371	13.7#
Toluene *	0.695	0.721	0.709	0.626	0.590	0.668	8.6*
Chlorobenzene #	0.835	0.861	0.842	0.838	0.784	0.832	3.4#
Ethylbenzene *	0.510	0.485	0.776	0.445	0.413	0.526	27.5*
Styrene	1.009	0.969	0.608	0.828	0.783	0.839	19.1
Total Xylenes	0.937	0.892	0.892	0.933	0.859	0.903	3.6
Toluene-d8	1.139	1.167	1.210	1.117	1.147	1.156	3.0
BFB	0.812	0.738	0.689	0.715	0.742	0.739	6.2
1,2-Dichloroethane-d4	1.391	1.398	1.521	1.356	1.448	1.423	4.5

VOLATILE ORGANICS INITIAL CALIBRATION DATA

ORIGINAL (Red)

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID: OWA-2 Calibration Date(s): 6/27/89 _____

Matrix: (soil/water) Soil Level: (low/med) LOW Column: (pack/cap) PACK

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = 8176 RRF50 = 8171
RRF100= 8180 RRF150= 8175 RRF200= 8178

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD
Chloromethane	1.809	1.657	1.882	1.757	1.856	1.7922	11.2
Bromomethane							
Vinyl Chloride	0.904	0.6060	0.594	0.757	0.453	0.6628	26.0
Chloroethane							
Methylene Chloride							
Acetone							
Carbon Disulfide							
1,1-Dichloroethene	1.193	1.181	1.228	1.079	1.307	1.1996	6.9
1,1-Dichloroethane	2.684	2.927	2.947	2.627	3.234	2.8378	
1,2-Dichloroethene (total)							
Chloroform	2.943	3.461	3.279	2.[illegible]	3.498	3.2206	9.4
1,2-Dichloroethane							
2-Butanone							
1,1,1-Trichloroethane							
Carbon Tetrachloride							
Vinyl Acetate							
Bromodichloromethane							
1,2-Dichloropropane	0.433	0.527	0.502	0.462	0.588	0.502	11.9
cis-1,3-Dichloropropene							
Trichloroethene							
Dibromochloromethane							
1,1,2-Trichloroethane							
Benzene							
trans-1,3-Dichloropropene							
Bromoform	0.217	0.301	0.295	0.277	0.377	0.293	19.5
4-Methyl-2-Pentanone							
2-Hexanone							
Tetrachloroethene							
1,1,2,2-Tetrachloroethane	0.644	0.673	0.703	0.584	0.816	0.684	12.6
Toluene	0.714	0.874	0.781	0.728	0.904	0.800	10.7
Chlorobenzene	0.911	1.111	0.934	0.886	1.079	0.984	10.5
Ethylbenzene	0.396	0.496	0.425	0.388	0.484	0.438	11.9
Styrene							
Xylene (total)							
Toluene-d8							
Bromofluorobenzene							
1,2-Dichloroethane-d4							

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

000287

ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Instrument ID: FINN Calibration Date(s): 07/15/89 07/15/89

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = 1A10715D RRF50 = 1B10715D
RRF100= 1C10715D RRF150= 1D10715D RRF200= 1E10715D

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	RRF	% RSD
Chloromethane #	0.686	0.660	0.624	0.674	0.517	0.632	10.8#
Bromomethane	1.585	1.597	2.670	2.575	2.057	2.097	24.7
Vinyl Chloride *	1.036	1.039	1.084	1.093	0.893	1.029	7.8*
Chloroethane	0.714	0.675	0.668	0.640	0.500	0.639	12.9
Methylene Chloride	1.422	1.332	1.325	1.246	1.045	1.274	11.2
Acetone	0.693	0.476	0.510	0.474	0.864	0.603	28.4
Carbon Disulfide	2.731	2.781	2.816	2.682	1.974	2.597	13.6
1,1-Dichloroethene *	1.259	1.219	1.184	1.124	0.906	1.138	12.2*
1,1-Dichloroethane #	2.077	2.017	2.016	1.922	1.517	1.910	11.9#
1,2-Dichloroethene (total)	1.387	1.345	1.356	1.311	0.995	1.279	12.6
Chloroform *	2.964	2.882	2.876	2.754	2.222	2.740	10.9*
1,2-Dichloroethane	1.672	1.649	1.714	1.690	1.525	1.650	4.5
2-Butanone	0.030	0.026	0.027	0.028	0.020	0.026	14.5
1,1,1-Trichloroethane	0.653	0.647	0.682	0.640	0.583	0.641	5.6
Carbon Tetrachloride	0.556	0.580	0.615	0.583	0.541	0.575	4.9
Vinyl Acetate	0.214	0.230	0.279	0.312	0.293	0.266	15.7
Bromodichloromethane	0.609	0.623	0.683	0.664	0.623	0.640	4.9
1,2-Dichloropropane *	0.268	0.266	0.287	0.274	0.254	0.270	4.5*
cis-1,3-Dichloropropene	0.387	0.409	0.464	0.464	0.417	0.428	8.1
Trichloroethene	0.473	0.468	0.494	0.462	0.404	0.460	7.3
Dibromochloromethane	0.481	0.504	0.590	0.596	0.604	0.555	10.4
1,1,2-Trichloroethane	0.279	0.281	0.305	0.304	0.313	0.296	5.2
Benzene	0.785	0.764	0.817	0.786	0.672	0.765	7.2
Trans-1,3-Dichloropropene	0.247	0.262	0.319	0.344	0.331	0.301	14.4
Bromoform #	0.281	0.302	0.363	0.385	0.398	0.346	14.9#
4-Methyl-2-Pentanone	0.149	0.148	0.160	0.172	0.175	0.161	7.8
2-Hexanone	0.142	0.142	0.151	0.165	0.116	0.143	12.5
Tetrachloroethene	0.486	0.464	0.477	0.459	0.391	0.455	8.3
1,1,2,2-Tetrachloroethane #	0.321	0.330	0.361	0.420	0.438	0.374	14.1#
Toluene *	0.714	0.671	0.704	0.682	0.567	0.668	8.8*
Chlorobenzene #	0.987	0.947	0.999	0.981	0.834	0.950	7.1#
Ethylbenzene *	0.468	0.454	0.478	0.467	0.385	0.450	8.3*
Styrene	0.873	0.834	0.896	0.845	0.633	0.816	12.9
Total Xylenes	0.546	0.542	0.543	0.522	0.402	0.511	12.1
Toluene-d8	1.086	1.063	1.182	1.142	0.937	1.082	8.6
BFB	0.699	0.688	0.765	0.716	0.546	0.683	12.0
1,2-Dichloroethane-d4	1.674	1.584	1.729	1.610	1.417	1.603	7.4

Low RRF

7A

VOLATILE CONTINUING CALIBRATION CHECK

000318

ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Instrument ID: FINN Calibration date: 07/17/89 Time: 900

Lab File ID: CC10717D Init. Calib. Date(s): 07/15/89 07/15/89

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Chloromethane #	0.632	0.862	-36.4 #
Bromomethane	2.097	1.837	12.4
Vinyl Chloride *	1.029	1.179	-14.6 *
Chloroethane	0.639	0.722	-13.0
Methylene Chloride	1.274	1.398	-9.7
Acetone	0.603	1.359	-99.9
Carbon Disulfide	2.597	2.690	-3.6
1,1-Dichloroethene *	1.138	1.191	-4.7 *
1,1-Dichloroethane #	1.910	1.903	0.4 #
1,2-Dichloroethene (total)	1.279	1.270	0.7
Chloroform *	2.740	2.704	1.3 *
1,2-Dichloroethane	1.650	1.549	6.1
2-Butanone	0.026	0.026	0.0
1,1,1-Trichloroethane	0.641	0.650	-1.4
Carbon Tetrachloride	0.575	0.584	-1.6
Vinyl Acetate	0.266	0.219	17.7
Bromodichloromethane	0.640	0.601	6.1
1,2-Dichloropropane *	0.270	0.258	4.4 *
cis-1,3-Dichloropropene	0.428	0.392	8.4
Trichloroethene	0.460	0.438	4.8
Dibromochloromethane	0.555	0.502	9.6
1,1,2-Trichloroethane	0.296	0.278	6.1
Benzene	0.765	0.750	2.0
Trans-1,3-Dichloropropene	0.301	0.253	16.0
Bromoform #	0.346	0.299	13.6 #
4-Methyl-2-Pentanone	0.161	0.130	19.2
2-Hexanone	0.143	0.116	18.9
Tetrachloroethene	0.455	0.450	1.1
1,1,2,2-Tetrachloroethane #	0.374	0.353	5.6 #
Toluene *	0.668	0.643	3.7 *
Chlorobenzene #	0.950	0.905	4.7 #
Ethylbenzene *	0.450	0.447	0.7 *
Styrene	0.816	0.773	5.3
Total Xylenes	0.511	0.506	1.0
Toluene-d8	1.082	1.101	-1.8
BFB	0.683	0.674	1.3
1,2-Dichloroethane-d4	1.603	1.621	-1.1

Low RRF

7A

VOLATILE CONTINUING CALIBRATION CHECK

000313 ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Instrument ID: FINN Calibration date: 07/16/89 Time: 0910

Lab File ID: CC10716D Init. Calib. Date(s): 07/15/89 07/15/89

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Chloromethane #	0.632	0.704	-11.4 #
Bromomethane	2.097	2.325	-10.9
Vinyl Chloride *	1.029	1.263	-22.7 *
Chloroethane	0.639	0.756	-18.3
Methylene Chloride	1.274	1.534	-20.4
Acetone	0.603	1.244	-99.9
Carbon Disulfide	2.597	2.734	-5.3
1,1-Dichloroethene *	1.138	1.294	-13.7 *
1,1-Dichloroethane #	1.910	2.185	-14.4 #
1,2-Dichloroethene (total)	1.279	1.413	-10.5
Chloroform *	2.740	3.203	-16.9 *
1,2-Dichloroethane	1.650	2.012	-21.9
2-Butanone	0.026	0.026	0.0
1,1,1-Trichloroethane	0.641	0.784	-22.3
Carbon Tetrachloride	0.575	0.709	-23.3
Vinyl Acetate	0.266	0.350	-31.6
Bromodichloromethane	0.640	0.803	-25.5
1,2-Dichloropropane *	0.270	0.329	-21.8 *
cis-1,3-Dichloropropene	0.428	0.522	-22.0
Trichloroethene	0.460	0.531	-15.4
Dibromochloromethane	0.555	0.691	-24.5
1,1,2-Trichloroethane	0.296	0.384	-29.7
Benzene	0.765	0.906	-18.4
Trans-1,3-Dichloropropene	0.301	0.365	-21.3
Bromoform #	0.346	0.450	-30.1 #
4-Methyl-2-Pentanone	0.161	0.203	-26.1
2-Hexanone	0.143	0.125	12.6
Tetrachloroethene	0.455	0.528	-16.0
1,1,2,2-Tetrachloroethane #	0.374	0.532	-42.2 #
Toluene *	0.668	0.767	-14.8 *
Chlorobenzene #	0.950	1.105	-16.3 #
Ethylbenzene *	0.450	0.541	-20.2 *
Styrene	0.816	0.975	-19.5
Total Xylenes	0.511	0.617	-20.7
Toluene-d8	1.082	0.948	12.4
BFB	0.683	0.605	11.4
1,2-Dichloroethane-d4	1.603	1.477	7.9

Low RRF

7A

VOLATILE CONTINUING CALIBRATION CHECK

000308

ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Instrument ID: FINN Calibration date: 07/14/89 Time: 849

Lab File ID: CC10714D Init. Calib. Date(s): 06/21/89 06/21/89

Matrix:(soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND		RRF	RRF50	%D	
Chloromethane	#	0.793	0.865	-9.1	#
Bromomethane		1.285	1.518	-18.1	
Vinyl Chloride	*	1.078	1.126	-4.5	*
Chloroethane		0.705	0.672	4.7	
Methylene Chloride		1.237	1.370	-10.8	
Acetone		0.336	0.429	-27.7	
Carbon Disulfide		2.011	2.968	-47.6	
1,1-Dichloroethene	*	1.155	1.266	-9.6	*
1,1-Dichloroethane	#	2.578	2.033	21.1	#
1,2-Dichloroethene (total)		1.254	1.320	-5.3	
Chloroform	*	2.616	2.759	-5.5	*
1,2-Dichloroethane		1.374	1.641	-19.4	
2-Butanone		0.016	0.023	-43.8	
1,1,1-Trichloroethane		0.488	0.627	-28.5	
Carbon Tetrachloride		0.410	0.610	-48.8	
Vinyl Acetate		0.327	0.261	20.2	
Bromodichloromethane		0.516	0.585	-13.4	
1,2-Dichloropropane	*	0.330	0.268	18.8	*
cis-1,3-Dichloropropene		0.430	0.398	7.4	
Trichloroethene		0.376	0.498	-32.4	
Dibromochloromethane		0.411	0.564	-37.2	
1,1,2-Trichloroethane		0.224	0.270	-20.5	
Benzene		0.754	0.728	3.4	
Trans-1,3-Dichloropropene		0.268	0.269	-0.4	
Bromoform	#	0.301	0.340	-13.0	#
4-Methyl-2-Pentanone		0.178	0.157	11.8	
2-Hexanone		0.149	0.147	1.3	
Tetrachloroethene		0.422	0.498	-18.0	
1,1,2,2-Tetrachloroethane	#	0.371	0.325	12.4	#
Toluene	*	0.668	0.677	-1.3	*
Chlorobenzene	#	0.832	1.013	-21.8	#
Ethylbenzene	*	0.526	0.472	10.3	*
Styrene		0.839	0.796	5.1	
Total Xylenes		0.903	0.522	42.2	
Toluene-d8		1.156	1.037	10.3	
BFB		0.739	0.644	12.9	
1,2-Dichloroethane-d4		1.423	1.537	-8.0	

Low RRF

000726

ORIGINAL (Red)

No	Name
48	C550 ACENAPHTHENE CCC
49	C555 2,4-DINITROPHENOL
50	C560 4-NITROPHENOL

sample CP855: 7/28/89 4:34 a.m.

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	570	9:30	1	1.000	A BB	19578.	40.000 UG/L	7.72
2	136	766	12:46	2	1.000	A BB	48162.	40.000 UG/L	7.72
3	164	1039	17:19	3	1.000	A BB	29424.	40.000 UG/L	7.72
4	188	1269	21:09	4	1.000	A BB	50821.	40.000 UG/L	7.72
5	240	1688	28:08	5	1.000	A BB	27303.	40.000 UG/L	7.72
6	264	2015	33:35	6	1.000	A BB	14493.	40.000 UG/L	7.72
7	112	385	6:25	1	0.675	A BB	34316.	62.252 UG/L	12.02
8	99	526	8:46	1	0.923	A BB	12512.	25.144 UG/L	4.85
9	82	662	11:02	2	0.864	A BB	14734.	26.938 UG/L	5.20
10	172	935	15:35	3	0.900	A BB	29087.	29.392 UG/L	5.67
11	330	1164	19:24	3	1.120	A BB	13152.	81.380 UG/L	15.71
12	244	1517	25:17	5	0.899	A BB	43984.	49.572 UG/L	9.57
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	146	565	9:25	1	0.991	A BB	792.	1.013 UG/L	0.2[illegible]
19	NOT FOUND								
20	NOT FOUND								

RT matches 1,3- not 1,4-dichlorobenzene since RT is before d_4-1,4-dichlorobenzene

001073

No	Name
48	C550 ACENAPHTHENE CCC
49	C555 2,4-DINITROPHENOL
50	C560 4-NITROPHENOL

7/27 23:15 standard

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	574	9:34	1	1.000	A BB	17356.	40.000 UG/L	1.02
2	136	766	12:46	2	1.000	A BB	57452.	40.000 UG/L	1.02
3	164	1039	17:19	3	1.000	A BB	32011.	40.000 UG/L	1.02
4	188	1268	21:08	4	1.000	A BV	55605.	40.000 UG/L	1.02
5	240	1686	28:06	5	1.000	A BB	35918.	40.000 UG/L	1.02
6	264	2011	33:31	6	1.000	A BB	19084.	40.000 UG/L	1.02
7	112	393	6:33	1	0.685	A BB	24434.	50.000 UG/L	1.27
8	99	525	8:45	1	0.915	A BB	22058.	50.000 UG/L	1.27
9	82	660	11:00	2	0.862	A BB	32623.	50.000 UG/L	1.27
10	172	934	15:34	3	0.899	A BB	53832.	50.000 UG/L	1.27
11	330	1164	19:24	3	1.120	A BB	8791.	50.000 UG/L	1.27
12	244	1517	25:17	5	0.900	A VV	58362.	50.000 UG/L	1.27
13	93	539	8:59	1	0.939	A VB	34186.	50.000 UG/L	1.27
14	94	527	8:47	1	0.918	A BB	34796.	50.000 UG/L	1.27
15	93	539	8:59	1	0.939	A VB	34186.	50.000 UG/L	1.27
16	128	547	9:07	1	0.953	A BB	28777.	50.000 UG/L	1.27
17	146	568	9:28	1	0.990	A BV	36029.	50.000 UG/L	1.27
18	146	576	9:36	1	1.003	A VB	34658.	50.000 UG/L	1.27
19	108	615	10:15	1	1.071	A BB	22290.	50.000 UG/L	1.27
20	146	604	10:04	1	1.052	A BB	29718.	50.000 UG/L	1.27
21	108	615	10:15	1	1.071	A BB	22290.	50.000 UG/L	1.27
22	45	620	10:20	1	1.080	A BB	46095.	50.000 UG/L	1.27
23	108	639	10:39	1	1.113	A BB	20223.	50.000 UG/L	1.27
24	70	640	10:40	1	1.115	A BB	20125.	50.000 UG/L	1.27
25	117	650	10:50	1	1.132	A BB	15360.	50.000 UG/L	1.27
26	77	662	11:02	2	0.864	A BB	32530.	50.000 UG/L	1.27

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

000431

PFE ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Lab File ID (Standard): 4589 Date Analyzed: 07/27/89

Instrument ID: 4501 Time Analyzed: 2315

List of the Samples affected by low sensitivity of instrument for late eluters

	IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
12 HOUR STD	55600	21.14	35900	28.11	19100	33.52
UPPER LIMIT	111200		71800		38200	
LOWER LIMIT	27800		17950		9550	
EPA SAMPLE NO.						
01 CAP53	50600	21.19	25700	28.16	12800	33.52
02 CAP54	62000	21.14	34000	28.22	21100	33.67
03 CAP56	51200	21.19	25200	28.16	11600	33.66
04 CP855	50800	21.15	27300	28.14	14500	33.59
05 CP857	66200	21.15	38700	28.12	20100	33.57
06 CW767	65200	21.17	35800	28.21	19300	33.67
07 CW768	66700	21.15	37200	28.14	16900	33.57
08 CY225	54800	21.15	29100	28.14	13900	33.61
09 CAP56MS	74000	21.14	42700	28.14	22900	33.59
10 CAP56MSD	62900	21.17	33600	28.16	18400	33.61
11 SBLK2	47800	21.15	30000	28.29	16400	33.74

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

FORM VIII SV-2 1/87 Rev.

ORIGI (Red)

Marginal Sensitivity – this page and the next 7 pages

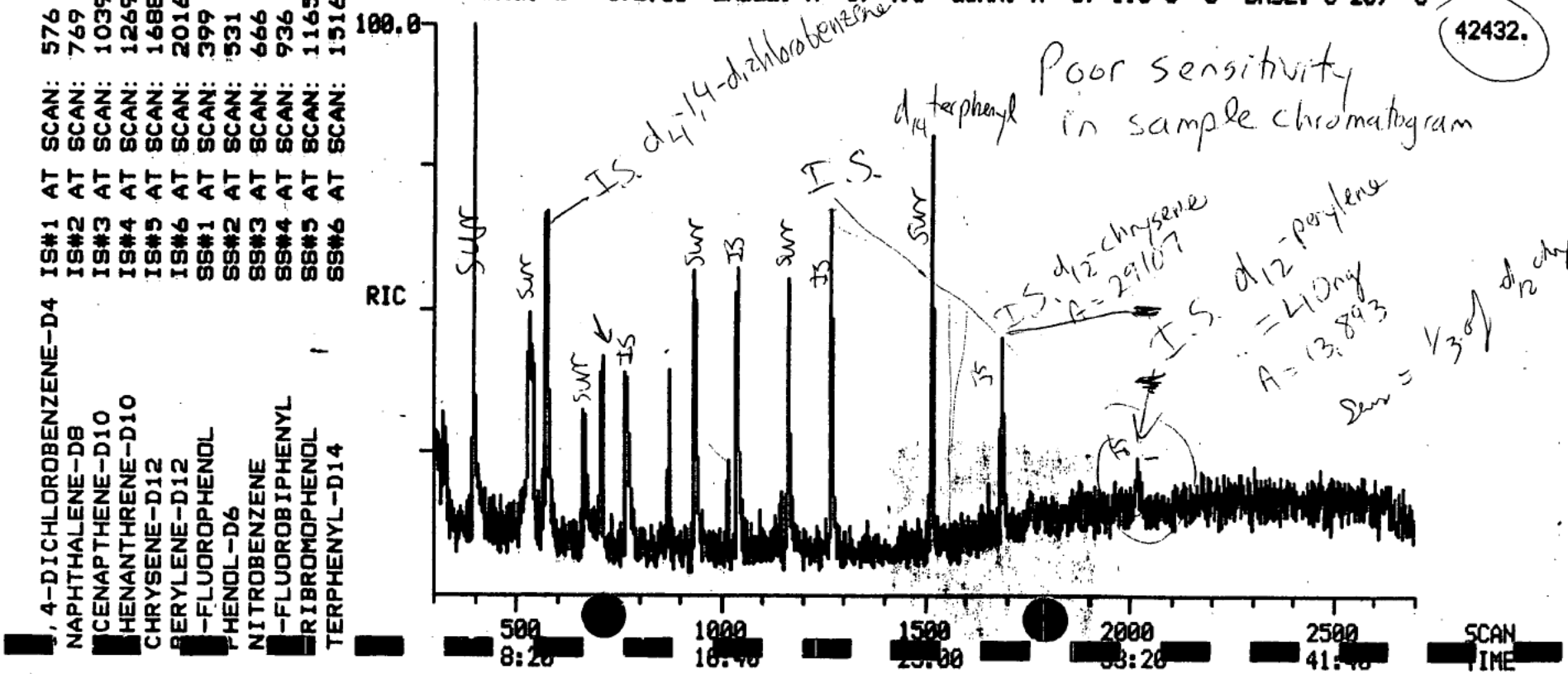
RIC
07/28/89 0:06:00
SAMPLE: CY 225 7/14/89 1:1BN:A TAM
CONDS.: 4501 FSCC GCBA USEPA CASE#12283 SDG#CAP53
RANGE: G 1,2700 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 4590 #1516
CALI: 4590 #5

SCANS 300 TO 2700

42432.

Poor sensitivity in sample chromatogram



1,4-DICHLOROBENZENE-D4	IS#1	AT SCAN:	576
NAPHTHALENE-D8	IS#2	AT SCAN:	769
ACENAPTHENE-D10	IS#3	AT SCAN:	1039
PHENANTHRENE-D10	IS#4	AT SCAN:	1269
CHRYSENE-D12	IS#5	AT SCAN:	1688
PERYLENE-D12	IS#6	AT SCAN:	2016
2-FLUOROPHENOL	SS#1	AT SCAN:	399
PHENOL-D6	SS#2	AT SCAN:	531
NITROBENZENE	SS#3	AT SCAN:	666
2-FLUOROBIPHENYL	SS#4	AT SCAN:	936
TRIBROMOPHENOL	SS#5	AT SCAN:	1165
TERPHENYL-D14	SS#6	AT SCAN:	1516

966000

ORIGINAL (Red)

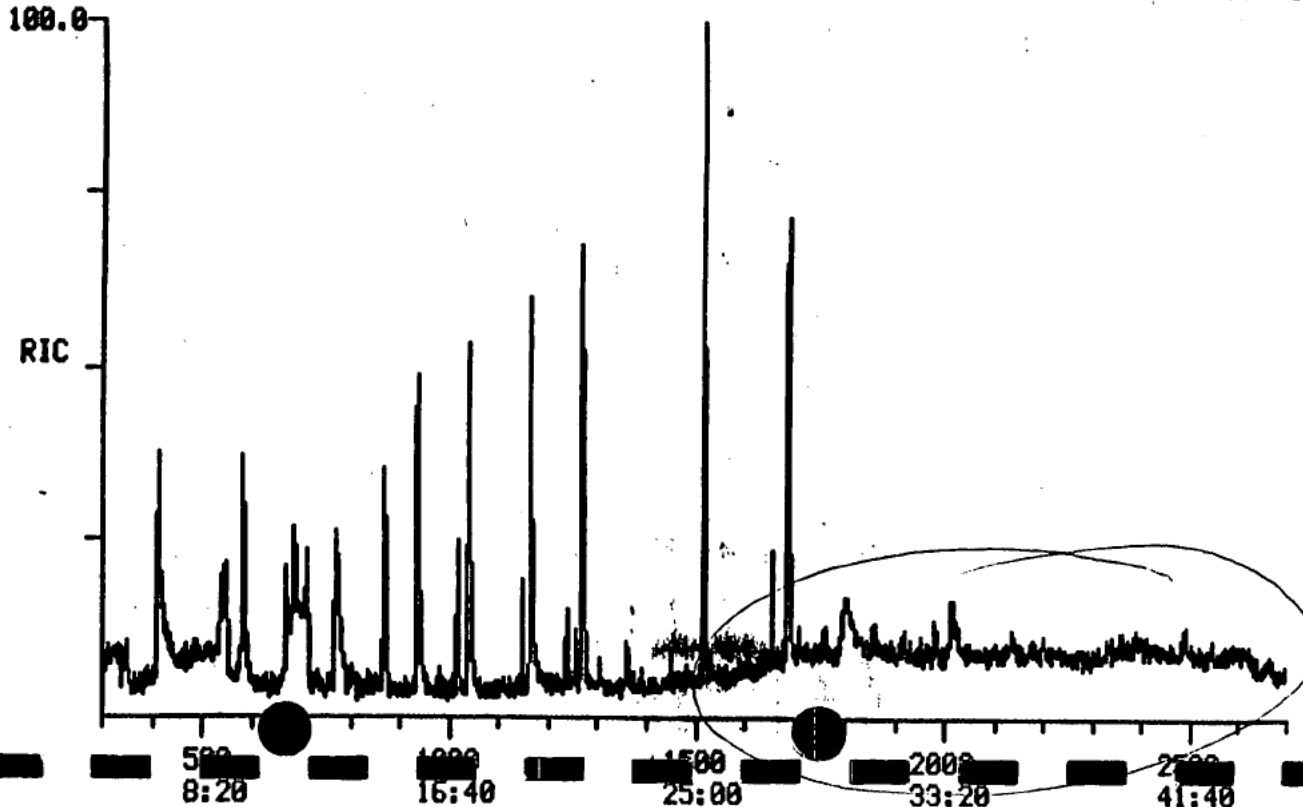
RIC
07/28/89 1:10:00
SAMPLE: CW 768 7/14/89 1:1BN:A TAM
CONDS.: 4501 FSCC GCBA USEPA CASE#12283 SDG#CAP53
RANGE: G 1,2700 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 4591 #1517
CALI: 4591 #5

SCANS 300 TO 2700

53312.

1,4-DICHLOROBENZENE-D4 IS#1 AT SCAN: 583
NAPHTHALENE-D8 IS#2 AT SCAN: 771
ACENAPTHENE-D10 IS#3 AT SCAN: 1041
PHENANTHRENE-D10 IS#4 AT SCAN: 1269
CHRYSENE-D12 IS#5 AT SCAN: 1688
PERYLENE-D12 IS#6 AT SCAN: 2014
2-FLUOROPHENOL SS#1 AT SCAN: 414
PHENOL-D6 SS#2 AT SCAN: 540
NITROBENZENE SS#3 AT SCAN: 670
2-FLUOROBIPHENYL SS#4 AT SCAN: 937
TRIBROMOPHENOL SS#5 AT SCAN: 1165
TERPHENYL-D14 SS#6 AT SCAN: 1517



000952

ORIGINAL (Red)

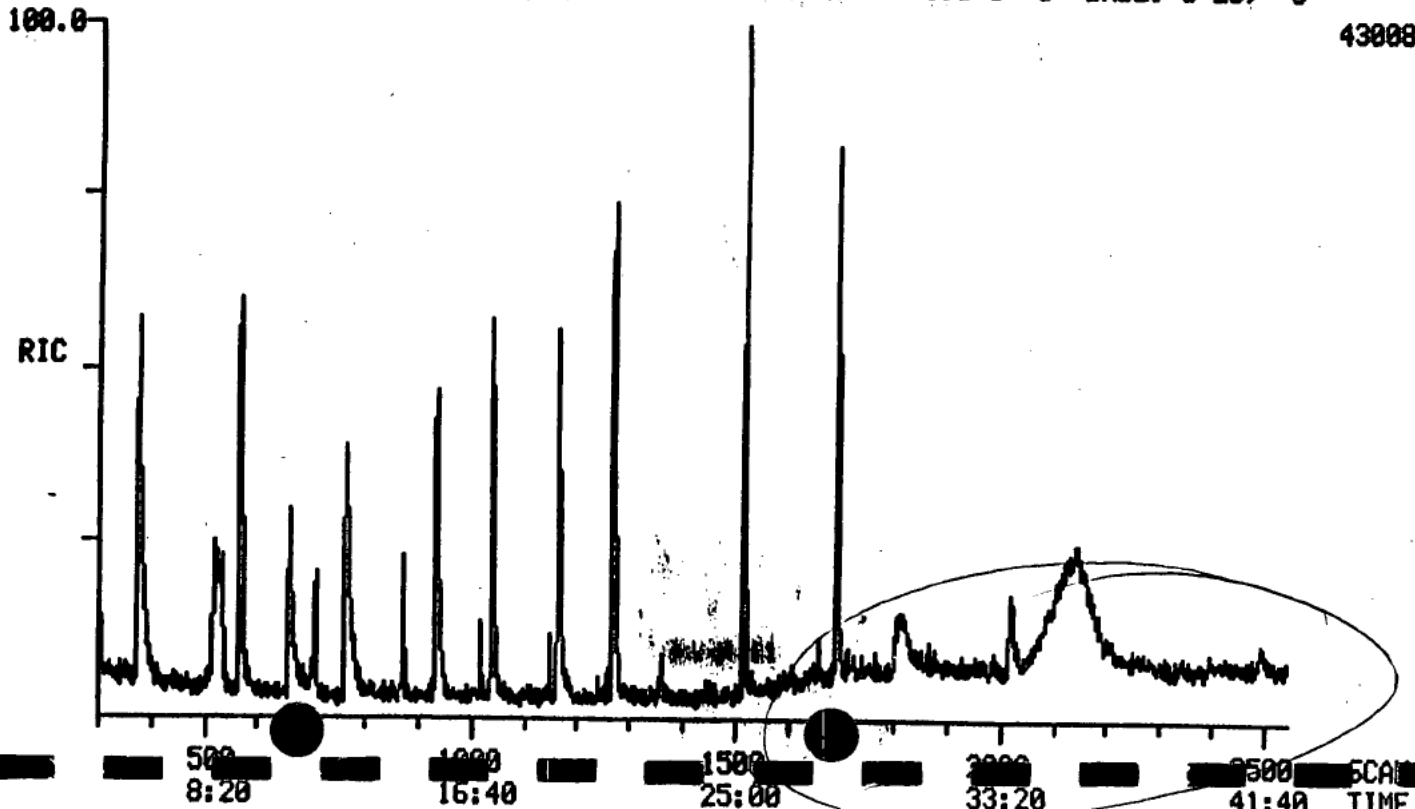
RIC
07/28/89 7:02:00
SAMPLE: CW 767 7/14/89 1:1BN:A DDC
CONDS.: 4501 FSCC GCBA USEPA CASE#12283 SDG#CAP53
RANGE: G 1,2546 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 4598 #1518
CALI: 4598 #5

SCANS 300 TO 2546

43008.

1,4-DICHLOROBENZENE-D4 IS#1 AT SCAN: 568
NAPHTHALENE-D8 IS#2 AT SCAN: 766
ACENAPTHENE-D10 IS#3 AT SCAN: 1040
PHENANTHRENE-D10 IS#4 AT SCAN: 1270
CHRYSENE-D12 IS#5 AT SCAN: 1692
PERYLENE-D12 IS#6 AT SCAN: 2020
2-FLUOROPHENOL SS#1 AT SCAN: 376
PHENOL-D6 SS#2 AT SCAN: 520
NITROBENZENE SS#3 AT SCAN: 660
2-FLUOROBIPHENYL SS#4 AT SCAN: 936
TRIBROMOPHENOL SS#5 AT SCAN: 1166
TERPHENYL-D14 SS#6 AT SCAN: 1518



000914

PFF ORIGINAL (Red)

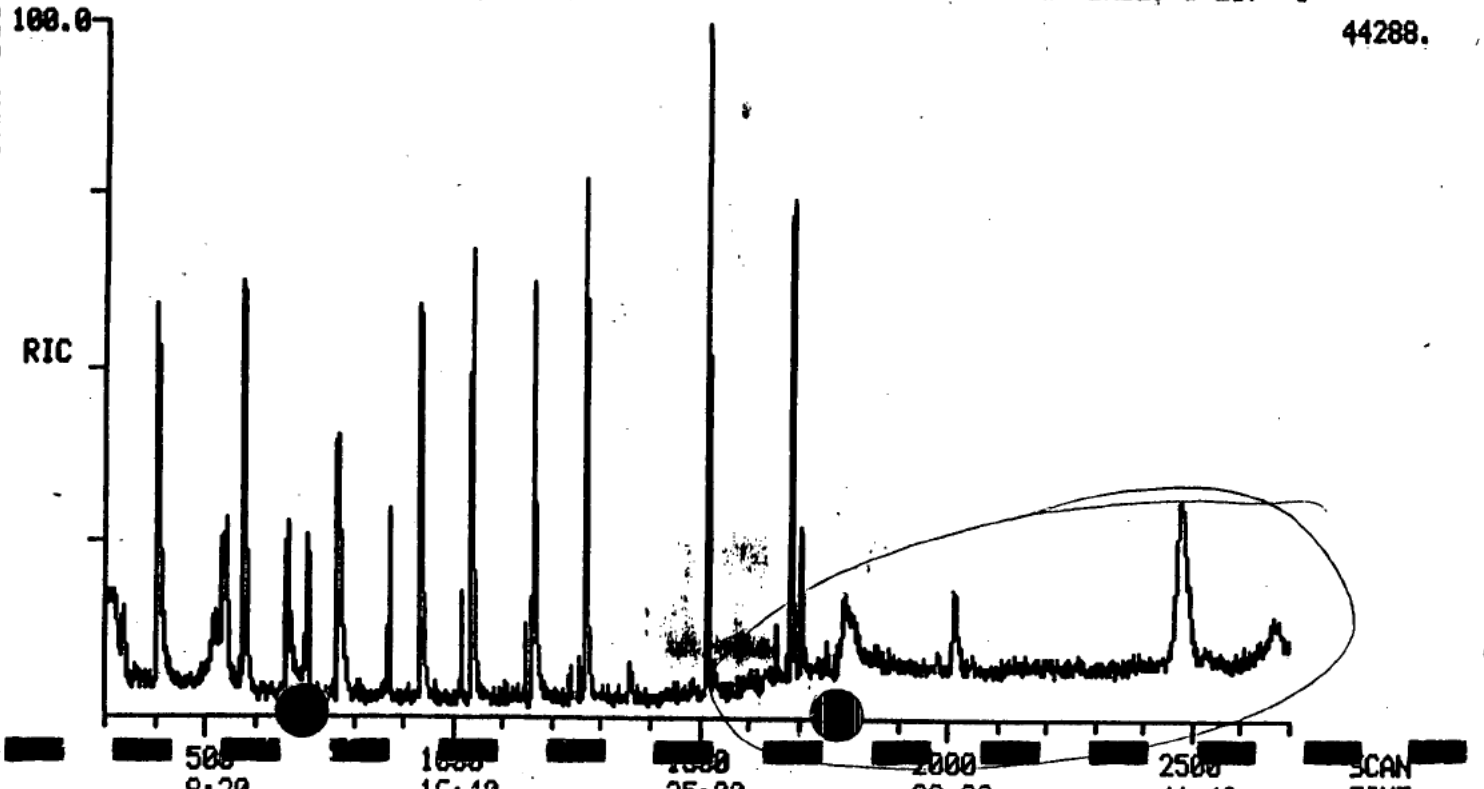
RIC
07/28/89 3:44:00
SAMPLE: CP 857 7/14/89 1:1BN:A TAM
CONDS.: 4501 FSCC GCBA USEPA CASE#12283 SDG#CAP53
RANGE: G 1,2700 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 4594 #1517
CALI: 4594 #5

SCANS 300 TO 2700

44288.

1,4-DICHLOROBENZENE-D4 IS#1 AT SCAN: 580
NAPHTHALENE-D8 IS#2 AT SCAN: 769
ACENAPTHENE-D10 IS#3 AT SCAN: 1039
PHENANTHRENE-D10 IS#4 AT SCAN: 1269
CHRYSENE-D12 IS#5 AT SCAN: 1687
PERYLENE-D12 IS#6 AT SCAN: 2014
2-FLUOROPHENOL SS#1 AT SCAN: 407
PHENOL-D6 SS#2 AT SCAN: 536
NITROBENZENE SS#3 AT SCAN: 667
2-FLUOROBIPHENYL SS#4 AT SCAN: 936
TRIBROMOPHENOL SS#5 AT SCAN: 1165
TERPHENYL-D14 SS#6 AT SCAN: 1517



SD8000

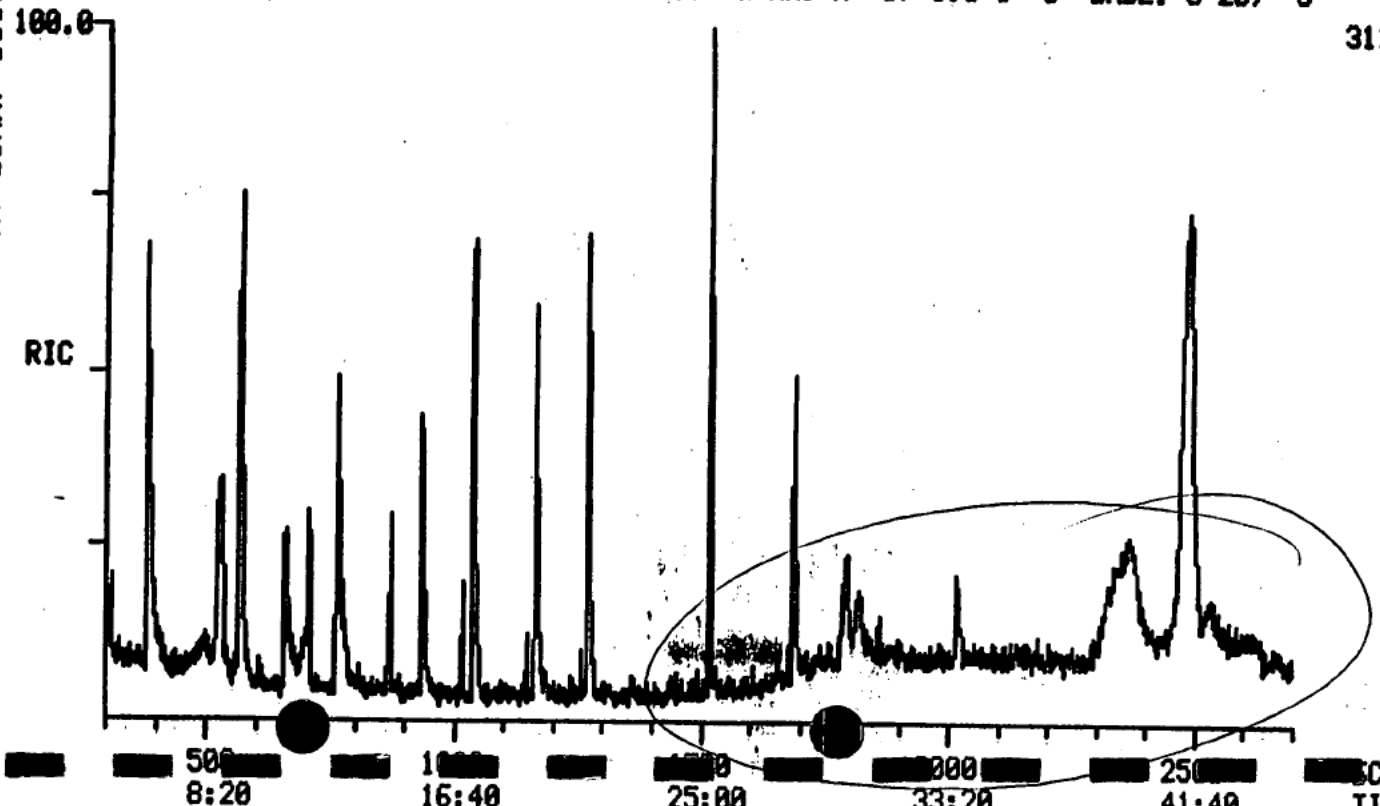
ORIGINAL (Red)

RIC
07/28/89 4:34:00
SAMPLE: CP 855 7/14/89 1:1BN:A TAM
CONDS.: 4501 FSCC GCBA USEPA CASE#12283 SDG#CAP53
RANGE: G 1,2700 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 4595 #1517
CALI: 4595 #5

SCANS 300 TO 2700

31104.



4-DICHLOROBENZENE-D4 IS#1 AT SCAN: 570
NAPHTHALENE-D8 IS#2 AT SCAN: 766
ACENAPTHENE-D10 IS#3 AT SCAN: 1039
PHENANTHRENE-D10 IS#4 AT SCAN: 1269
CHRYSENE-D12 IS#5 AT SCAN: 1688
PERYLENE-D12 IS#6 AT SCAN: 2015
2-FLUOROPHENOL SS#1 AT SCAN: 385
PHENOL-D6 SS#2 AT SCAN: 526
NITROBENZENE SS#3 AT SCAN: 662
2-FLUOROBIPHENYL SS#4 AT SCAN: 935
TRIBROMOPHENOL SS#5 AT SCAN: 1165
TERPHENYL-D14 SS#6 AT SCAN: 1517

000724

ORIGINAL (Red)

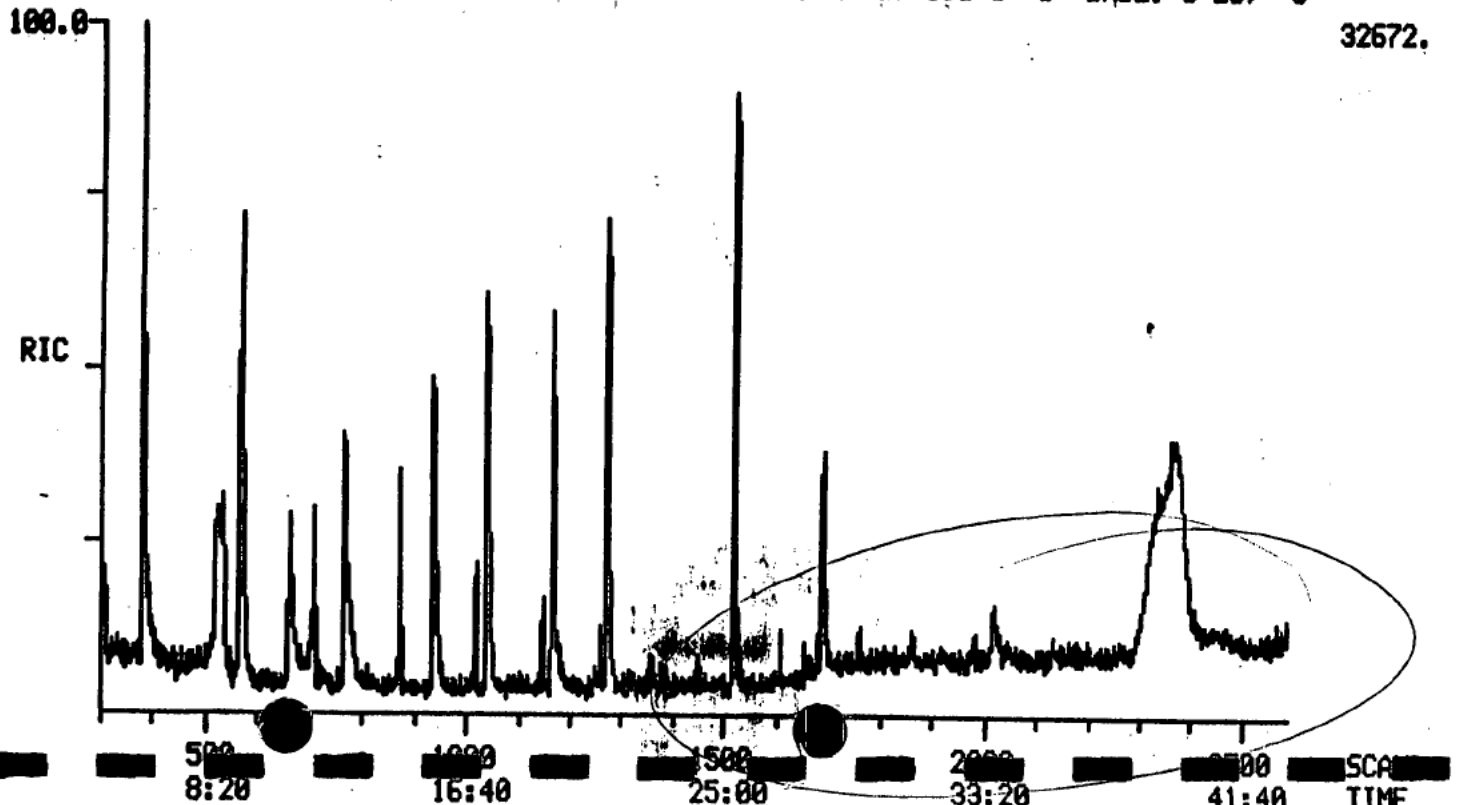
RIC
07/28/89 5:23:00
SAMPLE: CAP 56 7/14/89 1:1BN:A TAM
CONDS.: 4501 FSCC GCBA USEPA CASE#12283 SDG#CAP53
RANGE: G 1,2588 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 4596 #1518
CALI: 4596 #5

SCANS 300 TO 2588

32672.

1,4-DICHLOROBENZENE-D4 IS#1 AT SCAN: 568
NAPHTHALENE-D8 IS#2 AT SCAN: 767
ACENAPTHENE-D10 IS#3 AT SCAN: 1040
PHENANTHRENE-D10 IS#4 AT SCAN: 1271
CHRYSENE-D12 IS#5 AT SCAN: 1689
PERYLENE-D12 IS#6 AT SCAN: 2019
2-FLUOROPHENOL SS#1 AT SCAN: 380
PHENOL-D6 SS#2 AT SCAN: 521
NITROBENZENE SS#3 AT SCAN: 662
2-FLUOROBIPHENYL SS#4 AT SCAN: 937
TRIBROMOPHENOL SS#5 AT SCAN: 1167
TERPHENYL-D14 SS#6 AT SCAN: 1518



000547

ORIGINAL (Red)

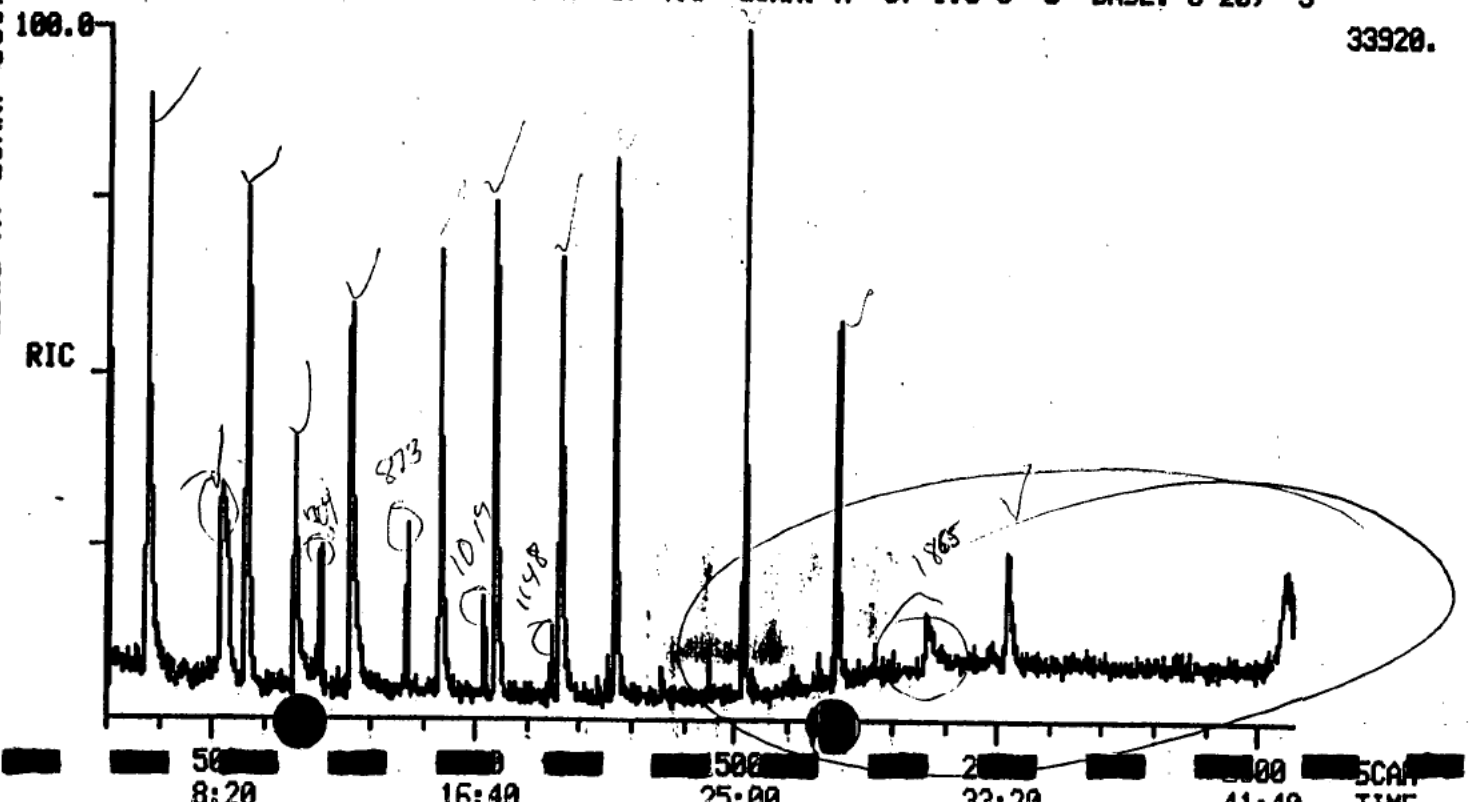
RIC
07/28/89 7:50:00
SAMPLE: CAP 54 7/14/89 1:1BN:A DDC
CONDS.: 4501 FSCC GCBA USEPA CASE#12283 SDG#CAP53
RANGE: G 1,2570 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 4599 #1517
CALI: 4599 #5

SCANS 300 TO 2570

33920.

1,4-DICHLOROBENZENE-D4 IS#1 AT SCAN: 567
APHTHALENE-D8 IS#2 AT SCAN: 765
ENAPTHENE-D10 IS#3 AT SCAN: 1038
ENANTHRENE-D10 IS#4 AT SCAN: 1268
CHRYSENE-D12 IS#5 AT SCAN: 1693
RYLENE-D12 IS#6 AT SCAN: 2020
FLUOROPHENOL SS#1 AT SCAN: 378
PHENOL-D6 SS#2 AT SCAN: 520
NITROBENZENE SS#3 AT SCAN: 659
FLUOROBIPHENYL SS#4 AT SCAN: 935
TRIBROMOPHENOL SS#5 AT SCAN: 1164
TERPHENYL-D14 SS#6 AT SCAN: 1317



000482

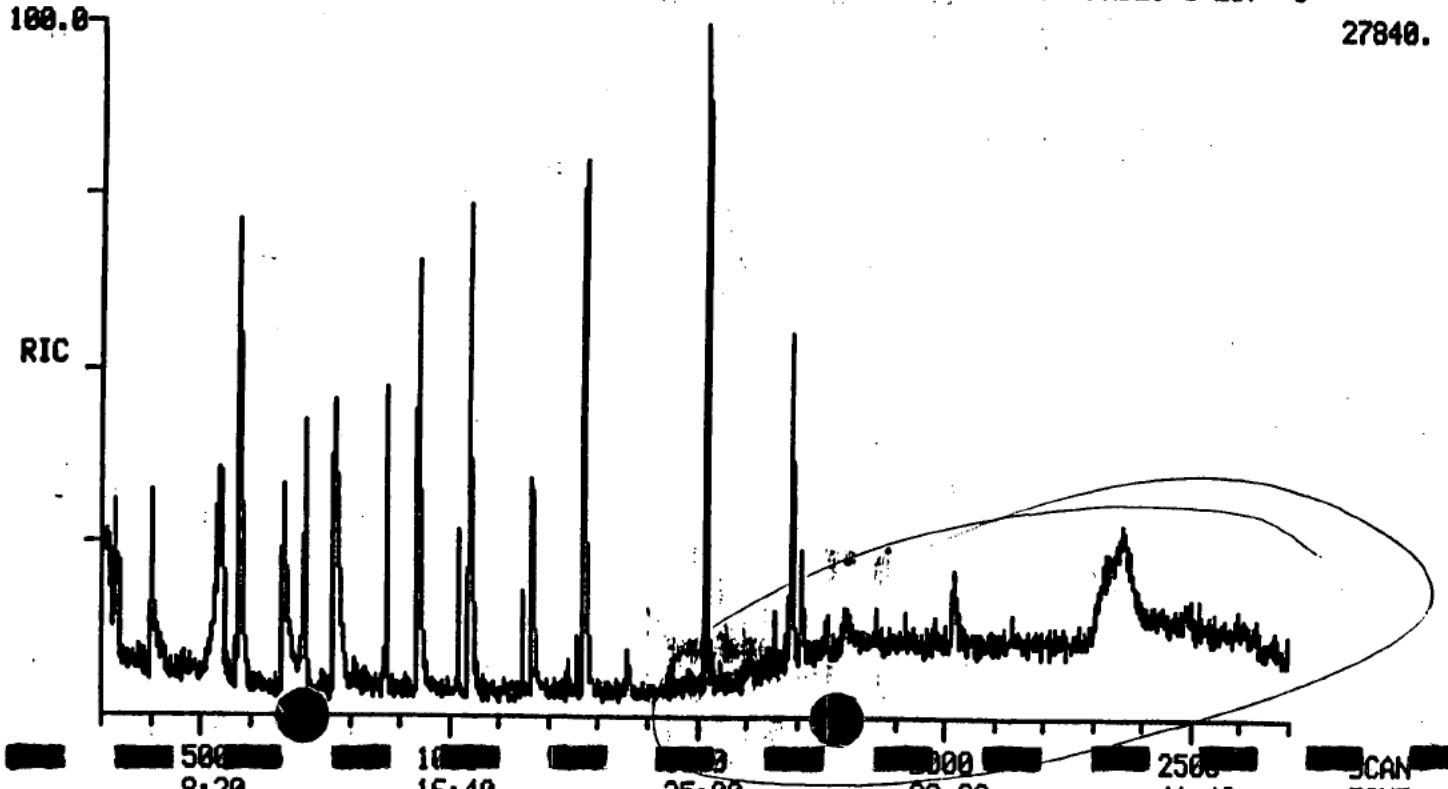
ORIGINAL (Red)

RIC
07/28/89 2:51:00
SAMPLE: CAP 53 7/14/89 1:1BN:A TAM
CONDS.: 4501 FSCC GCBA USEPA CASE#12283 SDG#CAP53
RANGE: G 1,2700 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 4593 #1518
CALI: 4593 #5

SCANS 300 TO 2700

27840.



4-DICHLOROBENZENE-D4 IS#1 AT SCAN: 579
NAPHTHALENE-D8 IS#2 AT SCAN: 770
ENAPTHENE-D10 IS#3 AT SCAN: 1041
ENANTHRENE-D10 IS#4 AT SCAN: 1271
CHRYSENE-D12 IS#5 AT SCAN: 1689
PERYLENE-D12 IS#6 AT SCAN: 2017
FLUOROPHENOL SS#1 AT SCAN: 404
PHENOL-D6 SS#2 AT SCAN: 542
NITROBENZENE SS#3 AT SCAN: 668
FLUOROBIPHENYL SS#4 AT SCAN: 938
IBROMOPHENOL SS#5 AT SCAN: 1168
TERPHENYL-D14 SS#6 AT SCAN: 1518

000431

ORIGINAL
(Red)

APPENDIX B

PROJECT NAME: Plasti-Seal
TDD NO.: F3-8906-08

EPA SITE NO.: PA 272
REGION: 3

ORIGINAL (Red)

SUPPORT DOCUMENTATION FOR THE REVIEW OF INORGANIC ANALYTICAL DATA PACKAGE

CASE/SAS NO.: 12283
TYPE OF ANALYSIS: Metals
CONTRACT LABORATORY: NET Mid-Atlantic
APPLICABLE IFB OR SOW: 7/87
REVIEWER: [redacted] Not responsive due to revised scope
REVIEW DATE: 1/29/90

APPLICABLE SAMPLE NO's.: MCBX40 through MCBX50
MCN534, MCR535, MCP499, MCP500
MCQ263, MCQ264, MCY312, MCY313

THE FOLLOWING TABLE INDICATES AREAS WHICH WERE EXAMINED IN DETAIL, THE IDENTIFIED PROBLEM AREAS, AND SUPPORT DOCUMENTATION ATTACHMENTS:

	AREAS EXAMINED IN DETAIL — CHECK(✓) IF YES OR FOOTNOTE LETTER FOR COMMENTS BELOW					PROBLEM AREAS IDENTIFIED — CHECK(✓) IF YES OR FOOTNOTE NUMBER FOR COMMENTS BELOW					SUPPORT DOCUMENTATION ATTACHMENTS — CHECK(✓) IF YES OR IDENTIFY ATTACHMENT NO.				
	ALL APPLICABLE ANALYSES	ICP OR A.A. METALS	FURNACE METALS	COLD VAPOR MERCURY	CYANIDE	ALL APPLICABLE ANALYSES	ICP OR A.A. METALS	FURNACE METALS	COLD VAPOR MERCURY	CYANIDE	ALL APPLICABLE ANALYSES	ICP OR A.A. METALS	FURNACE METALS	COLD VAPOR MERCURY	CYANIDE
HOLDING TIMES	✓									✓	✓				
BLANK ANALYSIS RESULTS	✓					✓					✓				
MATRIX SPIKES (PRE-DIGESTION)	✓						✓	✓			✓				
DUPLICATES	✓						✓				✓				
QUANTITATION OF RESULTS	✓														
DETECTION LIMITS/SENSITIVITY	✓														
INITIAL CALIBRATIONS	✓														
CONTINUING CALIBRATIONS	✓														
LABORATORY CONTROL STANDARDS	✓										✓				
ICP LINEAR RANGE ANALYSIS	✓														
ICP INTERFERENCE CHECKS	✓														
ICP SERIAL DILUTIONS	✓						✓				✓				
GFAA POST-DIGESTION SPIKES	✓										✓				
GFAA DUPLICATE BURNS	✓														
GFAA STANDARD ADDITIONS	✓										✓				
OTHERS	✓														

COMMENTS:

BLANK ANALYSIS RESULTS

TASK	TYPE	CONC	MATRIX	SAMPLE #	SOURCE OF H_2O	CONTAMINANTS (CONCENTRATION / DETECTION LIMIT	
Metals	Initial Cal.					None	ORIGINAL (Red)
	Continuing Cal.					Sb 50 ug/L Fe 35 ug/L	* *
	Prep.					None	
	Field (solids aqueous)			mcp499		Sb 21 ug/L Ca 218 Pb 3 K 113 Na 779	 * * * *
	Filtered			mcp500		Sb 46 ug/L Ca 174 Mg 33 Na 316	 *

LABORATORY REPORTED FIELD BLANK DATA IS COMPARED WITH THE SAMPLE DATA IN A TABULATION FORM WITHI SAMPLE ANALYTICAL DATA SUMMARY.

COMMENTS:

(1) RESULT REPORTED BY LABORATORY AND CONFIRMED BY REVIEWER.

(2) RESULT INFERRED FROM RAW DATA

* = highest contamination level for element

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3
BLANKS

ORIGINAL (Red)

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	16.0	U	16.0	U	16.0	U	16.0	U	16.000	U	P
Antimony	16.0	U	17.0	B	34.0	B	50.0	B	16.000	U	P
Arsenic	4.0	U	4.0	U	4.0	U	4.0	U	4.000	U	F
Barium	4.0	U	4.0	U	4.0	U	4.0	U	4.000	U	P
Beryllium	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Cadmium	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	P
Calcium	35.0	U	35.0	U	35.0	U	35.0	U	35.000	U	P
Chromium	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Cobalt	5.0	U	5.0	U	5.0	U	5.0	U	5.000	U	P
Copper	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Iron	32.0	U	32.0	U	32.0	U	35.0	B	32.000	U	P
Lead	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	F
Magnesium	28.0	U	28.0	U	28.0	U	28.0	U	28.000	U	P
Manganese	4.0	U	4.0	U	4.0	U	4.0	U	4.000	U	P
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.200	U	CV
Nickel	8.0	U	8.0	U	8.0	U	8.0	U	8.000	U	P
Potassium	73.0	U	73.0	U	73.0	U	73.0	U	73.000	U	P
Selenium	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	F
Silver	7.0	U	7.0	U	7.0	U	7.0	U	7.000	U	P
Sodium	52.0	U	52.0	U	52.0	U	52.0	U	52.000	U	P
Thallium	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	F
Vanadium	4.0	U	4.0	U	4.0	U	4.0	U	4.000	U	P
Zinc	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Cyanide	10.0	U	10.0	U	10.0	U			10.000	U	C

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3
BLANKS

ORIGINAL (Red)

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			16.0	U	16.0	U			3.200	U	P
Antimony			16.0	U	16.0	U			3.200	U	P
Arsenic			4.0	U	4.0	U	4.0	U	0.800	U	F
Barium			4.0	U	4.0	U			0.800	U	P
Beryllium			3.0	U	3.0	U			0.600	U	P
Cadmium			2.0	U	2.0	U			0.400	U	P
Calcium			35.0	U	35.0	U			7.000	U	P
Chromium			3.0	U	3.0	U			0.600	U	P
Cobalt			5.0	U	5.0	U			1.000	U	P
Copper			3.0	U	3.0	U			0.600	U	P
Iron			32.0	U	32.0	U			6.400	U	P
Lead			3.0	U	3.0	U	3.0	U	0.600	U	F
Magnesium			28.0	U	28.0	U			5.600	U	P
Manganese			4.0	U	4.0	U			0.800	U	P
Mercury									0.100	U	CV
Nickel			8.0	U	8.0	U			1.600	U	P
Potassium			73.0	U	73.0	U			14.600	U	P
Selenium	2.0	U	2.0	U	2.0	U	2.0	U	0.400	U	F
Silver			7.0	U	7.0	U			1.400	U	P
Sodium			52.0	U	52.0	U			10.400	U	P
Thallium	2.0	U	2.0	U					0.400	U	F
Vanadium			4.0	U	4.0	U			0.800	U	P
Zinc			3.0	U	3.0	U			0.600	U	P
Cyanide									1.000	U	C

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3
BLANKS

ORIGINAL (Red)

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Preparation Blank Matrix (soil/water): _____

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											P
Antimony											P
Arsenic											F
Barium											P
Beryllium											P
Cadmium											P
Calcium											P
Chromium											P
Cobalt											P
Copper											P
Iron											P
Lead	3.0	U	3.0	U	3.0	U	3.0	U			F
Magnesium											P
Manganese											P
Mercury											CV
Nickel											P
Potassium											P
Selenium											F
Silver											P
Sodium											P
Thallium	2.0	U	2.0	U	2.0	U					F
Vanadium											P
Zinc											P
Cyanide											NR

ORIGINAL (Red)

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5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MCBX48S

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Matrix (soil/water): SOIL Level (low/med): LOW

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum				2454.5000					NR
Antimony	75-125	61.2937		5.5100	B	106.0	52.6	N	P
Arsenic	75-125	7.4231		2.3300		8.5	59.9	N	F
Barium	75-125	473.5949		35.8400	B	424.2	103.2		P
Beryllium	75-125	10.8165		0.6400	U	10.6	102.0		P
Cadmium	75-125	10.3924		0.4200	U	10.6	98.0		P
Calcium				6149.5200					NR
Chromium	75-125	50.6893		6.9900		42.4	103.1		P
Cobalt	75-125	110.0742		2.5400	B	106.0	101.4		P
Copper	75-125	71.8982		20.7800		53.0	96.4		P
Iron				7594.4800					NR
Lead	75-125	13.9979		12.0800		4.2	45.7	N	F
Magnesium				1007.2100	B				NR
Manganese	75-125	269.1410		158.0000		106.0	104.8		P
Mercury	75-125	0.4545		0.1000	U	0.5	90.9		CV
Nickel	75-125	120.2545		13.9900		106.0	100.2		P
Potassium				470.2000	B				NR
Selenium	75-125	1.4846		0.4242	U	2.1	70.7	N	F
Silver	75-125	9.5440		1.4800	U	10.6	90.0		P
Sodium				339.9700	B				NR
Thallium	75-125	8.4836		0.4200	U	10.6	80.0		F
Vanadium	75-125	116.8611		9.5400	B	106.0	101.2		P
Zinc	75-125	128.1018		21.2000		106.0	100.9		P
Cyanide	75-125	4.3478		1.0604	U	5.3	82.0		C

Comments:

ORIGINAL (Red)

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5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MCBX49S

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	2023.0000		37.0000	B	2000.0	99.3		P
Antimony	75-125	339.0000		32.0000	B	500.0	61.4	N	P
Arsenic	75-125	35.0000		4.0000	U	40.0	87.5		F
Barium	75-125	2184.0000		81.0000	B	2000.0	105.2		P
Beryllium	75-125	54.0000		3.0000	U	50.0	108.0		P
Cadmium	75-125	50.0000		2.0000	U	50.0	100.0		P
Calcium				28036.0000					NR
Chromium	75-125	198.0000		3.0000	U	200.0	99.0		P
Cobalt	75-125	515.0000		5.0000	U	500.0	103.0		P
Copper	75-125	330.0000		76.0000		250.0	101.6		P
Iron	75-125	1513.0000		411.0000		1000.0	110.2		P
Lead	75-125	31.0000		3.0000	U	20.0	156.0	N	F
Magnesium				9365.0000					NR
Manganese	75-125	664.0000		148.0000		500.0	103.2		P
Mercury	75-125	1.4000		0.2000	U	1.0	140.0	N	CV
Nickel	75-125	536.0000		24.0000	B	500.0	102.4		P
Potassium				7879.0000					NR
Selenium	75-125	10.0000		2.0000	B	10.0	80.0		F
Silver	75-125	46.0000		7.0000	U	50.0	92.0		P
Sodium				23031.0000					NR
Thallium	75-125	56.0000		2.0000	U	50.0	112.0		F
Vanadium	75-125	510.0000		4.0000	U	500.0	102.0		P
Zinc	75-125	525.0000		3.0000	U	500.0	105.0		P
Cyanide	75-125	80.0000		10.0000	U	100.0	80.0		C

positive questional by blank

$31 - 13.9 = \frac{17.1}{20} \times 100 = 85.5\%$ less Recovery for Lead using the dupl.

Comments:

Note Hg recovery is acceptable if raw data is re-examined. Using linear interpolation, the sample dup. is positive at 0.21, and the original sample 0.19 just below the DL. If the spike is interpolated, too, the recovery calc. is

$\frac{SSR - SR}{SA} \times 100 = \frac{1.33 - 0.2}{1.0} \times 100 = 113\%$

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ORIGINAL (Red)

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6
DUPLICATES

EPA SAMPLE NO.

MCBX48D

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 94.3 % Solids for Duplicate: 94.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M	
Aluminum		2454.5000		2364.3690		3.7		P	
Antimony	12.7	5.5100	B	7.4231	B	29.6		P	
Arsenic	2.1	2.3300		1.2725	B	58.7		F	ok
Barium	42.4	35.8400	B	25.8749	B	32.3		P	
Beryllium	1.1	0.6363	U	0.6363	U			P	
Cadmium	1.1	0.4242	U	0.4242	U			P	
Calcium	1060.4	6149.5200		636.8914	B	162.5	*	P	check calc. -OK IDL = 24.
Chromium	2.1	6.9900		6.5748		6.1		P	
Cobalt	10.6	2.5400	B	3.3934	B	28.8		P	
Copper	5.3	20.7800		17.1792		19.0		P	
Iron		7594.4800		8725.9809		13.9		P	
Lead		12.0800		8.6956		32.6	*	F	
Magnesium	1060.4	1007.2100	B	913.4677	B	9.8		P	
Manganese		158.0000		111.1347		34.8	*	P	
Mercury		0.1000	U	0.1010	U			CV	
Nickel	8.5	13.9900		11.0286		23.7		P	
Potassium	1060.4	470.2000	B	532.3436	B	12.4		P	
Selenium		0.4242	U	0.4242	B	200.0		F	ok
Silver	2.1	1.4846	U	1.4846	U			P	
Sodium	1060.4	339.9700	B	110.7105	B	101.7		P	ok
Thallium		0.4200	U	0.4242	U			F	
Vanadium	10.6	9.5400	B	11.6770		21.8		P	
Zinc	4.2	21.2000		29.0562		31.3	*	P	
Cyanide		1.0604	U	1.0604	U			C	

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ORIGINAL (Red)

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6
DUPLICATES

EPA SAMPLE NO.

MCBX49D

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M	
Aluminum	200.0	37.0000	B	24.0000	B	42.6		P	Close ? IDL=11.
Antimony	60.0	32.0000	B	35.0000	B	9.0		P	
Arsenic	10.0	4.0000	U	4.0000	U			F	
Barium	200.0	81.0000	B	79.0000	B	2.5		P	
Beryllium	5.0	3.0000	U	3.0000	U			P	
Cadmium	5.0	2.0000	U	2.0000	U			P	
Calcium		28036.0000		27341.0000		2.5		P	
Chromium	10.0	3.0000	U	3.0000	U			P	
Cobalt	50.0	5.0000	U	5.0000	U			P	
Copper	25.0	76.0000		77.0000		1.3		P	
Iron	100.0	411.0000		398.0000		3.2		P	
Lead	5.0	3.0000	U	13.9000		129.0	*	F	Close ? IDL = 3.
Magnesium	5000.0	9365.0000		9139.0000		2.4		P	
Manganese		148.0000		144.0000		2.7		P	
Mercury	0.2	0.2000	U	0.2000	U			CV	
Nickel	40.0	24.0000	B	23.0000	B	4.3		P	
Potassium	5000.0	7879.0000		7747.0000		1.7		P	
Selenium	5.0	2.0000	B	2.0000	U	200.0		F	OK
Silver	10.0	7.0000	U	7.0000	U			P	
Sodium	5000.0	23031.0000		23586.0000		2.4		P	
Thallium	10.0	4.0000	U	2.0000	U			F	
Vanadium	50.0	4.0000	U	4.0000	U			P	
Zinc	20.0	3.0000	U	3.0000	U			P	
Cyanide		10.0000	U	10.0000	U			C	

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LABORATORY CONTROL SAMPLE

ORIGINAL (Red)

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Solid LCS Source: EMSL/LV

Aqueous LCS Source: EMSL/LV

Analyte	Aqueous (ug/L) True	Aqueous (ug/L) Found	Aqueous (ug/L) %R	Solid (mg/kg) True	Solid (mg/kg) Found	C	Limits	Limits	%R
Aluminum	1980.0	1910.00	96.5	325.0	268.1		225.0	424.0	82.5
Antimony	1010.0	950.00	94.1	211.0	201.8		127.0	294.0	95.6
Arsenic	47.0	43.00	91.5	917.0	740.0		635.0	1199.0	80.7
Barium	1990.0	2008.00	101.4		0.9		0.0	40.0	18.8 NA
Beryllium	481.0	490.00	101.9	19.4	18.0		16.5	22.3	92.8
Cadmium	489.0	486.00	99.4	45.4	42.9		35.7	55.1	94.5
Calcium	49800.0	48661.00	97.7	195200.0	195930.0		166800.0	225600.0	99.9
Chromium	506.0	479.00	94.7	99.6	104.3		79.2	120.0	104.7
Cobalt	474.0	494.00	104.2	144.0	133.7		125.0	162.0	92.8
Copper	542.0	519.00	95.8	6910.0	6363.8		6006.0	7820.0	92.1
Iron	1990.0	2056.00	103.3	22430.0	18652.0		17770.0	27080.0	83.2
Lead	98.0	110.00	112.2	236.0	284.0		188.0	285.0	120.3
Magnesium	25000.0	23732.00	94.9	118100.0	109720.0		100400.0	129900.0	92.9
Manganese	513.0	493.00	96.1	208.0	199.1		177.0	239.0	95.7
Mercury	5.2			12.7	10.0		8.5	17.0	78.7
Nickel	496.0	468.00	94.4	60.9	60.6		49.2	72.6	99.5
Potassium	50200.0	49270.00	98.3		43.8		0.0	1000.0	87.2
Selenium	104.0	96.00	92.3	22.2	26.0		15.5	29.0	117.1
Silver	509.0	473.00	92.9	39.2	28.0		19.1	59.4	71.4
Sodium	50700.0	49981.00	98.6		68.5	B	0.0	1000.0	137.0
Thallium	97.3	98.00	100.7	39.0	31.2		24.6	53.5	80.0
Vanadium	511.0	497.00	97.3	65.8	70.4		51.7	79.9	107.0
Zinc	3100.0	2884.00	93.0	187.0	148.1		138.0	236.0	79.2
Cyanide	90.0			85.0					

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STANDARD ADDITION RESULTS

ORIGINAL (Red)

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Concentration Units: ug/L

EPA Sample No.	An	Dil	0 ADD ABS	1 ADD CON	1 ADD ABS	2 ADD CON	2 ADD ABS	3 ADD CON	3 ADD ABS	Final Conc.	r	Q
MCBX49D	PB	1	0.047	10	0.820	50	0.234	100	0.398	13.9	0.9990	
MCN534	PB	1	0.214	10	0.252	50	0.378	100	0.516	73.2	0.9990	
MCN535	PB	10	0.065	10	0.095	50	0.238	100	0.404	187.0	0.9990	
MCY312	PB	10	0.063	10	0.098	50	0.240	100	0.402	191.0	0.9990	

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ICP SERIAL DILUTIONS

ORIGINAL (Red)

EPA SAMPLE NO.

MCBX48L

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	11600.00		11600.00				
Antimony	26.00	B					NR
Arsenic							
Barium	169.00	B	165.00	B	2.4		
Beryllium	3.00	U	ND				NR
Cadmium	2.00	U	ND				NR
Calcium	29000.00		29300.00		1.0		
Chromium	33.00		15.00	U			NR
Cobalt	12.00	B	ND				NR
Copper	98.00		85.00		13.3		
Iron	35800.00		36500.00		2.0		
Lead							
Magnesium	9750.00		10000.00		2.6		
Manganese	746.00		760.00		1.9		
Mercury							
Nickel	66.00		20	U			NR
Potassium	2220.00	B	2175.00	B	2.0		
Selenium							
Silver	7.00	U	ND				NR
Sodium	1600.00	B	340 1320.00	B	17.5		
Thallium							
Vanadium	45.00	B	30.00	B	33.3		
Zinc	100.00		15.00	B	85.0		

33÷5=6.6>IDL=3.0 (IDL×2=6)

2.6 - OK

66÷5=13.2>IDL=5.0 (IDL×2=10.0)

56 — OK Borderline

U.S. EPA - CLP

9

ICP SERIAL DILUTIONS

ORIGINAL (Red)

EPA SAMPLE NO.

MCBX49

Lab Name: NET-MIDATLANTIC. INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	37.00	B	ND				NR
Antimony	32.00	B	29x5				NR
Arsenic							F
Barium	81.00	B	75.00	B	7.4		P
Beryllium	3.00	U	ND				NR
Cadmium	2.00	U	ND				NR
Calcium	28000.00		28500.00		1.8		P
Chromium	3.00	U	ND				NR
Cobalt	5.00	U	ND				NR
Copper	76.00		65.00		14.5		P
Iron	411.00		395.00		3.9		P
Lead							F
Magnesium	9360.00		9740.00		4.1		P
Manganese	148.00		150.00		1.4		P
Mercury							CV
Nickel	24.00	B	ND				NR
Potassium	7880.00		8125.00		3.1		P
Selenium							F
Silver	7.00	U	ND				NR
Sodium	23000.00		23300.00		1.3		P
Thallium							F
Vanadium	4.00	U	ND				NR
Zinc	3.00	U	ND				NR

ok

blanked out

ok

ok

RS4 INTG# 5

ORIGINAL (Red)

CH#	ELM	WL-Nm	INTEN	CH#	ELM	WL-Nm	INTEN	CH#	ELM	WL-Nm	INTEN
28	AG	328.07	98.599998	16	FE	238.20	306.60000				
24	AL	308.21	343.70001					10	SB	206.83	58.299999
				32	K	766.49	39.000000				
5	B	182.64	92.400001	30	LI	670.70	53.400001	21	SI	288.16	709.70001
17	BA	493.41	29.000000	20	MG	279.55	11764.299	6	SN	189.99	65.300003
25	BE	313.04	29.899999	18	MN	257.61	162.30000				
26	CA	317.93	11136.400	9	MO	202.03	88.500000	29	TI	337.20	143.89999
14	CD	226.55	114.69999	22	NA	589.50	7426.2998				
33	CO	228.68	146.30000	15	NI	231.60	243.39999	23	V	292.4	111.09999
19	CR	267.71	134.80000								
27	CU	324.75	384.39999	13	PB	220.35	144.19999	12	ZN	213.86	84.099998

Online Analysis Output

Page 1

Output Data File: RITA

Current Date: 8/14/89

Id: MCBX47

Current Time: 11:43:32

Sy	Inten	RSD	Conc	Unit	Sy	Inten	RSD	Conc	Unit
[illegible]	1	0.996	0.001	PPM	AL	13	0.777	0.043	PPM
[illegible]	61	1.069	0.263	PPM	BA	17	0.343	0.081	PPM
BE	-0	0.435	0.000	PPM	CA	9929	0.497	27.651	PPM
CD	-1	0.964	0.000	PPM	CO	-3	0.790	0.000	PPM
CR	-2	1.001	0.000	PPM	CU	136	0.256	0.067	PPM
FE	246	0.369	0.445	PPM	K	26	0.581	7.646	PPM
LI	0	0.725	0.001	PPM	MG	11026	0.633	9.204	PPM
MN	139	0.530	0.159	PPM	MO	2	0.676	0.002	PPM
NA	7458	1.050	22.980	PPM	NI	19	0.514	0.025	PPM
PB	-2	0.667	0.000	PPM	SB	2	0.446	0.024	PPM
SI	571	0.543	7.295	PPM	SN	-1	1.083	0.000	PPM
TI	1	0.647	0.001	PPM	V	-1	0.628	0.000	PPM
ZN	9	0.259	0.010	PPM					

[illegible] current dilution factor is 1.00000
[illegible] dilution factor?(<CR> to retain current value)
Please enter sample ID? MCBX48-1.00

Lab reported RSD instead of value itself for Ni & V & forgot to report Zn

RS4 INTB# 1

CH#	ELM	WL-Nm	INTEN	CH#	ELM	WL-Nm	INTEN	CH#	ELM	WL-Nm	INTEN
28	AG	328.07	95.800003	16	FE	238.20	19423.300				
24	AL	308.21	3916.3000					10	SB	206.83	51.099998
				32	K	766.49	21.000000				
5	B	182.64	36.200000	30	LI	670.70	56.900001	21	SI	288.16	58.099998
17	BA	493.41	47.799999	20	MG	279.55	12561.799	6	SN	189.99	48.699998
25	BE	313.04	34.400001	18	MN	257.61	896.90002				
26	CA	317.93	11768.200	9	MO	[illegible]	92.199996	29	TI	337.20	490.20001
14	CD	226.55	123.69999	22	NA	589.50	885.70001				
33	CO	228.68	139.60000	15	NI	231.60	281.89999	23	V	292.4	132.89999
19	CR	267.71	155.69999								
27	CU	324.75	445.[illegible]0000	13	PB	220.35	187.30000	12	ZN	213.86	171.[illegible]0000

000112

RS4 INTE# 1

25	CA	317.93	2608.6999	9	MO	202.03	97.699996	29	TI	337.20	[illegible]
14	CD	226.55	122.19999	22	NA	589.50	609.90002				
33	CO	228.68	174.50000	15	NI	231.60	256.89999	23	V	292.4	119.89999
19	CR	267.71	151.89999								
27	CU	324.75	339.79998	13	PB	220.35	162.90000	12	ZN	213.86	310.39999

ORIGINAL (Red)

RS4 INTG# 5

CH#	ELM	WL-Nm	INTEN	CH#	ELM	WL-Nm	INTEN	CH#	ELM	WL-Nm	INTEN
28	AG	328.07	96.000000	16	FE	238.20	8653.0000				
24	AL	308.21	10788.000					10	SB	206.83	66.000000
				32	K	766.49	23.200000				
5	B	182.64	32.700000	30	LI	670.70	62.799999	21	SI	288.16	124.00000
17	BA	493.41	80.300003	20	MG	279.55	12816.099	6	SN	189.99	68.900001
25	BE	313.04	42.000000	18	MN	257.61	1173.0999				
26	CA	317.93	2603.1000	9	MO	202.03	98.199996	29	TI	337.20	179.50000
14	CD	226.55	122.30000	22	NA	589.50	611.00000				
33	CO	228.68	173.39999	15	NI	231.60	257.50000	23	V	292.4	120.19999
19	CR	267.71	153.50000								
27	CU	324.75	339.10000	13	PB	220.35	163.30000	12	ZN	213.86	312.60000

Online Analysis Output

Page 1

tput Data File: RITA
MCN534-1.00

Current Date: 8/14/89
Current Time: 12:22:21

Sy	Inten	RSD	Conc	Unit	Sy	Inten	RSD	Conc	Unit
AG	-1	0.323	0.000	PPM	AL	10457	0.340	33.820	PPM
B	-1	0.702	0.000	PPM	BA	70	0.257	0.325	PPM
BE	11	0.504	0.003	PPM	CA	2215	0.339	6.167	PPM
CD	2	0.468	0.001	PPM	CO	23	0.537	0.027	PPM
CR	16	0.523	0.018	PPM	CU	92	0.529	0.045	PPM
FE	8761	0.242	15.837	PPM	K	10	0.385	2.905	PPM
LI	11	0.306	0.024	PPM	MG	11977	0.323	9.997	PPM
MN	1118	0.348	1.275	PPM	MO	0	0.401	0.000	PPM
NA	232	0.115	0.712	PPM	NI	31	0.370	0.040	PPM
PB	8	0.586	0.052	PPM	SB	3	0.441	0.047	PPM
SI	74	1.355	0.946	PPM	SN	-1	0.660	0.000	PPM
TI	38	0.330	0.029	PPM	V	8	0.472	0.010	PPM
	226	0.384	0.251	PPM					

Lab reported the RSD instead of the actual value for Co & Cu

Co = 27 ug/kg × 0.224 = 6.0

The current dilution factor is 1.00000
New dilution factor?(<CR> to retain current value)
Please enter sample ID? MCY312-1.00

Cu = 45 ug/kg × 0.224 = 10.

000137

RS4 INTG# 1

CH#	ELM	WL-Nm	INTEN	CH#	ELM	WL-Nm	INTEN	CH#	ELM	WL-Nm	INTEN
28	AG	328.07	97.900001	16	FE	238.20	28868.400				
24	AL	308.21	10121.799					10	SB	206.83	66.699996
				32	K	766.49	24.100000				
5	B	182.64	38.799999	30	LI	670.70	65.400001	21	SI	288.16	72.300003
17	BA	493.41	82.699996	20	MG	279.55	15722.799	6	SN	189.99	71.199996
25	BE	313.04	41.099998	18	MN	257.61	1255.4000				
26	CA	317.93	7860.8999	9	MO	202.03	101.09999	29	TI	337.20	297.50000
14	CD	226.55	131.19999	22	NA	589.50	802.59997				
33	CO	228.68	178.39999	15	NI	231.60	261.29998	23	V	292.4	177.80000
19	CR	267.71	187.10000								
27	CU	324.75	392.50000	13	PB	220.35	176.60000	12	ZN	213.86	260.39999

320

Baker Stds 8-8-89.
Start Time 5:35 P.M.

Hg L.R. = .997

8-8-89 (J.D.)

Sample	wt	dil	Abs.	Conc.	Result
CALBLK			1	interpolate for low points	
.0005			11.5		
.0010			22	interpolate for spike amt.	
.0020			40		
(J.D.) .0040 ~~.005~~			70		
ICV	6:05 P.M.	2X	51	.0028 X 2 .0056	108%
ICB	6:08 P.M.		1	<.0002	
PBNA 127			3	<.0002	
PBAq 128			2.5	<.0002	
LCSS		10X	38	.002 x 10 = .02	10 mg/Kg
MCBX41			67	.0037	
MCY313			3	<.0002	
MCBX44			2	<.0002	
MCBX43			3.5	<.0002	
MCQ263			3	<.0002	
MCQ264			4	<.0002	
MCBX45			2	<.0002	
CCV	6:30 P.M.		20	.0010	100%
CCB	6:33 P.M.		1	<.0002	
MCBX46			4.5	<.0002	
MCBX40			6	~~.0002~~	0.2 ug/L
MCBX47			7.5	~~.0002~~	0.2 ug/L
~~MCBX47D~~		(J.D.)			
MCBX48	.21g		3	<.0002	
MCBX48D	.21g		3	<.0002	
MCBX48S	.21g		19	.0009	90%
MCBX49			5	<.0002	0.14
MCBX49D			5.5	<.0002	0.21
MCBX49S			28	.0014	140%
MCBX50	.21g		3.5	<.0002	
CCV	7:00 P.M.		19	.0009	90%
CCB	7:02 P.M.		2	<.0002	
MCNS34	.22g		5	<.0002	
MCY312	.26g		5.5	<.0002	
MCBX42	.20g		5.5	<.0002	

If spl result ~~spike~~ recovery is OK

$\frac{1.33 - 0.2}{1.0} \times 100 = 113\%$

continued (Red)

Sample	wt
MCP 499	
MCP 500	
MCNS35	.26
27547	.20
27543	.21
27544	.22
CCV	7:21 P.
CCB	7:27 P.

Lab reported values of 2.0 instead of 0.2 See Next 2 pages

submitted

000208

U.S. EPA - CLP

PFE

ORIGINAL (Red)

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MCBX40

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Matrix (soil/water): WATER Lab Sample ID: 89-32-09

Level (low/med): LOW Date Received: 07/11/89

% 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	16.00	U		P
7440-36-0	Antimony	24.00	B	N	P
7440-38-2	Arsenic	4.00	U		F
7440-39-3	Barium	379.00			P
7440-41-7	Beryllium	3.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	40300.00			P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	5.00	U		P
7440-50-8	Copper	7.00	B		P
7439-89-6	Iron	32.00	U		P
7439-92-1	Lead	3.00	U	N*	F
7439-95-4	Magnesium	22200.00			P
7439-96-5	Manganese	19.00			P
7439-97-6	Mercury	2.00		N	CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	3750.00	B		P
7782-49-2	Selenium	2.00	U		F
7440-22-4	Silver	7.00	U		P
7440-23-5	Sodium	32500.00			P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	4.00	U		P
7440-66-6	Zinc	3.00	U		P
	Cyanide				NR

value for Hg should be 0.2

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

000009

U.S. EPA - CLP

ORIGINAL (Red)

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MCBX47

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Matrix (soil/water): WATER Lab Sample ID: 89-32-10

Level (low/med): LOW Date Received: 07/11/89

% 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	43.00	B		P
7440-36-0	Antimony	24.00	B	N	P
7440-38-2	Arsenic	4.00	U		F
7440-39-3	Barium	81.00	B		P
7440-41-7	Beryllium	3.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	27600.00			P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	5.00	U		P
7440-50-8	Copper	67.00			P
7439-89-6	Iron	446.00			P
7439-92-1	Lead	4.00	B	WN*	F
7439-95-4	Magnesium	9200.00			P
7439-96-5	Manganese	159.00			P
7439-97-6	Mercury	2.00		N	CV
7440-02-0	Nickel	514.00			P
7440-09-7	Potassium	7550.00			P
7782-49-2	Selenium	2.00	U		F
7440-22-4	Silver	7.00	U		P
7440-23-5	Sodium	23000.00			P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	629.00			P
7440-66-6	Zinc	10.00	U		P
	Cyanide	10.00	U		C

value for Hg should be 0.2

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

000015

U.S. EPA - CLP

10
HOLDING TIMES

ORIGINAL (Red)

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

SAMPLED 7/10/89

33 days from spl to analysis

EPA Sample No.	Matrix	Date Received	Mercury Prep Date	Mercury Holding Time	Cyanide Prep Date	Cyanide Holding Time
MCBX40	WATER	07/11/89	08/08/89	28		
MCBX41	WATER	07/11/89	08/08/89	28	08/12/89	32
MCBX42	SOIL	07/11/89	08/08/89	28	08/12/89	32
MCBX43	WATER	07/11/89	08/08/89	28	08/12/89	32
MCBX44	WATER	07/11/89	08/08/89	28	08/12/89	32
MCBX45	WATER	07/11/89	08/08/89	28		
MCBX46	WATER	07/11/89	08/08/89	28		
MCBX47	WATER	07/11/89	08/08/89	28	08/12/89	32
MCBX48	SOIL	07/11/89	08/08/89	28	08/12/89	32
MCBX48D	SOIL	07/11/89	08/08/89	28	08/12/89	32
MCBX48S	SOIL	07/11/89	08/08/89	28	08/12/89	32
MCBX49	WATER	07/11/89	08/08/89	28	08/12/89	32
MCBX49D	WATER	07/11/89	08/08/89	28	08/12/89	32
MCBX49S	WATER	07/11/89	08/08/89	28	08/12/89	32
MCBX50	SOIL	07/11/89	08/08/89	28	08/12/89	32
MCN534	SOIL	07/11/89	08/08/89	28	08/12/89	32
MCN535	SOIL	07/11/89	08/08/89	28	08/12/89	32
MCP499	WATER	07/11/89	08/08/89	28	08/12/89	32
MCP500	WATER	07/11/89	08/08/89	28		
MCQ263	WATER	07/11/89	08/08/89	28	08/12/89	32
MCQ264	WATER	07/11/89	08/08/89	28		
MCY312	SOIL	07/11/89	08/08/89	28	08/12/89	32
MCY313	WATER	07/11/89	08/08/89	28	08/12/89	32

Metal : As
IDL : 4.
U = < IDL

PDS amt. = 20.
MS amt. = 40

Spike Recovery Evaluation Form

ORIGINAL (Red)

	Sample ID	Instr. Level Result (ug/L)	PDS Recovery (%)	Diluted Result	Diluted Recovery	MSA Result (if needed)	Final Result Reported	
1	mcRX41	U	100					
2	mcY313	U	115					
3	mcBX43	U	100					
4	mcBX44	U	95					
5	mcQ263	U	95					
6	mcQ264	U	105					
7	mcBX45	U	115					
8	mcBX46	U	95					
9	mcBX40	U	110.					
10	mcBX47	U	105					
11	mcBX48	11.	85				2.3	
12	mcBX48D	6.	100.				1.3	
13	mcBX48S	35.	—				7.4	59.9%
14	mcBX49	U	85					
15	mcBX49D	U	105					
16	mcBX49S	35.	—				35.	87.5%
17	mcBX50	5	110				1.2	
18	mcN534	16.	100.				3.6	
19	mcY312	21.	95				4.9	
20	mcBX42	28.	105				7.7	
21	mcP499	U	90.					
22	mcP500	U	100					
23	mcN535	21.	110.				4.7	

Metal : Se
IDL : 2
U = < IDL

Spike Recovery Evaluation Form

PDS amt. = 10
MS amt. = 10.

ORIGINAL (Red)

	Sample ID	Instr. Level Result	PDS Recovery	Diluted Result	Diluted Recovery	MSA Result (if needed)	Final Result Reported	
1	mcBX41	U	130.					
2	mcY313	U	110					
3	mcBX43	U	110					
4	mcBX44	U	110					
5	mcQ263	U	100					
6	mcQ264	U	110					
7	mcBX45	2	90.				2.	
8	mcBX46	U	100					
9	mcBX40	U	110					
10	mcBX47	U	110					
11	mcBX48	U	110					
12	mcBX48D	2	80					
13	mcBX48S	7						70%
14	mcBX49	2	80				2.	
15	mcBX49D	U	100					
16	mcBX49S	10						80%
17	mcBX50	U	100					
18	mcN534	U	90					
19	mcY312	U	100					
20	mcBX42	2	100				0.55	
21	mcP499	U	100					
22	mcP500	U	100					
23	mcN535	U	100					

Metal : Tl
IDL : 2
U = < IDL

PDS amt. = 20
MS amt. = 40

ORIGINAL (Red)

Spike Recovery Evaluation Form

	Sample ID	Instr. Level Result	PDS Recovery	Diluted Result	Diluted Recovery	MSA Result (if needed)	Final Result Reported
1	mcBX41	U	110				
2	mcY313	U	70			*	
3	mcBX43	U	105				
4	mcBX44	U	85				
5	mcQ263	U	80				
6	mcQ264	U	90				
7	mcBX45	U	95				
8	mcBX46	U	80				
9	mcBX40	U	90				
10	mcBX47	U	90				
11	mcBX48	U	95				
12	mcBX48D	U	90				
13	mcBX48S	40					100 %
14	mcBX49	U	100.				
15	mcBX49D	U	105.				
16	mcBX49S	56					
17	mcBX50	U	135			*	
18	mcN534	U	115				
19	mcY312	U	110.				
20	mcBX42	U	110				
21	mcP499	U	130				
22	mcP500	U	80				
23	mcN535	U	105				

Metal : Pb
IDL : 3.0
U = < IDL

PDS amt. = 10
MS amt. = 20

Spike Recovery Evaluation Form

ORIGINAL (Red)

	Sample ID	Instr. Level Result	PDS Recovery	Diluted Result	Diluted Recovery	MSA Result (if needed)	Final Result Reported	
1	mcBX41	4.	110				4.	
2	mcY313	23.	110				23.	
3	mcBX43	35.	110				35.	
4	mcBX44	8.	110				8.	
5	mcQ263	17.	100				17.	
6	mcQ264	U	100.					
7	mcBX45	U	90.					
8	mcBX46	U	100.					
9	mcBX40	U	100.					
10	mcBX47	4.	120 ok				4	
11	mcBX48	57.	90				12.1	
12	mcBX48D	41.	100.					
13	mcBX48S	66.					14.	45.7%
14	mcBX49	U	120 ok					
15	mcBX49D	8	120			* 14.		
16	mcBX49S	31					31.	155%
17	mcBX50	53	90				13.2	
18	mcN534	59	70.			* 73.	16.4	
19	mcY312			* 68 x 2	70	* 191.	44.5	
20	mcBX42			* 33 x 10	110		90.5	
21	mcP499	3	110				3.	
22	mcP500	U	110					
23	mcN535			* 66 x 2	80	* 187.	41.7	

U.S. EPA - CLP

ORIGINAL (Red)

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MCBX44

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Matrix (soil/water): WATER Lab Sample ID: 89-32-04

Level (low/med): LOW Date Received: 07/11/89

% 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	26.00	B		P
7440-36-0	Antimony	16.00	U	N	P
7440-38-2	Arsenic	4.00	U		F
7440-39-3	Barium	158.00	B		P
7440-41-7	Beryllium	3.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	56500.00			P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	5.00	U		P
7440-50-8	Copper	15.00	B		P
7439-89-6	Iron	368.00			P
7439-92-1	Lead	8.00		N*	F
7439-95-4	Magnesium	33300.00			P
7439-96-5	Manganese	1310.00			P
7439-97-6	Mercury	0.20	U	N	CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	3180.00	B		P
7782-49-2	Selenium	2.00	U		F
7440-22-4	Silver	7.00	U		P
7440-23-5	Sodium	68700.00			P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	4.00	U		P
7440-66-6	Zinc	35.00			P
	Cyanide	10.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

000013

U.S. EPA - CLP

ORIGINAL (Red)

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MCY313

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Matrix (soil/water): WATER Lab Sample ID: 89-32-02

Level (low/med): LOW Date Received: 07/11/89

% 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	649.00			P
7440-36-0	Antimony	16.00	U	N	P
7440-38-2	Arsenic	4.00	U		F
7440-39-3	Barium	1420.00			P
7440-41-7	Beryllium	3.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	37000.00			P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	5.00	U		P
7440-50-8	Copper	55.00			P
7439-89-6	Iron	1140.00			P
7439-92-1	Lead	23.00		N*	F
7439-95-4	Magnesium	20400.00			P
7439-96-5	Manganese	281.00			P
7439-97-6	Mercury	0.20	U	N	CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	3540.00	B		P
7782-49-2	Selenium	2.00	U		F
7440-22-4	Silver	7.00	U		P
7440-23-5	Sodium	29900.00			P
7440-28-0	Thallium	2.00	U	W	F
7440-62-2	Vanadium	4.00	U		P
7440-66-6	Zinc	28.00			P
	Cyanide	10.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

000027

U.S. EPA - CLP

ORIGINAL (Red)

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MCBX41

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Matrix (soil/water): WATER Lab Sample ID: 89-32-01

Level (low/med): LOW Date Received: 07/11/89

% 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	16.00	U		P
7440-36-0	Antimony	16.00	U	N	P
7440-38-2	Arsenic	4.00	U		F
7440-39-3	Barium	4.00	U		P
7440-41-7	Beryllium	3.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	514.00	B		P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	5.00	U		P
7440-50-8	Copper	66.00			P
7439-89-6	Iron	102.00			P
7439-92-1	Lead	4.00	B	N*	F
7439-95-4	Magnesium	118.00	B		P
7439-96-5	Manganese	4.00	U		P
7439-97-6	Mercury	3.70		N	CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	364.00	B		P
7782-49-2	Selenium	2.00	U	W	F
7440-22-4	Silver	7.00	U		P
7440-23-5	Sodium	56000.00			P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	4.00	U		P
7440-66-6	Zinc	15.00	B		P
	Cyanide	10.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

000010

U.S. EPA - CLP

ORIGINAL (Red)

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MCN535

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Matrix (soil/water): SOIL Lab Sample ID: 89-32-19

Level (low/med): LOW Date Received: 07/11/89

% 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	8440.00			P
7440-36-0	Antimony	11.80	B	N	P
7440-38-2	Arsenic	4.70		N	F
7440-39-3	Barium	68.00			P
7440-41-7	Beryllium	0.89	B		P
7440-43-9	Cadmium	0.45	U		P
7440-70-2	Calcium	1100.00	B	*	P
7440-47-3	Chromium	9.40			P
7440-48-4	Cobalt	5.40	B		P
7440-50-8	Copper	17.60			P
7439-89-6	Iron	11300.00			P
7439-92-1	Lead	41.70		SN*	F
7439-95-4	Magnesium	1830.00			P
7439-96-5	Manganese	256.00		*	P
7439-97-6	Mercury	0.09	U		CV
7440-02-0	Nickel	5.90	B		P
7440-09-7	Potassium	652.00	B		P
7782-49-2	Selenium	0.45	U	N	F
7440-22-4	Silver	1.50	U		P
7440-23-5	Sodium	179.00	B		P
7440-28-0	Thallium	0.45	U		F
7440-62-2	Vanadium	12.00			P
7440-66-6	Zinc	52.20		*	P
	Cyanide	1.10	U		C

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

000021

U.S. EPA - CLP

ORIGINAL (Red)

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MCBX42

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Matrix (soil/water): SOIL Lab Sample ID: 89-32-16

Level (low/med): LOW Date Received: 07/11/89

% Solids: 72.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10000.00			P
7440-36-0	Antimony	13.70	B	N	P
7440-38-2	Arsenic	7.70		N	F
7440-39-3	Barium	49.40	B		P
7440-41-7	Beryllium	0.82	B		P
7440-43-9	Cadmium	0.55	U		P
7440-70-2	Calcium	385.00	B	*	P
7440-47-3	Chromium	16.20			P
7440-48-4	Cobalt	6.80	B		P
7440-50-8	Copper	21.10			P
7439-89-6	Iron	15200.00			P
7439-92-1	Lead	90.50		N*	F
7439-95-4	Magnesium	1300.00	B		P
7439-96-5	Manganese	489.00		*	P
7439-97-6	Mercury	0.14	U		CV
7440-02-0	Nickel	7.40	B		P
7440-09-7	Potassium	374.00	B		P
7782-49-2	Selenium	0.55	B	N	F
7440-22-4	Silver	1.90	U		P
7440-23-5	Sodium	159.00	B		P
7440-28-0	Thallium	0.55	U		F
7440-62-2	Vanadium	25.90			P
7440-66-6	Zinc	41.20		*	P
	Cyanide	1.40	U		C

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

000011

PTE ORIGINAL (Red)

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MCY312

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Matrix (soil/water): SOIL Lab Sample ID: 89-32-15

Level (low/med): LOW Date Received: 07/11/89

% 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	7360.00			P
7440-36-0	Antimony	12.30	B	N	P
7440-38-2	Arsenic	4.90		N	F
7440-39-3	Barium	78.60			P
7440-41-7	Beryllium	0.70	B		P
7440-43-9	Cadmium	0.47	U		P
7440-70-2	Calcium	4490.00		*	P
7440-47-3	Chromium	12.80			P
7440-48-4	Cobalt	7.00	B		P
7440-50-8	Copper	16.50			P
7439-89-6	Iron	12500.00			P
7439-92-1	Lead	44.50		SN*	F
7439-95-4	Magnesium	2850.00			P
7439-96-5	Manganese	317.00		*	P
7439-97-6	Mercury	0.09	U		CV
7440-02-0	Nickel	8.40	B		P
7440-09-7	Potassium	736.00	B		P
7782-49-2	Selenium	0.47	U	N	F
7440-22-4	Silver	1.50	U		P
7440-23-5	Sodium	310.00	B		P
7440-28-0	Thallium	0.47	U		F
7440-62-2	Vanadium	19.50			P
7440-66-6	Zinc	44.30		*	P
	Cyanide	1.20	U		C

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

000026

ORIGINAL (Red)

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MCN534

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Matrix (soil/water): SOIL Lab Sample ID: 89-32-14

Level (low/med): LOW Date Received: 07/11/89

% Solids: 89.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7560.00			P
7440-36-0	Antimony	10.50	B	N	P
7440-38-2	Arsenic	3.60		N	F
7440-39-3	Barium	72.70			P
7440-41-7	Beryllium	0.67	U		P
7440-43-9	Cadmium	0.45	U		P
7440-70-2	Calcium	1380.00		*	P
7440-47-3	Chromium	4.00			P
7440-48-4	Cobalt	120.00			P
7440-50-8	Copper	119.00			P
7439-89-6	Iron	3540.00			P
7439-92-1	Lead	16.40		SN*	F
7439-95-4	Magnesium	2240.00			P
7439-96-5	Manganese	285.00		*	P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	8.90	B		P
7440-09-7	Potassium	650.00	B		P
7782-49-2	Selenium	0.45	U	N	F
7440-22-4	Silver	1.57	U		P
7440-23-5	Sodium	159.00	B		P
7440-28-0	Thallium	0.45	U		F
7440-62-2	Vanadium	2.20	B		P
7440-66-6	Zinc	56.20		*	P
	Cyanide	1.10	U		C

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

000020

ORIGINAL (Red)

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MCBX50

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Matrix (soil/water): SOIL Lab Sample ID: 89-32-13

Level (low/med): LOW Date Received: 07/11/89

% Solids: 80.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4380.00			P
7440-36-0	Antimony	11.00	B	N	P
7440-38-2	Arsenic	1.20	B	N	F
7440-39-3	Barium	45.90	B		P
7440-41-7	Beryllium	0.75	B		P
7440-43-9	Cadmium	0.50	U		P
7440-70-2	Calcium	973.00	B	*	P
7440-47-3	Chromium	11.00			P
7440-48-4	Cobalt	5.50	B		P
7440-50-8	Copper	47.40			P
7439-89-6	Iron	13500.00			P
7439-92-1	Lead	13.20		N*	F
7439-95-4	Magnesium	1730.00			P
7439-96-5	Manganese	273.00		*	P
7439-97-6	Mercury	0.12			CV
7440-02-0	Nickel	31.40			P
7440-09-7	Potassium	847.00	B		P
7782-49-2	Selenium	0.50	U	N	F
7440-22-4	Silver	1.80	U		P
7440-23-5	Sodium	247.00	B		P
7440-28-0	Thallium	0.50	U		F
7440-62-2	Vanadium	15.00			P
7440-66-6	Zinc	49.60		*	P
	Cyanide	1.20	U		C

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

000019

U.S. EPA - CLP

ORIGINAL (Red)

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MCBX48

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Matrix (soil/water): SOIL Lab Sample ID: 89-38-11

Level (low/med): LOW Date Received: 07/11/89

% Solids: 94.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2450.00			P
7440-36-0	Antimony	5.50	B	N	P
7440-38-2	Arsenic	2.30		N	F
7440-39-3	Barium	35.80	B		P
7440-41-7	Beryllium	0.64	U		P
7440-43-9	Cadmium	0.42	U		P
7440-70-2	Calcium	6150.00		*	P
7440-47-3	Chromium	7.00			P
7440-48-4	Cobalt	2.50	B		P
7440-50-8	Copper	20.80			P
7439-89-6	Iron	7590.00			P
7439-92-1	Lead	12.10		N*	F
7439-95-4	Magnesium	2070.00			P
7439-96-5	Manganese	158.00		*	P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	14.00			P
7440-09-7	Potassium	470.00	B		P
7782-49-2	Selenium	0.42	U	N	F
7440-22-4	Silver	1.50	U		P
7440-23-5	Sodium	340.00	B		P
7440-28-0	Thallium	0.42	U		F
7440-62-2	Vanadium	8.50	B		P
7440-66-6	Zinc	31.20		*	P
	Cyanide	1.10	U		C

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

000017

ORIGINAL (Red)

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MCP500

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Matrix (soil/water): WATER Lab Sample ID: 89-32-18

Level (low/med): LOW Date Received: 07/11/89

% 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	16.00	U		P
7440-36-0	Antimony	46.00	B	N	P
7440-38-2	Arsenic	4.00	U		F
7440-39-3	Barium	4.00	U		P
7440-41-7	Beryllium	3.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	174.00	B		P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	5.00	U		P
7440-50-8	Copper	3.00	U		P
7439-89-6	Iron	32.00	U		P
7439-92-1	Lead	3.00	U	N*	F
7439-95-4	Magnesium	33.00	B		P
7439-96-5	Manganese	4.00	U		P
7439-97-6	Mercury	0.20	U	N	CV
7440-02-0	Nickel	9.00	U		P
7440-09-7	Potassium	73.00	U		P
7782-49-2	Selenium	2.00	U		F
7440-22-4	Silver	7.00	U		P
7440-23-5	Sodium	215.00	B		P
7440-28-0	Thallium	2.00	U	W	F
7440-62-2	Vanadium	4.00	U		P
7440-66-6	Zinc	3.00	U		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

000023

U.S. EPA - CLP

ORIGINAL (Red)

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MCP499

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0053

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Matrix (soil/water): WATER Lab Sample ID: 89-32-17

Level (low/med): LOW Date Received: 07/11/89

% 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	16.00	U		P
7440-36-0	Antimony	21.00	B	N	P
7440-38-2	Arsenic	4.00	U		F
7440-39-3	Barium	4.00	U		P
7440-41-7	Beryllium	3.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	218.00	B		P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	5.00	U		P
7440-50-8	Copper	3.00	U		P
7439-89-6	Iron	32.00	U		P
7439-92-1	Lead	3.00	B	N*	F
7439-95-4	Magnesium	28.00	U		P
7439-96-5	Manganese	4.00	U		P
7439-97-6	Mercury	0.20	U	N	CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	113.00	B		P
7782-49-2	Selenium	2.00	U		F
7440-22-4	Silver	7.00	U		P
7440-23-5	Sodium	779.00	B		P
7440-28-0	Thallium	2.00	U	W	F
7440-62-2	Vanadium	4.00	U		P
7440-66-6	Zinc	3.00	U		P
	Cyanide	10.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

000022

ORIGINAL (Red)

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MCBX49

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Matrix (soil/water): WATER Lab Sample ID: 89-32-12

Level (low/med): LOW Date Received: 07/11/89

% 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	37.00	B		
7440-36-0	Antimony	32.00	B	N	P
7440-38-2	Arsenic	4.00	U		F
7440-39-3	Barium	81.00	B		P
7440-41-7	Beryllium	3.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	28000.00			P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	5.00	U		P
7440-50-8	Copper	75.00			P
7439-89-6	Iron	411.00			P
7439-92-1	Lead	3.00	U	WN*	F
7439-95-4	Magnesium	9360.00			P
7439-96-5	Manganese	148.00			P
7439-97-6	Mercury	0.20	U	N	CV
7440-02-0	Nickel	24.00	B		P
7440-09-7	Potassium	7880.00			P
7782-49-2	Selenium	25.00	B	W	F
7440-22-4	Silver	7.00	U		P
7440-23-5	Sodium	25000.00			P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	4.00	U		P
7440-66-6	Zinc	3.00	U		P
	Cyanide	10.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

000018

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MCBX47

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Matrix (soil/water): WATER Lab Sample ID: 89-32-10

Level (low/med): LOW Date Received: 07/11/89

% 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	43.00	B		P
7440-36-0	Antimony	24.00	B	N	P
7440-38-2	Arsenic	4.00	U		F
7440-39-3	Barium	81.00	B		P
7440-41-7	Beryllium	3.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	27600.00			P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	5.00	U		P
7440-50-8	Copper	67.00			P
7439-89-6	Iron	446.00			P
7439-92-1	Lead	4.00	B	WN*	F
7439-95-4	Magnesium	9200.00			P
7439-96-5	Manganese	159.00			P
7439-97-6	Mercury	2.00		N	CV
7440-02-0	Nickel	514.00			P
7440-09-7	Potassium	7550.00			P
7782-49-2	Selenium	2.00	U		F
7440-22-4	Silver	7.00	U		P
7440-23-5	Sodium	23000.00			P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	629.00			P
7440-66-6	Zinc	10.00	U		P
	Cyanide	10.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

000018

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MCBX40

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Matrix (soil/water): WATER Lab Sample ID: 89-32-09

Level (low/med): LOW Date Received: 07/11/89

% 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	16.00	U		P
7440-36-0	Antimony	24.00	B	N	P
7440-38-2	Arsenic	4.00	U		F
7440-39-3	Barium	379.00			P
7440-41-7	Beryllium	3.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	40300.00			P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	5.00	U		P
7440-50-8	Copper	7.00	B		P
7439-89-6	Iron	32.00	U		P
7439-92-1	Lead	3.00	U	N*	F
7439-95-4	Magnesium	22200.00			P
7439-96-5	Manganese	19.00			P
7439-97-6	Mercury	0.00		N	CV
7440-02-0	Nickel	5.00	U		P
7440-09-7	Potassium	3750.00	B		P
7782-49-2	Selenium	3.00	U		F
7440-22-4	Silver	7.00	U		P
7440-23-5	Sodium	22500.00			P
7440-28-0	Thallium	3.00	U		F
7440-62-2	Vanadium	4.00	U		P
7440-66-6	Zinc	3.00	U		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

000009

U.S. EPA - CLP

ORIGINAL (Red)

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBCX43

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

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

Level (low/med): LOW Date Received: 07/11/89

% 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	41.00	B		P
7440-36-0	Antimony	16.00	U	N	P
7440-38-2	Arsenic	4.00	U		F
7440-39-3	Barium	67.00	B		P
7440-41-7	Beryllium	3.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	23400.00			P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	5.00	U		P
7440-50-8	Copper	31.00			P
7439-89-6	Iron	4010.00			P
7439-92-1	Lead	35.00		N*	F
7439-95-4	Magnesium	9380.00			P
7439-96-5	Manganese	56.00			P
7439-97-6	Mercury	0.20	U	N	CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	1730.00	B		P
7782-49-2	Selenium	2.00	U		F
7440-22-4	Silver	7.00	U		P
7440-23-5	Sodium	13300.00			P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	4.00	U		P
7440-66-6	Zinc	43.00			P
	Cyanide	10.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

000012

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MC0263

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Matrix (soil/water): WATER Lab Sample ID: 89-32-05

Level (low/med): LOW Date Received: 07/11/89

% 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	430.00			P
7440-36-0	Antimony	16.00	U	N	P
7440-38-2	Arsenic	4.00	U		F
7440-39-3	Barium	100.00			P
7440-41-7	Beryllium	3.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	36600.00			P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	5.00	U		P
7440-50-8	Copper	52.00			P
7439-89-6	Iron	737.00			P
7439-92-1	Lead	17.00		N*	F
7439-95-4	Magnesium	20200.00			P
7439-96-5	Manganese	290.00			P
7439-97-6	Mercury	0.20	U	N	CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	3550.00	B		P
7782-49-2	Selenium	2.00	U		F
7440-22-4	Silver	7.00	U		P
7440-23-5	Sodium	30200.00			P
7440-28-0	Thallium	2.00	U	W	F
7440-62-2	Vanadium	4.00	U		P
7440-66-6	Zinc	13.00	B		P
	Cyanide	10.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

000024

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MCQ264

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Matrix (soil/water): WATER Lab Sample ID: 89-32-06

Level (low/med): LOW Date Received: 07/11/89

% 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	16.00	U		P
7440-36-0	Antimony	16.00	B	N	P
7440-38-2	Arsenic	4.00	U		F
7440-39-3	Barium	375.00			P
7440-41-7	Beryllium	3.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	40100.00			P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	5.00	U		P
7440-50-8	Copper	5.00	B		P
7439-89-6	Iron	32.00	U		P
7439-92-1	Lead	3.00	U	N*	F
7439-95-4	Magnesium	22100.00			P
7439-96-5	Manganese	19.00			P
7439-97-6	Mercury	0.20	U	N	CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	3590.00	B		P
7782-49-2	Selenium	2.00	U		F
7440-22-4	Silver	7.00	U		P
7440-23-5	Sodium	32400.00			P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	4.00	U		P
7440-66-6	Zinc	3.00	U		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

000025

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MCBX45

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Matrix (soil/water): WATER Lab Sample ID: 89-32-07

Level (low/med): LOW Date Received: 07/11/89

% 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	16.00	U		P
7440-36-0	Antimony	16.00	U	N	P
7440-38-2	Arsenic	4.00	U		F
7440-39-3	Barium	65.00	B		P
7440-41-7	Beryllium	3.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	24200.00			P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	5.00	U		P
7440-50-8	Copper	3.00	U		P
7439-89-6	Iron	42.00	B		P
7439-92-1	Lead	3.00	U	N*	F
7439-95-4	Magnesium	9120.00			P
7439-96-5	Manganese	48.00			P
7439-97-6	Mercury	0.20	U	N	CV
7440-02-0	Nickel	8.00	U		P
7440-09-7	Potassium	1700.00	B		P
7782-49-2	Selenium	2.00	B		F
7440-22-4	Silver	7.00	U		P
7440-23-5	Sodium	14700.00			P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	4.00	U		P
7440-66-6	Zinc	12.00	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

000014

U.S. EPA - CLP

ORIGINAL (Red)

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MCBX46

Lab Name: NET-MIDATLANTIC, INC. Contract: 68-W8-0063

Lab Code: CENTRY Case No.: 12283 SAS No.: _____ SDG No.: MCBX40

Matrix (soil/water): WATER Lab Sample ID: 89-32-08

Level (low/med): LOW Date Received: 07/11/89

% 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	16.00	U		P
7440-36-0	Antimony	21.00	B	N	P
7440-38-2	Arsenic	4.00	U		F
7440-39-3	Barium	168.00	B		P
7440-41-7	Beryllium	3.00	U		P
7440-43-9	Cadmium	2.00	U		P
7440-70-2	Calcium	60800.00			P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	5.00	U		P
7440-50-8	Copper	3.00	U		P
7439-89-6	Iron	32.00	U		P
7439-92-1	Lead	3.00	U	N+	F
7439-95-4	Magnesium	35500.00			P
7439-96-5	Manganese	672.00			P
7439-97-6	Mercury	0.20	U	N	CV
7440-02-0	Nickel	9.00	U		P
7440-09-7	Potassium	3390.00	B		P
7782-49-2	Selenium	2.00	U		F
7440-22-4	Silver	7.00	U		P
7440-23-5	Sodium	71400.00			P
7440-28-0	Thallium	2.00	U	W	F
7440-62-2	Vanadium	4.00	U		P
7440-66-6	Zinc	8.00	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

000015

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
ORIGINAL (Red)
CP857

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CP857

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1010717D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ Date Analyzed: 07/17/89

Column: (pack/cap) PACK Dilution Factor: 1.0

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	1	BJ
67-64-1	Acetone	5	BJ
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	3	J
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
ORIGINAL (Red)
CP857

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CP857

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1010717D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ Date Analyzed: 07/17/89

Column (pack/cap) PACK Dilution Factor: 1.0

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

000802 EPA SAMPLE NO.

ORIGINAL (Red)

CP857

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CP857

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4594

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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	6	J
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)Ether	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
65-85-0	Benzoic Acid	50	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	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C

000803

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CP857

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CP857

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4594

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	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	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	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	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	4	BJ
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	11	
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.

ORIGINAL (Red)

CP857

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CP857

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4594

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	28.46	26	J
2.	UNKNOWN	29.99	96	J
3.	UNKNOWN	41.27	260	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

001225

EPA SAMPLE NO.

CP857

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CP857

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

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/21/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.096	
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	U
309-00-2	Aldrin	0.050	U
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
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

000058

EPA SAMPLE NO.

ORIGINAL (Red)

CAP55

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CAP55

Sample wt/vol: 5.1 (g/mL) G Lab File ID: 1010714D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 33 Date Analyzed: 07/14/89

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	3	BJ
67-64-1	Acetone	15	B
75-15-0	Carbon Disulfide	7	U
75-35-4	1,1-Dichloroethene	7	U
75-34-3	1,1-Dichloroethane	7	U
540-59-0	1,2-Dichloroethene (total)	7	U
67-66-3	Chloroform	7	U
107-06-2	1,2-Dichloroethane	7	U
78-93-3	2-Butanone	14	U
71-55-6	1,1,1-Trichloroethane	7	U
56-23-5	Carbon Tetrachloride	7	U
108-05-4	Vinyl Acetate	14	U
75-27-4	Bromodichloromethane	7	U
78-87-5	1,2-Dichloropropane	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
79-01-6	Trichloroethene	7	U
124-48-1	Dibromochloromethane	7	U
79-00-5	1,1,2-Trichloroethane	7	U
71-43-2	Benzene	7	U
10061-02-6	Trans-1,3-Dichloropropene	7	U
75-25-2	Bromoform	7	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	7	U
79-34-5	1,1,2,2-Tetrachloroethane	7	U
108-88-3	Toluene	7	U
108-90-7	Chlorobenzene	7	U
100-41-4	Ethylbenzene	7	U
100-42-5	Styrene	7	U
1330-20-7	Total Xylenes	7	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000059 EPA SAMPLE NO.

ORIGINAL (Red)

CAP55

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CAP55

Sample wt/vol: 5.1 (g/mL) G Lab File ID: 1010714D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 33 Date Analyzed: 07/14/89

Column (pack/cap) PACK Dilution Factor: 1.0

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

000513 EPA SAMPLE NO.

ORIGINAL (Red)

CAP55

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CAP55

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4569

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 12 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/89

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	750	U
111-44-4	bis(2-Chloroethyl)Ether	750	U
95-57-8	2-Chlorophenol	750	U
541-73-1	1,3-Dichlorobenzene	750	U
106-46-7	1,4-Dichlorobenzene	750	U
100-51-6	Benzyl Alcohol	750	U
95-50-1	1,2-Dichlorobenzene	750	U
95-48-7	2-Methylphenol	750	U
108-60-1	bis(2-Chloroisopropyl)Ether	750	U
106-44-5	4-Methylphenol	750	U
621-64-7	N-Nitroso-Di-n-Propylamine	750	U
67-72-1	Hexachloroethane	750	U
98-95-3	Nitrobenzene	750	U
78-59-1	Isophorone	750	U
88-75-5	2-Nitrophenol	750	U
105-67-9	2,4-Dimethylphenol	750	U
65-85-0	Benzoic Acid	3600	U
111-91-1	bis(2-Chloroethoxy)Methane	750	U
120-83-2	2,4-Dichlorophenol	750	U
120-82-1	1,2,4-Trichlorobenzene	750	U
91-20-3	Naphthalene	750	U
106-47-8	4-Chloroaniline	750	U
87-68-3	Hexachlorobutadiene	750	U
59-50-7	4-Chloro-3-Methylphenol	750	U
91-57-6	2-Methylnaphthalene	750	U
77-47-4	Hexachlorocyclopentadiene	750	U
88-06-2	2,4,6-Trichlorophenol	750	U
95-95-4	2,4,5-Trichlorophenol	3600	U
91-58-7	2-Chloronaphthalene	750	U
88-74-4	2-Nitroaniline	3600	U
131-11-3	Dimethyl Phthalate	750	U
208-96-8	Acenaphthylene	750	U
606-20-2	2,6-Dinitrotoluene	750	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ORIGINAL (Red)

CAP55

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CAP55

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4569

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 12 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/89

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3600	U
83-32-9	Acenaphthene	750	U
51-28-5	2,4-Dinitrophenol	3600	U
100-02-7	4-Nitrophenol	3600	U
132-64-9	Dibenzofuran	750	U
121-14-2	2,4-Dinitrotoluene	750	U
84-66-2	Diethylphthalate	750	U
7005-72-3	4-Chlorophenyl-phenylether	750	U
86-73-7	Fluorene	750	U
100-01-6	4-Nitroaniline	3600	U
534-52-1	4,6-Dinitro-2-Methylphenol	3600	U
86-30-6	N-Nitrosodiphenylamine (1)	750	U
101-55-3	4-Bromophenyl-phenylether	750	U
118-74-1	Hexachlorobenzene	750	U
87-86-5	Pentachlorophenol	3600	U
85-01-8	Phenanthrene	750	U
120-12-7	Anthracene	750	U
84-74-2	Di-n-Butylphthalate	86	J
206-44-0	Fluoranthene	750	U
129-00-0	Pyrene	750	U
85-68-7	Butylbenzylphthalate	750	U
91-94-1	3,3'-Dichlorobenzidine	1500	U
56-55-3	Benzo(a)Anthracene	750	U
218-01-9	Chrysene	750	U
117-81-7	bis(2-Ethylhexyl)Phthalate	750	U
117-84-0	Di-n-Octyl Phthalate	750	U
205-99-2	Benzo(b)Fluoranthene	750	U
207-08-9	Benzo(k)Fluoranthene	750	U
50-32-8	Benzo(a)Pyrene	750	U
193-39-5	Indeno(1,2,3-cd)Pyrene	750	U
53-70-3	Dibenz(a,h)Anthracene	750	U
191-24-2	Benzo(g,h,i)Perylene	750	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CAP55

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CAP55

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4569

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 12 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/89

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.08	920	J
2.	UNKNOWN	5.60	51000	J
3.	UNKNOWN	27.61	340	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

1197 ORIGINAL (Red)

EPA SAMPLE NO.

CAP55

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CAP55

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 12 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/25/89

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	18	U
319-85-7	beta-BHC	18	U
319-86-8	delta-BHC	18	U
58-89-9	gamma-BHC (Lindane)	18	U
76-44-8	Heptachlor	18	U
309-00-2	Aldrin	18	U
1024-57-3	Heptachlor epoxide	18	U
959-98-8	Endosulfan I	18	U
60-57-1	Dieldrin	36	U
72-55-9	4,4'-DDE	36	U
72-20-8	Endrin	36	U
33213-65-9	Endosulfan II	36	U
72-54-8	4,4'-DDD	36	U
1031-07-8	Endosulfan sulfate	36	U
50-29-3	4,4'-DDT	36	U
72-43-5	Methoxychlor	180	U
53494-70-5	Endrin ketone	36	U
5103-71-9	alpha-Chlordane	180	U
5103-74-2	gamma-Chlordane	180	U
8001-35-2	Toxaphene	360	U
12674-11-2	Aroclor-1016	180	U
11104-28-2	Aroclor-1221	180	U
11141-16-5	Aroclor-1232	180	U
53469-21-9	Aroclor-1242	180	U
12672-29-6	Aroclor-1248	180	U
11097-69-1	Aroclor-1254	360	U
11096-82-5	Aroclor-1260	360	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

001197

EPA SAMPLE NO.

CAP55 ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CAP55

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 12 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/25/89

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	18	U
319-85-7	beta-BHC	18	U
319-86-8	delta-BHC	18	U
58-89-9	gamma-BHC (Lindane)	18	U
76-44-8	Heptachlor	18	U
309-00-2	Aldrin	18	U
1024-57-3	Heptachlor epoxide	18	U
959-98-8	Endosulfan I	18	U
60-57-1	Dieldrin	36	U
72-55-9	4,4'-DDE	36	U
72-20-8	Endrin	36	U
33213-65-9	Endosulfan II	36	U
72-54-8	4,4'-DDD	36	U
1031-07-8	Endosulfan sulfate	36	U
50-29-3	4,4'-DDT	36	U
72-43-5	Methoxychlor	180	U
53494-70-5	Endrin ketone	36	U
5103-71-9	alpha-Chlordane	180	U
5103-74-2	gamma-Chlordane	180	U
8001-35-2	Toxaphene	360	U
12674-11-2	Aroclor-1016	180	U
11104-28-2	Aroclor-1221	180	U
11141-16-5	Aroclor-1232	180	U
53469-21-9	Aroclor-1242	180	U
12672-29-6	Aroclor-1248	180	U
11097-69-1	Aroclor-1254	360	U
11096-82-5	Aroclor-1260	360	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

000088

EPA SAMPLE NO.

ORIGINAL

CAP57

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CAP57

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1020714D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 27 Date Analyzed: 07/14/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	7	U
67-64-1	Acetone	19	B
75-15-0	Carbon Disulfide	7	U
75-35-4	1,1-Dichloroethene	7	U
75-34-3	1,1-Dichloroethane	7	U
540-59-0	1,2-Dichloroethene (total)	7	U
67-66-3	Chloroform	7	U
107-06-2	1,2-Dichloroethane	7	U
78-93-3	2-Butanone	18	
71-55-6	1,1,1-Trichloroethane	7	U
56-23-5	Carbon Tetrachloride	7	U
108-05-4	Vinyl Acetate	14	U
75-27-4	Bromodichloromethane	7	U
78-87-5	1,2-Dichloropropane	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
79-01-6	Trichloroethene	7	U
124-48-1	Dibromochloromethane	7	U
79-00-5	1,1,2-Trichloroethane	7	U
71-43-2	Benzene	7	U
10061-02-6	Trans-1,3-Dichloropropene	7	U
75-25-2	Bromoform	7	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	7	U
79-34-5	1,1,2,2-Tetrachloroethane	7	U
108-88-3	Toluene	7	U
108-90-7	Chlorobenzene	7	U
100-41-4	Ethylbenzene	7	U
100-42-5	Styrene	7	U
1330-20-7	Total Xylenes	7	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000089

EPA SAMPLE NO.

CAP57

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CAP57

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1020714D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 27 Date Analyzed: 07/14/89

Column (pack/cap) PACK Dilution Factor: 1.00

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.
ORIGINAL (Reg)
CAP57

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CAP57

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 4571

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 13 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	750	U
111-44-4	bis(2-Chloroethyl)Ether	750	U
95-57-8	2-Chlorophenol	750	U
541-73-1	1,3-Dichlorobenzene	750	U
106-46-7	1,4-Dichlorobenzene	750	U
100-51-6	Benzyl Alcohol	750	U
95-50-1	1,2-Dichlorobenzene	750	U
95-48-7	2-Methylphenol	750	U
108-60-1	bis(2-Chloroisopropyl)Ether	750	U
106-44-5	4-Methylphenol	750	U
621-64-7	N-Nitroso-Di-n-Propylamine	750	U
67-72-1	Hexachloroethane	750	U
98-95-3	Nitrobenzene	750	U
78-59-1	Isophorone	750	U
88-75-5	2-Nitrophenol	750	U
105-67-9	2,4-Dimethylphenol	750	U
65-85-0	Benzoic Acid	3700	U
111-91-1	bis(2-Chloroethoxy)Methane	750	U
120-83-2	2,4-Dichlorophenol	750	U
120-82-1	1,2,4-Trichlorobenzene	750	U
91-20-3	Naphthalene	750	U
106-47-8	4-Chloroaniline	750	U
87-68-3	Hexachlorobutadiene	750	U
59-50-7	4-Chloro-3-Methylphenol	750	U
91-57-6	2-Methylnaphthalene	750	U
77-47-4	Hexachlorocyclopentadiene	750	U
88-06-2	2,4,6-Trichlorophenol	750	U
95-95-4	2,4,5-Trichlorophenol	3700	U
91-58-7	2-Chloronaphthalene	750	U
88-74-4	2-Nitroaniline	3700	U
131-11-3	Dimethyl Phthalate	750	U
208-96-8	Acenaphthylene	750	U
606-20-2	2,6-Dinitrotoluene	750	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EMF 8-7-89 ~~685000~~ 000589

EPA SAMPLE NO.

CAP57 ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CAP57

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 4571

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 13 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3700	U
83-32-9	Acenaphthene	750	U
51-28-5	2,4-Dinitrophenol	3700	U
100-02-7	4-Nitrophenol	3700	U
132-64-9	Dibenzofuran	750	U
121-14-2	2,4-Dinitrotoluene	750	U
84-66-2	Diethylphthalate	750	U
7005-72-3	4-Chlorophenyl-phenylether	750	U
86-73-7	Fluorene	750	U
100-01-6	4-Nitroaniline	3700	U
534-52-1	4,6-Dinitro-2-Methylphenol	3700	U
86-30-6	N-Nitrosodiphenylamine (1)	750	U
101-55-3	4-Bromophenyl-phenylether	750	U
118-74-1	Hexachlorobenzene	750	U
87-86-5	Pentachlorophenol	3700	U
85-01-8	Phenanthrene	98	J
120-12-7	Anthracene	750	U
84-74-2	Di-n-Butylphthalate	77	J
206-44-0	Fluoranthene	130	J
129-00-0	Pyrene	140	J
85-68-7	Butylbenzylphthalate	750	U
91-94-1	3,3'-Dichlorobenzidine	1500	U
56-55-3	Benzo(a)Anthracene	750	U
218-01-9	Chrysene	110	J
117-81-7	bis(2-Ethylhexyl)Phthalate	750	U
117-84-0	Di-n-Octyl Phthalate	750	U
205-99-2	Benzo(b)Fluoranthene	750	U
207-08-9	Benzo(k)Fluoranthene	750	U
50-32-8	Benzo(a)Pyrene	750	U
193-39-5	Indeno(1,2,3-cd)Pyrene	750	U
53-70-3	Dibenz(a,h)Anthracene	750	U
191-24-2	Benzo(g,h,i)Perylene	750	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000590 EPA SAMPLE NO.

ORIGINAL (Red)

CAP57

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CAP57

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 4571

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 13 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.08	800	J
2.	UNKNOWN	5.58	53000	J

1205

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CAP57 ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CAP57

Sample wt/vol: 30.1 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 13 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/25/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	18	U
319-85-7	beta-BHC	18	U
319-86-8	delta-BHC	18	U
58-89-9	gamma-BHC (Lindane)	18	U
76-44-8	Heptachlor	18	U
309-00-2	Aldrin	18	U
1024-57-3	Heptachlor epoxide	18	U
959-98-8	Endosulfan I	18	U
60-57-1	Dieldrin	37	U
72-55-9	4,4'-DDE	37	U
72-20-8	Endrin	37	U
33213-65-9	Endosulfan II	37	U
72-54-8	4,4'-DDD	37	U
1031-07-8	Endosulfan sulfate	37	U
50-29-3	4,4'-DDT	37	U
72-43-5	Methoxychlor	180	U
53494-70-5	Endrin ketone	37	U
5103-71-9	alpha-Chlordane	180	U
5103-74-2	gamma-Chlordane	180	U
8001-35-2	Toxaphene	370	U
12674-11-2	Aroclor-1016	180	U
11104-28-2	Aroclor-1221	180	U
11141-16-5	Aroclor-1232	180	U
53469-21-9	Aroclor-1242	180	U
12672-29-6	Aroclor-1248	180	U
11097-69-1	Aroclor-1254	370	U
11096-82-5	Aroclor-1260	370	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

001205

EPA SAMPLE NO.

CAP57

ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CAP57

Sample wt/vol: 30.1 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 13 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/25/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	18	U
319-85-7	beta-BHC	18	U
319-86-8	delta-BHC	18	U
58-89-9	gamma-BHC (Lindane)	18	U
76-44-8	Heptachlor	18	U
309-00-2	Aldrin	18	U
1024-57-3	Heptachlor epoxide	18	U
959-98-8	Endosulfan I	18	U
60-57-1	Dieldrin	37	U
72-55-9	4,4'-DDE	37	U
72-20-8	Endrin	37	U
33213-65-9	Endosulfan II	37	U
72-54-8	4,4'-DDD	37	U
1031-07-8	Endosulfan sulfate	37	U
50-29-3	4,4'-DDT	37	U
72-43-5	Methoxychlor	180	U
53494-70-5	Endrin ketone	37	U
5103-71-9	alpha-Chlordane	180	U
5103-74-2	gamma-Chlordane	180	U
8001-35-2	Toxaphene	370	U
12674-11-2	Aroclor-1016	180	U
11104-28-2	Aroclor-1221	180	U
11141-16-5	Aroclor-1232	180	U
53469-21-9	Aroclor-1242	180	U
12672-29-6	Aroclor-1248	180	U
11097-69-1	Aroclor-1254	370	U
11096-82-5	Aroclor-1260	370	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
ORIGINAL (Red)
CAP56

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CAP56

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1090716D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ Date Analyzed: 07/16/89

Column: (pack/cap) PACK Dilution Factor: 1.0

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	1	J
67-64-1	Acetone	30	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	2	J
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	1	J
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CAP56 ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CAP56

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1090716D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ Date Analyzed: 07/16/89

Column (pack/cap) PACK Dilution Factor: 1.0

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

000541

EPA SAMPLE NO.

ORIGINAL (Red)

CAP56

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CAP56

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4596

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)Ether	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
65-85-0	Benzoic Acid	50	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	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

000545

EPA SAMPLE NO.

ORIGINAL (Red) PFE

CAP56

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CAP56

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4596

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	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	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	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	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	3	BJ
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	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

000546

EPA SAMPLE NO.

CAP56 ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CAP56

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4596

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	39.49	67	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET 001201

EPA SAMPLE NO.
ORIGINAL (Red)
CAP56

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CAP56

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

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/21/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
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
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

000187

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ORIGINAL (Red)

CW767

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CW767

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1050716D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ Date Analyzed: 07/16/89

Column: (pack/cap) PACK Dilution Factor: 1.0

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	1	J
67-64-1	Acetone	31	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	3	J
75-34-3	1,1-Dichloroethane	2	J
540-59-0	1,2-Dichloroethene (total)	10	
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	2	J
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	76	
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	1	J
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000188 EPA SAMPLE NO.

ORIGINAL
CW767

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CW767

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1050716D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ Date Analyzed: 07/16/89

Column (pack/cap) PACK Dilution Factor: 1.0

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.

ORIGINAL CW767 (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CW767

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4598

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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	3	J
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)Ether	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
65-85-0	Benzoic Acid	50	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	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ORIGINAL (Red) CW767

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CW767

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4598

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	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	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	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	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	5	BJ
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	18	
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

000913 EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

ORIGINAL CW767L (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CW767

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4598

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	30.21	110	J
2.	UNKNOWN	35.72	100	J

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

001236 EPA SAMPLE NO.

CW767

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CW767

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

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/21/89

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

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

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.050	U
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	U
309-00-2	Aldrin	0.050	U
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
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET 000129

EPA SAMPLE NO.

CP855 ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CP855

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1070716D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ Date Analyzed: 07/16/89

Column: (pack/cap) PACK Dilution Factor: 1.0

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	J
67-64-1	Acetone	25	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000130

EPA SAMPLE NO.

CP855

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CP855

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1070716D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ Date Analyzed: 07/16/89

Column (pack/cap) PACK Dilution Factor: 1.0

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.

CP855 ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CP855

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4595

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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	2	J
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)Ether	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
65-85-0	Benzoic Acid	50	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	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

000722 EPA SAMPLE NO.

CP855 ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CP855

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4595

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	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	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	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	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	3	BJ
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	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

000723

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ORIGINAL (Red) CP855

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CP855

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4595

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	29.91	110	J
2.	UNKNOWN	39.41	60	J
3.	UNKNOWN	41.39	560	J

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

001217

EPA SAMPLE NO.

CP855 ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CP855

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

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/21/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
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
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

000020 EPA SAMPLE NO.

ORIGINAL
CAP53

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CAP53

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1010716D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ Date Analyzed: 07/16/89

Column: (pack/cap) PACK Dilution Factor: 1.0

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	1	J
67-64-1	Acetone	16	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	1	J
75-34-3	1,1-Dichloroethane	3	J
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	4	J
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	J
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000021 EPA SAMPLE NO.

CAP53

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CAP53

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1010716D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ Date Analyzed: 07/16/89

Column (pack/cap) PACK Dilution Factor: 1.0

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.
ORIGINAL (Red)
CAP53

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CAP53

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4593

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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	5	J
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)Ether	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
65-85-0	Benzoic Acid	50	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	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

000433 EPA SAMPLE NO.

CAP53 ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CAP53

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4593

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	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	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	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	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	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	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	4	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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ORIGINAL (Red) CAP53

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CAP53

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4593

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	27.62	11	J
2.	UNKNOWN	28.51	30	J
3.	UNKNOWN	31.01	29	J

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

001186 EPA SAMPLE NO.

CAP53 ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CAP53

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

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/21/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.34	
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	U
309-00-2	Aldrin	0.050	U
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
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

000250 EPA SAMPLE NO.

ORIGINAL
CY256

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CY256

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1100714D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ Date Analyzed: 07/14/89

Column: (pack/cap) PACK Dilution Factor: 1.0

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	3	BJ
67-64-1	Acetone	33	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	3	J
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000251 EPA SAMPLE NO.

CY256 ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CY256

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1100714D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ Date Analyzed: 07/14/89

Column (pack/cap) PACK Dilution Factor: 1.0

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

000142 EPA SAMPLE NO.

CP856

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CP856

Sample wt/vol: 4.8 (g/mL) G Lab File ID: 1090714D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 28 Date Analyzed: 07/14/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	6	BJ
67-64-1	Acetone	42	B
75-15-0	Carbon Disulfide	7	U
75-35-4	1,1-Dichloroethene	7	U
75-34-3	1,1-Dichloroethane	7	U
540-59-0	1,2-Dichloroethene (total)	7	U
67-66-3	Chloroform	7	U
107-06-2	1,2-Dichloroethane	7	U
78-93-3	2-Butanone	24	
71-55-6	1,1,1-Trichloroethane	7	U
56-23-5	Carbon Tetrachloride	7	U
108-05-4	Vinyl Acetate	14	U
75-27-4	Bromodichloromethane	7	U
78-87-5	1,2-Dichloropropane	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
79-01-6	Trichloroethene	7	U
124-48-1	Dibromochloromethane	7	U
79-00-5	1,1,2-Trichloroethane	7	U
71-43-2	Benzene	7	U
10061-02-6	Trans-1,3-Dichloropropene	7	U
75-25-2	Bromoform	7	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	7	U
79-34-5	1,1,2,2-Tetrachloroethane	7	U
108-88-3	Toluene	7	U
108-90-7	Chlorobenzene	7	U
100-41-4	Ethylbenzene	7	U
100-42-5	Styrene	7	U
1330-20-7	Total Xylenes	7	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000143

EPA SAMPLE NO.

ORIGINAL
CP856

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CP856

Sample wt/vol: 4.8 (g/mL) G Lab File ID: 1090714D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 28 Date Analyzed: 07/14/89

Column (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B

000759

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CP856

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CP856

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 4572

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 29 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/89

GPC Cleanup: (Y/N) Y pH: 4.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	920	U
111-44-4	bis(2-Chloroethyl)Ether	920	U
95-57-8	2-Chlorophenol	920	U
541-73-1	1,3-Dichlorobenzene	920	U
106-46-7	1,4-Dichlorobenzene	920	U
100-51-6	Benzyl Alcohol	920	U
95-50-1	1,2-Dichlorobenzene	920	U
95-48-7	2-Methylphenol	920	U
108-60-1	bis(2-Chloroisopropyl)Ether	920	U
106-44-5	4-Methylphenol	920	U
621-64-7	N-Nitroso-Di-n-Propylamine	920	U
67-72-1	Hexachloroethane	920	U
98-95-3	Nitrobenzene	920	U
78-59-1	Isophorone	920	U
88-75-5	2-Nitrophenol	920	U
105-67-9	2,4-Dimethylphenol	920	U
65-85-0	Benzoic Acid	4500	U
111-91-1	bis(2-Chloroethoxy)Methane	920	U
120-83-2	2,4-Dichlorophenol	920	U
120-82-1	1,2,4-Trichlorobenzene	920	U
91-20-3	Naphthalene	920	U
106-47-8	4-Chloroaniline	920	U
87-68-3	Hexachlorobutadiene	920	U
59-50-7	4-Chloro-3-Methylphenol	920	U
91-57-6	2-Methylnaphthalene	920	U
77-47-4	Hexachlorocyclopentadiene	920	U
88-06-2	2,4,6-Trichlorophenol	920	U
95-95-4	2,4,5-Trichlorophenol	4500	U
91-58-7	2-Chloronaphthalene	920	U
88-74-4	2-Nitroaniline	4500	U
131-11-3	Dimethyl Phthalate	920	U
208-96-8	Acenaphthylene	920	U
606-20-2	2,6-Dinitrotoluene	920	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CP856 ORIGINAL

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CP856

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 4572

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 29 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/89

GPC Cleanup: (Y/N) Y pH: 4.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	4500	U
83-32-9	Acenaphthene	920	U
51-28-5	2,4-Dinitrophenol	4500	U
100-02-7	4-Nitrophenol	4500	U
132-64-9	Dibenzofuran	920	U
121-14-2	2,4-Dinitrotoluene	920	U
84-66-2	Diethylphthalate	920	U
7005-72-3	4-Chlorophenyl-phenylether	920	U
86-73-7	Fluorene	920	U
100-01-6	4-Nitroaniline	4500	U
534-52-1	4,6-Dinitro-2-Methylphenol	4500	U
86-30-6	N-Nitrosodiphenylamine (1)	920	U
101-55-3	4-Bromophenyl-phenylether	920	U
118-74-1	Hexachlorobenzene	920	U
87-86-5	Pentachlorophenol	4500	U
85-01-8	Phenanthrene	920	U
120-12-7	Anthracene	920	U
84-74-2	Di-n-Butylphthalate	920	U
206-44-0	Fluoranthene	920	U
129-00-0	Pyrene	920	U
85-68-7	Butylbenzylphthalate	920	U
91-94-1	3,3'-Dichlorobenzidine	1800	U
56-55-3	Benzo(a)Anthracene	920	U
218-01-9	Chrysene	920	U
117-81-7	bis(2-Ethylhexyl)Phthalate	920	U
117-84-0	Di-n-Octyl Phthalate	920	U
205-99-2	Benzo(b)Fluoranthene	920	U
207-08-9	Benzo(k)Fluoranthene	920	U
50-32-8	Benzo(a)Pyrene	920	U
193-39-5	Indeno(1,2,3-cd)Pyrene	920	U
53-70-3	Dibenz(a,h)Anthracene	920	U
191-24-2	Benzo(g,h,i)Perylene	920	U

(1) - Cannot be separated from Diphenylamine

1F

000761

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CP856 ORIGINAL (Rerun)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CP856

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 4572

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 29 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/89

GPC Cleanup: (Y/N) Y pH: 4.8 Dilution Factor: 1.0

Number TICs found: 9

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.08	910	J
2.	UNKNOWN	5.60	58000	J
3.	UNKNOWN	29.44	700	J
4.	UNKNOWN	31.17	810	J
5.	UNKNOWN	31.94	5900	J
6.	UNKNOWN	34.42	1100	J
7.	UNKNOWN	35.47	5800	J
8.	UNKNOWN	39.12	1200	J
9.	UNKNOWN	40.62	1500	J

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET 001221

EPA SAMPLE NO.

CP856 ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CP856

Sample wt/vol: 30.06 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 29 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/25/89

GPC Cleanup: (Y/N) Y pH: 4.8 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	23	U
319-85-7	beta-BHC	23	U
319-86-8	delta-BHC	23	U
58-89-9	gamma-BHC (Lindane)	23	U
76-44-8	Heptachlor	23	U
309-00-2	Aldrin	23	U
1024-57-3	Heptachlor epoxide	23	U
959-98-8	Endosulfan I	23	U
60-57-1	Dieldrin	45	U
72-55-9	4,4'-DDE	45	U
72-20-8	Endrin	45	U
33213-65-9	Endosulfan II	45	U
72-54-8	4,4'-DDD	45	U
1031-07-8	Endosulfan sulfate	45	U
50-29-3	4,4'-DDT	45	U
72-43-5	Methoxychlor	230	U
53494-70-5	Endrin ketone	45	U
5103-71-9	alpha-Chlordane	230	U
5103-74-2	gamma-Chlordane	230	U
8001-35-2	Toxaphene	450	U
12674-11-2	Aroclor-1016	230	U
11104-28-2	Aroclor-1221	230	U
11141-16-5	Aroclor-1232	230	U
53469-21-9	Aroclor-1242	230	U
12672-29-6	Aroclor-1248	230	U
11097-69-1	Aroclor-1254	450	U
11096-82-5	Aroclor-1260	450	U

1221

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CP856

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CP856

Sample wt/vol: 30.06 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 29 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/25/89

GPC Cleanup: (Y/N) Y pH: 4.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	23	U
319-85-7	beta-BHC	23	U
319-86-8	delta-BHC	23	U
58-89-9	gamma-BHC (Lindane)	23	U
76-44-8	Heptachlor	23	U
309-00-2	Aldrin	23	U
1024-57-3	Heptachlor epoxide	23	U
959-98-8	Endosulfan I	23	U
60-57-1	Dieldrin	45	U
72-55-9	4,4'-DDE	45	U
72-20-8	Endrin	45	U
33213-65-9	Endosulfan II	45	U
72-54-8	4,4'-DDD	45	U
1031-07-8	Endosulfan sulfate	45	U
50-29-3	4,4'-DDT	45	U
72-43-5	Methoxychlor	230	U
53494-70-5	Endrin ketone	45	U
5103-71-9	alpha-Chlordane	230	U
5103-74-2	gamma-Chlordane	230	U
8001-35-2	Toxaphene	450	U
12674-11-2	Aroclor-1016	230	U
11104-28-2	Aroclor-1221	230	U
11141-16-5	Aroclor-1232	230	U
53469-21-9	Aroclor-1242	230	U
12672-29-6	Aroclor-1248	230	U
11097-69-1	Aroclor-1254	450	U
11096-82-5	Aroclor-1260	450	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

000101

EPA SAMPLE NO.

CN721

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CN721

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1030714D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 12 Date Analyzed: 07/14/89

Column: (pack/cap) PACK Dilution Factor: 1.0

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	77	B
67-64-1	Acetone	20	B
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000102 EPA SAMPLE NO.

CN721

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CN721

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1030714D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 12 Date Analyzed: 07/14/89

Column (pack/cap) PACK Dilution Factor: 1.0

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

000627

EPA SAMPLE NO.

CN721

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CN721

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4574

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 12 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/89

GPC Cleanup: (Y/N) Y pH: 5.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	750	U
111-44-4	bis(2-Chloroethyl)Ether	750	U
95-57-8	2-Chlorophenol	750	U
541-73-1	1,3-Dichlorobenzene	750	U
106-46-7	1,4-Dichlorobenzene	750	U
100-51-6	Benzyl Alcohol	750	U
95-50-1	1,2-Dichlorobenzene	750	U
95-48-7	2-Methylphenol	750	U
108-60-1	bis(2-Chloroisopropyl)Ether	750	U
106-44-5	4-Methylphenol	750	U
621-64-7	N-Nitroso-Di-n-Propylamine	750	U
67-72-1	Hexachloroethane	750	U
98-95-3	Nitrobenzene	750	U
78-59-1	Isophorone	750	U
88-75-5	2-Nitrophenol	750	U
105-67-9	2,4-Dimethylphenol	750	U
65-85-0	Benzoic Acid	3600	U
111-91-1	bis(2-Chloroethoxy)Methane	750	U
120-83-2	2,4-Dichlorophenol	750	U
120-82-1	1,2,4-Trichlorobenzene	750	U
91-20-3	Naphthalene	750	U
106-47-8	4-Chloroaniline	750	U
87-68-3	Hexachlorobutadiene	750	U
59-50-7	4-Chloro-3-Methylphenol	750	U
91-57-6	2-Methylnaphthalene	750	U
77-47-4	Hexachlorocyclopentadiene	750	U
88-06-2	2,4,6-Trichlorophenol	750	U
95-95-4	2,4,5-Trichlorophenol	3600	U
91-58-7	2-Chloronaphthalene	750	U
88-74-4	2-Nitroaniline	3600	U
131-11-3	Dimethyl Phthalate	750	U
208-96-8	Acenaphthylene	750	U
606-20-2	2,6-Dinitrotoluene	750	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CN721

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CN721

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4574

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 12 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/89

GPC Cleanup: (Y/N) Y pH: 5.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3600	U
83-32-9	Acenaphthene	750	U
51-28-5	2,4-Dinitrophenol	3600	U
100-02-7	4-Nitrophenol	3600	U
132-64-9	Dibenzofuran	750	U
121-14-2	2,4-Dinitrotoluene	750	U
84-66-2	Diethylphthalate	750	U
7005-72-3	4-Chlorophenyl-phenylether	750	U
86-73-7	Fluorene	750	U
100-01-6	4-Nitroaniline	3600	U
534-52-1	4,6-Dinitro-2-Methylphenol	3600	U
86-30-6	N-Nitrosodiphenylamine (1)	750	U
101-55-3	4-Bromophenyl-phenylether	750	U
118-74-1	Hexachlorobenzene	750	U
87-86-5	Pentachlorophenol	3600	U
85-01-8	Phenanthrene	750	U
120-12-7	Anthracene	750	U
84-74-2	Di-n-Butylphthalate	77	J
206-44-0	Fluoranthene	750	U
129-00-0	Pyrene	750	U
85-68-7	Butylbenzylphthalate	750	U
91-94-1	3,3'-Dichlorobenzidine	1500	U
56-55-3	Benzo(a)Anthracene	750	U
218-01-9	Chrysene	750	U
117-81-7	bis(2-Ethylhexyl)Phthalate	750	U
117-84-0	Di-n-Octyl Phthalate	750	U
205-99-2	Benzo(b)Fluoranthene	750	U
207-08-9	Benzo(k)Fluoranthene	750	U
50-32-8	Benzo(a)Pyrene	750	U
193-39-5	Indeno(1,2,3-cd)Pyrene	750	U
53-70-3	Dibenz(a,h)Anthracene	750	U
191-24-2	Benzo(g,h,i)Perylene	750	U

(1) - Cannot be separated from Diphenylamine

1F

000629

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CN721 PFE

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CN721

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4574

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 12 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/89

GPC Cleanup: (Y/N) Y pH: 5.9 Dilution Factor: 1.0

Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.12	890	J
2.	UNKNOWN	5.63	51000	J
3.	UNKNOWN	31.22	1000	J
4.	UNKNOWN	32.01	1100	J
5.	UNKNOWN	35.51	1700	J
6.	UNKNOWN	41.94	860	J

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET 001209

EPA SAMPLE NO.

CN721

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CN721

Sample wt/vol: 30.1 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 12 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/25/89

GPC Cleanup: (Y/N) Y pH: 5.9 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	18	U
319-85-7	beta-BHC	18	U
319-86-8	delta-BHC	18	U
58-89-9	gamma-BHC (Lindane)	18	U
76-44-8	Heptachlor	18	U
309-00-2	Aldrin	18	U
1024-57-3	Heptachlor epoxide	18	U
959-98-8	Endosulfan I	18	U
60-57-1	Dieldrin	36	U
72-55-9	4,4'-DDE	36	U
72-20-8	Endrin	36	U
33213-65-9	Endosulfan II	36	U
72-54-8	4,4'-DDD	36	U
1031-07-8	Endosulfan sulfate	36	U
50-29-3	4,4'-DDT	36	U
72-43-5	Methoxychlor	180	U
53494-70-5	Endrin ketone	36	U
5103-71-9	alpha-Chlordane	180	U
5103-74-2	gamma-Chlordane	180	U
8001-35-2	Toxaphene	360	U
12674-11-2	Aroclor-1016	180	U
11104-28-2	Aroclor-1221	180	U
11141-16-5	Aroclor-1232	180	U
53469-21-9	Aroclor-1242	180	U
12672-29-6	Aroclor-1248	180	U
11097-69-1	Aroclor-1254	360	U
11096-82-5	Aroclor-1260	360	U

1209

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CN721

ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CN721

Sample wt/vol: 30.1 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 12 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/25/89

GPC Cleanup: (Y/N) Y pH: 5.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	18	U
319-85-7	beta-BHC	18	U
319-86-8	delta-BHC	18	U
58-89-9	gamma-BHC (Lindane)	18	U
76-44-8	Heptachlor	18	U
309-00-2	Aldrin	18	U
1024-57-3	Heptachlor epoxide	18	U
959-98-8	Endosulfan I	18	U
60-57-1	Dieldrin	36	U
72-55-9	4,4'-DDE	36	U
72-20-8	Endrin	36	U
33213-65-9	Endosulfan II	36	U
72-54-8	4,4'-DDD	36	U
1031-07-8	Endosulfan sulfate	36	U
50-29-3	4,4'-DDT	36	U
72-43-5	Methoxychlor	180	U
53494-70-5	Endrin ketone	36	U
5103-71-9	alpha-Chlordane	180	U
5103-74-2	gamma-Chlordane	180	U
8001-35-2	Toxaphene	360	U
12674-11-2	Aroclor-1016	180	U
11104-28-2	Aroclor-1221	180	U
11141-16-5	Aroclor-1232	180	U
53469-21-9	Aroclor-1242	180	U
12672-29-6	Aroclor-1248	180	U
11097-69-1	Aroclor-1254	360	U
11096-82-5	Aroclor-1260	360	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

000114

EPA SAMPLE NO.

CN722

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CN722

Sample wt/vol: 4.9 (g/mL) G Lab File ID: 1040714D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 11 Date Analyzed: 07/14/89

Column: (pack/cap) PACK Dilution Factor: 1.00

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	63	B
67-64-1	Acetone	20	B
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	21	
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CN722

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CN722

Sample wt/vol: 4.9 (g/mL) G Lab File ID: 1040714D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 11 Date Analyzed: 07/14/89

Column (pack/cap) PACK Dilution Factor: 1.00

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

000677 EPA SAMPLE NO.

CN722 ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CN722

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4570

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 12 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/89

GPC Cleanup: (Y/N) Y pH: 5.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	750	U
111-44-4	bis(2-Chloroethyl)Ether	750	U
95-57-8	2-Chlorophenol	750	U
541-73-1	1,3-Dichlorobenzene	750	U
106-46-7	1,4-Dichlorobenzene	750	U
100-51-6	Benzyl Alcohol	750	U
95-50-1	1,2-Dichlorobenzene	750	U
95-48-7	2-Methylphenol	750	U
108-60-1	bis(2-Chloroisopropyl)Ether	750	U
106-44-5	4-Methylphenol	750	U
621-64-7	N-Nitroso-Di-n-Propylamine	750	U
67-72-1	Hexachloroethane	750	U
98-95-3	Nitrobenzene	750	U
78-59-1	Isophorone	750	U
88-75-5	2-Nitrophenol	750	U
105-67-9	2,4-Dimethylphenol	750	U
65-85-0	Benzoic Acid	3600	U
111-91-1	bis(2-Chloroethoxy)Methane	750	U
120-83-2	2,4-Dichlorophenol	750	U
120-82-1	1,2,4-Trichlorobenzene	750	U
91-20-3	Naphthalene	750	U
106-47-8	4-Chloroaniline	750	U
87-68-3	Hexachlorobutadiene	750	U
59-50-7	4-Chloro-3-Methylphenol	750	U
91-57-6	2-Methylnaphthalene	750	U
77-47-4	Hexachlorocyclopentadiene	750	U
88-06-2	2,4,6-Trichlorophenol	750	U
95-95-4	2,4,5-Trichlorophenol	3600	U
91-58-7	2-Chloronaphthalene	750	U
88-74-4	2-Nitroaniline	3600	U
131-11-3	Dimethyl Phthalate	750	U
208-96-8	Acenaphthylene	750	U
606-20-2	2,6-Dinitrotoluene	750	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

000678

EPA SAMPLE NO.

CN722

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CN722

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4570

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 12 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/89

GPC Cleanup: (Y/N) Y pH: 5.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3600	U
83-32-9	Acenaphthene	750	U
51-28-5	2,4-Dinitrophenol	3600	U
100-02-7	4-Nitrophenol	3600	U
132-64-9	Dibenzofuran	750	U
121-14-2	2,4-Dinitrotoluene	750	U
84-66-2	Diethylphthalate	750	U
7005-72-3	4-Chlorophenyl-phenylether	750	U
86-73-7	Fluorene	750	U
100-01-6	4-Nitroaniline	3600	U
534-52-1	4,6-Dinitro-2-Methylphenol	3600	U
86-30-6	N-Nitrosodiphenylamine (1)	750	U
101-55-3	4-Bromophenyl-phenylether	750	U
118-74-1	Hexachlorobenzene	750	U
87-86-5	Pentachlorophenol	3600	U
85-01-8	Phenanthrene	750	U
120-12-7	Anthracene	750	U
84-74-2	Di-n-Butylphthalate	750	U
206-44-0	Fluoranthene	750	U
129-00-0	Pyrene	750	U
85-68-7	Butylbenzylphthalate	750	U
91-94-1	3,3'-Dichlorobenzidine	1500	U
56-55-3	Benzo(a)Anthracene	750	U
218-01-9	Chrysene	750	U
117-81-7	bis(2-Ethylhexyl)Phthalate	750	U
117-84-0	Di-n-Octyl Phthalate	750	U
205-99-2	Benzo(b)Fluoranthene	750	U
207-08-9	Benzo(k)Fluoranthene	750	U
50-32-8	Benzo(a)Pyrene	750	U
193-39-5	Indeno(1,2,3-cd)Pyrene	750	U
53-70-3	Dibenz(a,h)Anthracene	750	U
191-24-2	Benzo(g,h,i)Perylene	750	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000679

EPA SAMPLE NO.

CN722

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CN722

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4570

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 12 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/89

GPC Cleanup: (Y/N) Y pH: 5.9 Dilution Factor: 1.0

Number TICs found: 8

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.10	800	J
2.	UNKNOWN	5.62	30000	J
3.	UNKNOWN	27.61	1800	J
4.	UNKNOWN	27.72	1900	J
5.	UNKNOWN	29.41	360	J
6.	UNKNOWN	31.94	620	J
7.	UNKNOWN	35.46	970	J
8.	UNKNOWN	40.62	510	J

1213

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CN722

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CN722

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 12 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/25/89

GPC Cleanup: (Y/N) Y pH: 5.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	18	U
319-85-7	beta-BHC	18	U
319-86-8	delta-BHC	18	U
58-89-9	gamma-BHC (Lindane)	18	U
76-44-8	Heptachlor	18	U
309-00-2	Aldrin	18	U
1024-57-3	Heptachlor epoxide	18	U
959-98-8	Endosulfan I	18	U
60-57-1	Dieldrin	36	U
72-55-9	4,4'-DDE	36	U
72-20-8	Endrin	36	U
33213-65-9	Endosulfan II	36	U
72-54-8	4,4'-DDD	36	U
1031-07-8	Endosulfan sulfate	36	U
50-29-3	4,4'-DDT	36	U
72-43-5	Methoxychlor	180	U
53494-70-5	Endrin ketone	36	U
5103-71-9	alpha-Chlordane	180	U
5103-74-2	gamma-Chlordane	180	U
8001-35-2	Toxaphene	360	U
12674-11-2	Aroclor-1016	180	U
11104-28-2	Aroclor-1221	180	U
11141-16-5	Aroclor-1232	180	U
53469-21-9	Aroclor-1242	180	U
12672-29-6	Aroclor-1248	180	U
11097-69-1	Aroclor-1254	360	U
11096-82-5	Aroclor-1260	360	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

001213 EPA SAMPLE NO.

CN722

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CN722

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 12 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/25/89

GPC Cleanup: (Y/N) Y pH: 5.9 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	18	U
319-85-7	beta-BHC	18	U
319-86-8	delta-BHC	18	U
58-89-9	gamma-BHC (Lindane)	18	U
76-44-8	Heptachlor	18	U
309-00-2	Aldrin	18	U
1024-57-3	Heptachlor epoxide	18	U
959-98-8	Endosulfan I	18	U
60-57-1	Dieldrin	36	U
72-55-9	4,4'-DDE	36	U
72-20-8	Endrin	36	U
33213-65-9	Endosulfan II	36	U
72-54-8	4,4'-DDD	36	U
1031-07-8	Endosulfan sulfate	36	U
50-29-3	4,4'-DDT	36	U
72-43-5	Methoxychlor	180	U
53494-70-5	Endrin ketone	36	U
5103-71-9	alpha-Chlordane	180	U
5103-74-2	gamma-Chlordane	180	U
8001-35-2	Toxaphene	360	U
12674-11-2	Aroclor-1016	180	U
11104-28-2	Aroclor-1221	180	U
11141-16-5	Aroclor-1232	180	U
53469-21-9	Aroclor-1242	180	U
12672-29-6	Aroclor-1248	180	U
11097-69-1	Aroclor-1254	360	U
11096-82-5	Aroclor-1260	360	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

000172 EPA SAMPLE NO.

CW766

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CW766

Sample wt/vol: 5.1 (g/mL) G Lab File ID: 1050714D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 16 Date Analyzed: 07/14/89

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	26	B
67-64-1	Acetone	17	B
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	23	
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	12	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000173 EPA SAMPLE NO.

CW766

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CW766

Sample wt/vol: 5.1 (g/mL) G Lab File ID: 1050714D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 16 Date Analyzed: 07/14/89

Column (pack/cap) PACK Dilution Factor: 1.0

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 000846

EPA SAMPLE NO.

CW766

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CW766

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 4573

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 16 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	790	U
111-44-4	bis(2-Chloroethyl)Ether	790	U
95-57-8	2-Chlorophenol	790	U
541-73-1	1,3-Dichlorobenzene	790	U
106-46-7	1,4-Dichlorobenzene	790	U
100-51-6	Benzyl Alcohol	790	U
95-50-1	1,2-Dichlorobenzene	790	U
95-48-7	2-Methylphenol	790	U
108-60-1	bis(2-Chloroisopropyl)Ether	790	U
106-44-5	4-Methylphenol	790	U
621-64-7	N-Nitroso-Di-n-Propylamine	790	U
67-72-1	Hexachloroethane	790	U
98-95-3	Nitrobenzene	790	U
78-59-1	Isophorone	790	U
88-75-5	2-Nitrophenol	790	U
105-67-9	2,4-Dimethylphenol	790	U
65-85-0	Benzoic Acid	3800	U
111-91-1	bis(2-Chloroethoxy)Methane	790	U
120-83-2	2,4-Dichlorophenol	790	U
120-82-1	1,2,4-Trichlorobenzene	790	U
91-20-3	Naphthalene	790	U
106-47-8	4-Chloroaniline	790	U
87-68-3	Hexachlorobutadiene	790	U
59-50-7	4-Chloro-3-Methylphenol	790	U
91-57-6	2-Methylnaphthalene	790	U
77-47-4	Hexachlorocyclopentadiene	790	U
88-06-2	2,4,6-Trichlorophenol	790	U
95-95-4	2,4,5-Trichlorophenol	3800	U
91-58-7	2-Chloronaphthalene	790	U
88-74-4	2-Nitroaniline	3800	U
131-11-3	Dimethyl Phthalate	790	U
208-96-8	Acenaphthylene	790	U
606-20-2	2,6-Dinitrotoluene	790	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

000847

EPA SAMPLE NO.

CW766 ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CW766

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 4573

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 16 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3800	U
83-32-9	Acenaphthene	790	U
51-28-5	2,4-Dinitrophenol	3800	U
100-02-7	4-Nitrophenol	3800	U
132-64-9	Dibenzofuran	790	U
121-14-2	2,4-Dinitrotoluene	790	U
84-66-2	Diethylphthalate	790	U
7005-72-3	4-Chlorophenyl-phenylether	790	U
86-73-7	Fluorene	790	U
100-01-6	4-Nitroaniline	3800	U
534-52-1	4,6-Dinitro-2-Methylphenol	3800	U
86-30-6	N-Nitrosodiphenylamine (1)	790	U
101-55-3	4-Bromophenyl-phenylether	790	U
118-74-1	Hexachlorobenzene	790	U
87-86-5	Pentachlorophenol	3800	U
85-01-8	Phenanthrene	790	U
120-12-7	Anthracene	790	U
84-74-2	Di-n-Butylphthalate	93	J
206-44-0	Fluoranthene	790	U
129-00-0	Pyrene	88	J
85-68-7	Butylbenzylphthalate	790	U
91-94-1	3,3'-Dichlorobenzidine	1600	U
56-55-3	Benzo(a)Anthracene	790	U
218-01-9	Chrysene	790	U
117-81-7	bis(2-Ethylhexyl)Phthalate	790	U
117-84-0	Di-n-Octyl Phthalate	360	J
205-99-2	Benzo(b)Fluoranthene	790	U
207-08-9	Benzo(k)Fluoranthene	790	U
50-32-8	Benzo(a)Pyrene	790	U
193-39-5	Indeno(1,2,3-cd)Pyrene	790	U
53-70-3	Dibenz(a,h)Anthracene	790	U
191-24-2	Benzo(g,h,i)Perylene	790	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000848 EPA SAMPLE NO.

CW766 ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CW766

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 4573

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 16 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

Number TICs found: 14

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.55	50000	J
2.	UNKNOWN	27.27	870	J
3.	UNKNOWN	29.31	730	J
4.	UNKNOWN	29.42	840	J
5.	UNKNOWN	31.26	1200	J
6.	UNKNOWN	31.66	880	J
7.	UNKNOWN	32.02	780	J
8.	UNKNOWN	32.89	1800	J
9.	UNKNOWN	34.82	530	J
10.	UNKNOWN	35.56	1500	J
11.	UNKNOWN	36.62	1700	J
12.	UNKNOWN	40.67	640	J
13.	UNKNOWN	41.73	1100	J
14.	UNKNOWN	41.99	3000	J

1232

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CW766

ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CW766

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 16 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/25/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	19	U
319-85-7	beta-BHC	19	U
319-86-3	delta-BHC	19	U
58-89-9	gamma-BHC (Lindane)	19	U
76-44-8	Heptachlor	19	U
309-00-2	Aldrin	19	U
1024-57-3	Heptachlor epoxide	19	U
959-98-8	Endosulfan I	19	U
60-57-1	Dieldrin	38	U
72-55-9	4,4'-DDE	38	U
72-20-8	Endrin	38	U
33213-65-9	Endosulfan II	38	U
72-54-8	4,4'-DDD	38	U
1031-07-8	Endosulfan sulfate	38	U
50-29-3	4,4'-DDT	38	U
72-43-5	Methoxychlor	190	U
53494-70-5	Endrin ketone	38	U
5103-71-9	alpha-Chlordane	190	U
5103-74-2	gamma-Chlordane	190	U
8001-35-2	Toxaphene	380	U
12674-11-2	Aroclor-1016	190	U
11104-28-2	Aroclor-1221	190	U
11141-16-5	Aroclor-1232	190	U
53469-21-9	Aroclor-1242	190	U
12672-29-6	Aroclor-1248	190	U
11097-69-1	Aroclor-1254	380	U
11096-82-5	Aroclor-1260	380	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET 001232

EPA SAMPLE NO.

CW766

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CW766

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 16 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/25/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	19	U
319-85-7	beta-BHC	19	U
319-86-8	delta-BHC	19	U
58-89-9	gamma-BHC (Lindane)	19	U
76-44-8	Heptachlor	19	U
309-00-2	Aldrin	19	U
1024-57-3	Heptachlor epoxide	19	U
959-98-8	Endosulfan I	19	U
60-57-1	Dieldrin	38	U
72-55-9	4,4'-DDE	38	U
72-20-8	Endrin	38	U
33213-65-9	Endosulfan II	38	U
72-54-8	4,4'-DDD	38	U
1031-07-8	Endosulfan sulfate	38	U
50-29-3	4,4'-DDT	38	U
72-43-5	Methoxychlor	190	U
53494-70-5	Endrin ketone	38	U
5103-71-9	alpha-Chlordane	190	U
5103-74-2	gamma-Chlordane	190	U
8001-35-2	Toxaphene	380	U
12674-11-2	Aroclor-1016	190	U
11104-28-2	Aroclor-1221	190	U
11141-16-5	Aroclor-1232	190	U
53469-21-9	Aroclor-1242	190	U
12672-29-6	Aroclor-1248	190	U
11097-69-1	Aroclor-1254	380	U
11096-82-5	Aroclor-1260	380	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

000041 EPA SAMPLE NO.

CAP54

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CAP54

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1020717D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ Date Analyzed: 07/17/89

Column: (pack/cap) PACK Dilution Factor: 1.0

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	2	BJ
67-64-1	Acetone	21	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	2	J
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	1	J
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000042 EPA SAMPLE NO.

CAP54

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CAP54

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1020717D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ Date Analyzed: 07/17/89

Column (pack/cap) PACK Dilution Factor: 1.0

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

000479

EPA SAMPLE NO.

CAP54

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CAP54

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4599

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)Ether	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
65-85-0	Benzoic Acid	50	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	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

000480

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CAP54 ORIGINAL (Rev)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CAP54

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4599

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	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	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	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	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	2	BJ
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	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.

CAP54

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CAP54

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4599

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.12	17	J

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

001193 EPA SAMPLE NO.

CAP54

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CAP54

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

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/21/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
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
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

000237 EPA SAMPLE NO.

CY225

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CY225

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1080716D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ Date Analyzed: 07/16/89

Column: (pack/cap) PACK Dilution Factor: 1.0

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	2	J
67-64-1	Acetone	21	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000238

EPA SAMPLE NO.

CY225

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CY225

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1080716D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ Date Analyzed: 07/16/89

Column (pack/cap) PACK Dilution Factor: 1.0

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

000993

EPA SAMPLE NO.

CY225 ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CY225

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4590

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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	17	
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)Ether	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
65-85-0	Benzoic Acid	50	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	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

000994

EPA SAMPLE NO.

CY225

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CY225

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4590

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	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	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	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	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	4	BJ
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	5	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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CY225 (Red) ORIGINAL

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CY225

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4590

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET 001244

EPA SAMPLE NO.

CY225 (ORIGINAL red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CY225

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

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/21/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
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
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

000212

EPA SAMPLE NO.

CW768

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CW768

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1060716D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ Date Analyzed: 07/16/89

Column: (pack/cap) PACK Dilution Factor: 1.0

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	J
67-64-1	Acetone	26	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	3	J
75-34-3	1,1-Dichloroethane	2	J
540-59-0	1,2-Dichloroethene (total)	9	
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	3	J
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	76	
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	1	J
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CW768

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CW768

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1060716D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ Date Analyzed: 07/16/89

Column (pack/cap) PACK Dilution Factor: 1.0

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.

CW768

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CW768

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4591

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

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
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)Ether	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
65-85-0	Benzoic Acid	50	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	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

000950 EPA SAMPLE NO.

CW768

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CW768

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4591

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	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	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	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	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	7	BJ
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	26	
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

000951

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ORIGINAL (Red)

CW768

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CW768

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4591

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	27.61	14	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET 001240

EPA SAMPLE NO.

CW768 (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CW768

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

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/21/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
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
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1362

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ORIGINAL (Red)

PBLK2

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: PBLK2 7-19-89

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/25/89

GPC Cleanup: (Y/N) Y pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	16	U
319-85-7	beta-BHC	16	U
319-86-8	delta-BHC	16	U
58-89-9	gamma-BHC (Lindane)	16	U
76-44-8	Heptachlor	16	U
309-00-2	Aldrin	16	U
1024-57-3	Heptachlor epoxide	16	U
959-98-8	Endosulfan I	16	U
60-57-1	Dieldrin	32	U
72-55-9	4,4'-DDE	32	U
72-20-8	Endrin	32	U
33213-65-9	Endosulfan II	32	U
72-54-8	4,4'-DDD	32	U
1031-07-8	Endosulfan sulfate	32	U
50-29-3	4,4'-DDT	32	U
72-43-5	Methoxychlor	160	U
53494-70-5	Endrin ketone	32	U
5103-71-9	alpha-Chlordane	160	U
5103-74-2	gamma-Chlordane	160	U
8001-35-2	Toxaphene	320	U
12674-11-2	Aroclor-1016	160	U
11104-28-2	Aroclor-1221	160	U
11141-16-5	Aroclor-1232	160	U
53469-21-9	Aroclor-1242	160	U
12672-29-6	Aroclor-1248	160	U
11097-69-1	Aroclor-1254	320	U
11096-82-5	Aroclor-1260	320	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

001096

EPA SAMPLE NO.

SBLK2 ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: SBLK-7-14-89

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4601

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)Ether	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
65-85-0	Benzoic Acid	50	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	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C

001097 EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SBLK2

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: SBLK-7-14-89

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4601

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	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	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	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	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	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	20	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 001098

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ORIGINAL

SBLK2

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: SBLK-7-14-89

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4601

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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 001123

EPA SAMPLE NO.

SBLK1

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: SBLK-7-27-89

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4568

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	660	U
111-44-4	bis(2-Chloroethyl)Ether	660	U
95-57-8	2-Chlorophenol	660	U
541-73-1	1,3-Dichlorobenzene	660	U
106-46-7	1,4-Dichlorobenzene	660	U
100-51-6	Benzyl Alcohol	660	U
95-50-1	1,2-Dichlorobenzene	660	U
95-48-7	2-Methylphenol	660	U
108-60-1	bis(2-Chloroisopropyl)Ether	660	U
106-44-5	4-Methylphenol	660	U
621-64-7	N-Nitroso-Di-n-Propylamine	660	U
67-72-1	Hexachloroethane	660	U
98-95-3	Nitrobenzene	660	U
78-59-1	Isophorone	660	U
88-75-5	2-Nitrophenol	660	U
105-67-9	2,4-Dimethylphenol	660	U
65-85-0	Benzoic Acid	3200	U
111-91-1	bis(2-Chloroethoxy)Methane	660	U
120-83-2	2,4-Dichlorophenol	660	U
120-82-1	1,2,4-Trichlorobenzene	660	U
91-20-3	Naphthalene	660	U
106-47-8	4-Chloroaniline	660	U
87-68-3	Hexachlorobutadiene	660	U
59-50-7	4-Chloro-3-Methylphenol	660	U
91-57-6	2-Methylnaphthalene	660	U
77-47-4	Hexachlorocyclopentadiene	660	U
88-06-2	2,4,6-Trichlorophenol	660	U
95-95-4	2,4,5-Trichlorophenol	3200	U
91-58-7	2-Chloronaphthalene	660	U
88-74-4	2-Nitroaniline	3200	U
131-11-3	Dimethyl Phthalate	660	U
208-96-8	Acenaphthylene	660	U
606-20-2	2,6-Dinitrotoluene	660	U

001124

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK1 ORIGINAL

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: SBLK-7-27-89

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4568

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3200	U
83-32-9	Acenaphthene	660	U
51-28-5	2,4-Dinitrophenol	3200	U
100-02-7	4-Nitrophenol	3200	U
132-64-9	Dibenzofuran	660	U
121-14-2	2,4-Dinitrotoluene	660	U
84-66-2	Diethylphthalate	660	U
7005-72-3	4-Chlorophenyl-phenylether	660	U
86-73-7	Fluorene	660	U
100-01-6	4-Nitroaniline	3200	U
534-52-1	4,6-Dinitro-2-Methylphenol	3200	U
86-30-6	N-Nitrosodiphenylamine (1)	660	U
101-55-3	4-Bromophenyl-phenylether	660	U
118-74-1	Hexachlorobenzene	660	U
87-86-5	Pentachlorophenol	3200	U
85-01-8	Phenanthrene	660	U
120-12-7	Anthracene	660	U
84-74-2	Di-n-Butylphthalate	660	U
206-44-0	Fluoranthene	660	U
129-00-0	Pyrene	660	U
85-68-7	Butylbenzylphthalate	660	U
91-94-1	3,3'-Dichlorobenzidine	1300	U
56-55-3	Benzo(a)Anthracene	660	U
218-01-9	Chrysene	660	U
117-81-7	bis(2-Ethylhexyl)Phthalate	660	U
117-84-0	Di-n-Octyl Phthalate	660	U
205-99-2	Benzo(b)Fluoranthene	660	U
207-08-9	Benzo(k)Fluoranthene	660	U
50-32-8	Benzo(a)Pyrene	660	U
193-39-5	Indeno(1,2,3-cd)Pyrene	660	U
53-70-3	Dibenz(a,h)Anthracene	660	U
191-24-2	Benzo(g,h,i)Perylene	660	U

(1) - Cannot be separated from Diphenylamine

001125

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK1

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: SBLK-7-27-89

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4568

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.10	830	J
2.	UNKNOWN	5.63	50000	J
3.	UNKNOWN	27.71	370	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET 001152

EPA SAMPLE NO.

CAP56MS

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CAP56MS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4592

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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	5	J
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)Ether	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
65-85-0	Benzoic Acid	50	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	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET 001153

EPA SAMPLE NO.

CAP56MS (ORIGINAL Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CAP56MS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4592

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	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	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	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	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	3	BJ
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	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

001159 EPA SAMPLE NO.

ORIGINAL (Red)

CAP57MS

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CAP57MS

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 4575

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 13 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	760	U
111-44-4	bis(2-Chloroethyl)Ether	760	U
95-57-8	2-Chlorophenol	760	U
541-73-1	1,3-Dichlorobenzene	760	U
106-46-7	1,4-Dichlorobenzene	760	U
100-51-6	Benzyl Alcohol	760	U
95-50-1	1,2-Dichlorobenzene	760	U
95-48-7	2-Methylphenol	760	U
108-60-1	bis(2-Chloroisopropyl)Ether	760	U
106-44-5	4-Methylphenol	760	U
621-64-7	N-Nitroso-Di-n-Propylamine	760	U
67-72-1	Hexachloroethane	760	U
98-95-3	Nitrobenzene	760	U
78-59-1	Isophorone	760	U
88-75-5	2-Nitrophenol	760	U
105-67-9	2,4-Dimethylphenol	760	U
65-85-0	Benzoic Acid	3700	U
111-91-1	bis(2-Chloroethoxy)Methane	760	U
120-83-2	2,4-Dichlorophenol	760	U
120-82-1	1,2,4-Trichlorobenzene	760	U
91-20-3	Naphthalene	760	U
106-47-8	4-Chloroaniline	760	U
87-68-3	Hexachlorobutadiene	760	U
59-50-7	4-Chloro-3-Methylphenol	760	U
91-57-6	2-Methylnaphthalene	760	U
77-47-4	Hexachlorocyclopentadiene	760	U
88-06-2	2,4,6-Trichlorophenol	760	U
95-95-4	2,4,5-Trichlorophenol	3700	U
91-58-7	2-Chloronaphthalene	760	U
88-74-4	2-Nitroaniline	3700	U
131-11-3	Dimethyl Phthalate	760	U
208-96-8	Acenaphthylene	760	U
606-20-2	2,6-Dinitrotoluene	760	U

001160

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ORIGINAL (Red)

CAP57MS

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CAP57MS

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 4575

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 13 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3700	U
83-32-9	Acenaphthene	760	U
51-28-5	2,4-Dinitrophenol	3700	U
100-02-7	4-Nitrophenol	3700	U
132-64-9	Dibenzofuran	760	U
121-14-2	2,4-Dinitrotoluene	760	U
84-66-2	Diethylphthalate	760	U
7005-72-3	4-Chlorophenyl-phenylether	760	U
86-73-7	Fluorene	760	U
100-01-6	4-Nitroaniline	3700	U
534-52-1	4,6-Dinitro-2-Methylphenol	3700	U
86-30-6	N-Nitrosodiphenylamine (1)	760	U
101-55-3	4-Bromophenyl-phenylether	760	U
118-74-1	Hexachlorobenzene	760	U
87-86-5	Pentachlorophenol	3700	U
85-01-8	Phenanthrene	140	J
120-12-7	Anthracene	760	U
84-74-2	Di-n-Butylphthalate	97	J
206-44-0	Fluoranthene	420	J
129-00-0	Pyrene	760	U
85-68-7	Butylbenzylphthalate	760	U
91-94-1	3,3'-Dichlorobenzidine	1500	U
56-55-3	Benzo(a)Anthracene	310	J
218-01-9	Chrysene	330	J
117-81-7	bis(2-Ethylhexyl)Phthalate	90	J
117-84-0	Di-n-Octyl Phthalate	760	U
205-99-2	Benzo(b)Fluoranthene	270	J
207-08-9	Benzo(k)Fluoranthene	240	J
50-32-8	Benzo(a)Pyrene	760	U
193-39-5	Indeno(1,2,3-cd)Pyrene	220	J
53-70-3	Dibenz(a,h)Anthracene	760	U
191-24-2	Benzo(g,h,i)Perylene	760	U

(1) - Cannot be separated from Diphenylamine

001166

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CAP56MSD

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CAP56MSD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4597

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)Ether	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
65-85-0	Benzoic Acid	50	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	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

001167 EPA SAMPLE NO.

CAP56MSD ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CAP56MSD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4597

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/28/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	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	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	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	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	3	BJ
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	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.
ORIGINAL (Red)
CAP57MSD

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CAP57MSD

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4576

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 13 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	760	U
111-44-4	bis(2-Chloroethyl)Ether	760	U
95-57-8	2-Chlorophenol	760	U
541-73-1	1,3-Dichlorobenzene	760	U
106-46-7	1,4-Dichlorobenzene	760	U
100-51-6	Benzyl Alcohol	760	U
95-50-1	1,2-Dichlorobenzene	760	U
95-48-7	2-Methylphenol	760	U
108-60-1	bis(2-Chloroisopropyl)Ether	760	U
106-44-5	4-Methylphenol	760	U
621-64-7	N-Nitroso-Di-n-Propylamine	760	U
67-72-1	Hexachloroethane	760	U
98-95-3	Nitrobenzene	760	U
78-59-1	Isophorone	760	U
88-75-5	2-Nitrophenol	760	U
105-67-9	2,4-Dimethylphenol	760	U
65-85-0	Benzoic Acid	3700	U
111-91-1	bis(2-Chloroethoxy)Methane	760	U
120-83-2	2,4-Dichlorophenol	760	U
120-82-1	1,2,4-Trichlorobenzene	760	U
91-20-3	Naphthalene	760	U
106-47-8	4-Chloroaniline	760	U
87-68-3	Hexachlorobutadiene	760	U
59-50-7	4-Chloro-3-Methylphenol	760	U
91-57-6	2-Methylnaphthalene	760	U
77-47-4	Hexachlorocyclopentadiene	760	U
88-06-2	2,4,6-Trichlorophenol	760	U
95-95-4	2,4,5-Trichlorophenol	3700	U
91-58-7	2-Chloronaphthalene	760	U
88-74-4	2-Nitroaniline	3700	U
131-11-3	Dimethyl Phthalate	760	U
208-96-8	Acenaphthylene	760	U
606-20-2	2,6-Dinitrotoluene	760	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

001174

EPA SAMPLE NO.

ORIGINAL

CAP57MSD

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CAP57MSD

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 4576

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 13 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3700	U
83-32-9	Acenaphthene	760	U
51-28-5	2,4-Dinitrophenol	3700	U
100-02-7	4-Nitrophenol	3700	U
132-64-9	Dibenzofuran	760	U
121-14-2	2,4-Dinitrotoluene	760	U
84-66-2	Diethylphthalate	760	U
7005-72-3	4-Chlorophenyl-phenylether	760	U
86-73-7	Fluorene	760	U
100-01-6	4-Nitroaniline	3700	U
534-52-1	4,6-Dinitro-2-Methylphenol	3700	U
86-30-6	N-Nitrosodiphenylamine (1)	760	U
101-55-3	4-Bromophenyl-phenylether	760	U
118-74-1	Hexachlorobenzene	760	U
87-86-5	Pentachlorophenol	3700	U
85-01-8	Phenanthrene	100	J
120-12-7	Anthracene	760	U
84-74-2	Di-n-Butylphthalate	94	J
206-44-0	Fluoranthene	190	J
129-00-0	Pyrene	760	U
85-68-7	Butylbenzylphthalate	760	U
91-94-1	3,3'-Dichlorobenzidine	1500	U
56-55-3	Benzo(a)Anthracene	100	J
218-01-9	Chrysene	150	J
117-81-7	bis(2-Ethylhexyl)Phthalate	92	J
117-84-0	Di-n-Octyl Phthalate	760	U
205-99-2	Benzo(b)Fluoranthene	230	J
207-08-9	Benzo(k)Fluoranthene	760	U
50-32-8	Benzo(a)Pyrene	760	U
193-39-5	Indeno(1,2,3-cd)Pyrene	760	U
53-70-3	Dibenz(a,h)Anthracene	760	U
191-24-2	Benzo(g,h,i)Perylene	760	U

(1) - Cannot be separated from Diphenylamine

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET 000349

EPA SAMPLE NO.

VBLK1

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: VBLK-7-14-89

Sample wt/vol: 5.0 (g/mL) G Lab File ID: SB10714D

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 07/14/89

Column: (pack/cap) PACK Dilution Factor: 1.0

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	9	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	2	J
591-78-6	2-Hexanone	3	J
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	2	J
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000350 EPA SAMPLE NO.

VBLK1 ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: VBLK-7-14-89

Sample wt/vol: 5.0 (g/mL) G Lab File ID: SB10714D

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 07/14/89

Column (pack/cap) PACK Dilution Factor: 1.0

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 000368

EPA SAMPLE NO.

VBLK2 ORIGINAL

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: VBLK-7-16-89

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: WB10716D

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 07/16/89

Column: (pack/cap) PACK Dilution Factor: 1.0

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	5	U
67-64-1	Acetone	11	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000369

EPA SAMPLE NO.

VBLK2

ORIGINAL

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: VBLK-7-16-89

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: WB10716D

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 07/16/89

Column (pack/cap) PACK Dilution Factor: 1.0

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 000379

EPA SAMPLE NO.

VBLK3

ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: VBLK-7-17-89

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: WB10717D

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 07/17/89

Column: (pack/cap) PACK Dilution Factor: 1.0

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	1	J
67-64-1	Acetone	22	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	2	J
591-78-6	2-Hexanone	1	J
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	1	J
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	2	J

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

000380

VBLK3

ORIGINAL

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: VBLK-7-17-89

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: WB10717D

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 07/17/89

Column (pack/cap) PACK Dilution Factor: 1.0

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 000403

EPA SAMPLE NO.

CAP56MS

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CAP56MS

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1030717D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ Date Analyzed: 07/17/89

Column: (pack/cap) PACK Dilution Factor: 1.0

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	27	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	3	J
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	6	J
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	1	J
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

000407

EPA SAMPLE NO.

ORIGINAL

CAP57MS

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CAP57MS

Sample wt/vol: 5.4 (g/mL) G Lab File ID: 1070714D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 27 Date Analyzed: 07/14/89

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	32	B
67-64-1	Acetone	39	B
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	41	
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	13	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

000411 EPA SAMPLE NO.

ORIGINAL

CAP56MSD

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CAP56MSD

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 1040717D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ Date Analyzed: 07/17/89

Column: (pack/cap) PACK Dilution Factor: 1.0

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	30	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	2	J
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	6	J
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	1	J
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

000415

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
ORIGINAL (Red)
CAP57MSD

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CAP57MSD

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1080714D

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 27 Date Analyzed: 07/14/89

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	18	B
67-64-1	Acetone	52	B
75-15-0	Carbon Disulfide	7	U
75-35-4	1,1-Dichloroethene	7	U
75-34-3	1,1-Dichloroethane	7	U
540-59-0	1,2-Dichloroethene (total)	7	U
67-66-3	Chloroform	7	U
107-06-2	1,2-Dichloroethane	7	U
78-93-3	2-Butanone	50	
71-55-6	1,1,1-Trichloroethane	7	U
56-23-5	Carbon Tetrachloride	7	U
108-05-4	Vinyl Acetate	14	U
75-27-4	Bromodichloromethane	7	U
78-87-5	1,2-Dichloropropane	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
79-01-6	Trichloroethene	7	U
124-48-1	Dibromochloromethane	7	U
79-00-5	1,1,2-Trichloroethane	7	U
71-43-2	Benzene	7	U
10061-02-6	Trans-1,3-Dichloropropene	7	U
75-25-2	Bromoform	7	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	7	U
79-34-5	1,1,2,2-Tetrachloroethane	7	U
108-88-3	Toluene	7	U
108-90-7	Chlorobenzene	7	U
100-41-4	Ethylbenzene	7	U
100-42-5	Styrene	7	U
1330-20-7	Total Xylenes	7	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

001356

EPA SAMPLE NO.

ORIGINAL (Red)

PBLK1

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: PBLK1 7-14-89

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

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/21/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
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
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

001362

EPA SAMPLE NO.

PBLK2

ORIGINAL (Red)

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: PBLK2 7-19-89

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/25/89

GPC Cleanup: (Y/N) Y pH: _____ Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	16	U
319-85-7	beta-BHC	16	U
319-86-8	delta-BHC	16	U
58-89-9	gamma-BHC (Lindane)	16	U
76-44-8	Heptachlor	16	U
309-00-2	Aldrin	16	U
1024-57-3	Heptachlor epoxide	16	U
959-98-8	Endosulfan I	16	U
60-57-1	Dieldrin	32	U
72-55-9	4,4'-DDE	32	U
72-20-8	Endrin	32	U
33213-65-9	Endosulfan II	32	U
72-54-8	4,4'-DDD	32	U
1031-07-8	Endosulfan sulfate	32	U
50-29-3	4,4'-DDT	32	U
72-43-5	Methoxychlor	160	U
53494-70-5	Endrin ketone	32	U
5103-71-9	alpha-Chlordane	160	U
5103-74-2	gamma-Chlordane	160	U
8001-35-2	Toxaphene	320	U
12674-11-2	Aroclor-1016	160	U
11104-28-2	Aroclor-1221	160	U
11141-16-5	Aroclor-1232	160	U
53469-21-9	Aroclor-1242	160	U
12672-29-6	Aroclor-1248	160	U
11097-69-1	Aroclor-1254	320	U
11096-82-5	Aroclor-1260	320	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET 001366

EPA SAMPLE NO.
CAP56MS

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CAP56MS

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

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/21/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
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
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET 001370

EPA SAMPLE NO.

CAP56MSD ORIGINAL

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) WATER Lab Sample ID: CAP56MSD

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

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/14/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/21/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
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
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

001374

EPA SAMPLE NO.

ORIGINAL (Red)

CAP57MS

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CAP57MS

Sample wt/vol: 30.1 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 13 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/25/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	55	U
319-85-7	beta-BHC	55	U
319-86-8	delta-BHC	55	U
58-89-9	gamma-BHC (Lindane)	55	U
76-44-8	Heptachlor	55	U
309-00-2	Aldrin	55	U
1024-57-3	Heptachlor epoxide	55	U
959-98-8	Endosulfan I	55	U
60-57-1	Dieldrin	110	U
72-55-9	4,4'-DDE	110	U
72-20-8	Endrin	110	U
33213-65-9	Endosulfan II	110	U
72-54-8	4,4'-DDD	110	U
1031-07-8	Endosulfan sulfate	110	U
50-29-3	4,4'-DDT	110	U
72-43-5	Methoxychlor	550	U
53494-70-5	Endrin ketone	110	U
5103-71-9	alpha-Chlordane	550	U
5103-74-2	gamma-Chlordane	550	U
8001-35-2	Toxaphene	1100	U
12674-11-2	Aroclor-1016	550	U
11104-28-2	Aroclor-1221	550	U
11141-16-5	Aroclor-1232	550	U
53469-21-9	Aroclor-1242	550	U
12672-29-6	Aroclor-1248	550	U
11097-69-1	Aroclor-1254	1100	U
11096-82-5	Aroclor-1260	1100	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET 001378

EPA SAMPLE NO.

ORIGINAL (Red)

CAP57MSD

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CAP57MSD

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 13 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/25/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	55	U
319-85-7	beta-BHC	55	U
319-86-8	delta-BHC	55	U
58-89-9	gamma-BHC (Lindane)	55	U
76-44-8	Heptachlor	55	U
309-00-2	Aldrin	55	U
1024-57-3	Heptachlor epoxide	55	U
959-98-8	Endosulfan I	55	U
60-57-1	Dieldrin	110	U
72-55-9	4,4'-DDE	110	U
72-20-8	Endrin	110	U
33213-65-9	Endosulfan II	110	U
72-54-8	4,4'-DDD	110	U
1031-07-8	Endosulfan sulfate	110	U
50-29-3	4,4'-DDT	110	U
72-43-5	Methoxychlor	550	U
53494-70-5	Endrin ketone	110	U
5103-71-9	alpha-Chlordane	550	U
5103-74-2	gamma-Chlordane	550	U
8001-35-2	Toxaphene	1100	U
12674-11-2	Aroclor-1016	550	U
11104-28-2	Aroclor-1221	550	U
11141-16-5	Aroclor-1232	550	U
53469-21-9	Aroclor-1242	550	U
12672-29-6	Aroclor-1248	550	U
11097-69-1	Aroclor-1254	1100	U
11096-82-5	Aroclor-1260	1100	U

1374

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
ORIGINAL (red)
CAP57MS

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CAP57MS

Sample wt/vol: 30.1 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 13 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/25/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	27	U
319-85-7	beta-BHC	27	U
319-86-8	delta-BHC	27	U
58-89-9	gamma-BHC (Lindane)	27	U
76-44-8	Heptachlor	27	U
309-00-2	Aldrin	27	U
1024-57-3	Heptachlor epoxide	27	U
959-98-8	Endosulfan I	27	U
60-57-1	Dieldrin	55	U
72-55-9	4,4'-DDE	55	U
72-20-8	Endrin	55	U
33213-65-9	Endosulfan II	55	U
72-54-8	4,4'-DDD	55	U
1031-07-8	Endosulfan sulfate	55	U
50-29-3	4,4'-DDT	55	U
72-43-5	Methoxychlor	270	U
53494-70-5	Endrin ketone	55	U
5103-71-9	alpha-Chlordane	270	U
5103-74-2	gamma-Chlordane	270	U
8001-35-2	Toxaphene	550	U
12674-11-2	Aroclor-1016	270	U
11104-28-2	Aroclor-1221	270	U
11141-16-5	Aroclor-1232	270	U
53469-21-9	Aroclor-1242	270	U
12672-29-6	Aroclor-1248	270	U
11097-69-1	Aroclor-1254	550	U
11096-82-5	Aroclor-1260	550	U

1378

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ORIGINAL (Red)

CAP57MSD

Lab Name: IT PITTSBURGH Contract: 68-01-7415M

Lab Code: ITPA Case No.: 12283 SAS No.: _____ SDG No.: CAP53

Matrix: (soil/water) SOIL Lab Sample ID: CAP57MSD

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 07/11/89

% Moisture: not dec. 13 dec. ____ Date Extracted: 07/19/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/25/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	28	U
319-85-7	beta-BHC	28	U
319-86-8	delta-BHC	28	U
58-89-9	gamma-BHC (Lindane)	28	U
76-44-8	Heptachlor	28	U
309-00-2	Aldrin	28	U
1024-57-3	Heptachlor epoxide	28	U
959-98-8	Endosulfan I	28	U
60-57-1	Dieldrin	55	U
72-55-9	4,4'-DDE	55	U
72-20-8	Endrin	55	U
33213-65-9	Endosulfan II	55	U
72-54-8	4,4'-DDD	55	U
1031-07-8	Endosulfan sulfate	55	U
50-29-3	4,4'-DDT	55	U
72-43-5	Methoxychlor	280	U
53494-70-5	Endrin ketone	55	U
5103-71-9	alpha-Chlordane	280	U
5103-74-2	gamma-Chlordane	280	U
8001-35-2	Toxaphene	550	U
12674-11-2	Aroclor-1016	280	U
11104-28-2	Aroclor-1221	280	U
11141-16-5	Aroclor-1232	280	U
53469-21-9	Aroclor-1242	280	U
12672-29-6	Aroclor-1248	280	U
11097-69-1	Aroclor-1254	550	U
11096-82-5	Aroclor-1260	550	U

ORIGINAL (Red)

APPENDIX C

AUGUST 1, 1985

BUCKS COUNTY

BUR. OF TOPO. AND GEOLOGIC SURVEY
DEPT. OF ENVIRONMENTAL RESOURCES, HARRISBURG, PA 17120
GROUNDWATER INVENTORY SYSTEM
REPORT TYPE A

[WELL RECORDS HAVE NOT BEEN FIELD CHECKED.]

TOWNSHIP	WELL NO.	SEQ	CTY	** OWNER **	USGS SUB-BAS.	PA SUB-BAS.	QUAD CODE	LATITUDE DEG	LATITUDE MIN	LATITUDE SEC	LONGITUDE DEG	LONGITUDE MIN	LONGITUDE SEC	ACCURACY	AGENCY	OWNERSHIP	WATER USE	WELL USE	WELL DATA	FREQ W/	FIELD CHA	HYD LAB	Q/W TYP	Q/W FRE	PUMP	APERTU	DA

(b) (6), (b) (9)

AUGUST 4, 1985 BUR. OF TOPO. AND GEOLOGIC SURVEY PAGE: 112
DEPT. OF ENVIRONMENTAL RESOURCES, HARRISBURG, PA 17120
BUCKS COUNTY GROUNDWATER INVENTORY SYSTEM
REPORT TYPE A

[WELL RECORDS HAVE NOT BEEN FIELD CHECKED.]

TOWNSHIP	WELL NO.	SEQ	CTY	** OWNER **	USGS SUB-BAS.	PA SUB-BAS.	QUAD CODE	LATITUDE DEG	MIN	SEC	LONGITUDE DEG	MIN	SEC	ACCURACY	AGENCY	OWNERSHIP	WATER USE	WELL USE	WELL DATA	FREQ W/L	FIELD CHAR	HYD LAB	Q/W TYPE	Q/W FREQ	PUMPAGE	APERTURE	LOG DATA

(b) (6), (b) (9)

AUGUST 4, 1983

BUR. OF TOPO. AND GEOLOGIC SURVEY
DEPT. OF ENVIRONMENTAL RESOURCES, HARRISBURG, PA 17120
GROUNDWATER INVENTORY SYSTEM
REPORT TYPE B

BUCKS COUNTY

(WELL LOCATIONS HAVE NOT BEEN FIELD CHECKED.)

** FIELD CHEMISTRY

TOWNSHIP	WELL NO.	SEQ	CTY	WELL DEPTH	ACCURACY	DEPTH CASED	DIA IN.	FINISH	DRILL METH	YR DRILLED	PUMP	SETTING	LIFT METH	DEEP/SHAL	POWER	ALT. LAND/ SURF/ DATUM	ACCURACY	WATER LEVEL	ACCURACY	DATE MEAS	YIELD (GPM)	METH DEF	DRAW DOWN (FT)	ACCURACY	PUMP PERIOD (HRS)	IRON	SULFATE	CHLORIDE	HARDNESS	SPEC COND	TEMP	DATE SAMPLED
XXXXXXXXXXXXXXXX	XXXX	X	XX	XXXXX	X	XXXXX	XXX	X	X	XXX	XXX	X	X	X	XXXXX	X	+XXXXX	X	X/XX	XXXXX.X	X	XXXX	X	XXXX.XX	X	X	X	X	X	X	X	X

(b) (9)

(b) (9)

AUGUST 4, 1983

BUCKS COUNTY

BUR. OF TOPO. AND GEOLOGIC SURVEY
DEPT. OF ENVIRONMENTAL RESOURCES, HARRISBURG, PA 17120
GROUNDWATER INVENTORY SYSTEM
REPORT TYPE B

[WELL LOCATIONS HAVE NOT BEEN FIELD CHECKED.]

** FIELD CHEMISTRY

TOWNSHIP	WELL NO.	SEQ	CTY	WELL DEPTH	ACCURACY	DEPTH CASED	DIA IN.	FINISH	DRILL METH	YR DRILLED	PUMP	SETTING	LIFT METH	DEEP/SHAL	POWER	ALT. LAND/ SURF/ DATUM	ACCURACY	WATER LEVEL	ACCURACY	DATE MEAS	YIELD (GPM)	METH DET	DRAW DOWN (FT)	ACCURACY	PUMP PERIOD (HRS)	IRON	SULFATE	CHLORIDE	HARDNESS	SPEC COND	TEMP	DATE SAMPLED
XXXXXXXXXXXXXXXX	XXXX	X	XX	XXXXX	X	XXXXX	XXX	X	X	XXX	XXX	X	X	X	XXXX																	

(b) (9)

(b) (9)

AUGUST 4, 1983 BUR. OF TOPO. AND GEOLOGIC SURVEY PAGE: 111

DEPT. OF ENVIRONMENTAL RESOURCES, HARRISBURG, PA 17120

BUCKS COUNTY GROUNDWATER INVENTORY SYSTEM

REPORT TYPE C

[WELL LOCATIONS HAVE NOT BEEN FIELD CHECKED.]

TOWNSHIP	WELL NO.	SEQ	CT	PRVCIT	TSQDEPCOD	SSYEERIES	FORM	MAJOR AQUIFER LITHOLOGY	AQUIFER IRRIGATION	TMKNESS	LWEELL OF PEN	DEPTH TO MAJOR	SSYEERIES	FORM	MINOR AQUIFER LITHOLOGY	AQUIFER IRRIGATION	TMKNESS	LWEELL OF PEN	DEPTH TO MAJOR	PTOP	CSOURCE	SDORC	PTOTOCK	DEPTH TO MAJOR	BASEMENT	SJRC	SURF MAT.	TRANS COEF LIT	STEN FLOW	STORE COEF LIT	STEN FLOW
XXXXXXXXXXXXXXXX	XXXX	X	XX	XX	X X	X X	XX	XX X	XXX	XXXX	XXXX	X	X	XX	XX X	XXX	XXXX	XXXX	XXXXX	K	XXXXX	K	XX X	XX X	XX X	XX X					

(b) (9)

AUGUST 4, 1983

BUR. OF TOPO. AND GEOLOGIC SURVEY
DEPT. OF ENVIRONMENTAL RESOURCES, HARRISBURG, PA 17120
GROUNDWATER INVENTORY SYSTEM
REPORT TYPE C

BUCKS COUNTY

(WELL LOCATIONS HAVE NOT BEEN FIELD CHECKED.)

TOWNSHIP	WELL NO.	SEQ	CTY	PROVINCE	TOPO QUAD	SYSTEM	SERIES	FORM	LITHOLOGY	HORIZON	QUALIFIER	CAPACITY	GALLONS	PUMP TEST	TOTAL HOURS	SYSTEM	SERIES	FORM	LITHOLOGY	HORIZON	QUALIFIER	CAPACITY	GALLONS	PUMP TEST	TOTAL HOURS	DEPTH TO WATER	TOTAL DEPTH	CONSOLIDATED	ROCK	SOURCE	DEPTH TO WATER	BASEMENT	SOURCE	SURF MAT.	LIFE	TRANS COEF SIG	TRANS COEF IGN	STORE COEF SIG	STORE COEF IGN
XXXXXXXXXXXXXXXX	XXXX	X	XX	XX	X	X	X	X	XX	XX	X	XXX	XXXX	XXXX	X	X	XX	XX	X	XXX	XXXX	XXXX	XXXXX	X	XXXXX	X	XX	X	XX	X	XX	X	XX	X	XX	X	XX	X

(b) (9)

AUGUST 4, 1983

BUR. OF TOPO. AND GEOLOGIC SURVEY
DEPT. OF ENVIRONMENTAL RESOURCES, HARRISBURG, PA 17120
GROUNDWATER INVENTORY SYSTEM
REPORT TYPE P

BUCKS COUNTY

(WELL LOCATIONS HAVE NOT BEEN FIELD CHECKED.)

***** WATER-BEARING ZONES *****

TOWNSHIP	WELL NO.	SEQ	CTY	ONON CODE	DRILLERS	LIC. NO.	SPEC CAP. GPM/FT	DUR CAP. TEST	ZONES SOURCE	TOTAL	MAJOR	SOURCE	FIRST DEPTH	FIRST YIELD	SECOND DEPTH	SECOND YIELD	THIRD DEPTH	THIRD YIELD	FOURTH DEPTH	FOURTH YIELD	PH	HARDNESS	SPEC COND	BACT ANAL	ANAL	DATE	SOURCE
XXXXXXXXXXXXXXXXX	XXXX	X	XX	XX-XX.X	XXXX		XXXX	XXXX	X	X	X	X	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	X	XX	XX	XXXX	X	XXXX	X

(b) (9)

(b) (9)

DEPT. OF ENVIRONMENTAL RESOURCES, HARRISBURG, PA 17120

BUCKS COUNTY GROUNDWATER INVENTORY SYSTEM

REPORT TYPE P

[WELL LOCATIONS HAVE NOT BEEN FIELD CHECKED.]

TOWNSHIP	WELL NO.	SEQ	CTY	BWQM CODE	DRILLERS	LIC. NO.	SPEC CAP. GPM/FT	DUR CAP. TEST	ZONES SOURCE	TOTAL	MAJOR	SOURCE	FIRST DEPTH	FIRST YIELD	SECOND DEPTH	SECOND YIELD	THIRD DEPTH	THIRD YIELD	FOURTH DEPTH	FOURTH YIELD	PH	HARDNESS	SPEC COND	BACT ANAL	ANAL	DATE	SOURCE
XXXXXXXXXXXXXXXXX	XXXX	X	XX	XX-XX.X	XXXX		XXXX	XXXX	X	X	X	X	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	X.XX	XX	XXXX	X	XXX	X	

(b) (9)

ORIGINAL
(Red)

APPENDIX D

D. 4FT

PLASTI-SEAL MONITORING WELLS
F3-8006-11 PA-272

SPECIFICATIONS

The contractor shall drill a test hole at each designated site. The test holes shall be then enlarged and cased, becoming the finished monitoring wells.

The work to be done hereunder includes the furnishing of all labor, material, transportation, tools, supplies, plant, equipment and appurtenances, unless hereinafter specifically excepted, necessary for the complete and satisfactory construction and testing of the proposed monitoring wells.

The contractor shall, at his own expense, procure all permits, certificates and licenses required of him by law for the execution of his work. He shall comply with all Federal, State or local laws, ordinances or rules and regulations relating to the performance of the work.

The owner shall provide land and rights-of-way for the work specified in this contract and make suitable provisions for ingress and egress, and the contractor shall not enter on or occupy with men, tools, equipment or material, any ground outside the property of the owner without the written consent of the owner of such ground. The contractor shall conduct his work so as not to impede unnecessarily any work being done by others on or adjacent to the sites.

Excepting as otherwise provided herein, the contractor shall protect all structures, walks, pipelines, trees, shrubbery, lawns, etc. during the progress of his work; shall remove from the site all cuttings, drillings, debris and unused materials; and shall, upon completion of the work, restore the site as nearly as possible to its original condition, including the replacement, at the contractor's sole expense, of any facility or landscaping which has been damaged beyond restoration to its original condition or destroyed. Water pumped from the well shall be conducted to where it will be possible to dispose of the water without damage to property or the creation of a nuissance.

ORIGINAL (Red)

A. Location

The 6-inch monitoring wells shall be installed approximately 200' deep in Montgomery County and Bucks County, Pennsylvania

1. At or near Plasti-Seal site
2. Near alloy Steel site
3. Between CW Industries and Well #10
4. Between former Plasti-Seal site and Well #10
5. Between H & R Industries and Plasti-Seal site

B. Drilling of test holes

1. The drilling method, pit samples, permeability test and geophysical logging of these 5 monitoring wells shall be left to the discretion of the contractor and accepted by Ecology & Environment, Inc. (E & E) or its representative.

2. The contractor shall keep an accurate record of the location of the top and bottom of each stratum penetrated and shall save and deliver to E & E a sample of material taken from each 20 ft. of drilling and at every change of formation.

3. The contractor shall submit a daily report describing the nature of formation encountered, the work done each day, including the items of work accomplished.

C. Soil sampling of purgeable organic compound

1. Soil samples of two sites, Plasti-Seal and Alloy Steel, shall be taken at 5-foot intervals, starting at ground surface, to the confining zone, then, 20-foot intervals to the ground water table.

2. The representative samples shall be obtained from each sampling interval.

3. The Split Spoon method is suggested to be used. The steel cylinder shall be drilled vertically into the formation at the bottom of the drilled hole. The cylinder shall be returned to the surface and transferred to a container supplied by E & E.

ORIGINAL (Red)

C. 4. After each sampling, the cylinder shall be cleaned by fresh and non-polluted water as directed by E & E.

D. Well construction

1. The contractor shall choose the construction method of drilling wells as accepted by E & E.

2. The contractor shall be responsible for removal of the drilling mud but it should be disposed under the direction of E & E.

3. After the well has been completely constructed, it shall be thoroughly cleaned of all foreign substances, including tools, timbers, rope, debris of any kind, cement, oil, grease, joint dope and scum.

E. Casing and screen

1. The screen is a 6" slotted PVC pipe, staggered every inch at 120 degrees with retaining at least 30% opening of the formation material and shall place inside of the drilled hole.

2. The length of the screen shall be 2 feet above the bottom of the well and at least 1 foot below the water table.

3. The screen shall be followed by a 6" PVC casing to the top of the well.

4. PVC pipe used for well casing and screen shall conform to ASTM standard.

5. PVC pipe shall be joined watertight by either solvent welding or fusion welding in accordance with the directions of the manufacturer of the material used.

F. Gravel packing

1. An envelope of gravel shall surround the entire screen, a thickness of 3" is used.

2. The gravel pack material shall be that its 70% size is 4 to 6 times the 70% size of the material in the finest layer of the aquifer and its uniformity coefficient is less than 2.5.

ORIGINAL

F. 3. The gravel pack material shall be clean with well rounded grains that are smooth and uniform.

4. The gravel packing shall extend at least 1 foot above the water table and about 2 feet below the screen.

G. Backfill

1. The quantity of the backfill shall be sufficient to fill the annular space around the casing.

2. A layer of cement seal shall be placed between the gravel packing and the backfill.

3. Material used as the backfill need not be of special gradation, the low permeability backfill can be used.

4. Due to geological conditons, 2" thickness of cement grout shall be placed in between the casing and the low permeability backfill, if necessary.

5. Cement grout shall be a mixture of portland cement (ASTM C150), sand and water in the portion of not more than two parts by weight of sand to one part of cement with not more than 7 gallons of clean water per bag of cement. (1 cubic foot or 94 pounds).

H. Protective Casing

1. A 10-foot length of painted steel casing several inches larger in diameter than the monitoring well shall be emplaced.

2. This casing shall be grouted and placed with a concrete plug which is at least two feet below the confining zone.

3. This casing shall extend at least 1 foot above the general level of the surrounding land surface.

4. The casing shall be surrounded at ground surface by a 4" thick concrete slab extending at least 2 feet in all directions. The upper surface of this slab and its immediate surroundings shall be gently sloping so as to drain water away from the well. The drain shall be around the outer edge of the slab and extend it to a discharge point at some distance from the well.

ORIGINAL (Red)

H. 5. The protective casing shall be threaded so that a screw cap can be used to close the well. Two heavy-duty hardened steel hasps welded on opposite sides of the cap and the casing will allow the well to be locked.

6. Concrete shall be a mixture of Portland Cement, sand, coarse aggregate and water in the proportion of at least 5 bags of cement per cubic yard of concrete, to not more than 7 gallons of clean water per bag of cement.

I. Measurement of water levels

1. After the well is developed, the contractor shall pump the water out of the well for at least two hours.

2. Discharged water shall be conducted from the pump to the drain as approved by E & E to prevent recirculation of discharged water into the aquifer.

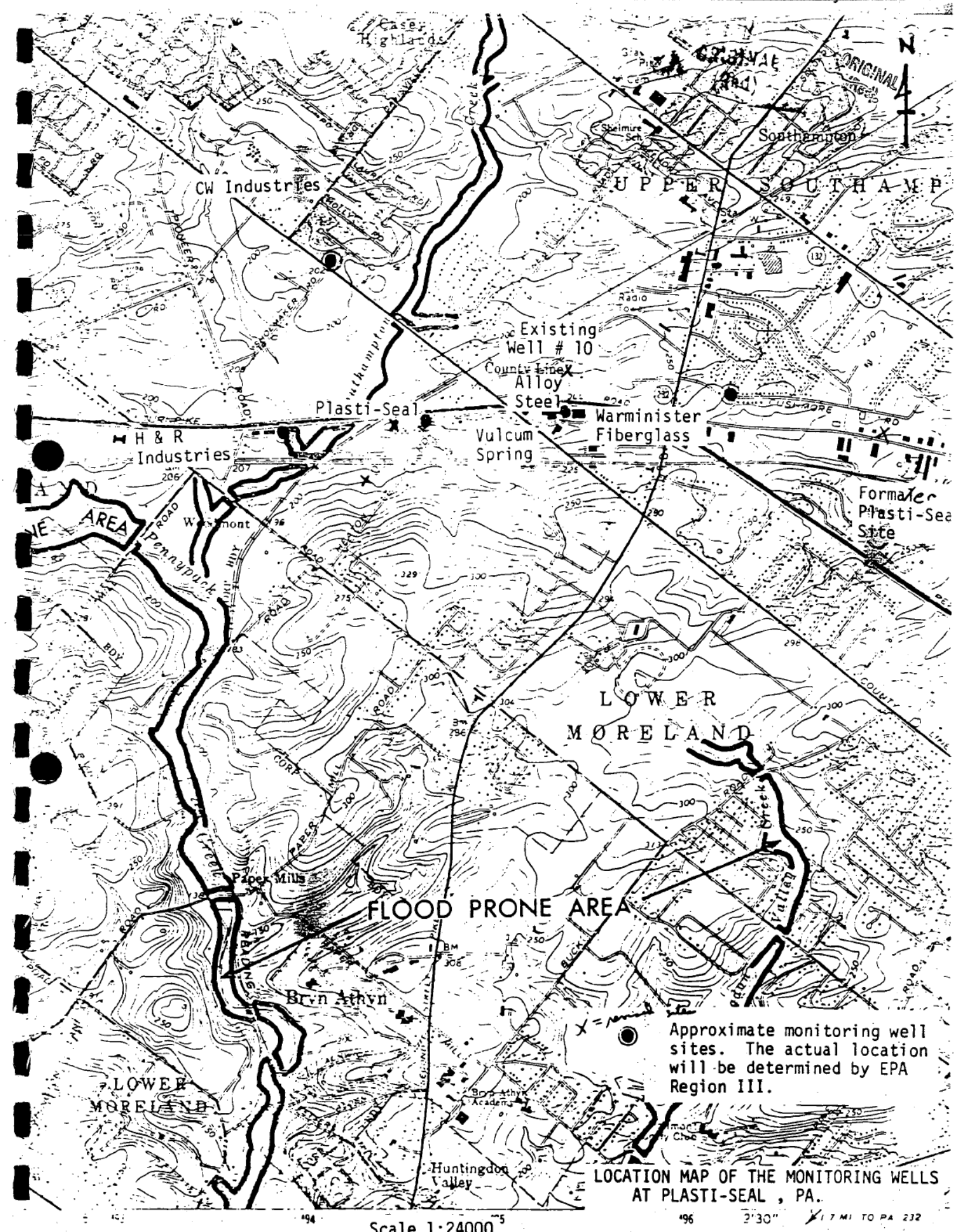
3. The contractor shall measure the static level of the water in the monitoring wells 12 hours after the Well #10 has stopped pumping. The method of taking water level measurement will be at the discretion of the contractor, however, accuracy to within plus or minus 0.1 feet shall be attained.

J. Reference point

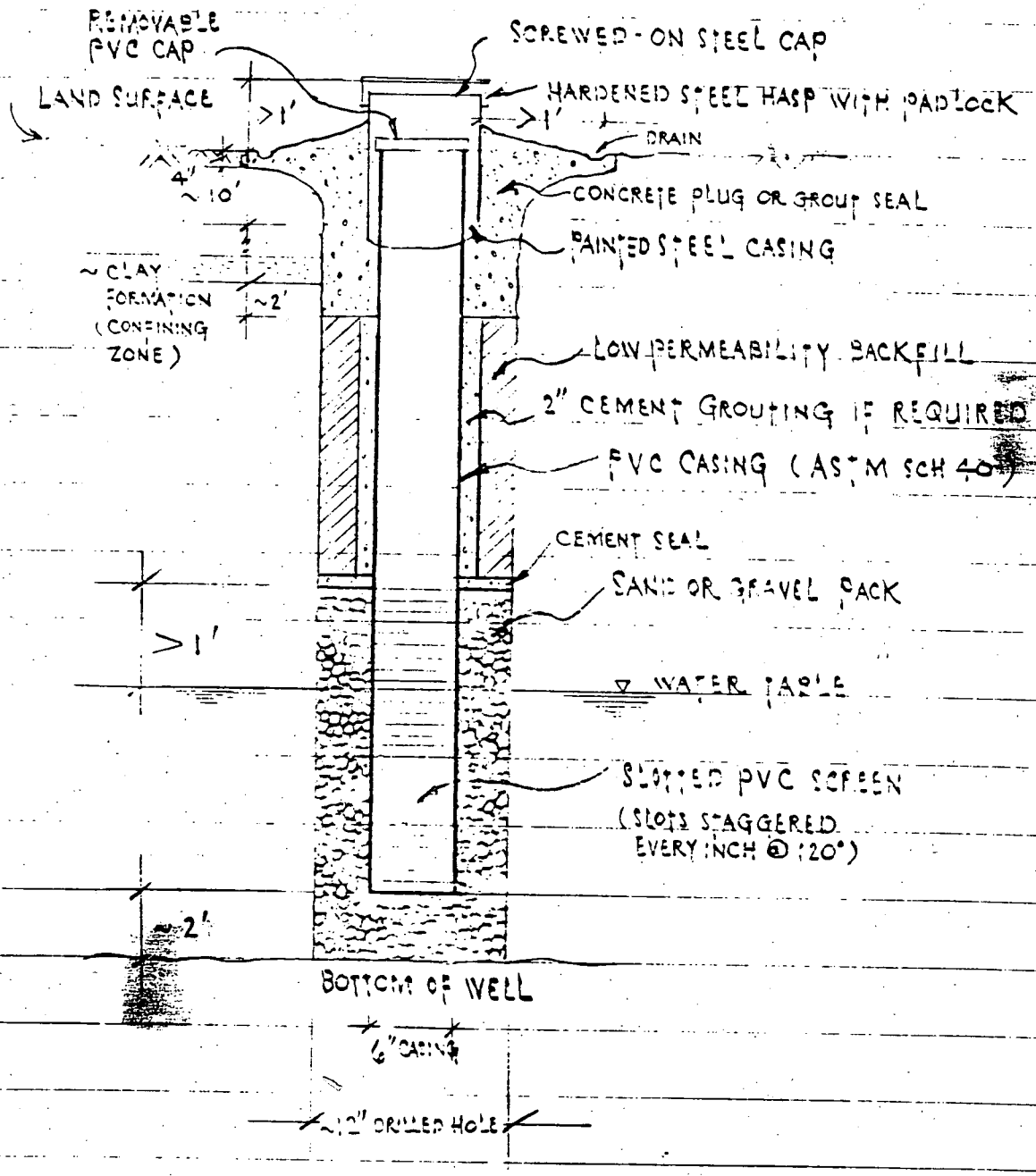
The contractor shall conduct a land survey to connect all reference points in mean sea level to the national bench marks.

K. Drilling report

The contractor shall provide a formal report including drilling operation, formation analysis, permeability test and geophysical logging of these five monitoring wells.



LOCATION MAP OF THE MONITORING WELLS AT PLASTI-SEAL , PA.



SKETCH OF MONITORING WELL (NO SCALE)

ORIGINAL (Red)

PA-272 PLASTI-SEAL MONITORING WELLS

TASK DESCRIPTION

The major objectof this task is to investigate the possible path of TCE, PCE etc. from the suspected polluted sites where may contaminate the existing well of the Upper Southampton Municipal Authority. The performance of this task includes four parts:

1. Three 6-inch monitoring wells will be drilled by subcontractor near the contaminated sites

2. In order to evaluate the vertical distribution of pollutants at each site, the soil sampling and analysis of test hole will be conducted at each 5-foot interval, where appropriate, during the period of constructing the monitoring wells.

   Starting with shallow surface sample

3. The horizontal flow within the saturated aquifer of the monitoring wells will be detected by a desirable dye or tracer. The result of the detection will be evaluated the direction of the groundwater flow from the suspected polluted sites when the existing well is pumping.

4. By using the Kemmerer water bottle sampler, a set of water sampling and analyzing will be performed both in the existing well and the monitoring wells. It could define the trace of pollutants to the existing well in steady flow and pumped conditions

The performance will be taken as shown on the following table:

WORKING ITEMS		OPERATED BY DRILLING CONTRACTOR	OPERATED BY LAB.
Test holes	Drill	*	
	Soil sampling	*	
	Analysis of soil samples		*
Wells	Casing & construction	*	
	Dye test	*	
	Establish bench marks or reference points	*	
	Water sampling		*
	Analysis of water samples		*
Drilling Report		*	

ORIGINAL (Red)

ORIGINAL (Red)

SCOPE WORK FOR SUBCONTRACTING

The subcontractor shall drill a test hole to the depth of the bedrock at each designated site. The test holes will be then enlarged and cased, becoming the finished monitoring wells.

1. Location
   The monitoring wells will be installed on Lower Moreland Township, Montgomery County and Upper Southampton Township, Bucks County, Pa. A well is at or near Plasti-Seal site, the other two are at Vulcum and Alloy Steel.

2. Drilling of Test Holes
   The contractor shall provide all equipment that will assure proper executing of the test drilling and sampling program. The drilling method and geophysical logging will be left to the discretion of the contractor and accepted by the owner or his representative.

3. Formation Sampling Method
   Formation samples of each site are to be taken at 5-foot intervals. (number) (volume) representative samples shall be obtained from each sampling interval. The Split Spoon method is suggested to be used. The steel cylinder shall be driven vertically into the formation at the bottom of the drilled hole. The cylinder will be return to the surface and transferred to a container supplied by the owner. After each sampling, the cylinder should be cleaned by fresh, non-polluted water as directed by the owner.

4. Well Construction
   The contractor shall choose the construction method of drilling well as accepted by the owner. The contractor is responsible for the removal of the drilling mud but it should be disposed under the direction of the owner. The 6-inch PVC screens and casing are placed inside the test hole, 2 feet above the bedrock. A clean coarse sand filter pack is placed in the annular space around and outside the PVC screen. The sand filter pack is followed by bentonite clay pellets clay soil and cement seals as shown on the sketch. Once a well has been completed, the protective installation, a 10-foot length of steel casing several inches larger in diameter than the monitoring well is emplaced. This casing is grouted and placed with a cement collar at least 4 to 5 feet deep to hold it firmly in position. The casing should be threaded so that a screw cap can be used to close the well. Two heavy-duty hardened steel hasps welded on opposit dsides of the cap and casing will allow the well to be locked.

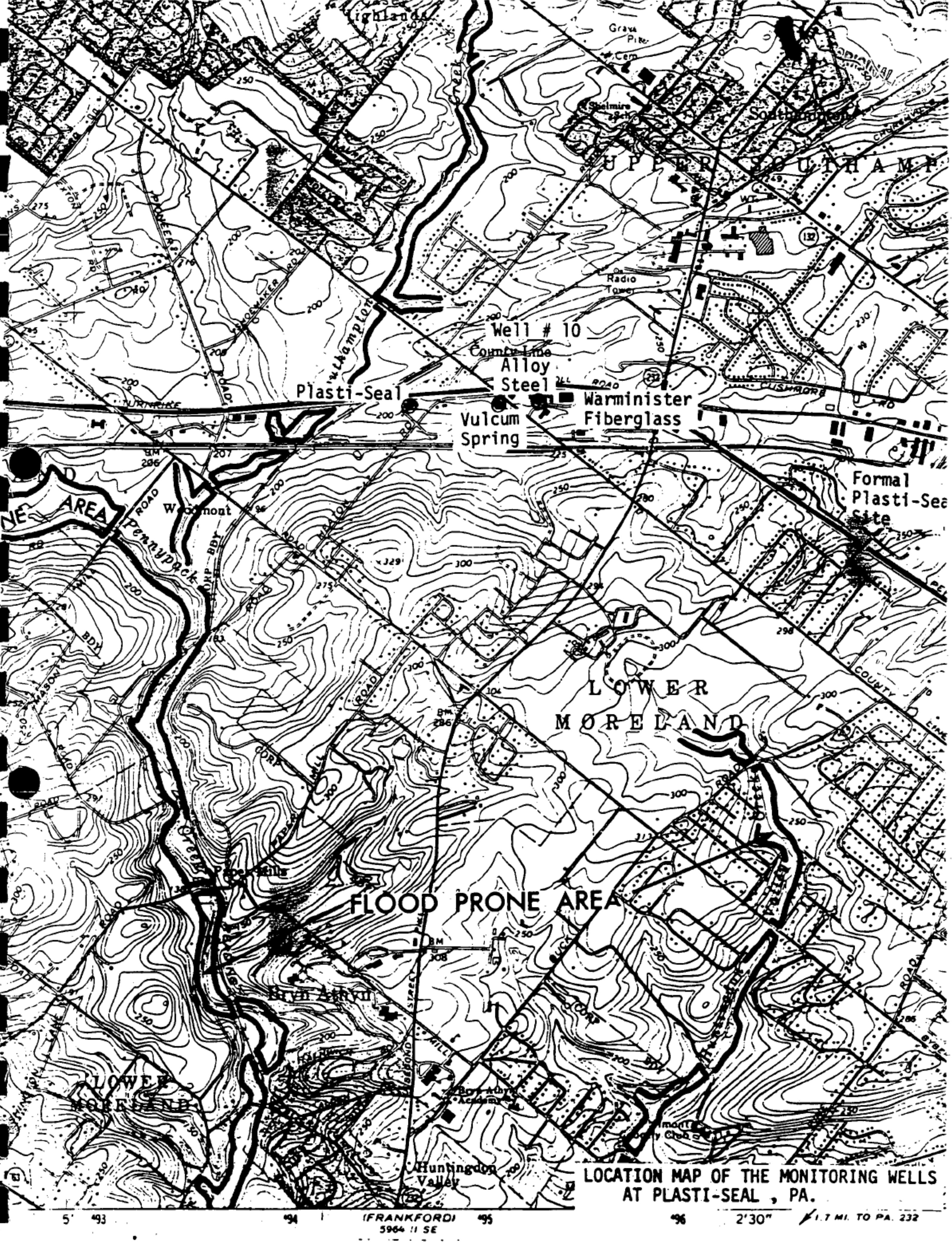
ORIGINAL

5. Dye Tests
   The contractor shall select a safe, simple and inexpensive technique of dye test for tracing the ground flow movement, especially to identify the ground water direction while it is being pumped of the existing well at the shallow levels.

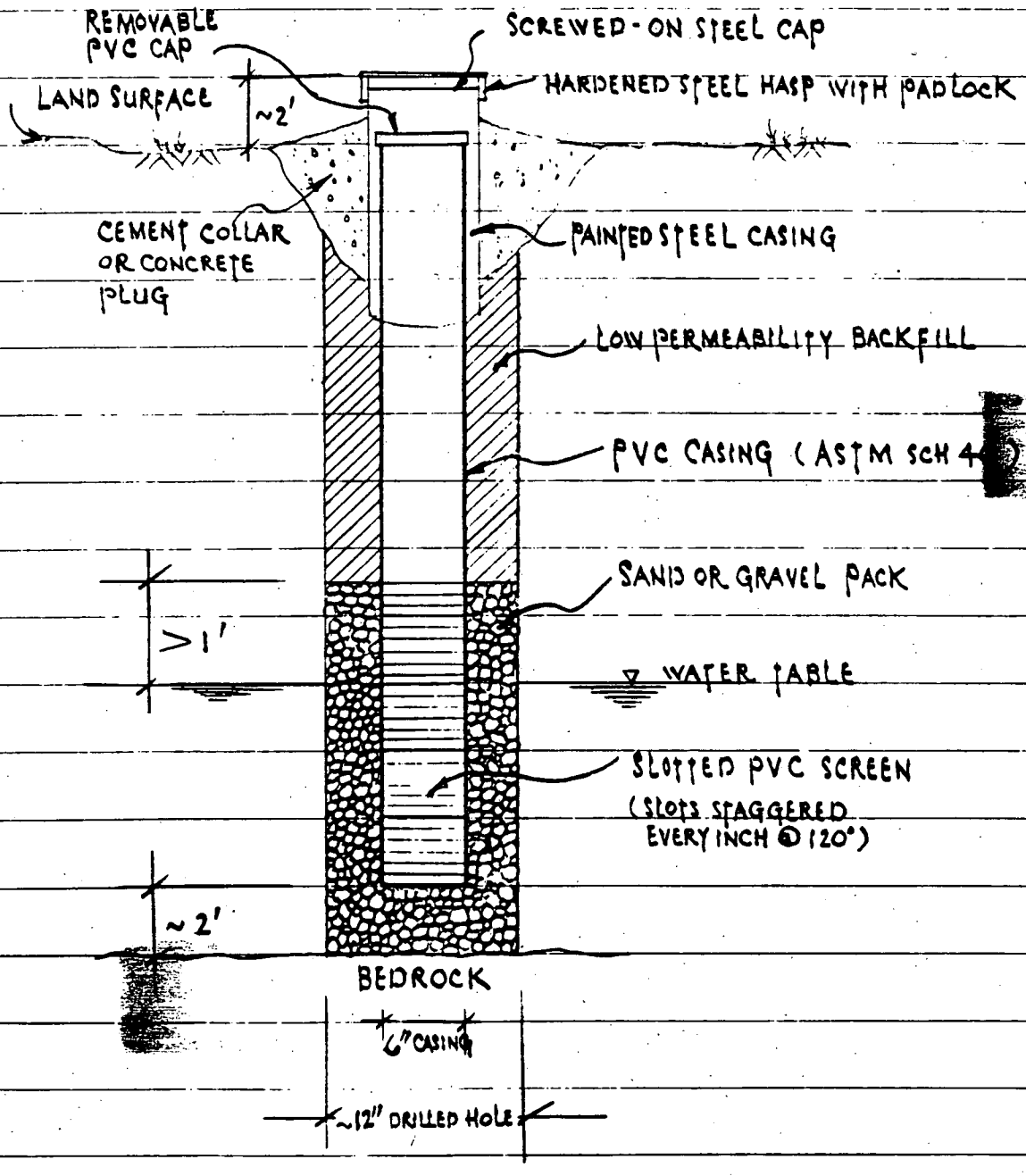
6. Reference Point
   The contractor shall conduct a land survey to connect all reference points in mean sea level to the national bench marks.

7. Drilling Report
   The contractor shall give a complete description of all informations encountered the pertinent data in report form.

8. Method of Payment



LOCATION MAP OF THE MONITORING WELLS AT PLASTI-SEAL , PA.



SKETCH OF MONITORING WELL (NO SCALE)

ORIGINAL (Red)

M A P S

PLASTIC-SEAL MONITORING WELLS

MONTGOMERY COUNTY, PENNSYLVANIA

TDD No. F3-8006-11

EPA No. PA-272

Figure 1	Location Map of Plastic-Seal Monitoring Wells
Figure 2	Sketch of Well #1, Plastic-Seal Site
Figure 3	Sketch of Well #2, Pitcairn Site
Figure 4	Sketch of Well #3, ARSCO Site
Figure 5	Sketch of Well #4, SDM Materials Site
Figure 6	Sketch of Well #5, Penn Fastener Site
Figure 7	Sketch of existing well #10, Upper Southampton Municipal Authority

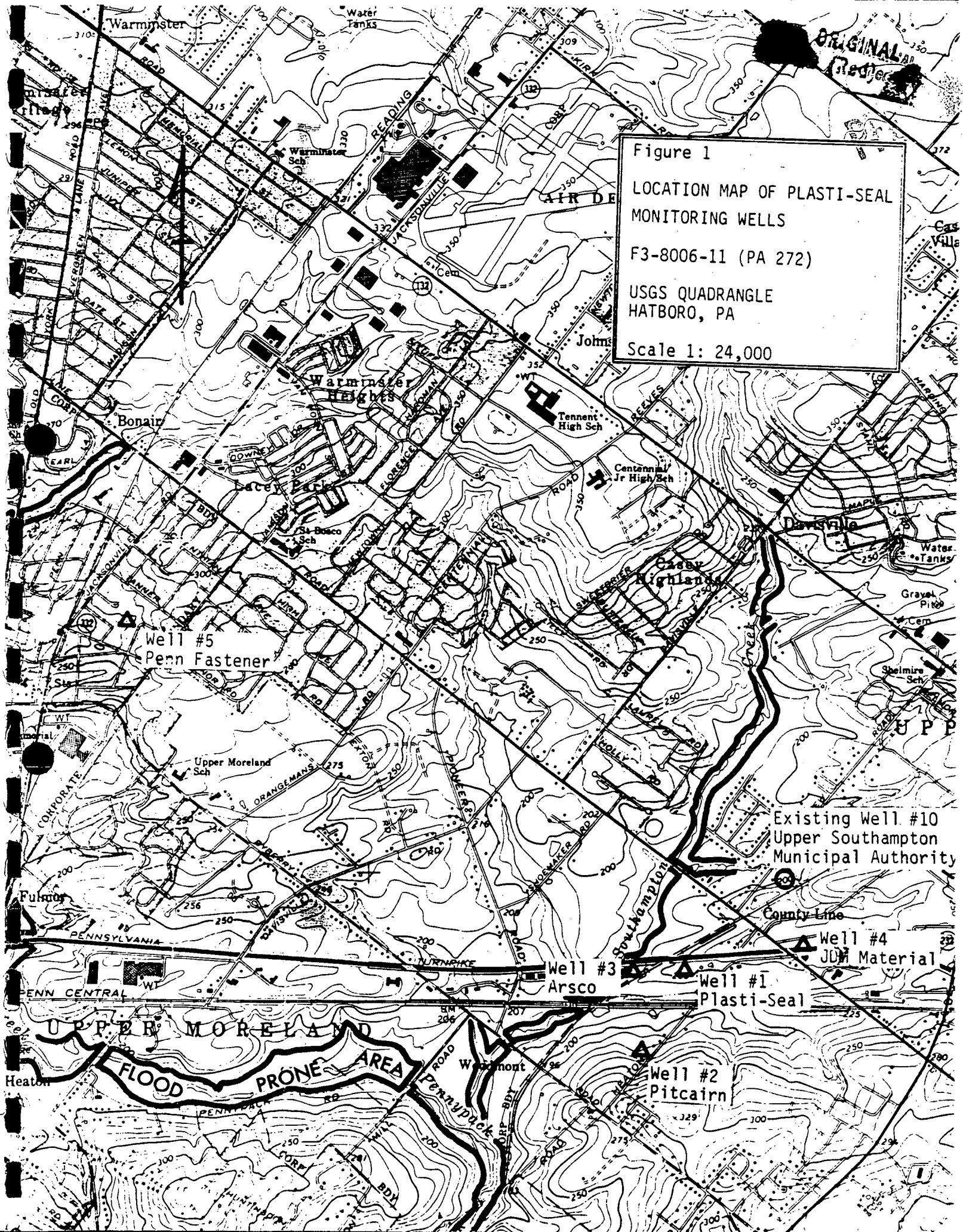


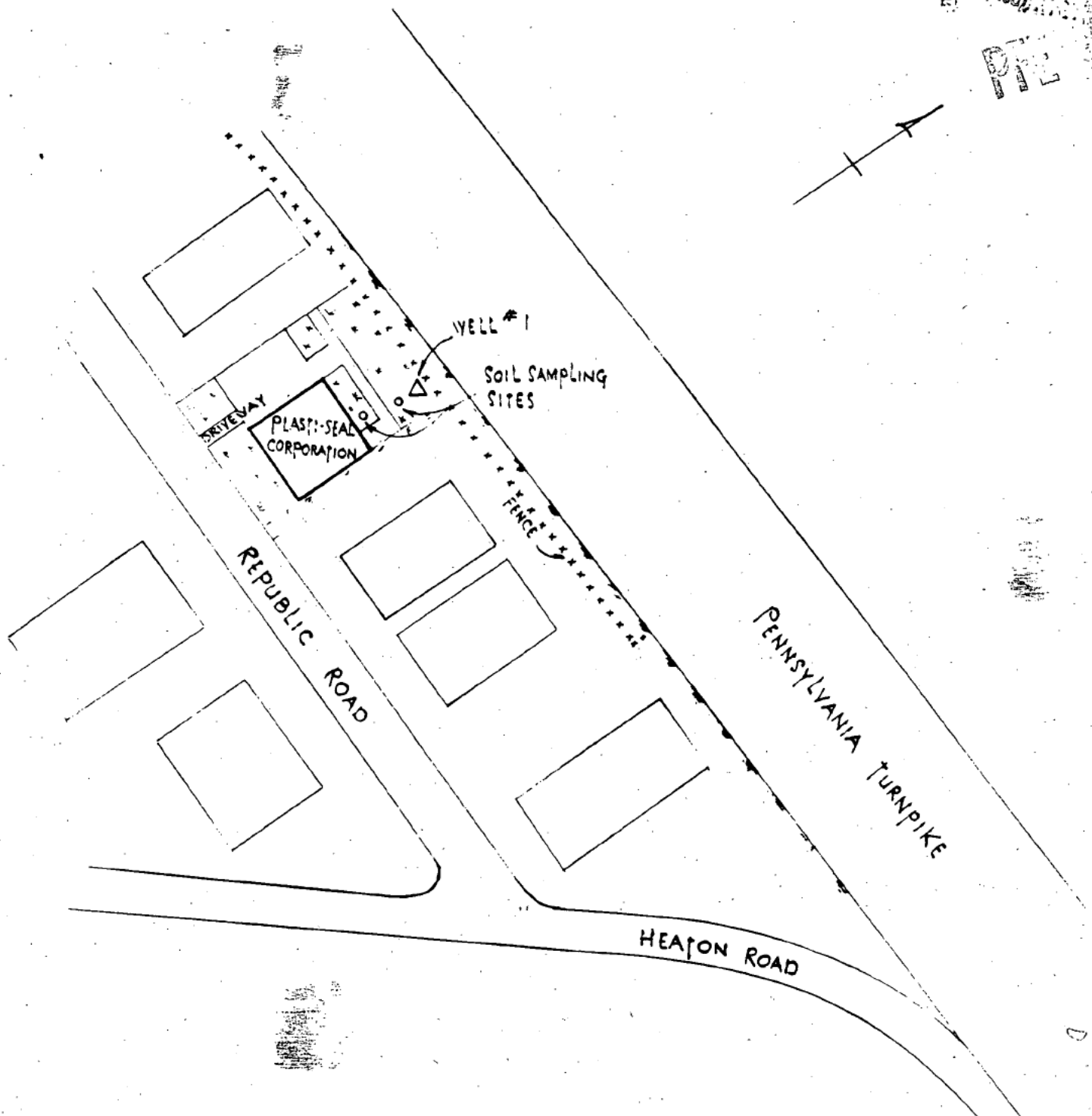
Figure 1

LOCATION MAP OF PLASTI-SEAL MONITORING WELLS

F3-8006-11 (PA 272)

USGS QUADRANGLE
HATBORO, PA

Scale 1: 24,000

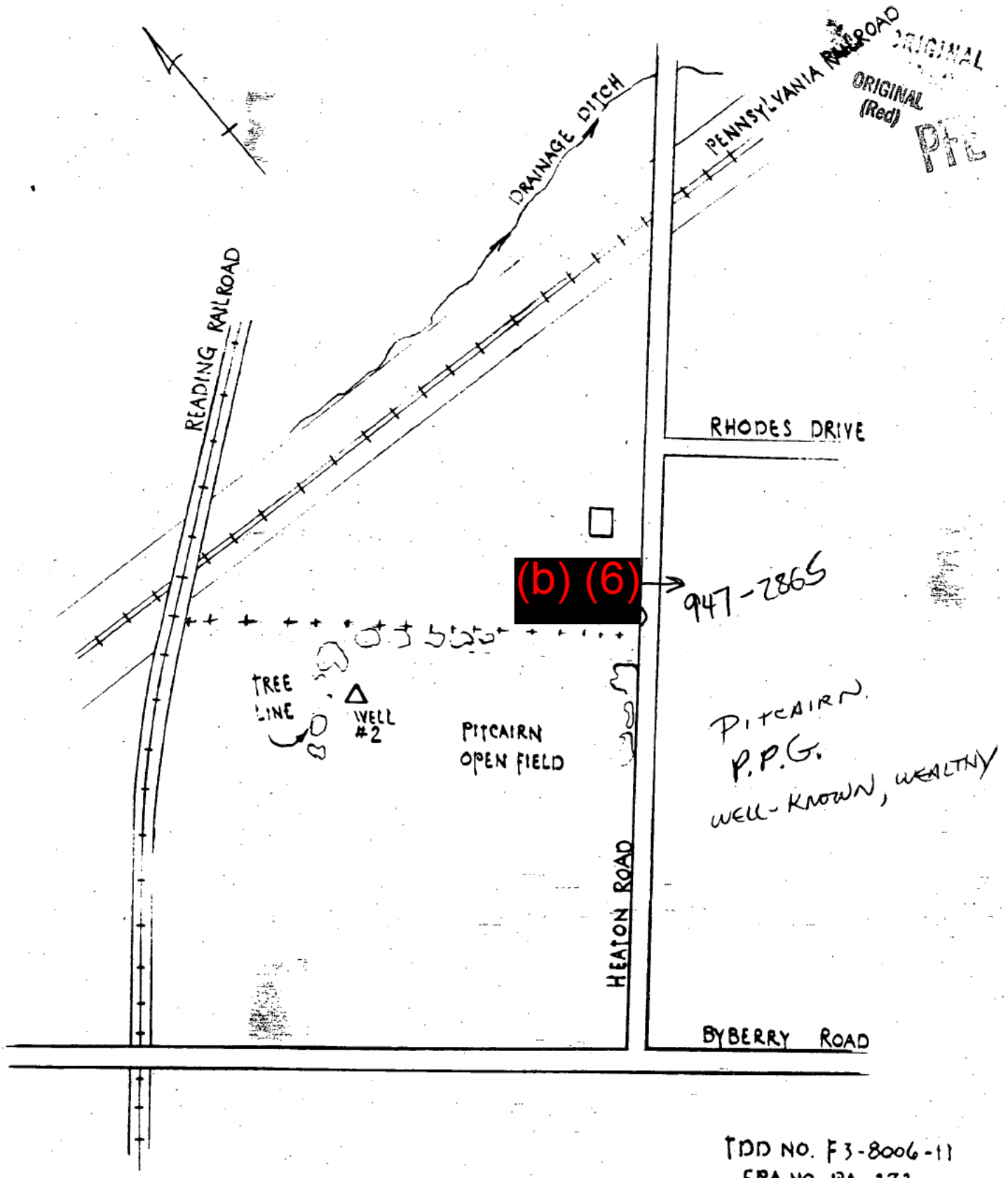


TDD NO. F3-8006-11
EPA NO. PA-272

Figure 2

SKETCH OF WELL # 1
PLASTI-SEAL SITE

No scale



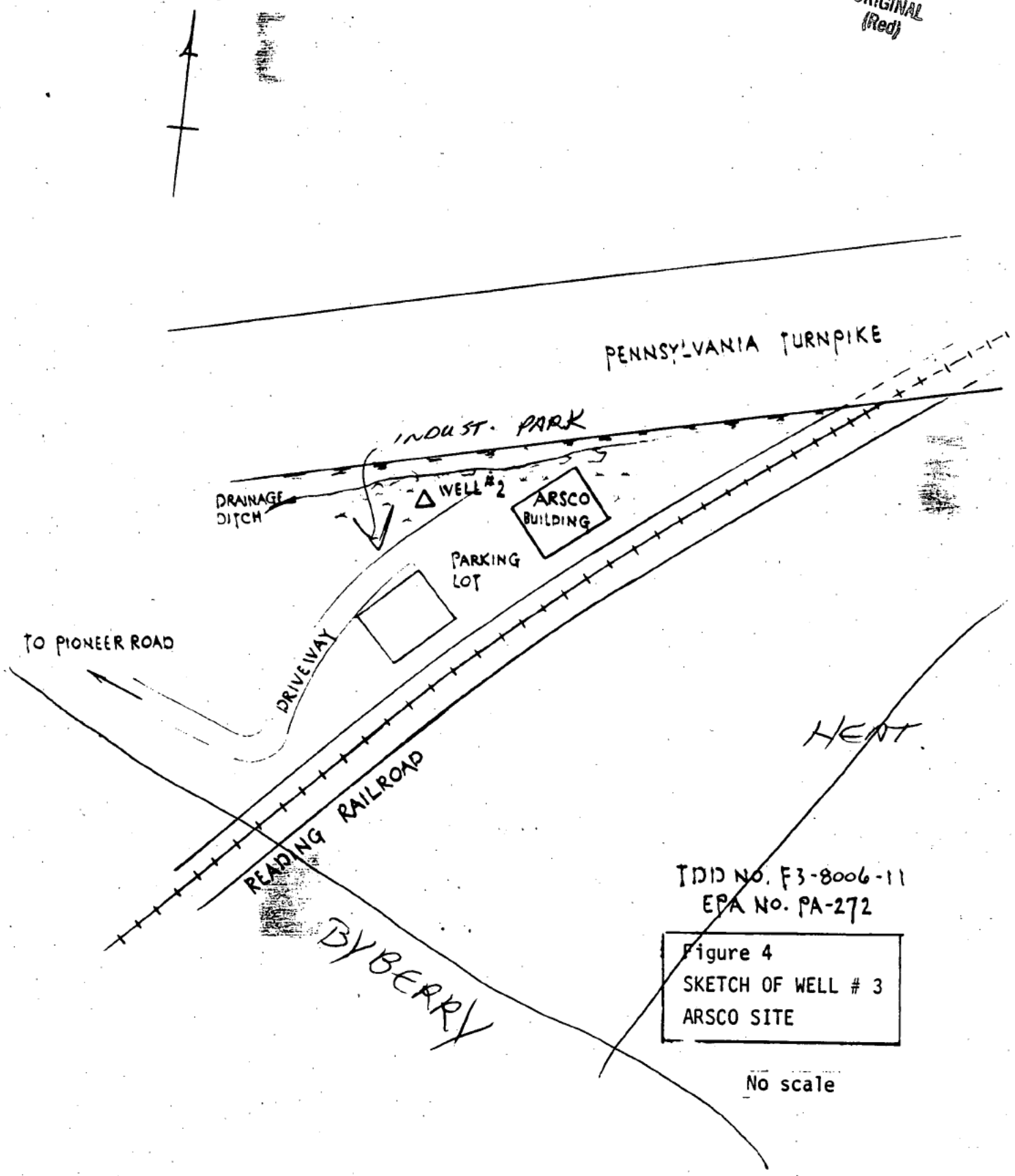
TDD NO. F3-8006-11
EPA NO. PA-272

Figure 3
SKETCH OF WELL # 2
PITCAIRN SITE

No scale

PFE

ORIGINAL (Red)



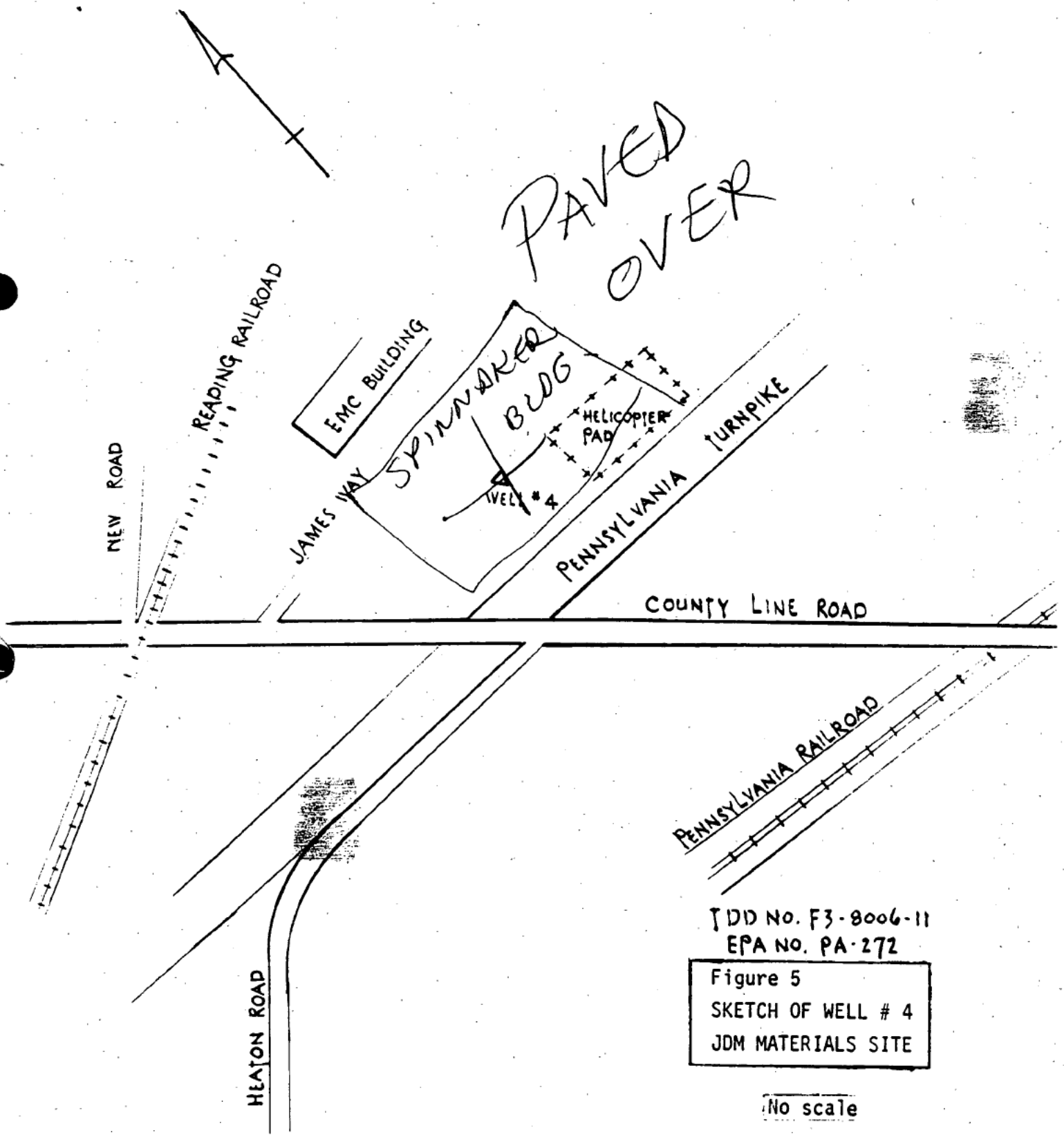
TDD NO. F3-8006-11
EPA NO. PA-272

Figure 4
SKETCH OF WELL # 3
ARSCO SITE

No scale

PFE

ORIGINAL (Red)



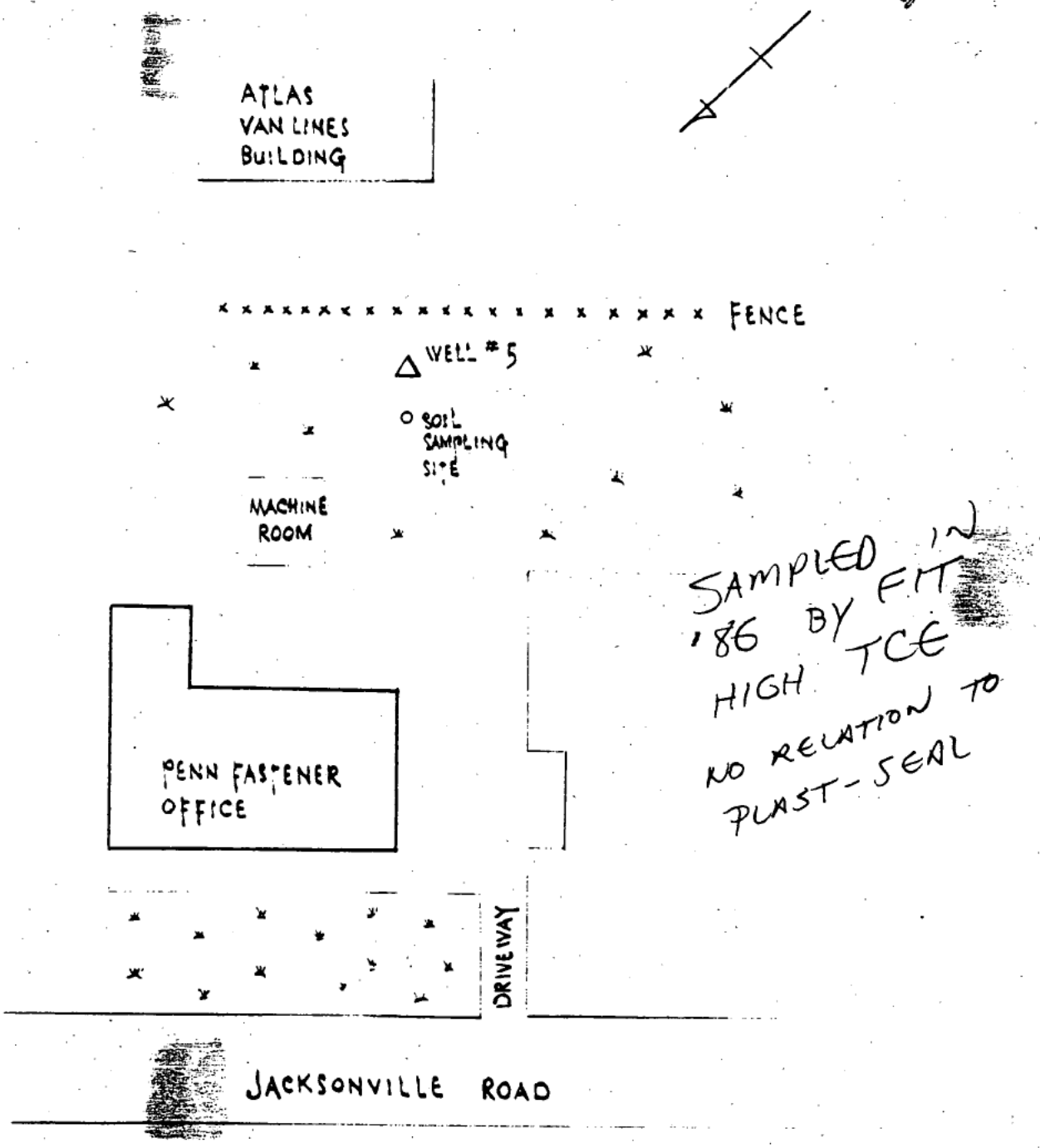
TDD NO. F3-8006-11
EPA NO. PA-272

Figure 5
SKETCH OF WELL # 4
JDM MATERIALS SITE

No scale

PFE

ORIGINAL (Red)

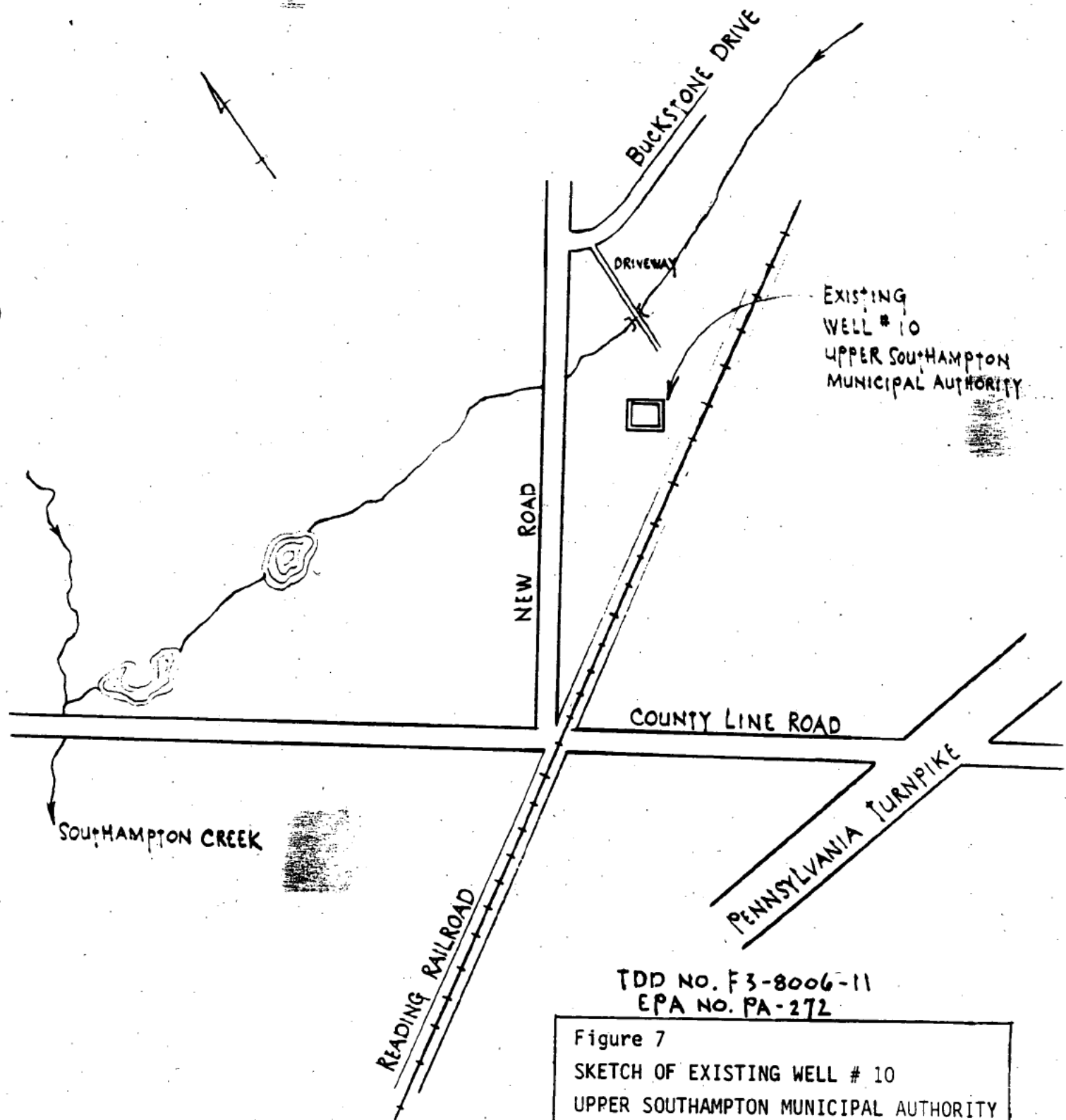


TDD NO. F3-8006-11
EPA NO. PA-272

Figure 6
SKETCH OF WELL # 5
PENN FASTENER SITE

No scale

ORIGINAL (Red) PFE



TDD NO. F3-8006-11
EPA NO. PA-272

Figure 7
SKETCH OF EXISTING WELL # 10
UPPER SOUTHAMPTON MUNICIPAL AUTHORITY

No scale

ORIGINAL
(Red)

PLATE 1

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(b) (9)