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THE MEMPHIS DEPOT TENNESSEE

ADMINISTRATIVE RECORD COVER SHEET

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Defense Distribution Depot Memphis

FINAL

Background Sampling Program Report

May 1998

U.S. Army Corps of Engineers Huntsville Division

Prepared by



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Acronyms

ARARs applicable or relevant and appropriate requirements

ASTM American Society for Testing and Materials

BCT BRAC Cleanup Team

BEHP bis(2-ethylhexyl)phthalate

bgs below ground surface

Bldg Building

BRAC Base Realignment and Closure

CDD chlorinated dibenzo-p-dioxin

CDF chlorinated dibenzo furans

CERCLA Comprehensive Environmental Response, Compensation, and

Liability Act

CLP Contract Laboratory Program

COE U.S. Army Corps of Engineers

CRDL contract-required detection limit

CRQL contract-required quantitation limit

DCA dichloroethane

DDD dichlorodiphenyldichloroethane

DDE 1,1,1-dichloro-2,2-bis(4-chlorophenyl)ethylene

DDMT Defense Depot Memphis, Tennessee

DDT dichlorodiphenyltrichloroethane

DLA Defense Logistics Agency

DNBP di-n-butylphthalate

DO dissolved oxygen

EB equipment rinseate blank

EPA U.S. Environmental Protection Agency

FB field blank

FR Federal Register

Acronyms (continued)

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HRS Hazard Ranking System

IDL instrument detection limit

LCS Laboratory Control Sample

µg/kg micrograms per kilogram

μg/L micrograms per liter

μS/cm microSiemens per centimeter

MDL method detection limit

MEK methylethyl ketone

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MLGW Memphis Light, Gas, and Water

MOH Medal of Honor Park

MS/MSD matrix spike/matrix spike duplicate

NPL National Priorities List

O.D. outside diameter

PARCC precision, accuracy, representativeness, completeness, and

comparability

PCB polychlorinated biphenyl

PCE tetrachloroethylene

PCDD polychlorinated dibenzo-p-dioxin

PCDF polychlorinated dibenzofuran

PID photoionization detector

PRG preliminary remediation goal

QA/QC quality assurance/quality control

QAPP Quality Assurance Project Plan

RCRA Resource Conservation and Recovery Act

RI/FS Remedial Investigation/Feasibility Study

RME reasonable maximum exposure

RPD relative percent difference

SOW Statement of Work

SVOC semivolatile organic compound

TAL Target Analyte List

TB trip blank

TCA trichloroethane

TCE trichloroethylene

TCL Target Compound List

TCLP Toxicity Characteristic Leaching Procedure

TDEC Tennessee Department of Environment and Conservation

TEF toxicity equivalency factor

TM Technical Memorandum

UCL upper confidence limit

VOC volatile organic compound

TAB

Executive Summary

Executive Summary

This report documents the background sampling program conducted at the Defense Depot Memphis, Tennessee (DDMT). The program was conducted to provide sufficient data to establish representative background concentrations for naturally occurring and, if appropriate, anthropogenic constituents. Background concentrations are used to support objectives of the environmental program at DDMT, including the following:

- Development of action levels to be used in further-action/no-further-action decisionmaking
- Development of interim remedial action/early removal decisionmaking
- Delineation of nature and extent during remedial investigation (RI) efforts
- Determination of potential offsite migration of site-related constituents
- · Assessment of potential/future risk
- Development of cleanup criteria and preliminary remediation goals (PRGs)

Background data were collected for surface soil, subsurface soil, surface water, sediment, and groundwater. Background sampling locations were selected in areas believed to be unaffected by past or present DDMT waste management activities. However, background sample locations in the surrounding urban environment were not necessarily unaffected by residential or industrial activities. Twenty-two soil, surface water, and sediment sample locations were selected to identify the 90th percentile (the value that bounds 90 percent of the population values) of the population with 90 percent confidence. (That is, if 22 samples were repeatedly taken from the background population [e.g., background surface soil], the sample 90th percentile would be below the true 90th percentile of the population in 90 percent of the samples.) Twelve groundwater monitoring wells were assessed to be representative of background conditions. Data from these wells provide 85 percent confidence that the 85th percentile of the background population has been identified.

Surface and subsurface soil locations were selected along the perimeter of the DDMT main installation and Dunn Field as well as at offsite locations. Concentrations of metals, semivolatile organic compounds (SVOCs), and pesticides/herbicides were higher at the DDMT perimeter sample locations than at the offsite locations. The difference in the concentration of background constituents between the perimeter and offsite sample groups is low (less than 100 percent relative difference). This indicates that the difference is representative of variations in anthropogenic conditions between the two sample groups rather than a gross impact from waste management at DDMT. Therefore, perimeter and offsite data were combined into one background data set.

Dioxins and furans were detected in most perimeter and offsite soils and at generally higher concentrations at the surface than at depth. Dioxins were also detected in sediment and surface water background samples with the highest detected concentrations exceeding U.S. Environmental Protection Agency (EPA) Region III risk-based criteria at the Botanical

Gardens and Audubon Park. Specific dioxin and furan isomers detected in background samples are indicative of ambient atmospheric deposition rather than industrial or waste management sources.

Background data were validated according to EPA criteria. Constituents typical of field and laboratory contamination as well as dioxin and furan isomers were identified in the background samples as nondetected, following EPA procedures. Holding times, matrix recoveries, and duplicate analyses were all within EPA quality control performance requirements.

This report presents statistical summary tables for soil, sediment, surface water, and groundwater background constituents. In addition, background data are evaluated for quality and outliers or data population characteristics that could compromise the use of the data to represent background conditions.

TAB

1.0

1.0 Introduction

Defense Depot Memphis, Tennessee (DDMT) has conducted a multimedia background sampling program to support implementation of its environmental restoration program. The purpose of the background sampling program is to provide sufficient data to establish representative background concentration data for naturally occurring and, if appropriate, man-made constituents (e.g., pesticides) at DDMT. Constituent concentrations detected in various media as part of the remedial activities at the site will be compared with background data established herein to evaluate whether reported concentrations of those constituents were caused by DDMT operations, are naturally occurring, or are caused by ambient effects from the urban environment surrounding DDMT.

This report documents the multimedia Background Sampling Program conducted by DDMT to support its environmental restoration program. An overview of the facility and site information is presented in Section 1.1. The remaining sections in the introduction describe the background sampling project objectives and provide a guide to the organization of the remainder of the report.

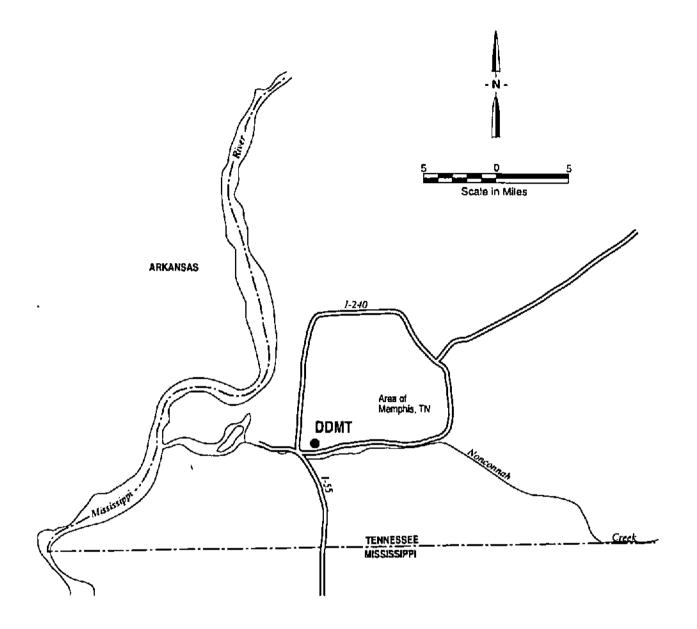
1.1 Facility Background

DDMT covers 642 acres of land in Shelby County, Memphis, Tennessee, in the extreme southwestern portion of the state (see Figure 1-1). DDMT lies approximately 5 miles east of the Mississippi River and just northeast of the Interstate 240–Interstate 55 junction, in the south-central section of Memphis, approximately 4 miles southeast of the Central Business District and 1 mile northwest of Memphis International Airport. Airways Boulevard borders DDMT on the east and provides primary access to the installation. Dunn Avenue, Ball Road, and Perry Road serve as the northern, southern, and western boundaries to the main installation, respectively. Dunn Field, a known burial area at DDMT, is located just north of the main installation. Person Avenue, Kyle Street, and Hays Street serve as the northern, western, and eastern boundaries to Dunn Field, respectively.

The installation consists of approximately 110 buildings, 26 miles of railroad track, and 28 miles of paved streets. The facility has approximately 5.5 million square feet of covered storage space and approximately 6 million square feet of open space.

Past activities at DDMT include a wide range of storage, distribution, and maintenance practices. Dunn Field has been used as a landfill area (northwest quadrant), storage area for mineral stockpiles (southwest and southeast quadrants), and pistol range (northeast quadrant). Activities within the southwest quadrant of the main installation have included hazardous material storage and recoupment (Building [Bldg] 873), sandblasting/painting activities (Bldgs 1086 through 1089), and maintenance (Bldg 770). Other activities that are documented to have occurred in this area of the installation include polychlorinated biphenyl (PCB) transformer storage (near Bldg 274), pesticide/herbicide storage and use, and fire truck pump testing (Lake Danielson). The northern portion of the main installation has a history of storage of hazardous materials, treatment of wood products with pentachlorophenol (Bldg 737), and storage of items awaiting disposal.

ORO113627.RR.ZZ/027.DOC



 LEGEND
 Interstate
 State Line
 River Creek

SOURCE: Engineering-Science, 1993.

DDMT was issued a Resource Conservation and Recovery Act (RCRA) Part B permit (No. TN4 210 020 570) by the U.S. Environmental Protection Agency (EPA), Region IV and the Tennessee Department of Environment and Conservation (TDEC) on September 28, 1990. Subsequently, in accordance with Section 120(d)(2) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. 9620(d)(2), EPA prepared a final Hazard Ranking System (HRS) Scoring Package for DDMT. On the basis of the final HRS score of 58.06, EPA added DDMT to the National Priorities List (NPL) by publication in the Federal Register (FR), 57 FR 47180 No. 199, on October 14, 1992.

As a result of DDMT's status as an NPL site, DDMT entered a Federal Facilities Agreement on March 6, 1995. The signatories of that agreement, the Defense Logistics Agency (DLA), EPA, and TDEC, agreed that the investigation of all applicable sites would proceed under the CERCLA process for remediation (remedial investigation, feasibility study, proposed plan, record of decision, remedial design, and remedial action).

In July 1995, DDMT was placed on the Base Realignment and Closure (BRAC) list, which indicates that the facility will be closed and converted to potentially different ownership and uses. Therefore, in addition to meeting all CERCLA requirements, environmental restoration at DDMT must also comply with specific requirements for property transfer under development by the BRAC Cleanup Team (BCT).

1.2 Project Objectives

The purpose of the Background Sampling Program at DDMT is to provide sufficient environmental data of known and acceptable quality to establish representative background concentrations for constituents present in surface soil, subsurface soil, surface water, and sediment at DDMT. Constituent concentrations detected in various media as part of the future remedial activities at the facility will be compared with background data to evaluate whether the reported concentrations of those constituents were caused by DDMT operations, are naturally occurring, or are caused by ambient effects from the urban environment surrounding DDMT.

The background data will be used to support several aspects of the environmental program at DDMT, including the following:

- Development of action levels to be used in further-action/no-further-action decisionmaking
- Development of interim remedial action/early removal decisionmaking
- Delineation of nature and extent during RI efforts
- Determination of potential offsite migration of site-related constituents
- Assessment of potential/future risk
- Development of remedial criteria and PRGs

During a BCT meeting on July 2, 1997, "sensitive" chemical constituents were identified from analytical data gathered during environmental characterization efforts carried out at BRAC, screening, and RI sites between the fall of 1996 and the winter of 1997. Sensitive constituents are those parameters detected in the BRAC, screening, and RI sampling events

that exceeded applicable criteria as well as background. Background levels for these parameters are therefore critical, as they will be compared to applicable criteria during the screening and data evaluation process to determine if parameter concentrations represent releases to the environment or natural conditions. Modifications (removal of outliers) to the background distributions were made by the BCT such that a more conservative (lower) background concentration was used in evaluating DDMT data. These modified background data are reported herein.

1.3 Organization

The report is organized into six sections:

- Section 1 contains introductory and background information.
- Section 2 presents a field sampling summary, sampling rationale, and specific sampling procedures.
- Section 3 identifies important background constituents, discusses the background data spatial distribution, and presents summary statistics.
- Section 4 contains a summary of project quality assurance and quality control (QA/QC) and the results of analytical data validation.
- Section 5 presents the summary and conclusions.
- Section 6 is a list of reference material consulted for this document.

Other data and supporting information are presented in the following appendices.

- Appendix A contains the soil boring logs.
- Appendix B presents copies of the field sampling logbooks.
- Appendix C presents distribution plots of metal data for all media.
- Appendix D contains a summary of the analytical data in tabular form.
- Appendix E contains a summary of background data qualifiers.
- Appendix F presents a compilation of summary statistics.
- Appendix G presents responses to review comments on the draft document.

TAB

2.0

2.0 Field Investigation

2.1 Field Sampling Summary

As specified in the *Draft Final Generic RI/FS Work Plan* (CH2M HILL, March 1995), environmental samples were taken from areas believed to be unaffected by past or present DDMT industrial activities. The soils, sediment, and surface water field sampling effort began October 9 and concluded on October 12, 1995. Groundwater sampling was conducted between February 6 and February 27, 1996.

Activities conducted by field personnel generally consisted of the following:

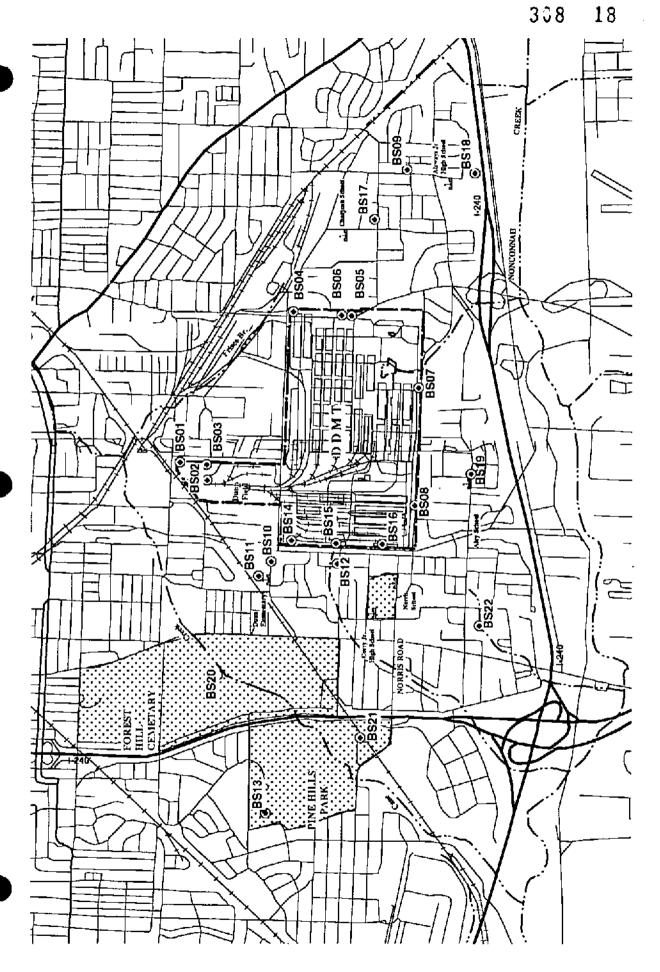
- Instrument calibration
- Equipment decontamination
- Surface and subsurface soil sampling
- Surface water and sediment sampling
- Surface water filtering
- · Groundwater monitoring well purging
- Groundwater sampling
- Sample management, tracking, and shipping

A total of 101 environmental samples were taken during this field investigation, excluding QA/QC samples. The distribution of the samples by medium is summarized as follows.

Sample Medium	Number of Environmental Samples
Surface soil	22
Subsurface soil	22
Surface water	22
Sediment	22
Groundwater	12

Surface soil and subsurface soil sampling locations are shown in Figure 2-1 and described in Tables 2-1 and 2-2. Surface and subsurface samples were each taken from the same location. Although locations for samples BS02, BW14, BS15, BS16, and BS21 shown on Figure 2-1 appear to be near railroad tracks, all five locations are at least 50 meters away from the nearest tracks. The condensed scale used in Figure 2-1 causes the sample locations to appear to be within the railroad track areas.

Surface water and sediment sampling locations are shown in Figure 2-2 and described in Tables 2-3 and 2-4. A surface water and sediment sample was taken at each location. Figure 2-3 shows the location of background monitoring wells.





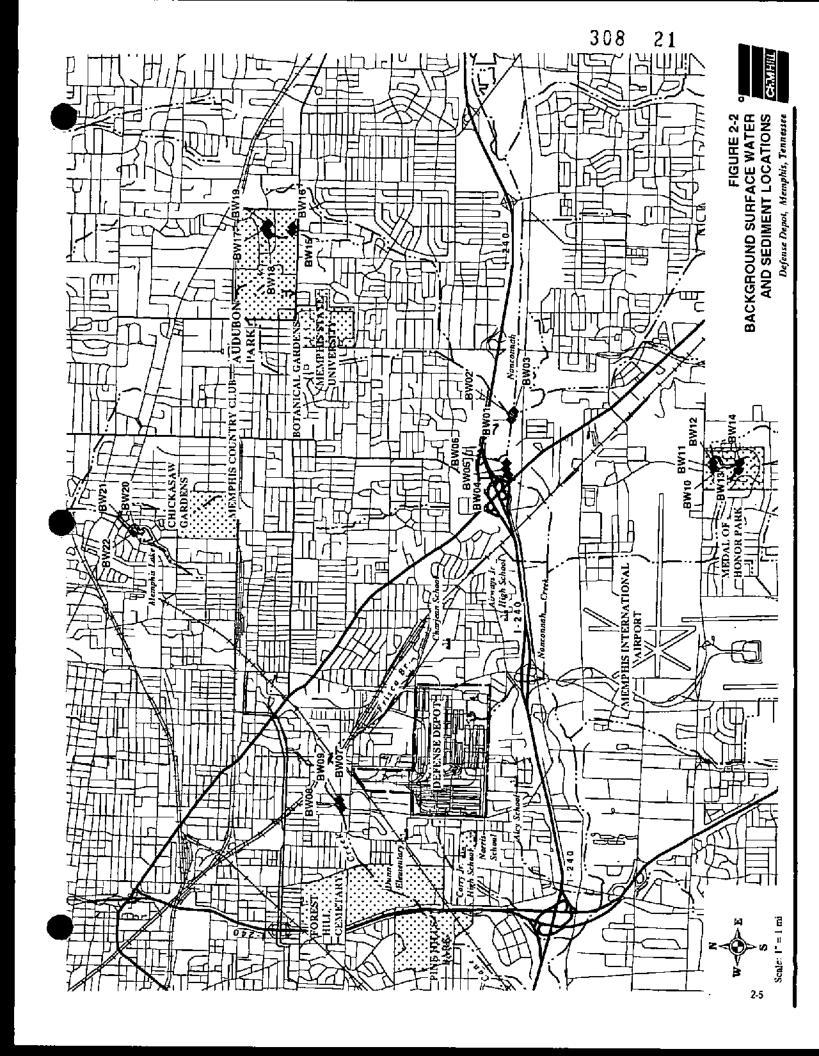
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M 등 속에 [다]다[다]다[다]다[다]데[다[다]왕의 왕의 전 생각[다]라] 왕 중 - 교	Backgro	Background Surface S Background Surface S Defense D. Defense D. Defense D. Defense D. IO/9/95 1447 NE corr 10/10/95 1447 NE corr 10/10/95 1542 Dunn F 10/10/95 1618 Dunn F 10/10/95 1010 East of 10/10/95 1010 East of 10/10/95 1010 East of 10/10/95 1334 South 5 10/10/95 East of 10/11/95 1334 South 5 10/10/95 East of 10/11/95 1303 Dunn E 10/11/95 Bunn E 10/11/95 1321 Pine Hil 10/11/95 Bunn E 10/11/95 1321 Pine Hil 10/11/95 Bunn E 10/11/95 1321 Pine Hil 10/11/95 Bunn E 10/12/95 1321 Pine Hil 10/12/95 Bunn E 10/12/95 1345 Pine Hil 10/12/95 Bunn E 10/12	Background Surface Sackground Surface Sackground Croup Date Time Defense D.	Background Surface S Background Surface S Background Date BS01 Perimeter 10/9/95 1447 NE correspondences BS02 Perimeter 10/9/95 1447 NE correspondences BS03 Perimeter 10/9/95 1618 Dunn F BS03 Perimeter 10/10/95 1618 Dunn F BS04 Perimeter 10/10/95 1618 Dunn F BS05 Perimeter 10/10/95 1327 Dunn F BS06 Perimeter 10/10/95 1324 South s BS07 Perimeter 10/10/95 1324 South s BS08 Perimeter 10/11/95 1321 Punn E BS10 Offsite 10/11/95 1321 Pine Hill BS11 Offsite 10/11/95 1321 Pine Hill BS12 Offsite 10/11/95 1325 M. edge BS13 Offsite 10/11/95 1325 Aicy Ele BS16 <t< td=""><td>Table 2-1</td><td>oil Sample and Location Information</td><td>und Sampling Program</td><td>epot Memphis Tennessee</td><td>General Sample Location</td><td>ner of Dunn Field; near intersection of Person and Hays St.</td><td>ner of Dunn Field; near intersection of Person and Hays SI.</td><td>ield; near intersection of Carver and Hays St.</td><td>ield; near intersection of Carver and Hays St.</td><td>er of DDMT; intersection of Airways Blvd and Dunn Rd</td><td>SE corner of Administration Bldg</td><td>NE corner of Administration Bldg</td><td>ide of DDMT; south of Bldg 490</td><td>ner of DDMT; south of Bldgs 970 and 875</td><td>DDMT; near intersection of Jolson St. and Barrymore St.</td><td>lementary School; east of school building</td><td>lementary School; north of school playground</td><td>DDMT; intersection of Sparks St. and Sparks Cove</td><td>Ils Golf Course; near Alice Ave. and Benton St.</td><td>of DDMT; Dunn Ave. and Perry St. (below power lines)</td><td>of DDMT; Perry St. and Elliston St. (below power lines)</td><td>of DDMT; Perry St. and Norris St. (below power lines)</td><td>n School; near intersection of Dwight Rd. and Imagene St.</td><td>Jr. High School; south of SW corner of school building</td><td>ementary School; E of SE corner of school building</td><td>ill Cemetary; near Cane Creek; East of Garden of Hope</td><td>Is Golf Course; off Mallory Ave.; near pump house</td><td>rk West (SW of DDMT); South of Alcy St.</td><td></td><td>icides, TAL metals, and dioxin/furans.</td><td>polychlorinated biphenyls</td><td>Caroot Anound int</td></t<>	Table 2-1	oil Sample and Location Information	und Sampling Program	epot Memphis Tennessee	General Sample Location	ner of Dunn Field; near intersection of Person and Hays St.	ner of Dunn Field; near intersection of Person and Hays SI.	ield; near intersection of Carver and Hays St.	ield; near intersection of Carver and Hays St.	er of DDMT; intersection of Airways Blvd and Dunn Rd	SE corner of Administration Bldg	NE corner of Administration Bldg	ide of DDMT; south of Bldg 490	ner of DDMT; south of Bldgs 970 and 875	DDMT; near intersection of Jolson St. and Barrymore St.	lementary School; east of school building	lementary School; north of school playground	DDMT; intersection of Sparks St. and Sparks Cove	Ils Golf Course; near Alice Ave. and Benton St.	of DDMT; Dunn Ave. and Perry St. (below power lines)	of DDMT; Perry St. and Elliston St. (below power lines)	of DDMT; Perry St. and Norris St. (below power lines)	n School; near intersection of Dwight Rd. and Imagene St.	Jr. High School; south of SW corner of school building	ementary School; E of SE corner of school building	ill Cemetary; near Cane Creek; East of Garden of Hope	Is Golf Course; off Mallory Ave.; near pump house	rk West (SW of DDMT); South of Alcy St.		icides, TAL metals, and dioxin/furans.	polychlorinated biphenyls	Caroot Anound int

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Sample # Location Group Date Time Date Time Sample Pengram					:	Table 2-2	
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1995 1451 NE corner of Dunn Field; intersection of Person and Hays St. 1995 1555 Dunn Field; near intersection of Carver and Hays St. 1995 1627 Dunn Field; near intersection of Carver and Hays St. 1995 1027 Dunn Field; near intersection of Carver and Hays St. 1995 1025 East of Se croner of Administration Bldg 1995 1101 East of NE corner of Administration Bldg 1995 1101 East of Se croner of Administration Bldg 1995 1340 South side of DDMT; south of Bldg 490 1995 1340 South side of DDMT; south of Bldg 490 1995 1352 Dunn Elementary School; east of Sebool building 1995 1522 East of DDMT; near intersection of Joison St.& Barrymore St. 1995 1522 Dunn Elementary School; east of school building 1195 1108 West of DDMT; near intersection of Dayground 1195 1108 West of DDMT; near Ave and Perry St. thelow power lines) 1195 1108 West of DDMT; Perry St. and Elliston St.(below power lines) 1195 1108 West of DDMT; Perry St. and Elliston St.(below power lines) 1195 1109 West of DDMT; Perry St. and Elliston St.(below power lines) 1195 1109 West of DDMT; Perry St. and Elliston St.(below power lines) 1195 1520 W. edge of DDMT; Perry St. and Elliston St.(below power lines) 1195 1520 W. edge of DDMT; Perry St. and Horris St. (below power lines) 1295 1627 Aley Elementary School; near intersection of Dayight Rd and Imogene St. 1295 1027 Aley Elementary School; each Corner of school building 1295 1108 Mest (SW of DDMT); South of Steps of Barby Park West (SW of DDMT); South of Aley St. 1295 1255 Forest Hill Centeury; near Cane Creek; East of Garden of Hope 1295 1255 Forest Hill Centeury; near Cane Creek; East of Garden of Hope 1295 1255 Forest Hill Centeury; near Cane Creek; East of Garden of Hope 1295 1255 Forest Hill Centeury; near Cane Creek; East of Garden of Aley Bark West (SW of DDMT); South of Aley St.	Sample #	Location	Group	Date	Time	Sample Location Description	QA/QC Sample
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10/95 1101 East of NE corner of Administration Bldg 10/95 1340 South side of DDMT; south of Bldg 490 10/95 1340 South side of DDMT; south of Bldg 490 10/95 1415 SW corner of DDMT; south of Bldg 490 10/95 1415 SW corner of DDMT; south of Bldgs 970 and 875 10/95 1522 East of DDMT; near intersection of Joison St.& Barrymore St. 11/95 1007 Dunn Elementary School; east of school pulkling 11/95 1108 West of DDMT; intersection of Sparks St. and Sparks Cove 11/95 1108 West of DDMT; intersection of Sparks St. and Sparks Cove 11/95 1108 West of DDMT; intersection of Sparks St. and Sparks Cove 11/95 1625 W. edge of DDMT; Dunn Ave and Perry St. (below power lines) 11/95 1625 W. edge of DDMT; Perry St. and Elliston St.(below power lines) 11/95 1625 W. edge of DDMT; Perry St. and Perry St. (below power lines) 11/95 1625 W. edge of DDMT; Perry St. and Perry St. (below power lines) 11/95 1625 W. edge of DDMT; Perry St. and Perry St. (below power lines) 12/95 <th< td=""><td>SB135</td><td>BS05</td><td>Perimeter</td><td>10/10/95</td><td>1025</td><td>East of SE corner of Administration Bldg</td><td>Ϋ́</td></th<>	SB135	BS05	Perimeter	10/10/95	1025	East of SE corner of Administration Bldg	Ϋ́
10/95 1340 South side of DDMT; south of Bldg 490 10/95 1340 South side of DDMT; south of Bldg 490 10/95 1340 South side of DDMT; south of Bldg 490 10/95 1415 SW corner of DDMT; south of Bldgs 970 and 875 10/95 1522 East of DDMT; near intersection of Jolson St.& Barrymore St. 11/95 1300 Dunn Elementary School; east of school playground 11/95 1309 Pine Hills Golf Course; near Alice Ave and Benton St. 11/95 1458 W. edge of DDMT; Intersection of Sparks St. and Sparks Cove 11/95 1450 W. edge of DDMT; Dunn Ave and Perry St. (below power lines) 11/95 1450 W. edge of DDMT; Perry St. and Elliston St.(below power lines) 11/95 1450 W. edge of DDMT; Perry St. and Norris St. (below power lines) 11/95 155 W. edge of DDMT; Perry St. and Norris St. (below power lines) 11/95 157 Alcy Elementary School; and Norris St. (below power lines) 12/95 3936 Airways Jr. High; south of SW corner of school building 12/95 1027 Alcy Elementary School; E of SE corner of school building 12/95 1027 Alcy Elementary School; E of SE corner of school building 12/95 1027 Alcy Elementary School; E of SE corner of school building 12/95 1428 Alcy Park West (SW of DDMT); South of Alcy St. 14 below ground surface. 15 KCBs = polychlorinated biphenyls 16 KCBs = polychlorinated biphenyls 17 Alc = Targel Analyte List 17 Scare 18 Bldg = Building 18 Sec. 18 New St. Alcy Elementary Schools 18 Sec. 19 Alcy Building 19 Sec. 19 S	SB145	BS06	Perimeter	10/10/95	1011	East of NE corner of Administration Bldg	AN
10/95 1340 South side of DDMT; south of Bldgs 970 and 875 10/95 1415 SW corner of DDMT; south of Bldgs 970 and 875 10/95 1522 East of DDMT; mear intersection of Jolson St.& Barrymore St. 11/95 1507 Dunn Elementary School; east of school building 11/95 1007 Dunn Elementary School; north of school building 11/95 1329 Pine Hills Golf Course; near Alice Ave and Benton St. 11/95 1458 W. edge of DDMT; intersection of Sparks St. thelow power lines) 11/95 1540 W. edge of DDMT; Perry St. and Elliston St.(below power lines) 11/95 1540 W. edge of DDMT; Perry St. and Morris St. (below power lines) 11/95 1540 W. edge of DDMT; Perry St. and Norris St. (below power lines) 11/95 1540 W. edge of DDMT; Perry St. and Norris St. (below power lines) 11/95 1625 W. edge of DDMT; Perry St. and Norris St. (below power lines) 12/95 1625 M. edge of DDMT; Perry St. and Norris St. (below power lines) 12/95 1625 M. edge of DDMT; Perry St. and Norris St. (below power lines) 12/95 1625 Alivays Jr. High; south of SW curner of school building 12/95 1027 Alcy Elementary School; E of SE corner of school building 12/95 1027 Alcy Elementary School; E of SE corner of school building 12/95 1027 Alcy Elementary School; E of SE corner of school building 12/95 1628 Alivays Jr. High; south of SW curner of school building 12/95 1628 Alcy Park West (SW of DDMT); South of Alcy St. Rese Arch = Target Analyte List 16	SB155	BS07	Perimeter	10/10/95	1340	South side of DDMT; south of Bldg 490	AN
10/95 1415 SW corner of DDMT; south of Bldgs 970 and 875 10/95 1522 East of DDMT; near intersection of Joison St.& Barrymore St. 11/95 930 Dunn Elementary School; east of school building 11/95 1007 Dunn Elementary School; north of school playground 11/95 1108 West of DDMT; intersection of Sparks St. and Sparks Cove 11/95 1108 West of DDMT; intersection of Sparks St. and Sparks Cove 11/95 1108 West of DDMT; intersection of Sparks St. and Sparks Cove 11/95 1108 West of DDMT; Dunn Ave and Perry St. (below power lines) 11/95 1458 W. edge of DDMT; Perry St. and Elliston St. (below power lines) 11/95 1540 W. edge of DDMT; Perry St. and Morris St. (below power lines) 11/95 1625 W. edge of DDMT; Perry St. and Morris St. (below power lines) 11/95 1625 W. edge of DDMT; Perry St. and Norris St. (below power lines) 11/95 1625 W. edge of DDMT; Perry St. and Norris St. (below power lines) 12/95 1625 W. edge of DDMT; Perry St. and Norris St. (below power lines) 12/95 1625 W. edge of DDMT; Perry St. and Norris St. (below power lines) 12/95 1625 W. edge of DDMT; Perry St. and Norris St. (below power lines) 12/95 1625 W. edge of DDMT; Perry St. and Norris St. (below power lines) 12/95 1626 W. edge of DDMT; Perry St. and Norris St. (below power lines) 12/95 1627 Aley Elementary School; E of SE corner of school building 12/95 1627 Aley Elementary School; E of SE corner of school building 12/95 1628 Aley Park West (SW of DDMT); South of Aley St. 12/95 1628 Aley Park West (SW of DDMT); South of Aley St. 12/95 The Hills Colif Course; off of Mallory Ave.; near pump house 12/95 The Hills Colif Course; off of Mallory Ave.; near pump house 12/95 Aley Park West (SW of DDMT); South of Aley St. 12/95 Aley Park West (SW of DDMT); South of Aley St. 12/95 The Hills Colif Course; off of Mallory Ave.; near pump house 12/95 Aley Park West (SW of DDMT); South of Aley St. 12/95 Aley Park Breat Analyte List 12/95 Aley Building 12/95 Aley Building	SB155A	BS07	Perimeter	10/10/95	1340	South side of DDMT, south of Bldg 490	Duplicate
10/95 1522 East of DDMT; near intersection of Joison St. & Barrymore St. 11/95 930 Dunn Elementary School; east of school building 11/95 1007 Dunn Elementary School; north of school playground 11/95 1108 West of DDMT; intersection of Sparks St. and Sparks Cove 11/95 1329 Pine Hills Golf Course; near Alice Ave and Benton St. 11/95 1329 Pine Hills Golf Course; near Alice Ave and Benton St. 11/95 1540 W. edge of DDMT; Dunn Ave and Perry St. (below power lines) 11/95 1540 W. edge of DDMT; Perry St. and Norris St. (below power lines) 11/95 1625 W. edge of DDMT; Perry St. and Norris St. (below power lines) 11/95 1625 W. edge of DDMT; Perry St. and Norris St. (below power lines) 12/95 1625 M. edge of DDMT; Perry St. and Norris St. (below power lines) 12/95 Airways Jr. High; south of SW corner of school building 12/95 Airways Jr. High; south of SW corner of schoo	SB165	BS08	Perimeter	10/10/95	1415	SW corner of DDMT; south of Bldgs 970 and 875	ΑN
11/95 930 Dunn Elementary School; east of school building 11/95 1007 Dunn Elementary School; north of school playground 11/95 1108 West of DDMT; intersection of Sparks St. and Sparks Cove 11/95 1108 West of DDMT; intersection of Sparks St. and Sparks Cove 11/95 1329 Pine Hills Golf Course; near Alice Ave and Benton St. 11/95 1458 W. edge of DDMT; Dunn Ave and Perry St. (below power lines) 11/95 1540 W. edge of DDMT; Perry St. and Norris St. (below power lines) 11/95 1625 W. edge of DDMT; Perry St. and Norris St. (below power lines) 11/95 1625 W. edge of DDMT; Perry St. and Norris St. (below power lines) 11/97 1625 W. edge of DDMT; Perry St. and Norris St. (below power lines) 11/98 1625 W. edge of DDMT; Perry St. and Norris St. (below power lines) 12/99 1027 Aley Elementary School; E of SE corner of school building 12/99 1027 Aley Elementary School; E of SE corner of school building 12/99 1027 Aley Elementary School; E of SE corner of school building 12/95 1027 Aley Elementary School; E of SE corner of school building 12/95 1027 Aley Elementary School; E of SE corner of school building 12/95 1027 Aley Elementary School; E of SE corner of school building 12/95 1027 Aley Elementary School; E of SE corner of school building 12/95 1027 Aley Elementary School; E of Mallory Ave.; near pump house 12/95 1428 Aley Park West (SW of DDMT); South of Aley St. CCs, pesticides/PCBs, herbicides, TAL metals, and dioxin/furans. PCBs = polychlorinated biphenyls sec	SB175	BS09	Offsite	10/10/95	1522	East of DDMT; near intersection of Jolson St.& Barrymore St.	ΨZ
11/95 1007 Dunn Elementary School; north of school playground 11/95 1108 West of DDMT; intersection of Sparks St. and Sparks Cove 11/95 1329 Pine Hills Golf Course; near Alice Ave and Benton St. 11/95 1458 W. edge of DDMT; Dunn Ave and Ferry St. (below power lines) 11/95 1540 W. edge of DDMT; Perry St. and Elliston St.(below power lines) 11/95 1625 W. edge of DDMT; Perry St. and Elliston St.(below power lines) 11/95 1625 W. edge of DDMT; Perry St. and Norris St. (below power lines) 11/95 1625 W. edge of DDMT; Perry St. and Norris St. (below power lines) 11/95 1625 W. edge of DDMT; Perry St. and Norris St. (below power lines) 11/95 1625 W. edge of DDMT; Perry St. and Norris St. (below power lines) 12/95 366 Airways Jr. High; south of SW corner of school building 12/95 1027 Aley Elementary School; E of SE corner of school building 12/95 1027 Aley Elementary School; E of SE corner of school building 12/95 1027 Aley Elementary School; E of SE corner of school building 12/95 1027 Aley Elementary School; E of SE corner of school building 12/95 1027 Aley Elementary School; E of SE corner of school building 12/95 1027 Aley Elementary School; E of SE corner of school building 12/95 1027 Aley Elementary School; E of SE corner of school building 12/95 1027 Aley Elementary School; E of SE corner of school building 12/95 1428 Aley Park West (SW of DDMT); South of Aley St. RCBs = polychlorinated biphenyls 12/95 1428 Aley Park Analyte List 12/95 1428 Aley Park Analyte List 12/95 1428 Aley Building 12/95 1428 Aley Building	SB184	BS10	Offsite	10/11/95	930	Dunn Elementary School; east of school building	MS/MSD
 11/95 1108 West of DDMT; intersection of Sparks St. and Sparks Cove 11/95 1329 Pine Hills Golf Course; near Alice Ave and Benton St. 11/95 1458 W. edge of DDMT; Dunn Ave and Perry St. (below power lines) 11/95 1540 W. edge of DDMT; Perry St. and Elliston St. (below power lines) 11/95 1625 W. edge of DDMT; Perry St. and Norris St. (below power lines) 11/95 1625 W. edge of DDMT; Perry St. and Norris St. (below power lines) 12/95 851 Charjean School; near intersection of Dwight Rd and Imogene St. 12/95 Airways Jr. High; south of SW corner of school building 12/95 Airways Jr. High; south of SW corner of school building 12/95 Alcy Elementary School; E of SE corner of school building 12/95 1027 Alcy Elementary School; E of SE corner of school building 12/95 1027 Alcy Elementary School; E of SE corner of school building 12/95 Forest Hill Cemetary School; E of SE corner of school building 12/95 1255 Forest Hill Cemetary School; E of SE corner of school building 12/95 1268 Alcy Park West (SW of DDMT); South of Alcy St. PCBs = polychlorinated biphenyls TAL = Target Analyte List Sec TAL = Target Analyte List Isaldg = Building 	SB195	BS11	Offsite	10/11/95	1007	Dunn Elementary School; north of school playground	Ϋ́
 11/95 1329 Pine Hills Golf Course; near Alice Ave and Benton St. 11/95 1458 W. edge of DDMT; Dunn Ave and Perry St. (below power lines) 11/95 1540 W. edge of DDMT; Perry St. and Elliston St.(below power lines) 11/95 1625 W. edge of DDMT; Perry St. and Norris St. (below power lines) 11/95 1625 W. edge of DDMT; Perry St. and Norris St. (below power lines) 12/95 851 Charjean School; near intersection of Dwight Rd and Imogene St. 12/95 936 Airways Jr. High; south of SW corner of school building 12/95 1027 Alcy Elementary School; E of SE corner of school building 12/95 1027 Alcy Elementary School; E of SE corner of school building 12/95 1027 Alcy Elementary School; E of SE corner of school building 12/95 1255 Forest Hill Cemetary; near Cane Creek; East of Garden of Hope 12/95 1255 Forest Hill Cemetary; near Cane Creek; East of Garden of Hope 12/95 1255 Forest Hill Cemetary; near Cane Creek; East of Garden of Hope 12/95 1255 Forest Hill Cemetary; near Cane Creek; East of Garden of Hope 12/95 1255 Forest Hill Cemetary; near Cane Creek; East of Garden of Hope 12/95 1255 Forest Hill Cemetary; near Cane Creek; East of Garden of Hope 12/95 1255 Forest Hill Cemetary; near Cane Creek; East of Garden of Hope 12/95 1255 Forest Hill Cemetary; near Cane Creek; East of Garden of Hope 12/95 1255 Forest Hill Cemetary; near Cane Creek; East of Garden of Hope 12/95 1255 Forest Hill Cemetary; near Cane Creek; East of Garden of Hope 12/95 1255 Forest Hill Cemetary; near Cane Creek; East of Garden of Hope 12/95 1255 Forest Hill Cemetary; near Cane Creek; East of Garden of Hope 12/95 1255 Forest Hill Cemetary; near Cane Creek; East of Garden of Hope 12/95 1255 Forest Hill Cemetary; near Cane Creek; East of Garden of Hope 12/95 1255 Forest Hill Cemetary; near Cane Cane Course; Of Of Mallor, near Cane Cane Cane Cane C	SB205	BS12	Offsite	10/11/95	1108	West of DDMT; intersection of Sparks St. and Sparks Cove	ž
 11/95 1458 W. edge of DDMT; Dunn Ave and Perry St. (below power lines) 11/95 1540 W. edge of DDMT; Perry St. and Elliston St.(below power lines) 11/95 1625 W. edge of DDMT; Perry St. and Norris St. (below power lines) 11/95 1625 W. edge of DDMT; Perry St. and Norris St. (below power lines) 12/95 851 Charjean School; near intersection of Dwight Rd and Imogene St. 12/95 936 Airways Jr. High; south of SW corner of school building 12/95 936 Airways Jr. High; south of SW curner of school building 12/95 1027 Alcy Elementary School; E of SE corner of school building 12/95 1027 Alcy Elementary School; E of SE corner of school building 12/95 1255 Forest Hill Cemetary; near Cane Creek; East of Garden of Hope 12/95 1350 Pine Hills Golf Course; off of Mallory Ave.; near pump house 12/95 1428 Alcy Park West (SW of DDMT); South of Alcy St. 12/95 Alcy Park West (SW of DDMT); South of Alcy St. 12/95 Alcy Park Mest (SW of DDMT); South of Alcy St. 12/95 Alcy Park Mest (SW of DDMT); South of Alcy St. 12/95 Alcy Park West (SW of DDMT); South of Alcy St. 12/95 Alcy Park West (SW of DDMT); South of Alcy St. 12/95 Alcy Park West (SW of DDMT); South of Alcy St. 12/95 Alcy Park West (SW of DDMT); South of Alcy St. 12/95 Alcy Park West (SW of DDMT); South of Alcy St. 12/95 Alcy Park West (SW of DDMT); South of Alcy St. 	SB215	BS13	Offsite	10/11/95	1329	Pine Hills Golf Course; near Alice Ave and Benton St.	ΑΝ
11/95 1540 W. edge of DDMT; Perry St. and Elliston St. (below power lines) 11/95 1625 W. edge of DDMT; Perry St. and Norris St. (below power lines) 12/95 851 Charjean School; near intersection of Dwight Rd and Imogene St. 12/95 936 Airways Jr. High; south of SW corner of school building 12/95 1027 Aley Elementary School; E of SE corner of school building 12/95 1027 Aley Elementary School; E of SE corner of school building 12/95 1027 Aley Elementary School; E of SE corner of school building 12/95 1027 Aley Elementary School; E of SE corner of school building 12/95 1027 Aley Elementary School; E of SE corner of school building 12/95 1027 Aley Elementary School; E of SE corner of school building 12/95 1027 Aley Elementary: near Cane Creek; East of Garden of Hope 12/95 1255 Forest Hill Cemetary: near Cane Creek; East of Garden of Hope 12/95 1350 Pine Hills Golf Course; off of Mallory Ave.; near pump house 12/95 1428 Aley Park West (SW of DDMT); South of Aley St. RCBs = polychlorinated biphenyls Sec TAL = Targel Analyte List Face NA= Not applicable Bidg = Building Rabel Maley Park Maley List Face Rabel Maley Park Park Maley Park Maley Park Park Park Park Park Park Park Park	SB225	BS14	Perimeter	10/11/95		W. edge of DDMT; Dunn Ave and Perry St. (below power lines)	Split
11/95 1625 W. edge of DDMT; Perry SI. and Norris SI. (below power lines) 12/95 851 Charjean School; near intersection of Dwight Rd and Imogene St. 12/95 936 Airways Jr. High; south of SW corner of school building 12/95 936 Airways Jr. High; south of SW curner of school building 12/95 1027 Alcy Elementary School; E of SE corner of school building 12/95 1027 Alcy Elementary School; E of SE corner of school building 12/95 1027 Alcy Elementary School; E of SE corner of school building 12/95 1255 Forest Hill Cemetary; near Cane Creek; East of Garden of Hope 12/95 1255 Forest Hill Cemetary; near Cane Creek; East of Garden of Hope 12/95 1256 Pine Hills Coll Course; off of Mallory Ave.; near pump house 12/95 1428 Alcy Park West (SW of DDMT); South of Alcy St. CS, pesticides/PCBs, herbicides, TAL metals, and dioxin/furans. PCBs = polychlorinated biphenyls Sec TAL = Targel Analyte List Indee Building NA= Not applicable Bldg = Building	SB235	BS15	Perimeter	10/11/05		W. edge of DDMT; Perry St. and Elliston St.(below power lines)	NA
1295 851 Charjean School; near intersection of Dwight Rd and Imogene St. 1295 936 Airways Jr. High; south of SW corner of school building 1295 1027 Alcy Elementary School; E of SE corner of school building 1295 1027 Alcy Elementary School; E of SE corner of school building 1295 1027 Alcy Elementary School; E of SE corner of school building 1295 1057 Alcy Elementary School; E of SE corner of school building 1295 1057 Alcy Elementary; near Cane Creek; East of Garden of Hope 1295 1255 Forest Hill Cemetary; near Cane Creek; East of Garden of Hope 1295 1350 Pine Hills Colf Course; off of Mallory Ave.; near pump house 1295 1428 Alcy Park West (SW of DDMT); South of Alcy St. KS, pesticides/PCBs, herbicides, TAL metals, and dioxin/furans. PCBs = polychlorinated biphenyls Sec	SB245	BS16	Perimeter	10/11/95	T	W. edge of DDMT; Perry St. and Norris St. (below power lines)	NA
 1295 936 Airways Jr. High; south of SW corner of school building 1295 936 Airways Jr. High; south of SW curner of school building 1295 1027 Alcy Elementary School; E of SE corner of school building 1295 1027 Alcy Elementary School; E of SE corner of school building 1295 1027 Alcy Elementary School; E of SE corner of school building 1295 1255 Forest Hill Cemetary; near Cane Creek; East of Garden of Hope 1295 1350 Pine Hills Colf Course; off of Mallory Ave.; near pump house 1295 1428 Alcy Park West (SW of DDMT); South of Alcy St. 1295 1428 Alcy Park West (SW of DDMT); South of Alcy St. 1295 KCS, pesticides/PCBs, herbicides, TAL metals, and dioxin/furans. PCBs = polychlorinated biphenyls Sec TAL = Target Analyte List NA= Not applicable Bldg = Building 	SB255	BS17	Offsite	10/12/95		Charjean School; near intersection of Dwight Rd and Imogene St.	AN
1295 936 Airways Jr. High; south of SW curner of school building 1295 1027 Alcy Elementary School; E of SE corner of school building 1295 1027 Alcy Elementary School; E of SE corner of school building 1295 1027 Alcy Elementary; near Cane Creek; East of Garden of Hope 1295 1000 Pine Hills Colf Course; off of Mallory Ave.; near pump house 1295 1000 Pine Hills Colf Course; off of Mallory Ave.; near pump house 1295 1000 Pine Hills Colf Course; off of Mallory Ave.; near pump house 1295 1000 Alcy Park West (SW of DDMT); South of Alcy St. 1296 1000 Secicides/PCBs, herbicides, TAL metals, and dioxin/furans. 1297 Alcy Park West (SW of DDMT); South of Alcy St. 1298 Alcy Park West (SW of DDMT); South of Alcy St. 1299 Alcy Park West (SW of DDMT); South of Alcy St. 1299 Alcy Park West (SW of DDMT); South of Alcy St. 1299 Alcy Park West (SW of DDMT); South of Alcy St. 1299 Alcy Park West (SW of DDMT); South of Alcy St. 1299 Alcy Park West (SW of DDMT); South of Alcy St. 1299 Alcy Park West (SW of DDMT); South of Alcy St. 1299 Alcy Park West (SW of DDMT); South of Alcy St. 1299 Alcy Park West (SW of DDMT); South of Alcy St. 1299 Alcy Park West (SW of DDMT); South of Alcy St. 1299 Alcy Park West (SW of DDMT); South of Alcy St. 1299 Alcy Park West (SW of DDMT); South of Alcy St.	SB265	BS18	Offsite	10/12/95	936	Airways Jr. High; south of SW comer of school building	AN
1295 1027 Alcy Elementary School; E of SE comer of school building 1295 1027 Alcy Elementary School; E of SE comer of school building 1295 1255 Forest Hill Cemetary; near Cane Creek; East of Garden of Hope 1295 1350 Pine Hills Golf Course; off of Mallory Ave.; near pump house 1295 1428 Alcy Park West (SW of DDMT); South of Alcy St. It below ground surface. CS, pesticides/PCBs, herbicides, TAL metals, and dioxin/furans. PCBs = polychlorinated biphenyls see TAL = Target Analyte List licate NA= Not applicable Bldg = Building	SB265A	BS18	Offsite	10/12/95	936	Airways Jr. High; south of SW curner of school building	Duplicate
12/95 1027 Alcy Elementary School; E of SE comer of school building 12/95 1255 Forest Hill Cemetary; near Cane Creek; East of Garden of Hope 12/95 1350 Pine Hills Golf Course; off of Mallory Ave.; near pump house 12/95 1428 Alcy Park West (SW of DDMT); South of Alcy St. It below ground surface. Cs. pesticides/PCBs, herbicides, TAL metals, and dioxin/furans. PCBs = polychlorinated biphenyls sec	SB275		Offsite	10/12/95	1027	Alcy Elementary School; E of SE corner of school building	NA
12/95 1255 12/95 1350 12/95 1428 12/95 1428 12/95 1428 12/95 1428 12/95 1369 12/95 1369 12/95 1369 12/95 1369 13/95 13/9	SB275A		Offsite	10/12/95	1027	Alcy Elementary School; E of SE comer of school building	Duplicate
12/95 1350 12/95 1428 12 below ground s Cs, pesticides/PC sec	SB285	BS20	Offsite	10/12/95	1255	Forest Hill Cemetary; near Cane Creek; East of Garden of Hope	NA
t below ground s Cs, pesticides/PC sec	SB295	BS21	Offsite	10/12/95		Pine Hills Golf Course; off of Mallory Ave.; near pump house	NA
st below ground s Cs, pesticides/Pt sec icate	SB305	BS22	Offsite	10/12/95	П	Alcy Park West (SW of DDMT); South of Alcy St.	NA
All samples were collected from 5- to 6-fect below ground surface. All samples were analyzed for VOCs, SVOCs, pesticides/PCBs, herbicides, TAL metals, and dioxin/furans. QA/QC = quality assurance/quality control PCBs = polychlorinated biphenyls DDMT = Defense Depot Memphis Tennessec TAL = Target Analyte List MS/MSD = matrix spike/matrix spike duplicate VOCs = volatile organic compounds Bldg = Building SVOCs = semivolatile organic compounds	Notes:						:
All samples were analyzed for VOCs, SVOCs, pesticides/PCBs, herbicides, TAL metals, and dioxin/furans. QA/QC = quality assurance/quality control PCBs = polychlorinated biphenyls DDMT = Defense Depot Memphis Tennessec TAL = Target Analyte List MS/MSD = matrix spike/matrix spike duplicate VOCs = volatile organic compounds SVOCs = semivolatile organic compounds	All samples v	vere collecte	d from 5- to	6-fect below	v ground s	urface.	
QA/QC = quality assurance/quality control PCBs = polychlorinated biphenyls DDMT = Defense Depot Memphis Tennessce TAL = Target Analyte List MS/MSD = matrix spike/matrix spike duplicate NA= Not applicable VOCs = volatile organic compounds SVOCs = semivolatile organic compounds	All samples v	vere analyze	d for VOCs,	SVOCs, pes	sticides/PN	3Bs, herbicides, TAL metals, and dioxin/furans.	
sec icate	QA/QC = qui	ality assurance	ce/quality co	ntrol	-	PCBs = polychlorinated biphenyls	
icate	DDMT = Del	fense Depot	Memphis Te	nnessec		TAL = Target Analyte List	
	MS/MSD = n	natrix spike/	matrix spike	duplicate		NA= Not applicable	
SVOCs = semivolatile organic compounds	VOCs = vola	úle organic c	spunoduos			Bldg = Building	
	SVOCs = sen	nivolatile org	ganic compo	nnds			

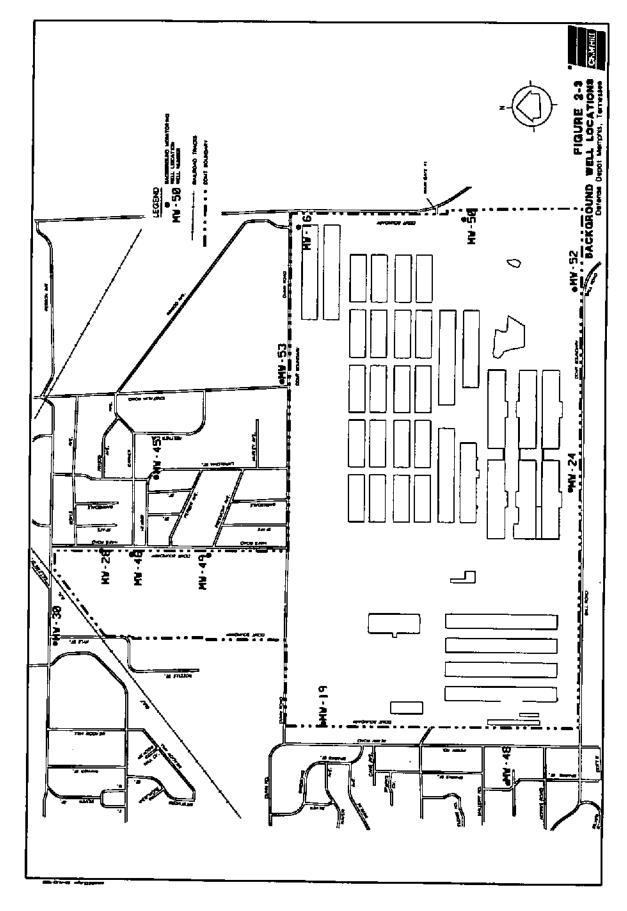
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Background Surface Water Sample and Location Information Background Surface Water Sample and Location Information	<u> </u>					Table 2-3	
Background Sampling Program Defense Depot Memphis Tennessee Centon Group Date Time General Sample Location 01 Nonconnach 10/10/95 330 Nonconnach Creek; downstream of Tennile Creek 02 Nonconnach 10/10/95 1030 Nonconnach Creek; downstream of Tennile Creek 03 Nonconnach 10/10/95 1120 Nonconnach Creek; upstream of Tennile Creek 04 Nonconnach 10/10/95 1130 Nonconnach Creek; upstream (east) of Lamar Ave bridge 05 Nonconnach 10/10/95 1340 Nonconnach Creek; upstream (east) of Lamar Ave bridge 06 Nonconnach Creek; upstream (east) of Ragan St. bridge 10/10/95 07 Came 10/10/95 1605 Cane Creek; upstream (east) of Ragan St. bridge 08 Cane 10/10/95 1615 Cane Creek; upstream (east) of Ragan St. bridge 10 MOH 10/11/95 10/10/95 10/10/95 10/10/95 10/10/95 10/10/95 10/10/95 10/10/95 10/10/95 10/10/95 10/10/95 10/10/95<			Вас	kground	Surfac	e Water Sample and Location Information	
Defence Depot Memphis Tennessee Central Sample Location Group Date Time General Sample Location General Sample Location General Sample Location Date Time General Sample Location General Sample Sampl					Back	ground Sampling Program	
Group Date Time General Sample Location Monconnah 10/1095 930 Nonconnah Oreski, downstream of Temilie Creek Monconnah 10/1095 930 Nonconnah Creek; downstream of Temilie Creek Nonconnah 10/1095 1320 Nonconnah Creek; upstream of Temilie Creek Nonconnah 10/1095 1320 Nonconnah Creek; upstream of Temilie Creek Monconnah 10/1095 1340 Nonconnah Creek; upstream (ass) of Lamar Ave bridge Nonconnah 10/1095 1340 Nonconnah Creek; upstream (ass) of Lamar Ave bridge Nonconnah 10/1095 1340 Nonconnah Creek; upstream (ass) of Lamar Ave bridge Nonconnah 10/1095 1340 Nonconnah Creek; upstream (ass) of Lamar Ave bridge Nonconnah 10/1095 1340 Nonconnah Creek; upstream (ass) of Lamar Ave bridge Nonconnah 10/1095 1340 Nonconnah Creek; upstream (ass) of Lamar Ave bridge Cane 10/1095 1400 Nonconnah Creek; upstream (ass) of Lamar Ave bridge Cane 10/1095 1400 Nonconnah Creek; upstream (ass) of Lamar Ave bridge MOH 10/1195 1605 Cane Creek; upstream (ass) of Ragan St. bridge MOH 10/1195 1605 Cane Creek; upstream (ass) of Ragan St. bridge MOH 10/1195 1605 Cane Creek; upstream (ass) of Ragan St. bridge MOH 10/1195 1020 Metal of Honor Park; northwestern section of lake MOH 10/1195 1020 Metal of Honor Park; southern section of lake MOH 10/1195 1020 Metal of Honor Park; southern section of lake Audubon 10/1195 1230 Audubon Park lake (northern section of lake Audubon 10/1195 1315 Audubon Park lake (northerstern section of lake Audubon 10/1195 1315 Audubon Park lake (northerstern section of lake Audubon 10/1195 1315 Audubon Park lake (northerstern section of lake Orickasaw 10/1295 805 Chickasaw Garders lake (northerstern section of lake Orickasaw 10/1295 805 Chickasaw Garders lake (northerstern section of lake Orickasaw 10/1295 805 Chickasaw Garders lake (northerstern section of lake Orick					Defen	se Depot Memphis Tennessee	
Noncounath 10/10/95 30 Noncounath Creek; downstream of Tenmile Creek	Sample #	Location	Group	Date	Time	General Sample Location	QA/QC Sample
Nonconnah 10/10/95 930 Nonconnah Creek; downstream of Tennile Creek	SW17	BW01	Nonconnah	10/10/95	930	Nonconnah Creek; downstream of Tenmile Creek	AN
Nanconnah 10/10/95 1030 Nonconnah Creek; neur the mouth of Tennile Creek	SW17A	BW01	Nonconnah	10/10/95	930	Nonconnah Creek; downstream of Tenmile Creck	Duplicate
Nonconnah 10/10/95 1120 Nonconnah Creek: upstream (east) of Lamar Ave bridge	SW18	BW02	Nonconnah	10/10/95	1030	Nonconnah Creck; neur the mouth of Tenmile Creek	Split Sample
Noncomah 10/10/95 1340 Noncomah Creek; upstream (east) of Lamar Ave bridge Noncomah 10/10/95 1345 Noncomah Creek; upstream (east) of Lamar Ave bridge Noncomah 10/10/95 1400 Noncomah Creek; upstream (east) of Lamar Ave bridge Oli 10/95 1400 Noncomah Creek; upstream (east) of Lamar Ave bridge Cane 10/10/95 1600 Cane Creek; upstream (east) of Ragan St. bridge Cane 10/10/95 1605 Cane Creek; upstream (east) of Ragan St. bridge Oli 10/95 1615 Cane Creek; upstream (east) of Ragan St. bridge MOH 10/11/95 925 Metal of Honor Park; western section of lake MOH 10/11/95 935 Metal of Honor Park; southwestern section of lake MOH 10/11/95 1020 Metal of Honor Park; southwestern section of lake Botanical 10/11/95 1020 Metal of Honor Park; southwestern section of lake Moh 10/11/95 1145 Botanical Gardens lake (western section of lake Botanical 10/11/95 1145 Botanical Gardens lake (northern section of lake Audubon 10/11/95 1230 Audubon Park lake (northern section of lake Audubon 10/11/95 1315 Audubon Park lake (northern section of lake Audubon 10/11/95 1315 Audubon Park lake (northern section of lake Olickasaw 10/11/95 1315 Audubon Park lake (northern section of lake Olickasaw 10/11/95 1315 Audubon Park lake (northern section of lake Olickasaw 10/11/95 1315 Audubon Park lake (northerstern section of lake Olickasaw 10/11/95 1315 Audubon Park lake (northerstern section of lake Olickasaw 10/11/95 1340 Olickasaw Gardens lake (northerstern section of lake Olickasaw 10/11/95 1340 Olickasaw Gardens lake (northerstern section of lake Olickasaw 10/11/95 1340 Olickasaw Gardens lake (northerstern section of lake Olickasaw 10/11/95 1340 Olickasaw Gardens lake (northerstern section of lake Olickasaw 10/11/95 1340 Olickasaw Gardens lake (northerstern section of lake Olickasaw 10/11/95 1340 Olicka	SW19	BW03	Nonconnah	10/10/95	1120	Nonconnah Creek; upstream of Tenmile Creek	Ϋ́
Nonconnah 10/10/95 1345 Nonconnah Creek; upsiream (east) of Lamar Ave bridge Nonconnah 10/10/95 1400 Nonconnah Creek; upstream (east) of Lamar Ave bridge Nonconnah 10/10/95 1600 Cane Creek; upstream (east) of Ragan St. bridge Cane 10/10/95 1605 Cane Creek; upstream (east) of Ragan St. bridge Orling Cane 10/10/95 1615 Cane Creek; upstream (east) of Ragan St. bridge MOH 10/11/95 925 Metal of Honor Park; westen section of lake MOH 10/11/95 935 Metal of Honor Park; southwestern section of lake MOH 10/11/95 1015 Metal of Honor Park; southwestern section of lake MOH 10/11/95 1015 Metal of Honor Park; southwestern section of lake MOH 10/11/95 1015 Metal of Honor Park; southwestern section of lake Moh 10/11/95 1015 Metal of Honor Park; southwestern section of lake Moh 10/11/95 1015 Metal of Honor Park; southwestern section of lake Moth 10/11/95 1145 Botanical Gardens lake (western section of lake Audubon 10/11/95 1230 Audubon Park lake (northern section of lake Audubon 10/11/95 1315 Audubon Park lake (northerastern section of lake Audubon 10/11/95 1315 Audubon Park lake (northerastern section of lake Chickasaw 10/12/95 835 Chickasaw Gardens lake (northerastern section of lake Chickasaw 10/12/95 840 Chickasaw Gardens lake (northerastern section of lake Chickasaw 10/12/95 840 Chickasaw Gardens lake (northerastern section of lake Chickasaw 10/12/95 840 Chickasaw Gardens lake (northerastern section of lake Chickasaw 10/12/95 840 Chickasaw Gardens lake (northerastern section of lake Chickasaw 10/12/95 840 Chickasaw Gardens lake (northerastern section of lake Chickasaw 10/12/95 840 Chickasaw Gardens lake (northerastern section of lake Chickasaw 10/12/95 840 Chickasaw Gardens lake (northerastern section of lake Chickasaw 10/12/95 840 Chickasaw Gardens lake (northerastern section o	SW20	BW04	Nonconnah	10/10/95	1340	Nonconnah Creek; upstream (east) of Lamar Ave bridge	MS/MSD
Nonconanh 10/10/95 1400 Nonconnath Creek; upstream (cast) of Lamar Ave bridge	SW21	BW05	Nonconnah	10/10/95	1345	Nonconnah Creek; upstreum (east) of Lamar Ave bridge	AN
27 Cane 10/10/95 1600 Cane Creek; upstream (east) of Ragan St. bridge 28 Cane 10/10/95 1605 Cane Creek; upstream (east) of Ragan St. bridge 29 Cane 10/10/95 1615 Cane Creek; upstream (east) of Ragan St. bridge 10 MOH 10/11/95 925 Metal of Honor Park; wastern section of lake 11 MOH 10/11/95 935 Metal of Honor Park; northwestern section of lake 12 MOH 10/11/95 930 Metal of Honor Park; southwestern section of lake 13 MOH 10/11/95 1020 Metal of Honor Park; southwestern section of lake 14 MOH 10/11/95 1020 Metal of Honor Park; southwestern section of lake 15 Botanical 10/11/95 1140 Botanical Gardens lake (western section of lake) 16 Botanical 10/11/95 1230 Audubon Park lake (northwestern section of lake) 17 Audubon 10/11/95 1315 Audubon Park lake (northwestern section of lake) 19 Audubon 10/11/95 1315 Aud	SW22	BW06	Nonconnah	10/10/95	1400	Nonconnah Creek; upstream (east) of Lamar Ave bridge	AN
28 Cane 10/10/95 1605 Cane Creek; upstream (east) of Ragan St. bridge 10 MOH 10/11/95 925 Metal of Honor Park; western section of lake 11 MOH 10/11/95 935 Metal of Honor Park; western section of lake 12 MOH 10/11/95 950 Metal of Honor Park; western section of lake 13 MOH 10/11/95 1015 Metal of Honor Park; southwestern section of lake 13 MOH 10/11/95 1010 Metal of Honor Park; southwestern section of lake 14 MOH 10/11/95 1010 Metal of Honor Park; southwestern section of lake 15 Botanical 10/11/95 1145 Botanical Gardens lake (western section of lake) 16 Botanical 10/11/95 1145 Botanical Gardens lake (northern section of lake) 17 Audubon 10/11/95 1230 Audubon Park lake (northern section of lake) 18 Audubon 10/11/95 1315 Audubon Park lake (northern section of lake) 19 Audubon 10/11/95 1315 Audubon Park la	SW23	BW07	Cane	10/10/95	1600	Cane Creek; upstream (east) of Ragan St. bridge	Ϋ́
99 Cane 10/10/95 1615 Cane Creek; upstream (east) of Rogan St. bridge 10 MOH 10/11/95 925 Metal of Honor Park; western section of lake 11 MOH 10/11/95 935 Metal of Honor Park; northern section of lake 12 MOH 10/11/95 1020 Metal of Honor Park; southwestern section of lake 13 MOH 10/11/95 1020 Metal of Honor Park; southwestern section of lake 14 MOH 10/11/95 1020 Metal of Honor Park; southwestern section of lake 15 Botanical 10/11/95 1143 Botanical Gardens lake (western section) 16 Botanical 10/11/95 1146 Botanical Gardens lake (northern section of lake) 17 Audubon 10/11/95 1143 Botanical Gardens lake (northern section of lake) 17 Audubon 10/11/95 1230 Audubon Park lake (northerstern section of lake) 18 Audubon 10/11/95 1315 Audubon Park lake (northerstern section of lake) 19 Audubon 10/11/95 1315 Audu	SW24	BW08	Сапе	10/10/95	1605	Cane Creek; upstream (east) of Ragan St. bridge	Ý
MOH 10/11/95 925 Metal of Honor Park; western section of lake MOH 10/11/95 935 Metal of Honor Park; northwestern section of lake 10/11/95 950 Metal of Honor Park; northwestern section of lake 10/11/95 1015 Metal of Honor Park; southwestern section of lake MOH 10/11/95 1015 Metal of Honor Park; southern section of lake MOH 10/11/95 1140 Bolanical Gardens lake (western section) Metal of Honor Park; southern section of lake Moh 10/11/95 1140 Bolanical Gardens lake (eastern section) Metal of Honor Park; southern section of lake Moh 10/11/95 1140 Bolanical Gardens lake (northern section of lake) Audubon 10/11/95 11243 Audubon Park lake (northerstern section of lake) Audubon 10/11/95 11245 Audubon Park lake (northeastern section of lake) Audubon 10/11/95 11315 Audubon Park lake (northeastern section of lake) Audubon 10/11/95 11315 Audubon Park lake (northeastern section of lake) Chickasaw 10/12/95 855 Chickasaw Gardens lake (northeastern section of lake) Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) SVOCs = semivolatile organic compounds PCHs = polychlorinated biphenyls PCHs = polychlorinated biphenyls PCHs = polychlorinated biphenyls PCHs = polychlorinated biphenyls PCHs = Plarget Analyte List	SWZS	BW09	Cane	10/10/95	1615	Cane Creek; unstream (east) of Ragan St. bridge	AN
MOH 10/11/95 935 Metal of Honor Park; northwestern section of lake MOH 10/11/95 950 Metal of Honor Park; northern section of lake MOH 10/11/95 1015 Metal of Honor Park; southwestern section of lake MOH 10/11/95 1020 Metal of Honor Park; southwestern section of lake MOH 10/11/95 1120 Metal of Honor Park; southern section of lake MOH 10/11/95 1140 Botanical Gardens lake (western section) Moth 10/11/95 1145 Botanical Gardens lake (western section) Moth 10/11/95 1145 Botanical Gardens lake (morthern section of lake) Mothon 10/11/95 1230 Audubon Park lake (northern section of lake) Multipon 10/11/95 1245 Audubon Park lake (northeastern section of lake) Multipon 10/11/95 1315 Audubon Park lake (northwestern section of lake) Multipon 10/11/95 1315 Audubon Park lake (northeastern section of lake) Myzed for VOCs, SVOCs, pesticides/PCBs, herbicides, TAL metals, and dioxin/furans. NYBs = polychlorinated biphenyls PCBs = polychlorinated biphenyls TAL = Target Analyte List	SW26	BWIO	МОН	56/11/01	925	Metal of Honor Park; western section of lake	AN
MOH 10/11/95 1015 Metal of Honor Park; northern section of lake MOH 10/11/95 1015 Metal of Honor Park; southwestern section of lake MOH 10/11/95 1020 Metal of Honor Park; southwestern section of lake MOH 10/11/95 1140 Botanical Cardens lake (western section of lake) Mohabon 10/11/95 1145 Botanical Cardens lake (eastern section) Audubon 10/11/95 1230 Audubon Park lake (northern section of lake) Audubon 10/11/95 1245 Audubon Park lake (northern section of lake) Audubon 10/11/95 1245 Audubon Park lake (northeastern section of lake) Audubon 10/11/95 1315 Audubon Park lake (northeastern section of lake) Audubon 10/11/95 1315 Audubon Park lake (northeastern section of lake) Orlickasuw 10/12/95 835 Chickasaw Gardens lake (northeastern section of lake) Chickasuw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) Chickasuw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) SVOCs, sesticides/PCBs, herbicides, TAL metals, and dioxin/furans. SVOCs = sernivolatile organic compounds PCBs = polychlotinated biphenyls TAL = Target Analyte List	SW27	BWII	МОН	10/11/95	935	Metal of Honor Park; northwestern section of lake	AN
MOH 10/11/95 1015 Metal of Honor Park; southwestern section of lake MOH 10/11/95 1020 Metal of Honor Park; southern section of lake Botanical 10/11/95 1140 Botanical 10/11/95 1145 Botanical 10/11/95 1145 Botanical 10/11/95 1230 Audubon 10/11/95 1230 Audubon 10/11/95 1245 Audubon 10/11/95 1315 Audubon Park lake (northeastern section of lake) 9 Audubon 10/11/95 1315 Audubon Park lake (northeastern section of lake) 10/12/95 900 Chickasaw Gardens lake (northwestern section of lake) 11/2/95 855 Chickasaw Gardens lake (northeastern section of lake) 11/2/95 840 Chickasaw Gardens lake (northeastern section of lake) 11/2/95 840 Chickasaw Gardens lake (northeastern section of lake) SVOCs = semivolatile organic compounds PCBs = polychlorinated biphenyls PCBs = polychlorinated biphenyls PCBs = polychlorinated biphenyls PCBs = Target Analyte List	SW28	BW12	МОН	\$6/11/01	950	Metal of Honor Park; northern section of take	AX
MOH 10/11/95 1020 Metal of Honor Park: southern section of lake Botanical 10/11/95 1140 Botanical Gardens lake (western section)	SW29	BW13	МОН	10/11/95	1015	Metal of Honor Park; southwestern section of lake	AZ.
Botanical 10/11/95 1140 Botanical Gardens lake (western section) Botanical 10/11/95 1145 Botanical Gardens lake (eastern section) Audubon 10/11/95 1230 Audubon Park lake (northern section of lake) Audubon 10/11/95 1245 Audubon Park lake (northern section of lake) Audubon 10/11/95 1245 Audubon Park lake (northeastern section of lake) Audubon 10/11/95 1315 Audubon Park lake (northeastern section of lake) Audubon 10/11/95 1315 Audubon Park lake (northeastern section of lake) Chickasaw 10/12/95 850 Chickasaw Gardens lake (northeastern section of lake) Chickasaw 10/12/95 855 Chickasaw Gardens lake (northeastern section of lake) Chickasaw 10/12/95 856 Chickasaw Gardens lake (northeastern section of lake) Chickasaw 10/12/95 850 Chickasaw Gardens lake (northeastern section of lake) Chickasaw 10/12/95 850 Chickasaw Gardens lake (northeastern section of lake) Chickasaw 10/12/95 850 Chickasaw Gardens lake (northeastern section of lake) Chickasaw 10/12/95 850 Chickasaw Gardens lake (northeastern section of lake) Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) Chickasaw 10/12/	SW30	BW14	ном	56/11/01	1020	Metal of Honor Park; southern section of take	AN
6 Botanical 10/11/95 1145 Botanical Gardens lake (eastern section) 7 Audubon 10/11/95 1230 Audubon Park lake (northern section of lake) 8 Audubon 10/11/95 1245 Audubon Park lake (northexistern section of lake) 9 Audubon 10/11/95 1315 Audubon Park lake (northexistern section of lake) 9 Audubon 10/11/95 1315 Audubon Park lake (northexistern section of lake) 10/11/95 1315 Audubon Park lake (northexistern section of lake) 9 Audubon 10/11/95 1315 Audubon Park lake (northexistern section of lake) 10/12/95 855 Chickasaw Gardens lake (northexistern section of lake) 10/12/95 840 Chickasaw Gardens lake (northexistern section of lake) 10/12/95 840 Chickasaw Gardens lake (northexistern section of lake) 10/12/95 840 Chickasaw Gardens lake (northexistern section of lake) 10/12/95 840 Chickasaw Gardens lake (northexistern section of lake) 10/12/95 840 Chickasaw Gardens lake (northexistern section of lake) 10/12/95 840 Chickasaw Gardens lake (northexistern section of lake) 10/12/95 840 Chickasaw Gardens lake (northexistern section of lake) 10/12/95 840 Chickasaw Gardens lake (northexistern section of lake) 10/12/95 840 Chickasaw Gardens lake (northexistern section of lake) 10/12/95 840 Chickasaw Gardens lake (northexistern section of lake) 10/12/95 840 Chickasaw Gardens lake (northexistern section of lake) 10/12/95 840 Chickasaw Gardens lake (northexistern section of lake) 10/12/95 840 Chickasaw Gardens lake (northexistern section of lake) 10/12/95 840 Chickasaw Gardens lake (northexistern section of lake) 10/12/95 840 Chickasaw Gardens lake (northexistern section of lake) 10/12/95 840 Chickasaw Gardens lake (northexistern section of lake) 10/12/95 840 Chickasaw Gardens lake (northexistern section of lake) 10/12/95 840 Chickasaw Gardens lake (northexistern section of lake) 10/12/95 840 Chickas	SW31	BW15	Botanical	10/11/05	1140	Bolanical Gardens lake (western section)	AN
17 Audubon 10/11/95 1230 Audubon Park lake (northern section of lake) 18 Audubon 10/11/95 1245 Audubon Park lake (northeastern section of lake) 19 Audubon 10/11/95 1315 Audubon Park lake (northeastern section of lake) 9 Audubon 10/11/95 1315 Audubon Park lake (northeastern section of lake) 9 Audubon 10/11/95 1315 Audubon Park lake (northeastern section of lake) 9 Chickasaw 10/12/95 800 Chickasaw Gardens lake (northeastern section of lake) 10 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 10 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 10 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 10 Chickasaw Gardens lake (northeastern section of lake) <t< td=""><td>SW32</td><td>BW16</td><td>Botanical</td><td>\$6/11/01</td><td>1145</td><td>Botanical Gardens lake (eastern section)</td><td>NA</td></t<>	SW32	BW16	Botanical	\$6/11/01	1145	Botanical Gardens lake (eastern section)	NA
Audubon 10/11/95 1245 Audubon Park lake (northwestern section of lake) 8 Audubon 10/11/95 1245 Audubon Park lake (northwestern section of lake) 9 Audubon 10/11/95 1315 Audubon Park lake (northeastern section of lake) 9 Audubon 10/11/95 1315 Audubon Park lake (northeastern section of lake) 10 Chickasaw 10/12/95 855 Chickasaw Gardens lake (north edge of lake, next to outfall) 11 Chickasaw 10/12/95 855 Chickasaw Gardens lake (northeastern section of lake) 12 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 13 Chickasaw 10/12/95 855 Chickasaw Gardens lake (northeastern section of lake) 14 Chickasaw 10/12/95 855 Chickasaw Gardens lake (northeastern section of lake) 15 Chickasaw 10/12/95 850 Chickasaw Gardens lake (northeastern section of lake) 16 Chickasaw 10/12/95 855 Chickasaw Gardens lake (northeastern section of lake) 17 Chickasaw 10/12/95 850 Chickasaw Gardens lake (northeastern section of lake) 18 Chickasaw 10/12/95 850 Chickasaw Gardens lake (northeastern section of lake) 18 Chickasaw 10/12/95 850 Chickasaw Gardens lake (northeastern section of lake) 18 Chickasaw 10/12/95 855 Chickasaw Gardens lake (northeastern section of lake) 18 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 18 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 18 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 18 Chickasaw 10/12/95 855 Chickasaw Gardens lake (northeastern section of lake) 18 Chickasaw 10/12/95 855 Chickasaw Gardens lake (northeastern section of lake) 18 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 18 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 18 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake)	SW33	BW17	Audubon	56/11/01		Audubon Park lake (northern section of lake)	VΝ
8 Auduhon 10/11/95 1245 Audubon Park lake (northeastern section of lake) 9 Audubon 10/11/95 1315 Audubon Park lake (northeastern section of lake) 9 Audubon 10/11/95 1315 Audubon Park lake (northeastern section of lake) 9 Audubon 10/12/95 1315 Audubon Park lake (northeastern section of lake) 10 Chickasaw 10/12/95 855 Chickasaw Gardens lake (northeastern section of lake) 12 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 19/20 840 Chickasaw Gardens lake (northeastern section of lake) 19/20 840 Chickasaw Gardens lake (northeastern section of lake) 19/20 840 Chickasaw Gardens lake (northeastern section of lake) 19/20 840 Chickasaw Gardens lake (northeastern section of lake) 19/20 840 Chickasaw Gardens lake (northeastern section of lake) 19/20 840 Chickasaw Gardens lake (northeastern section of lake) 19/20 840 Chickasaw Gardens lake (northeastern section of lake) 19/20 840 Chickasaw Gardens lake (northeastern section of lake)	SW33A	BW17	Audubon	10/11/95		Audubon Park lake (northern section of lake)	Duplicate
9 Audubon 10/11/95 1315 Audubon Park lake (northeastern section of lake) 9 Audubon 10/11/95 1315 Audubon Park lake (northeastern section of lake) 9 Audubon 10/12/95 900 Chickasaw Gardens lake (northeastern section of lake) 11 Chickasaw 10/12/95 855 Chickasaw Gardens lake (northeastern section of lake) 12 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 19 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 19 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 19 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 19 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 19 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 10 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 10 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeas	SW34	BW18	Audubon	10/11/95		Audubon Park lake (northwestern section of lake)	Ϋ́N
9 Audubon 10/11/95 1315 Audubon Park lake (northeasern section of lake) 10 Chickasaw 10/12/95 900 Chickasaw Gardens lake (northwestern section of lake) 11 Chickasaw 10/12/95 855 Chickasaw Gardens lake (north edge of lake, next to outfall) 12 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 13 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 14 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 15 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 16 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 17 Chickasaw 10/12/95 85 Shickasaw Gardens lake (northeastern section of lake) 18 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 19 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 19 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 19 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 10 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 10 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 10 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 10 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 10 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 10 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) 10 Chickasaw Ga	SW3S	BW19	Audubon	10/11/95		Audubon Park lake (northeastern section of lake)	Split + MS/MSD
Chickasaw 10/12/95 855 Chickasaw Gardens lake (northwestern section of lake) Chickasaw 10/12/95 855 Chickasaw Gardens lake (north edge of lake, next to outfall) Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) Ilyzed for VOCs, SVOCs, pesticides/PCBs, herbicides, TAL metals, and dioxin/furans. SVOCs = semivolatile organic compounds PCBs = polychlotinated biphenyls TAL = Target Analyte List	SW35A	BW19	Audubon	10/11/95		Audubon Park lake (northeastern section of lake)	Duplicate
Chickasaw 10/12/95 855 Chickasaw Gardens lake (north edge of lake, next to outfall) Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) Ilyzed for VOCs, SVOCs, pesticides/PCBs, herbicides, TAL metals, and dioxin/furans. SVOCs = semivolatile organic compounds SVOCs = semivolatile organic compounds PCBs = polychlorinated biphenyls TAL = Target Analyte List	SW36	BW20	Chickasaw	10/12/95	\Box	Chickasaw Gardens lake (northwestern section of lake)	٧Z
(2 Chickasaw 10/12/95 840 Chickasaw Gardens lake (northeastern section of lake) (byzed for VOCs, SVOCs, pesticides/PCBs, herbicides, TAL metals, and dioxin/furans. (byzed for VOCs, SVOCs, pesticides/PCBs, herbicides, TAL metals, and dioxin/furans. (compounds SVOCs = semivolatile organic compounds SVOCs = semivolatile organic compounds PCBs = polychlorinated biphenyls TAL = Target Analyte List	SW37	BW21	Chickasaw	10/12/95		Chickasaw Gardens lake (north edge of lake, next to outfall)	AN.
ilyzed for VOCs, SVOCs, pesticides/PCBs, urance/quality control pike/matrix spike duplicate mic compounds	SW38	BW22	Chickasaw	10/12/95		Chickasaw Gardens lake (northeastern section of take)	AN
ntyzed for VOCs, SYOCs, pesticides/PCBs, urance/quality control sike/matrix spike duplicate mie compounds	Notes:						
urance/quality control pike/matrix spike duplicate mic compounds	All samples w	ere analyzed to	y VUCs, SVO		«PCBs,	herbicides, TAL metals, and dioxin/furans.	
orke/matrix spike duplicate mic compounds	QA/QC = qual	lity assurance/c	quality control			SVOCs = semivolatile organic compounds	
mic compounds	E = COMPANY	airix spike/mai	ınx spike duplir İ	ate		PCBs = polychlorinated biphenyls	
	NA = Not appl	ne organic com licable	spunodi			TAL = Target Analyte List	

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					Table 2-4	
		•	Backgrou	nd Sed	ackground Sediment Sample and Location Information	
				Bac	Background Sampling Program	
				Defen	Defense Depot Memphis Tennessee	
Sample #	Station	Group	Date	Time	Sample Location Description	OA/OC Sample
SD060	BW01	Nonconnah	10/10/95	930	Nonconnah Creek; downstream of Tenmile Creek	¥
SD06A0	BWOI	Nonconnah	10/10/95	930	Nonconnah Creck; downstream of Tenmile Creck	Duplicate
SD070	BW02	Nonconnah	10/10/95	1030	Nonconnah Creek; near the mouth of Tenmile Creek	Split Sample
SD080	BW03	Nonconnah	10/10/95	1120	Nonconnah Creek; upstream of Tenmile Creek	¥
SD090	BW04	Nonconnah	10/10/95	1340	Nonconnah Creek; upstream (east) of Lamar Ave bridge	MS/MSD
SD100	BW05	Nonconnah	10/10/95	1345	Nonconnah Creek; upstream (east) of Lamar Ave bridge	AN AN
SD110	BW06	Nonconnah	10/10/95	1400	Nonconnah Creek; upstream (east) of Lamar Ave bridge	NA
SD120	BW07	Cane	10/10/95		Cane Creek; upstream (east) of Ragan St. bridge	Ä
SD130	BW08	Cane	10/10/95	1605	Cane Creek; upstream (east) of Ragan St. bridge	¥X
SD140	BW09	Cane	10/10/95	1615	Cane Creek; upstream (east) of Ragan St. bridge	ΑΝ
	BW10	МОН	10/11/95	925	Medal of Honor Park; western section of lake	ΑÑ
	BWII	МОН	10/11/95	935	Medal of Honor Park; northwestern section of lake	ΝΑ
SD170	BW12	МОН	10/11/95	950	Medal of Honor Park; northern section of lake	NA
Π	BW13	МОН	10/11/95	1015	Medal of Honor Park; southwestern section of lake	NA
	BW14	МОН	10/11/95	1020	Medal of Honor Park; southern section of lake	NA
	BW15	Botanical	10/11/95		Botanical Gardens lake (western section)	NA
П	BW16	Botanical	10/11/95	_	Botanical Gardens lake (eastern section)	NA
T	BW17	Audubon	10/11/95	┪	Audubon Park lake (northern section of lake)	NA
	BW17	Audubon	10/11/95		Audubon Park take (northern section of take)	Duplicate
П	BW18	Andubon	10/11/95	\neg	Audubon Park lake (northwestern section of lake)	NA
╗	BW19	Audubon	10/11/95	_	Audubon Park lake (northeastern section of lake)	Split + MS/MSD
	BW19	Audubon	10/11/95	ヿ	Audubon Park lake (northeastern section of lake)	Duplicate
П	BW20	Chickasaw	10/12/95	┪	Chickasaw Gardens lake (northwestern section of lake)	NA
Π	BW21	Chickasaw	10/12/95	ヿ	Chickasaw Gardens lake (north edge of lake, next to outfall)	NA
SD270	BW22	Chickasaw	10/12/95	840	Chickasaw Gardens lake (northeastern section of lake)	NA
Notes:						
All samples v	vere collecte	All samples were collected from zero to	6 inches below ground surface.	low groun	id surface.	
All samples v	vere analyze	d for VOCs, 2	VCCs, pesti	cides/PC	All samples were analyzed for VCCs, SVCCs, pesticides/YCBs, herbicides, TAL metals, and dioxin/furans.	
CAVC = qu	anny assuran	VA/V. = quality assurance/quality control			MOH = Medal of Honor	
MS/MSD = n	namx spike/	MS/MSD = matrix spike/matrix spike du	upircate		PCBs = polychlorinated biphenyls	
VOC5 = volatile organic compounds	ule organic (compounds			TAL = Target Analyte List	
3 V QC 3 E SG	II voludije or	S V CCS = Scali volutie organic compounds	nas		NA = Not applicable	



Samples were taken according to the procedures developed in the *Generic Remedial Investigation/Feasibility Study Work Plan* (CH2M HILL, 1995a) and discussed in Sections 2.3.1 through 2.3.3 of this report. Samples from all media were analyzed by the laboratory according to the EPA Contract Laboratory Program (CLP) Statement of Work (SOW) except for herbicides, which were analyzed using EPA SW846, Method 8151. Specific methods are summarized as follows.

Analytes	VOCs	SVOCs	Pesticides/ PCBs	Herbi- cides	TAL Metals (Unfiltered)	TAL Metals (Filtered)	Dioxin/ Furans
Method	CLP	Organic Method	Laboratory 1 1.9	SW 846		ic Laboratory od 3.1	CLP Dioxin/ Furan Laboratory Method 1.1
Soil	1	✓	1	√	✓ ¨		7
Surface Water	7	1	~	-	7	V	7
Sediment		1	~	-	· · ·		7
Ground- water	1	•	-	· ·	7		

Lists of all compounds analyzed are presented in Appendices F-1 through F-3.

The rationale for selecting the number, sampling depth interval, and location of samples is presented by medium in Section 2.2. The location-specific methods, procedures, and other sample information (e.g., sample depth, equipment, decontamination procedures) are described in Section 2.3.

2.2 Overall Sampling Rationale

Background sampling locations were selected within areas believed to be unaffected by past or present DDMT waste management activities. An important aspect of the sampling effort was consideration of the potential effects of urban pollutants from the area surrounding the site and of historical uses of the general area (e.g., pesticides from historical farming operations).

A statistical approach was used to select the number of soil, sediment, and surface water samples required to provide an appropriate level of confidence for each medium (CH2M HILL, 1995a). Sample sizes appropriate to estimate nonparametric tolerance intervals (Conover, 1980) were used to estimate the number of samples required for each medium. Nonparametric tolerance intervals make no assumptions about the underlying distribution of the data being evaluated. However, independent samples are assumed to be randomly drawn from an infinite population. Coverage is the percent or quartile of the population distribution to be bounded by the largest concentration in the sample. An upper tolerance bound is designed to contain at least 100 percent of the sampled population from a sample of size n with (1-a) percent confidence. The level of confidence reflects the probability that the maximum concentration detected from a collection of samples will bound the pre-specified quartile of the population distribution.

The equation used to generate the minimum sample size is as follows:

$$n = ln(a)/ln(p)$$

where

a = significance level (0 < a < 1)

p = percentile of the population to be contained by the upper bound (0

n = minimum number of samples required

Levels of confidence for each medium (sediment, surface water, surface soil, subsurface soil) were calculated according to the project objectives and are provided in the *Generic Remedial Investigation/Feasibility Study Work Plan* (CH2M HILL, 1995a). The selection of confidence intervals for DDMT was based on the need to obtain a relatively representative data set and on the cost of obtaining such data. It was determined that for soil, sediment, and surface water, the 90th percentile of the population would be determined with 90 percent confidence requiring 22 samples as follows:

$$n = \ln(1-0.9)/\ln(0.9) = 21.8 = 22$$

2.2.1 Surface and Subsurface Soil Sampling Rationale

The majority of the land surface at DDMT is classified as graded land (meaning that cut-and-fill or other surface disturbances have occurred). During grading and land development, the surface soil was mixed and reworked. Native surface soil is apparent in the stream and swale channels. Therefore, for purposes of this background sampling program, no distinctions were made between different surface soil mineralogies (as defined in Section 5.3.2.1 of the *Generic Remedial Investigation/Feasibility Study Work Plan* [CH2M HILL, 1995a]), although the soil type was classified in the field for identification purposes. Subsurface soil samples were taken from the same location as the surface soil samples at a depth interval representative of the native soil.

Surface and subsurface soil sampling locations are shown in Figure 2-1. Station descriptions and sample information are provided in Tables 2-1 and 2-2.

To obtain a set of background soil data representative of the diversity (non-homogeneity that results from regrading) of soil conditions anticipated at DDMT, samples were obtained from locations both on an off DDMT property. Onsite locations were included to represent ambient conditions expected at DDMT resulting from normal operation of the facility, excluding waste management and waste disposal activities. Onsite soil sampling locations were selected by first delineating areas throughout the installation that were not appropriate for background sampling, including areas of known or suspected contamination and areas covered by buildings or roads. A total of 11 onsite sample locations (BS01 through BS08 and BS14 through BS16; see Figure 2-1) were selected, generally along the perimeter of DDMT, to represent the most reasonable geographical distribution over the site, considering site limitations. Samples taken on DDMT property are herein referred to as perimeter samples.

Soil sampling locations off DDMT property were primarily focused at schools (SB10, SB11, SB17, SB18, and SB19), golf courses (SB13 and SB21), and cemeteries (SB20). Additional sampling locations included residential neighborhoods surrounding DDMT (BS09, BS12,

and BS22). These locations were selected as representative of ambient environmental conditions in the urban environment surrounding DDMT. They also are subject to similar grounds maintenance activities such as possible application of herbicides, pesticides, fertilizers, and lawn seed as well as mowing and aeration. A total of 11 offsite locations were sampled during the background program.

At each sampling location, soil samples were taken from the ground surface (zero to 1 foot below ground surface [bgs]) and at a depth sufficient to be representative of native (undisturbed) soil (4 to 6 feet bgs). The depth of the native soil was determined in the field on the basis of visual soil classifications. All samples were scanned in the field with a photoionization detector (PID) to eliminate sampling locations that might contain PID detectable volatile organic compounds (VOCs). No VOCs were detected in the field.

2.2.2 Surface Water and Sediment Sampling Rationale

To obtain a minimum 90 percent confidence and 90 percent coverage of the sample population's maximum value, 22 surface water and 22 sediment samples were required. All surface water and sediment samples were taken from offsite (refer to Figure 2-2 and Tables 2-3 and 2-4). Sampling locations were selected upgradient of any outfalls from DDMT to ensure a representative background sample. Two types of surface water and sediment features were evaluated as part of the background program: ponds similar in size and surrounding land use to DDMT's golf course pond and Lake Danielson and perennial streams.

Surface water/sediment samples were collected from four ponds during the background sampling field effort. The ponds were located in Medal of Honor Park, Audubon Park, Memphis Lake in Chickasaw Gardens, and the Botanical Gardens in Audubon Park.

Surface water/sediment samples were also taken from two perennial streams located near DDMT: Nonconnah Creek, located south of DDMT, and Cane Creek, located northwest of DDMT.

2.2.3 Groundwater Sampling Rationale

Groundwater monitoring well installation and sampling has been occurring at DDMT since 1982. During previous site characterization efforts, primarily the sitewide remedial investigation of 1989 (Law, 1990), monitoring wells MW-2 through MW-39 were installed to evaluate the extent of potential groundwater contamination on a sitewide basis. All but two of these wells were installed in the uppermost unconfined Fluvial Aquifer to depths ranging from 29 to 157 feet bgs. In 1996, 16 additional groundwater monitoring wells (MW-40 through MW-55) were installed to further evaluate groundwater contamination west of Dunn Field and to characterize the chemical constituents in groundwater flowing onto the main installation. Samples were taken from these wells and analyzed to assess the background chemical characteristics of groundwater in the surrounding area that is not affected by DDMT operations.

The approach to selecting wells for use in the background sampling program was to use the presence of VOCs, SVOCs, or pesticides/PCBs as an indicator to eliminate wells that are potentially affected by DDMT operations (CH2M HILL, 1995a). Areas outside known contamination and that are primarily upgradient of the site were considered as potential sampling locations. Figure 2-4 presents the potentiometric surface based on data from new (MW-40 through MW-54) and existing wells.

The potentiometric gradient indicates that groundwater flows onto the site from the northeast, east, south, and southwest. Groundwater generally flows from Dunn Field offsite to the west. On the basis of these criteria, the following existing wells were selected for use as background wells: MW-16, MW-19, MW-24, MW-28, and MW-30, MW-45, MW-46, MW-48, MW-49, MW-50, MW-52, and MW-53 (see Figure 2-3).

MW-23 was originally identified as a background well (CH2M HILL, 1995), but was dropped because the presence of methylethyl ketone (MEK, or 2-butanone) and tetrachloroethylene (PCE) suggests that MW-23 may be impacted by an organic groundwater plume located in the southwest portion of DDMT. Trace detections of both compounds were estimated at 1 microgram per liter (μ g/L), which is below the detection limits. At this time, it has not been determined whether this plume results from sources on or off DDMT property. Upgradient Wells MW-47 and MW-51 were not selected because they appear to be associated with organic groundwater contamination that may originate onsite.

Data from these 12 wells provide an 85 percent confidence level that the population's 85th percent quartile has been identified.

2.3 Field Activities

The sampling procedures, equipment, and locations followed the *Generic RI/FS Work Plan* (CH2M HILL, 1995a) and are fully described therein. Specific sampling equipment and procedures used during the field investigation are discussed for each medium in the following sections. All sampling equipment was decontaminated before use in the field and prior to sampling at each location.

2.3.1 Surface and Subsurface Soil Sampling

Surface soil samples were taken using a 5-foot stainless-steel continuous sampler from zero to 1 foot bgs (surface vegetation or gravel was removed prior to sampling). Samples were taken with the continuous sampler by either pushing the device hydraulically with the drill rig or by drilling and advancing the sampler ahead of a 7-5/8 inch outside diameter (O.D.) hollow-stem auger. If the amount of soil taken was insufficient to fill the designated laboratory sample containers, additional soil was taken at the same depth interval by offsetting a maximum of 2 feet from the original borehole location. VOC soil samples were taken directly from the continuous sampler using stainless-steel spoons. The remaining soil was placed into a stainless-steel bowl, mixed thoroughly, and then placed into the remaining laboratory sample containers.

Subsurface soil samples were taken from 4 to 6 feet bgs at the same sample locations where the surface soil samples were taken. Boreholes were advanced to the top of the sampling interval using a 7-5/8 inch O.D. hollow-stem auger. Soil was then taken from the sampling interval using a decontaminated 5-foot stainless-steel continuous sampler. VOC samples were taken directly from the sampler. The remaining soil was placed into a stainless-steel bowl, mixed thoroughly, and then placed into the appropriate sample containers. All soil cuttings were returned to the borehole.

An exception to the above procedures was the collection of soil from three locations (sample locations BS14, BS15, and BS16) along the western edge of DDMT. These borings were located beneath Memphis Light, Gas, and Water (MLGW) high-voltage power lines; and because of safety concerns, the drill rig was unable to set up at these locations. The three borings were completed to the desired depth intervals using a stainless-steel hand-auger. Analytical samples were taken from the hand-auger bucket using the same methods described above.

A soil boring log for each boring and well was completed in the field. Soils were logged according to *Visual-Manual Procedure for Description and Identification of Soils*, American Society for Testing and Materials (ASTM) D2488-24. The soil boring logs are included in Appendix A. Tables 2-1 and 2-2 contain specific information pertaining to each surface and subsurface soil sample taken. This information includes sample number, sample location, sample group, date and time taken, sample depth interval, boring location description, and corresponding QA/QC samples taken.

2.3.2 Surface Water and Sediment Sampling

Surface water samples were taken before sediment samples to minimize the amount of suspended solids in the water column. Thirteen samples were taken from ponds and 9 samples were taken from perennial streams within the area surrounding DDMT. All surface water samples were taken directly into laboratory sample containers. Table 2-3 contains specific information pertaining to each surface water sample taken. This information includes sample number, sample location, sample group, date and time taken, sample location description, and corresponding QA/QC samples taken.

Table 2-5 presents field parameters measured during collection of surface water samples. pH varies from near neutral at Nonconnah Creek (7.50 to 7.74) and Cane Creek (7.67) to slightly basic in the ponds at Medal of Honor Park (8.06 to 8.2), Botanical Gardens (8.05), Audubon Park (8.08 to 8.14), and Chickasaw Gardens (8.33). Conductivity is variable: it is highest in Nonconnah and Cane Creeks (0.199 to 0.243 microSiemens per centimeter [µS/cm]) as well as at Chickasaw Gardens (0.112) and is an order-of-magnitude lower in Botanical Gardens (0.073 to 0.079) and Audubon Park (0.066). Temperature and dissolved oxygen (DO) are variable within and between sample groups.

Sediment samples were taken within the same area of the water body as the surface water samples. Samples were taken from the top 6 inches using stainless-steel spoons. Samples taken for VOC analysis were transferred directly to the laboratory sample containers. The additional sediment material was placed into a stainless-steel bowl, thoroughly composited, and then transferred into sample containers. Table 2-4 details the sediment sample locations, sample numbers, sample locations, sample depths, dates and times taken, and corresponding QA/QC samples taken.

2.3.3 Groundwater Sampling

Groundwater monitoring wells were sampled following procedures identified in the *Generic Quality Assurance Project Plan* (CH2M HILL, 1995b). A Grundfos Redi-Flo2 submersible pump and Teflon pump tubing were used to develop and purge all wells. Metals, SVOC,

										Tabk 2-5												Г
								S	orface Wa	Surface Water Field Parameters	Parameter	ľ										
								ā	wkgroom	Background Sampling Program	ETRONG X	£										
								Ď	ense Depo	Defense Depot Meruphis Tennessee	L Tennes	5										
			Voncono	Nanconosh Creek	ا ا		ΰ	Cane Creek	٠		Medalo	Medal of Honor Park	Park	9	Botanical Gardens	ardets	Audi	Audubon Park	ŀ	Chkkası	Chickasaw Cardens	٦,
	BWal	BW02	BW03	BW04	BW02 BW03 BW04 BW05 BV	90MB	BW07	BW08	BW09	WOS BW07 BW08 BW09 BW10 BW11 BW12 BW13 BW14	BWII 1	3W12 E	WI3 B	1W14	BW15 F	RW16 BW17 BW18 BW19 BW20 BW21	I LIME	18 W	1W19 E	W20 B	W21 DW2	7
											Sample Number	Vumber										Γ
Parameter	SWI7	SW18	SWIP	BW20	SW18 SW19 BW20 SW21	SW2 SW2 SW2 SW2 SW2	SW23	5W24	SW25	5W26	SW27 SW28 SW29 SW30	5W28 S	W.79 S	W.30	SILEMS	SW31 8	KW3 LEWS	WM	3 SEM1	SW35 SW36 SW37	W37 SW38	200
pH	7.50	17.7	7.67	7.70	1,74	01.7	7.67	19.7	79.7	8	8.30	60.8	8.09	8.09	8.0.S		8.08	8.14	8.08	-	8.33	
Conductivity (pS/cm)	0.199	0.136	0.227	0,261	0.257	0.253	0.243	0.243	0.243	6,0	8.0	0.079 0	0.073 0	0.07.1	0.088		990.0	9900	990'0	° 	0.112	Γ
Terbidity (NTU)	8	46	71	14	17	3	88	85	58	68	36	45	7	4	148		S	120	71		£	Π
Temperature (*C)	17.9	21.7	21.7	23.6	24.3	24.7	23.5	23.3	23.5	20.3	19.8	20.5	22.2	27.7	18,4	F	24.4	24.5	23.6	<u> </u>	19.3	Ī
Dissolved Oxygen (mg/L)	3.27	8.30	9.36	1.72	60.6	8.54	6.37	6.37	6.37	6.35	7.28	5,30	8.30	8.30	6.30		10,12 8,30	-	8 7 .≘	-	3,22	Ī
Manager All management about the second south and second s	and the same			44.44													l	l				ľ

Notes: Alt parameter data were collected using a Horiba U-10 Water (publity Meter.)

Due to proximity of samples, and one parameter measurement was taken at Audubon Park and Chickasaw Gardens,

NTU = representate turbidity unit

LSC:n = microsiemen per centimeter

mpA. - milligram per liter

and pesticide/herbicide samples were taken using the Grundfos pump. Samples to be analyzed for VOCs were collected with a disposable Teflon bailer.

Groundwater field parameters are presented in Table 2-6. Field parameters were taken with a Horiba U-10 Water Quality Meter.

				Comments		DO meter down	Two events	DO meter down	Two evenu	Two events					DO meter down	DO meter down		
		L	-		None	8	į	8	Ĭ	Taro	Ž	Ž	Ž	Ng	8	8	Q Z	
		The state of	DO Turbidity Conductivity	(CERNING)		6.4 B-5	6.7 E-5	2.5 E-2	1.0 E-2	2.8 5.4	2,2 B.2	3.8 E-3	2.3E.2	5.3 R-3	1.6E-3	\$.9E-3	1.0 E-2	
			Terbidity	Ę	>icale	25.	왕	122		35	2	2	10	10	10	10	33	
1			8		75 28.	a	7.86	a	ã	8.8	6.67	8.35	8.26	8.92	113	12	8.75	
			Temperature	•		77.	15.8	6761	16.00	27.	18.00	17.5	19,2	18.9	18.4	17.3	13.1	
			Conductivity	(msycan)	0.221	0.630	0.20	0,181	0.184	0.276	8700	0.266	0.257	0.222	0.796	0.795	0.364	
ľ				Ŧ	<u>8</u>	5.5	5.92	97.9	5.87	58.0	6.14	6.05	6.32	3.90	10.9	6.16	5.81	
tin mary	Background Sampling Program Defense Depot Memphis Tennessee	Namber of Well	Volumes	Paring	39.4	3.33	2,82	19.13	00'5	11,25	3.98	1.57	5.22	4.52	3.39	¥.03	8.00	
Table 2-6 ter Sample Si	ampiing F fexaphis	Pured		Ē	, ,	6	3.1	77	F/2	12 _	BG	01	13	ž	=	13	7.5	
Table 2-6 Groundwater Sample Summary	Background Sampling Program efease Depot Memphis Tennesse	Nomber of Web	Volumes	Deretaped	đ	12	na.	9	14	13	24.88	23.86	6.52	74.19	19.84	27.03	66.67	
25	Back Defens	Developed	Volume	(<u>F</u>	2	th.	2	2	12	ī	S	72.4	2	ž	ij	ē	8	
		24	Voleme	(gal)	0.85	2.95	1.1	1.15	1.3	2.4	2.01	2.8	2	7	6.2	33	1.5	
				Analydu	2/11/56 MW141 VOC, SVOC, pesticide/PCB, berbicide. TAL, FS	2/13/96 MW161 VOC SVOC, TAL, prainte/PCB, herbicide	/OC. SVOC. pestkide/PCB, herbicide, TAL	2/10/96 MW241 VOC, SVOC, peutelde/PCB, herbicide, TAL	MW281 VOC, SVOC, praticide/PCB. horbicide, TAL	MW321 VOC. SVOC. pesticide/PCB. herbicide, TAL	2/8/96 MW451 VOC, SVOC, TAL, posicide/PCB, herbicide	MW461 VOC, SVOC, TAL, practicle/PCB, herbielde	MW481 VOC, SVOC, TAIL, pesticide/PCB, herbicide	2/9/16 MW491 VOC, SVOC, TAL, perticide/PCB, herbicide	2/11/96 MW501 VOC. SVOC. TAL, pertiride/PCB, herbicide	211/96 MW521 VOC, SVOC, TAL, perticide/PCB, herbicide	2/13/96 MW531 VOC, SVOC, TAL, pesticide/PCB, herbicide	
			Sample	i i	MWI41 V	MW161 V	7 [6] MM	MW241 V	MW281 V	MW321	MW451 V	MW461	MW481	MW491 V	MW50I	MW521 V	MW531 V	
			Date C	Number Sampled Number	2/11/26	2/13/56	27/96	2/10/26	_	27/8	2/8/2	3/9/9/6	278.96	2/9/46	211.78	21128	213/96	
			7		-	16	19	72	28	됬	45	\$	4	67	Я	23	ş	Notes

FS = TOC, rallete, abrazánivie, chlocide (C), NH,, and troa (Fe) WQ = HCO, SO,, chloride (C), fluoride (F), ND,, TDS, hardness, and tritum (H,)

gat = galkon
µS/cm = microsiemen per cenûmeter
DO = dissolved oxygen
mg/c = miliparan per litera
mg/c = miliparan per litera
mg/c = nephekonen'ic mabkiiy unit
cm/kec = cenûmeter per second
VOC = volatika arganic compound
SVOC = venivolatika organic compound
TAL. = Target Analyse Lisa

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TAB

3,0

3.0 Sampling Results

This section summarizes the analytical results for background surface soil, subsurface soil, surface water, sediment, and groundwater taken during the Background Sampling Program at DDMT. All samples were analyzed for VOCs, SVOCs, pesticides/PCBs, herbicides, and Target Analyte List (TAL) metals by CH2M HILL's Montgomery, Alabama, Laboratory. Dioxin/furan samples were analyzed by Triangle Laboratories, Durham, North Carolina. The resulting data were validated by CH2M HILL's data quality evaluation team.

3.1 Identification of Background Constituents Exceeding Applicable Criteria

To provide a more concise understanding of the detected chemicals and their importance, the detected chemicals were compared with criteria as described in the following sections. The selected criteria are from existing guidance documents and were developed to be protective of human health and the environment. Background constituents exceeding these criteria are likely to be considered in evaluating remedial actions at DDMT.

Definitions of statistical terms used in this section are provided in Table 3-1.

3.1.1 Applicable Criteria

Section 3.5 of the *Generic Remedial Investigation/Feasibility Study Work Plan* (CH2M HILL, 1995a) presents applicable criteria developed for groundwater, surface water, soil, and sediment. Criteria are based on chemical-, location-, or action-specific applicable or relevant and appropriate requirement (ARAR) standards or on screening risk-based PRGs. As discussed in Section 3.6 of the *Generic Remedial Investigation/Feasibility Study Work Plan* (CH2M HILL, 1995a), DDMT-specific PRGs were developed using conscrvative assumptions regarding human exposure and contaminant uptake and are therefore appropriate for screening purposes. Sites or areas that do not exceed screening-level PRGs most likely will not require additional risk-based analysis.

Background values that exceed applicable criteria will be considered in developing site-specific cleanup levels. Background data were compared with the minimum value of applicable criteria. Table 3-2 summarizes the comparison. Tables 3-7 through 3-10 in the Generic Remedial Investigation/ Feasibility Study Work Plan (CH2M HILL, 1995a) provide the constituent-specific source for each ARAR and the basis for the PRG calculations which were used to establish the applicable criteria. Criteria have been updated to use the most recent values available.

3.1.2 Metal Constituents

As discussed in Section 4.9, many of the metal constituents were detected at levels between the Instrument Detection Limit (IDL) and the CLP contract-required detection limit (CRDL). These metal data are qualified with a "J" flag and the concentrations are considered estimated because results at or near the IDL (typically 5 to 10 times lower than the CRDL)

ORO113627,RR.ZZ/029.DOC

; <u></u> ;	Table 3-1
	Definition of Statistical Terms
	Background Sampling Program
ļ	Defense Depot Memphis Tennessee
Detected Values	
Dettetta Values	Analytical constituents that were reported as detected or
	estimated below detection limits and reported with a "J" qualifier.
Mean Value	Arithmetic average value. Undetected values (J or UJ qualifier)
ivicali value	were averaged using one-half of the detection limit.
2 X Mean Value	Twice the mean value.
Ln(Mean Value)	
Entrem value	The natural log of the mean value of a natural lognormal distribution.
Ln(Standard Deviation)	The natural log of the standard deviation of the data from a
2(0	natural lognormal distribution.
Geometric Mean	The mean value of a lognormal distribution. The anti-logarithm
	of Ln (mean value) [e ^{Ln(Mean Value)}].
UCL (Normal)	The 95 percent upper confidence limit (UCL) of the mean
,	assuming the data are normally distributed. The true value of the
	mean of the distribution is known to be less than or equal to the
	UCL value with 95 percent confidence (EPA, 1992). The
	distribution was determined using one-half of undetected (U or
	U5 qualifier) values. Normality was determined using the
	Shapiro-Wilkes Test (Gilbert, 1987).
UCL (Lognormal)	The 95 percent UCL of the mean, assuming the data are
1	lognormally distributed. The distribution was determined using
·	one-half of undetected (U or U5 qualifier) values. Normality
	was determined using the Shapiro-Wilkes Test (Gilbert, 1987).
RME	The reasonable maximum exposure (RME) value is defined as
	the highest concentration that could reasonably be expected to
	occur for a given exposure pathway at DDMT (EPA, 1992). If
	the data are normal or lognormally distributed, the RME is the
	UCL for the respective distribution. If the data do not follow a
	parametric distribution, the RME is the maximum detected
	value.

3	0	8	3	7	
		ĺ			4

				E							
		Background Constitu	nstituents E	xeeeding A	g ARAR or R	tisk-Based	1 anne 3-2 ents Exceeding ARAR or Risk-Based PRG Concentrations	entrations			
			Bac	Background Sampling Program	ampling P	тодгат.					-
			Defe	Defense Depot Memphis Tennessee	Memphis 1	ennessee					
Media	Units	Constituent	Number of	Number of Detects	Criteria Volus	Criteria	Minimum	Maximum	Mean	Background	Background
	_	Aluminum	22	22	18	띭	8160	18500	Delected 11908	37000 2MD	Dasis
		Antimony	22	-	3.1	RES	3.5	3.5	3.5	7.0	7.0 ZMD
		Arsenic	22	22	0,43	0.43 RES	4.7	77.7	10.9	20.0 HCT	€CT
		Barium	22	22	32	GWP	11	160	126	234 BCT	307
		Beryllium	22	15	0.15	RES	0.5	0.6		Ξ	эмр
_		Chromium, Total	22	22	1	TERRAECO	8.4	17.7		25.1 BCT	37
		Iron	22	22	2300 RES	RES	10800	26100	18520	\$2200 2MD	MD
	1	Manganese	22	22	180	180 RES	330	1080	652	2160 2MD	2MD
	<u> 1</u>	Mercury	22	4	0,3	TERRAECO	0.1	0,4	0,2	0.8 ZMD	MD
	<u>-1</u>	Nickel	22	22	21	GWP	10,4	21.4	16.5	t DE	30 BCT
	<u>- 1</u>	Vanadium	22	22	7	TERRÆCO	1.71	35.2	26,1	49 BCT	בַּ
<u></u>	$\overline{}$	Zinc	22	22	50	SOTERNECO	35.6	89.5	62.8	JW2 671	MID
<u> </u>	βγβπ	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	22	9		n/a	120:0	0.39	0.14	4N 065.0	42
	 1	Benzo(a)anthracene	22	6	700	700 GWP	EÞ	710	151	4N 017	d.b
	1	Benzo(a)pyrene	22	6	88	88 RES	44	096	981	dN 096	47
	-1	Benzo(b)fluoranthene	22	6	880	880 RES	15	006	208	dN 006	d.
	- 1	Dibenz(a.h)anthracene	22	3	88	88 RES	96	260	113	260 NP	4
		Dieldrin	22	14	_	GWP	3.3	530	114	86 BCT	scr
	<u>-1</u>	Octachlorodibenzo-p-Dioxin	72	22		n/a	0,747	23.33	5.52	9.72	LN
ヿ		Octachlorodibenzofuran	22	r.		n/a	0.045	0.19	0.16	0.393	NP
Subsurface Soil m	Mg/kg /	Aluminum	22	22	7800 RES	RES	6820	14900	10915	Z9800 ZMD	MD
	<u>31</u>	Arsenic	22	22	0.43	RES	3.1	14.1	8.5	28.2	2MD
	<u> 1</u>	Barium	22	22	32	GWP	06	243	150	486	ZMD
	 1	Beryllium	22	14	0.15	RES	8.0	0.7	9.0	1.2	ZMD
_	<u>~ 1</u>	Chromium, Total	22	_ 22	-	TERRACO	8.7	18.0	13.2	36.02	2MD
	<u>~ 1</u>	Cobalt	22	22	20	TERRECO	5.0	20.4	10.2	40.8	2MD
	<u>- +</u>	Iron	22	22	2300	RES	8340	24900	19240	49800 2MD	MD
-	ᆕᆚ	Manganese	22	22	180	RES	231	1580	07.0	3160 2MD	<u>Ū</u> WD
	<u>-</u>	Nickel	22	. 22	21	GWP	0.6	22.4	18.3	44.8 ZMD	MD

		38	
111	8.56 NP		Page 2 of 4
:	8.5		<u>,,,</u>

Maximum Mean Detected Detected 31.7 25.6 370.0 127.0 9.44 2.99 3.9 3.8 3.8 11.1 6.0 11.1 6.0 12.0 2.0					Ta	Table 3-2						
Background Sampling Program Background Sampling Program Defense Depot Memphis Tentracsee			Background Co.	nstituents l	Sxceeding A	ARAR or R	isk-Based	PRG Conce	entrations			
Duils				Ba Defe	ckground S nse Depot 1	ampling P. Memphis T	rogram					
Section Constituent Anniyses Detected Detec				Number of		Criteria	Criteria	Minimum	Maximum	Mean	Backeround	Background
The first continuent	┰	Units		Analyses	Detects	Value	Basis	Detected	Detected	Detected	Value	Basis
pgfg Diction Jink 22 22 36TBRRECO 30.9 79.5 pgfg Diction Contact Introduction and Contact Interded Total Introduction and Contact Introduction and Contact Interded Co	ubsurface Soil	mg/kg		22	22	7	TERRECO	15.0	31.7	25.6	63,4	63.4 2MD
Hig/kg Discloration Lig/kg Discloration 127 3 100/hg 35 370.0 Octachlorodificance-p-Dioxin 22 17 hun 0.209 9.44 mg/kg Artinisesy Aminisesy 22 2 2 2 1.3 3.9 3.9 Americ Colpper 22 1.7 3.3 MOAA 1.5 1.1 1.4 1.1 1.2 1.2 1.1 1.2 1.2 1.1 1.2 1.1 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2			_	22	22	50	TERR/ECO	30.9	79.5	57.0	159	159 2MD
Octach		µg/kg		22	3	1	CWP	3.5	370.0	127.0	370.0NP	NP
mg/kg Antitimony Antitimony 22 17 3,0AAA 3,7 3,9 Artentic 22 17 3,3NOAA 1,5 11,1 6 Cadmium 22 17 3,3NOAA 1,1 136 11,1 6 Copper Copper 22 22 23 PRG 4,1 114 174 Lead 22 21 22 21 22 1,7 126 1,7 126 Lead 22 21 22 1 21 PKG 1,7 126 1 Nicker 22 1 0.1 PKG 1,7 20 2 Silver 22 1 0.5 PKG 0.5 0.0 0.0 Zine 23,4,7,3 Ferranchlorrodiberrace-p-Dioxin 22 2 22 20 0.5 0.0 0.0 Acromythicene 22 2 22 8 70 40 0.0 0.0 Acromythicene 22 2			_	22	[21		n⁄a	0.20	9.44	2.99	9.44 NP	A.V
Anxenic 22	diment	mg/kg		22	2	2	NOAA	3.7	3.9	3.8	7,6	7.62MD
Cadminum 22 3 1 PRG 1.3 38.2 1.4 Chromium, Total 22 22 33 PRG 4.1 174 174 Chromium, Total 22 16 22 17 126 1 Lead 22 1 2 1 2 1 20 1 Metrusy 22 1 0 1 7 20 1 Nickel 22 1 0 1 2 2 2 1<			Arsenic	22	17	3.3	NOAA	5.1	1111	0.9	22.2	22.2 2MD
Chromiun, Total 22 22 13 PRG 4.1 174 126 1 Copper 22 16 28 PRG 1.7 126 1 Lead 12 2 1 2 1 2.0 1 2.0 Lead 12 1 0.1 PRG 2.0			Cadmium	22	m,	1	PRG	£11	38.2	14.5	76.4	76.4 2MD
Copper 22 16 28 PRG 1.7 126 Lead 22 21 21 PRG 1.7 291 Metral 22 1 0.1 PRG 1.7 291 Metral 22 1 0.0 PRG 2.0 2.0 Metral 22 1 0.0 PRG 2.0 2.0 Silver 22 1 0.0 PRG 8.4 7.63 L.2.3.4.7.8-Pernachloroditenzo-p-Dioxin 22 2.2 6.8 PRG 8.4 7.63 L.2.3.4.7.8-Pernachloroditenzo-p-Dioxin 22 2.2 6.8 PRG 8.4 7.53 L.2.3.4.7.8-Pernachloroditenzo-p-Dioxin 22 2.2 PRG 8.4 7.63 0.0 A.2.4.7.8-Pernachloroditenzo-p-Dioxin 22 2.2 PRG 8.9 7.70 0.0 A.4.7.8-Pernachloroditenzo-p-Dioxin 22 2.2 PRG 8.5 7.0 A.4.7.8-Pernachloroditenzo-p-Dioxin 22 2.2 PRG 8.5 7.0 A-branchloroditenzo-p-Dioxin 22 2.2 PRG<			Chromium, Total	22	22	33	PRG	4.1	174	61	21	21 BCT
Lend 22 21 21 PRG 1.7 291 Mercury 22 1 0.1 PRG 2.0 2.0 Nickel 22 1 0.0 PRG 2.0 2.0 Silver 22 1 0.5 PRG 0.9 0.9 Zine 22 1 0.5 PRG 0.9 0.9 Zine 22 2 2 6.5 PRG 0.5 0.0 2.3.4.7.8. Pentachlorodibenzo-p. Dioxin 22 2 2 2 0.0 0.0 0.0 0.0 2.3.4.7.8. Pentachlorodibenzo-p. Dioxin 22 1 0.5 NOA 0.5 0.0			Copper	22	91	28	PRG	£11	1250	135	S4	S4 BCT
Metruty 22 1 0.1 PRG 2.0 2.0 Nickel 22 13 30 NOAA 5.3 37.4 1 Silver 22 13 30 NOAA 5.3 37.4 1 Silver 22 1 0.5 PRG 0.9 0.9 0.9 Zine 22 22 6.8 PRG 8.4 7630 0.9 L1.2.1.4.6.7.8.Hepiachlorodibenzo-Dioxin 22 3 r/a 0.06 0.58 0.0 L1.2.1.4.6.7.8.Hepiachlorodibenzo-Dioxin 22 3 r/a 0.00			Lead	22	21	12	PRG	£11	291	36.0	35.2	35.2 BCT
Nieckel 22 13 30 NOAA 5.3 37.4 Silver 22 1 0.5 PkO 0.9 0.9 Zinc 22 22 22 68 PRO 8.4 7630 L.2.3.4.7.8-Pentackhorodibenzofuran 22 2 22 PRO 8.4 7630 0.58 2.3.4.7.8-Pentackhorodibenzofuran 22 1 0.6 0.58 0 2.3.4.7.8-Pentackhorodibenzofuran 22 2 2 2.2 PRO 59 770 Actnoxphilkenc 21 4 0.5 NOAA 3.6 5.2 70 Apha-chlordanc 22 2 22 PRO 59 770 50 Anthracenc 22 2 85 NOAA 3.0 480 480 Benzo(a)suptracenc 22 1 220 PRO 64 2500 Chystene 22 2 22 PRO 64 2500 Chystene 22 2 1 7 20 PRO Plane			Mercury	22	1	0.1	PRG	2.0	2.0	2.0	4.0	4.0 ZMD
Silvet 22 1 0.5 PRO 0.9 0.9 Zinc Zinc 22 22 68 PRO 8.4 7630 L.2.3.4.7.8-Heptachlorodibenzo-p-Dioxin 22 3 7/a 0.064 0.58 0 2.3.4.7.8-Pentachlorodibenzofuran 22 1 6/a 0.002 0.002 0 Avenaphthene 22 2 2 PRO 59 770 Apha-chlordane 21 4 0.5 NOAA 3.6 5.2 Apha-chlordane 22 2 28 NOAA 3.10 1600 Benzo(a)balbracene 22 8 160 64 250 Benzo(a)balbracene 22 7 230 PRG 64 250 Benzo(a)balbracene 22 1 7 200 PRG 64 250 Chrysene 22 2 2 2 2 2 2 2 Planene 22 2 2 2 2 2 2			Nickel	22	13	30	NOAA	5.3	37.4	15.2	74.8	74.8 2MD
Link 22 22 68 PRG 8.4 7630 Li,2,3,4,5,7,8-Heptachlorodibenzo-p-Dioxin 22 3 r/a 0.064 0.58 2.3,4,7,8-Pentachlorodibenzofuran 22 1 4 0.5 NOAA 30 770 Acenaphthene 22 2 2 2PRG 59 770 Alpha-chlordane 21 4 0.5 NOAA 316 1.60 Anthracene 22 2 85 NOAA 310 1.60 Benzo(a)aphthene 22 7 2.30 PRG 64 2500 Benzo(a)aphthalter 22 7 2.30 PRG 64 2500 Chysene 22 1 1 480 480 480 480 Chysene 22 2 2 1 8 320 710 Chysene 22 2 2 1 8 710 710 Florence 22 2 1 8 <td>_</td> <th></th> <td>Silver</td> <td>22</td> <td>-</td> <td>0.5</td> <td>PRG</td> <td>6.0</td> <td>6.0</td> <td>6.0</td> <td>1.8</td> <td>1.8 2MD</td>	_		Silver	22	-	0.5	PRG	6.0	6.0	6.0	1.8	1.8 2MD
1.2.3.4 6,7.8-Hepiarchlorodibenzo-p-Dioxin 22 3 iva 0.064 0.58 2.3.4.7.8-Pertachlorodibenzo-p-Dioxin 22 1 nh 0.002 0.002 0.002 2.3.4.7.8-Pertachlorodibenzo-furan 22 2 22 PRG 59 770 Actrachlordare 21 4 0.5 NOAA 3.16 5.2 Alpha-chlordare 22 2 85 NOAA 3.10 1600 Anthrucene 22 5 160 PRG 64 2500 Benzo(a)anthrucene 22 1 2.10 PRG 64 2500 Benzo(a)privane 22 1 2.20 PRG 64 2500 Chrysene 22 1 2.20 PRG 88 3200 Chrysene 22 2 18 PRG 130 7100 Fluoranthene 22 18 PRG 130 870 Plaorene 22 2 18 PRG 130 870 Abuntach 22 5 0.5 NOAA		_	Zmc	22	22	89	PRG	8.4	7630	399	15260 2MD	2MD
ofuran 22 1 n/a 0,002 </td <td></td> <th>_</th> <td>1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin</td> <td>22</td> <td>3</td> <td></td> <td>n/a</td> <td>0.064</td> <td>0.58</td> <td>0.24</td> <td>0.583 NP</td> <td>4×</td>		_	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	22	3		n/a	0.064	0.58	0.24	0.583 NP	4×
22 2 22 PRG 59 770 21 4 0.5 NOAA 3.6 5.2 22 2 85 NOAA 3.0 1600 22 7 2.10 PRG 64 2900 22 7 2.10 PRG 64 2500 22 1 pla 480 480 480 22 8 2.20 PRG 88 3200 22 10 380 PRG 66 7100 1 22 2 18 PRG 130 870 22 2 18 PRG 60 7100 1 22 2 18 PRG 60 7100 1 22 5 0.5 NOAA 6.1 200.00 4 22 1 130 PRG 60 7100 4 22 1 130 PRG 130 870 22 1 130 PRG 130 870 22 1			2,3,4,7,8-Pentachlorodibenzofuran	22	-		υ⁄a	0.002	0.002	0.002	0.002 NP	ΝP
21 4 0.5 NOAA 3.6 5.2 22 2 85 NOAA 310 1600 22 6 160 PRG 64 2900 22 7 230 PRG 64 2900 22 1 nh 480 480 22 2 31 PRG 130 700 22 10 380 PRG 66 7100 17 22 2 18 PRG 130 870 200 41 22 5 0.5 NOAA 6.1 2000.0 41 22 1 130 PRG 130 870 200.0 41 22 1 130 PRG 130 870 41 420 41 42			Acenaphthene	22	2	22	PRG	65	770	415	N DYT	ďΝ
22 2 85 NOAA 310 1600 22 5 160 PRG 64 2900 22 7 210 PRG 64 2900 22 1 pha 480 480 22 2 31 PRG 130 700 22 2 18 PRG 130 700 22 2 18 PRG 66 7100 1 22 2 18 PRG 66 7100 1 22 5 0.5 NOAA 6.1 2000.0 4 22 1 130 PRG 130 870 22 1 130 PRG 130 870 22 1 130 PRG 130 870 22 1 130 PRG 130 830 22 1 140 PRG 130 830			Aipha-chlordane	77	4	0.5	NOAA	3.6	5.2	4.5	5.2 NP	ΝP
22 6 160 PRG 64 2900 22 7 230 PRG 64 2500 22 1 nh 480 480 22 2 31 PRG 88 3200 22 10 380 PRG 130 700 22 2 18 PRG 60 7100 22 2 18 PRG 130 870 22 5 0.5 NOAA 6.1 2000.0 22 1 130 PRG 130 130 22 1 130 PRG 130 870 22 1 130 PRG 130 870 22 1 130 PRG 130 870 22 1 130 PRG 130 130			Anthrucene	22	2	85	NOAA	310	0091	955	I 600 NP	ďΧ
22 7 230 PRG 64 2500 22 1 h/a 480 480 22 2 31 PRG 88 3200 22 10 380 PRG 60 7100 22 2 18 PRG 60 7100 22 2 18 PRG 130 870 22 5 0.5 NOAA 6.1 2000.0 22 1 130 PRG 130 130 22 1 130 PRG 130 130 22 1 130 PRG 130 130			Benzo(n)anthracene	22	9	160	PRG	64 64	0062	820	2900 NP	호
22 1 n/n 480 480 22 8 220 PRG 88 3200 22 2 31 PRG 130 700 22 10 380 PRG 60 7100 22 2 18 PRG 130 870 22 5 0.5 NOAA 6.1 2000.0 22 1 130 PRG 130 130			Benzo(a)pyrene	22	7	230	PRG	25	2500	632	2500 NP	-Z
22 B 220 PRG 8B 3200 22 2 31 PRG 130 700 22 10 380 PRG 60 7100 22 2 18 PRG 130 870 22 5 0.5 NOAA 6.1 2000.0 22 1 130 PRG 130 130 22 1 140 PRG 130 130	_	<u>~ 1</u>	bis(2-ethylexyl)phthalate	22	1		υla	480	480	480	480 NP	ΝP
22 2 31 PRG 130 700 22 10 380 PRG 60 7100 22 2 18 PRG 130 870 22 5 0.5 NOAA 6.1 2000.0 22 1 130 PRG 130 130 22 1 130 PRG 130 130 22 11 140 0.431 8.56		- 1	Chrysene	22	8		-RG	88	3200	735	3200 NP	ΝP
22 10 380 PRG 60 7100 22 2 18 PRG 130 870 22 5 0.5 NOAA 6.1 2000.0 22 1 130 PRG 130 130 22 1 130 PRG 130 130 22 11 8.56		1	Dibenz(a,h)anthracene	22	2	31	PRG	130	700	415	4N 007	NP
22 2 18 PRG 130 870 22 5 0.5 NOAA 6.1 2000.0 22 1 130 PRG 130 130 22 11 144 0.431 8.56	-	1	Fluoranthene	22	01	380	'RG	09	7100	1294	7100 NP	4P
22 5 0.5 NOAA 6.1 2000.0 22 1 130 PRG 130 130 22 11 144 0.431 8.56		<u> (</u>	Fluorenc	22	2	181	PRG	130	028	905	4N 078	AZ.
22 130 PRG 130			Gamma-Chlordane	22	5	0.5	VOAA	6.1	0.000z	417.0	2000,0 NP	ΝP
22 1 14		<u>1</u>	Naphthalene	22	1	130	PRG	σ£1	130	130	I30NP	NP
		۲	Octachlorodibenzo-p-Dixoin	22	=		v/a	0.431	B.56	2.62	8.56 NP	a Z

Background Sampling Program Basis Detected Detect					Ta	Table 3-2						
Packground Sampling Program Defeate Depot Memphis Tennessee Defeate Depot Memphis Tennessee Defeate Defeate Defeate			Background Co.	nstituents I	Sxceeding A	ARAR or Risk	·Based F	RG Conce	entrations			
Duits				Ba	ckground S	ampling Prog	;ram					
Page				Defe	nse Depot	Memphis Ten	nessec					
1946 Price Detected Detec			٠	Number of		_	iriteria.	-	Maximum	Mean	Background	Background
Phys. Phys	Media	Units		Analyses	Detects		Basis	Detected	Detected	Detected	Value	Basis
Part-DDE	Sediment	μg/kg		77	3	ZNO,	AA	2.8	6.1	5.0		6,1 NP
Pictualibration 22 6 idq PRG 68 6900 Pired Pired 22 10 229 RRG 43 6800 Aluminum, Dissolved 22 18 874 WOC-AO 1910 2800 Aluminum, Total 22 18 874 WOC-AH 154 1640 Anterior, Dissolved 22 1 14 WOC-HH 154 1640 Anterior, Dissolved 22 1 14 WOC-HH 154 1640 Chromium, Dissolved 22 1 14 WOC-AH 1650 1650 Chromium, Dissolved 22 1 14 WOC-AH 1650 1650 Chromium, Dissolved 22 1 14 WOC-AH 1650 1650 Chromium, Dissolved 22 2 1 14 WOC-AH 1650 1650 Chromium, Dissolved 22 2 1 14 WOC-AH 1650 1650 Lead Dissolved 22 2 1 14 WOC-AH 1650 1650 Lead Dissolved 22 2 1 14 WOC-AH 1650 1650 Lead Dissolved 22 2 1 14 WOC-AH 1650 1650 Lead Dissolved 22 2 1 14 WOC-AH 1650 1650 Lead Dissolved 22 1 16 0 1650 1650 Lead Dissolved 23 1650 1650 1650 1650 Lead Dissolved			p.pDDE	22	2	1.7 PRC	,,	5.8	7.2	6.5		7,2 NP
Pyrene P			Phenanthrene	22	9	140 PRC	ļ	89	0069	1651	dN 0069	d.V.
Fig. High Aluminum, Dissolved 22 18 87 AWOC-AO 1910 280.0 20			Pyrene	22	10	290 PRC	_	43	0089	1360		3
Adminium, Total Adminium, Total Antimory, Dissolved Arsenic, Dissolved Arsenic, Dissolved Arsenic, Dissolved Chromium, Dissolved Chromium, Dissolved Chromium, Dissolved Chromium, Dissolved Chromium, Total Iron Iron Iron Iron Iron Iron Iron Iron	Surface Water	µg/L	Aluminum, Dissolved	22	2	87 AW	OC-AO	0.161	280.0	235.5		2MD
Antimony, Dissolved 22 1 14 WOC-HH 16.4 16.4 16.4 16.4 16.4 16.4 16.4 16.4 16.4 16.4 16.4 16.4 16.5			Aluminum, Total	22	81	BZAW	QC-A0	366	00691	2538		2MD
Archite, Dissolved			Antimony, Dissolved	22	-	14 AW	.ос-нн	15.4	16.4	16.4	32.8	32.8 2MD
Chromium, Dissolved 22 1 0.018 AWQC.AO 16.7 1.5 Chromium, Dissolved 22 1 1.4 WQC.AO 16.7 1.5 Chromium, Dissolved 22 2 1.1 AWQC.AO 18.0 18.1 1.5 Chromium, Dissolved 22 2 1.1 AWQC.AO 11.6 16.7 1.5 Iron Dissolved 22 22 1.000 AWQC.AO 11.8 1.8 Iron Dissolved 22 6 1.2 AWQC.AO 11.8 1.1 1.1 1.1 Irichal, Dissolved 22 6 1.2 AWQC.AO 11.8 1.1 1.1 1.1 1.1 Wickel, Dissolved 22 1 1.2 AWQC.AO 11.8 1.1 1.1 1.1 1.1 Wickel, Dissolved 22 1 1.2 AWQC.AO 1.1 1.1 1.1 1.1 1.1 Wickel, Dissolved 22 1 1.2 AWQC.AO 1.1 1.1 1.1 1.1 1.1 Wickel, Dissolved 22 1 1.2 AWQC.AO 1.1 1.1 1.1 1.1 1.1 Wickel, Dissolved 22 1 1.2 AWQC.AO 1.2 1.2 1.2 Wickel, Dissolved 22 1 1.2 AWQC.AO 20.5 20.5 20.5 Wickel, Total 22 3 1.10 AWQC.AO 20.5 20.5 20.5 Wickel, Dissolved 22 3 1.10 AWQC.AO 20.5 20.5 20.5 Wickel, Dissolved 22 3 1.10 AWQC.AO 20.5 20.5 20.5 Wickel, Dissolved 22 3 1.10 AWQC.AO 20.5 20.5 20.5 Wickel, Dissolved 22 3 1.10 AWQC.AO 20.5 20.5 20.5 Wickel, Dissolved 22 3 1.10 AWQC.AO 20.5 Wickel, Dissolved 22 3 1.10 AWQC.AO 20.5 20.5 Wickel, Dissolved 22 3 1.10 AWQC.AO 20.5 Wickel, Dissolved 22 3 1.10 AWQC.AO 20.5 20.5 Wickel, Dissolved 22 3 1.10 AWQC.AO 20.5 Wickel, Dissolved 22 3			Arsenic, Dissolved	22	9	0.018 AW	ОС-ИН	5.1	7.4	6,2	12.4	12.4 2MD
Chromium, Discolved 22 1 1 AWQC-AO 16.7 16.7 Chromium, Discolved 22 2 11 AWQC-AO 18.0 Copper	-		Arsenic, Total	22	=	0.018 AWI	ос-нн	9.9	13.6	0.6	0.81	18.0 BCT
Chromium, Total 22 5 11 AwQC-AO 18.0 18.1			Chromium, Dissolved	22	-1	II AW	QC-AO	16.7	16.7	16.7	33.4	33.4 2MD
Copper C			Chromium, Total	22	2	II AWI	OC-AO	18.0	1.8.1	18.1	36.1	36.1 ZMD
From Dissolved 22 22 1000 AWQC-AO 346.0 20800.0 30			Copper	22	S	12 A W.	OC-40	10.4	76,4	5.75	.152.8 ZMD	ZMD
Prof. Dissolved 22 6 12AWQC.AO 118.0 2040.0 6			Iron	22	22	1000 AW	OC-AO	346.0	20800.0	3051.7	41600.0[2MD]	ZMD
Lead, Dissolved 22 1 3.2 AWQC-AO 11.3 1			Iron, Dissolved	22	9	1000 AW	OC-AO	118.0	2040.0	600.5	4080.0 2MD	2MD
Nickel, Dissolved 123 1 13.4 MyQc-AO 11.3 11.3 11.3			Lead	22	9	3.2 AW(QC-A0	5.5	16.7	6.6	33.4	33.4 2MD
Nickel, Dissolved 22 1 13.4 TN STATE 118 <td></td> <td></td> <td>Lead, Dissolved</td> <td>22</td> <td></td> <td>3.2 AW</td> <td>QC-A0</td> <td>11.3</td> <td>11.3</td> <td>11.3</td> <td>22.6</td> <td>22.6 2MD</td>			Lead, Dissolved	22		3.2 AW	QC-A0	11.3	11.3	11.3	22.6	22.6 2MD
Nickel, Total 12, 3			Nickel, Dissolved	22	-	13.4 TN 5	STATE	118	118	118	236	236 2MD
Silver, Total 22 2 0.012 AWQC:AO 1.8 2.0 20 <			Nickel, Total	22	5	13.4 TN 5	STATE	6.9	19.9	11.4	22.8	22.8 2MD
Zine, Dissolved 22 1 110 AWQC-AO 205.0 205.0 Zine, Total 22 3 110 AWQC-AO 64.0 221.0 1 1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dixoin 22 3 n/a 0,045 0,18 1,2,3,7,8-Pentachlorodibenzo-p-Dioxin 22 1 n/a 0,046 0.05 2,3,4,7,8-Pentachlorodibenzo-furan 22 2 n/a 0,024 0.05 2,3,7,8-Pentachlorodibenzo-furan 22 6 n/a 0,007 0.05 2,3,4,7,8-Pentachlorodibenzo-furan 22 6 n/a 0,007 0.03 Qetachlorodibenzo-polioxin 22 15 n/a 0,007 0.03 Qetachlorodibenzo-polioxin 12 1 6 MCL 17.2 17.2 Hg/L Antimony 12 2 0.07 0.03 0.2 Beryllium 12 2 0.07 0.03 0.0 0.0	,	•	Silver, Total	22	2	0.012 AW	QC-A0	8.1	8.1	8.1	3.6	3.62MD
rg/L L2.3.4.6.7.8-Heptachlorodibenzo-p-Dixoin 22 3 110 AWQC-AO 64.0 221.0 ng/L 1.2.3.4.6.7.8-Heptachlorodibenzo-p-Dixoin 22 3 n/a 0.045 0.18 1.2.3.7.8-Pentachlorodibenzo-p-Dixoin 22 1 n/a 0.046 0.05 2.3.4.7.8-Pentachlorodibenzo-p-Dixoin 22 2 n/a 0.03 0.05 2.3.4.7.8-Pentachlorodibenzo-p-Dixoin 22 15 n/a 0.007 0.03 2.3.7.8-Tetrachlorodibenzo-p-Dixoin 22 15 n/a 0.007 0.03 Octachlorodibenzo-p-Dixoin 22 15 n/a 0.007 0.03 Antimony 12 1 6 MCL 17.2 17.2 Beryllium 12 2 0.07 pp. 0.03 0.03			Zinc, Dissolved	22	-	110 AW	QC-AO	205.0	205.0	205.0	410.01ZMD	2MD
ng/L 1.2.3.4.6.7.8-Heptachlorodibenzo-p-Dixoin 22 4 p/a 0.043 0.18 1,2.3,7.8-Pentachlorodibenzo-furan 22 1 p/a 0.027 0.06 1,2.3,7.8-Pentachlorodibenzo-p-Dioxin 22 1 p/a 0.046 0.05 2,3,7.8-Pentachlorodibenzo-p-Dioxin 22 2 x/a 0.024 0.05 2,3,7.8-Pentachlorodibenzo-p-Dioxin 22 15 n/a 0.007 0.03 2,3,7.8-Pentachlorodibenzo-p-Dioxin 22 15 n/a 0.007 0.03 Antimony 12 1 6 MCL 17.2 17.2 Beryllium 12 2 0.07 pp. 0.3 0.3		_	Zinc, Total	22	-	110 AW(OC:AO	64.0	221.0	143.7	442.02MD	2MD
1,2,3,7,8-Pentachlordibenzo-groun 22 3 n/a 0.027 0.06 1,2,3,7,8-Pentachlordibenzo-g-Dioxin 22 1 n/a 0.046 0.05 2,3,4,7,8-Pentachlorodibenzo-grounn 22 2 n/a 0.024 0.05 2,3,7,8-Terrachlorodibenzo-grounn 22 6 n/a 0.007 0.03 Qetachlorodibenzo-grounn 22 15 n/a 0.206 1.23 Hg/L Antimony 12 1 6 MCL 17.2 17.2 Beryllium 12 2 0.07 PRG 0.0 0.0 0.0		<u> 7</u>	1.2,3,4,6,7,8-Heptachlorodibenzo-p-Dixoin	22	4	n/a		0.043	0.18	0.10	0.184 NP	ďN
1.2.3,7.8 Pentachlorodibenzo-p-Dioxin 22 1 n/a 0.046 0.05 2.3,4.7.8 Fentachlorodibenzofuran 22 2 1 0.024 0.05 2,3.7.8 Tetrachlorodibenzofuran 22 6 n/a 0.007 0.03 Octachlorodibenzo-p-Dioxin 22 15 n/a 0.206 1.23 Hg/L Antimony 12 1 6 MCL 17.2 17.2 Beryllium 12 2 0.07 MCL 0.0 0.0 0.0		•	1,2,3,7,8-Pentachlordibenzofuma	22	0	n/a		720.0	90'0	0.04	0.057 NP	NP
2.3.4.7,8-Pentachlorodibenzofuran 22 2 na 0.024 0.05 2.3.7,8-Tetrachlorodibenzofuran 22 6 n/a 0.007 0.03 Qctachlorodibenzo-p-Dioxin 22 15 n/a 0.206 1.23 Hg/L Antimony 12 1 6 MCL 17.2 17.2 Beryllium 12 2 0.07 MCL 0.0 0.0			1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	22	-	n/a		0.046	0.05	50'0	0.046 NP	ďΝ
2,3,7,8-Tetrachlorodibenzofuran 22 6 n/a 0.007 0.03 ug/L Antimony 12 1 6 MCL 17.2 17.2 Beryllium 12 2 0.07 PRS 0.3 0.3 0.4			2,3,4,7,8-Pentachlorodibenzofuran	22	2	n/a		0,024	0,03	0.04	0.050 NP	NP
Action Octachlorodibenzo-p-Dioxin 22 15 n/n 0.206 1.23 Hg/L Antimony 12 1 6 MCL 17.2 17.2 Beryllium 12 2 0.07 MRG 0.3 0.4	-		2, 3, 7,8-Tetrachlorodibenzofuran	22	9	n/a		0.007	0.03	0.02	0.031 NP	NP
Hg/L Antimony 12 1 6 MCL 17.2 17.2 Beryllium 12 2 0.02 PRG 0.2		7	Octachlorodibenzo-p-Dioxin	22	15	n/n		0,206	1.23	0.58	1.22.5 NP	NP
12 2 0002 PRG 01	iroundwaler		Andmony	12	-	9 WCI	ار ر	17.2	17.2	17.2	34.4	34.42MD
TO THE CONTRACT OF THE CONTRAC			Beryllium	12	2	0.02 PRG		0.2	0.4	0.3	0.8	0.8 2MD

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				Backe	1	68.02MD	QM2	GW2	
				Number of Number of Criteria Criteria Minimum Maximum Mean Background Backe	Value			48000.02MD	
				Mean	Detected	27.2		13022.5	
	entrations			Maximum	Detected Detected Detected	34.0	315.0	%	
	PRG Conc		i	Minimum	Detected	20.3	2.0	5250.0	
	Lisk-Based	годгат	Cennessee	Criteria	Basis	18 PRG	135 PRG	18 PRG	
Table 3-2	ARAR or F	sampling P	Memphis 1	Criteria	Value"	81	135	81	
T	exceeding /	Background Sampling Program	Defense Depot Memphis Tennessee	Number of	Detects	2	P	12	
	onstituents Exceeding ARAR or Risk-Based PRG Concentrations	Ba	Defe	Number of	Analyses	12	12	12	
	Background Co			-	Constituent	Hg/L Chronium, Total	Copper	Модисьічт	
					Units	μ g ⁄L			
			Į.						

Background Basis

Groundwater, surface water, soil, and sediment criteria are based on Tables 3.7 through 3.10 of the Generic Remedial Investigation/Feasibility Study Work Plan (CH2M HILL, 1995a).

Terrachloroethylene (PCE)

Media Proundwater 쭚

dank cell = Criteria Value Not Available

√a = Criteria Basis Not Available

3WP = Groundwaler Protection Criteria

ESS = EPA Region III Residential Risk Based Criteria

ERRJECO = Terrestrial Ecology Criteria

PRG = Preliminary Remediation Goal

NOAA = National Occanic and Atmospheric Administration

AWQC = Ambiant Water Quality Criteria

IN STATE = State of Tennessee

MD = Background is twice the mean detected value

BCT = Background based on evaluation in the July 7, 1997 BCT meeting (See Section 3.3).

VP = Background is the maximum value based on nonparametric distribution.

VO = Background is the UCL95 value based on a normal distribution.

LN = Background is the UCL95 value based on a lognormal distribution.

JCL95 = 95th percentile upper confidence level on mean concentration

1g/L = micrograms per liter

mg/kg = milligrams per kilogram

1g/kg = micrograms per kilogram ng/L = nanograms per liter may be influenced by instrument noise or low-level background shifts rather than by an analytical signal. Therefore, metal concentration statistics that are dominated by low-concentration, J-qualified data should be considered approximate. Table 3-3 summarizes the distribution of analytical data qualifiers for metals exceeding applicable criteria. Appendix E presents a compilation of data qualifiers for detected background constituents.

Surface and Subsurface Soil

Aluminum, antimony, arsenic, barium, beryllium, chromium, iron, manganese, mercury, nickel, vanadium, and zinc exceed applicable criteria in surface and subsurface soils. Because all of the soil selenium detections are below the CRDL, the reasonable maximum exposure (RME) selenium soil background values are considered approximate.

Surface Water

Unfiltered metal constituents that exceed applicable criteria in surface water are aluminum, arsenic, total chromium, copper, iron, nickel, lead, silver, and zinc. However, there were a low number of detections of arsenic (three above and eight below CRDL), total chromium (two above CRDL), copper (two above and three below CRDL), nickel (five below CRDL), lead (six above CRDL), silver (two below CRDL), and zinc (one above and two below CRDL [see Table 3-3]). The RME nickel and silver values in surface water are considered approximate since they are below the CRDL.

Sediment

Metal constituents that exceed applicable criteria in sediment are antimony, arsenic, cadmium, total chromium, copper, mercury, lead, silver, and zinc. However, there were infrequent detections of antimony, cadmium, mercury, and silver (see Table 3-3). Lead was detected in 21 of 22 samples; three concentrations were above CRDL. The RME antimony and silver sediment concentrations are considered approximate since they are below the CRDL.

Groundwater

The RME values of antimony, barium, beryllium, and copper all exceed applicable criteria for groundwater. Barium was detected in every sample; 15 percent of the detections exceeded the CRDL. Antimony and arsenic each had one detection below the CRDL; the RME concentrations should therefore be considered approximate (see Table 3-3).

3.1.3 Semivolatile Organic Compounds

SVOC constituents that exceed applicable criteria in surface soil are benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-c,d)pyrene, and phenol. Phenol was detected in the subsurface samples as exceeding applicable criteria at six locations.

Fewer sediment samples had SVOC detections relative to the number of soil samples with VOCs. However, a greater range of SVOCs were detected in sediment at concentrations exceeding applicable criteria: acenaphthene, anthracene, benzo(a)anthracene, benzo(a)pyrene, chrysene, dibenz(a,h)anthracene, fluorene, fluoranthene, naphthalene, phenanthrene, and pyrene.

SVOCs were not detected in surface water or groundwater at levels exceeding applicable criteria.

	Table 3-3			•		
	Qualifer Summary for Metals Exce	eding Applicable Co	riteria			
	Background Sampli					
	Defense Depot Mempi					
·			Т	O.	alifier	
		Number		T X 2	I	$\overline{}$
Matrix	Chemical	Sampled	_ =	l j	υ	1
Surface Soil	Aluminum		 -	+-	+ -	╁.
DELIEU CHAIL	Antimony	22 22	22	╀	+ -	╄
	Arsenic		22	 '-	- 8	╄
	Barium	22 22	22	+		╀
	Beryllium	22	12	15	+-	╀
	Chromium, Total	22	16	1 6	 ' -	╀
	Iron	22	22	+ -	-├	╀
	Manganese	22	15	7	 	╀
	Mercury	22	3	1	8	╁
	Nickel	22	22	+ -	 	╁╴
	Vanadium	22	22	┼	+	╁╾
	Zinc	722	3	19	+	╁
ubsurface Soil	Aluminum	22	22	† ′′	╁┈	╌
	Arsenie	22	22	 	┼	⊢
	Barium	22	22	 	 	╁
	Beryllium	22	 -	14	8	⊢
	Chrontium, Total	22	16	6	├ ┈	┢
	Cobalt	22	4	18	†	╁─
	lron	22	22	 ''-	 	一
	Manganese	22	15	7	<u> </u>	H
	Nickel	22	21	1	t	t
	Venadium	22	22		†——	t
	Zinc	22	3	19	<u> </u>	┢
urface Water	Aluminum, Dissolved	22	1	1	20	t
	Aluminum, Total	22	5	13	4	Н
	Antimony, Dissolved	22		1	21	
	Arsenic, Dissolved	22		6	11	_
	Arsenic, Total	22	3	8	8	
	Chromium. Dissolved	22		1	17	
•	Chromium, Total	22	2		20	
	Copper	22	2	3	17	
	Lron	22	22			
	Iron, Dissolved	22	6		16	_
	Lead	22	6		14	
	Lead, Dissolved	22	İ		21	
	Nickel, Dissolved	22	1_1		21	
	Nickel, Total	22		5	17	
	Silver, Total	22	[2	20	
	Zinc, Dissolved	22	1		21	
dimenı	Zinc. Total			2	8	1
Maritie III	Antimony	22		2	17	3
	Arsenic Cadmium	22	5	12	3	_2
	Chromium, Total	22	3		_19	
	Соррег	22	12	10		
	Lead	22	11	5	6	
	Mercury	22	3	18		1
	Ninkel	22	1		21	

22 22

Nickel

Table 3-3

Qualifer Summary for Metals Exceeding Applicable Criteria Background Sampling Program

Defense Depot Memphis Tennessee

				Qua	lifier	
Matrix	Chemical	Number Sampled	=	J	υ	υJ
Sediment	Silver	22		ı	21	_
(continued)	Zinc	22	13	9		<u> </u>
Groundwater	Antimony	12		1	11	
	Beryllium	12		- 2	10	_
	Chromium, Total	12	2		10	_
	Соррет	12		3	8	_
	Magnesium	12	12			

Notes:

"=" = Detected above the method detection limit

I = Reported value estimated

UJ = Analyte not detected at an estimated detection limit

U = Analyte not detected at the CRDL

CRDL = contract-required detection limit

Blank cells indicate zero qualifiers.

3-10

3.1.4 Volatile Organic Compounds

The VOC detected as exceeding applicable criteria was 1,1-dichloroethane (1,1-DCA) from groundwater monitoring well MW-45 at 2.0 μ g/L.

3.1.5 Pesticides, Herbicides, and PCBs

Heptachlor epoxide was detected exceeding the PRG in one surface soil sample. PCBs were detected exceeding the PRG at two surface soil sample locations. Alpha-chlordane and gamma-chlordane were detected above ARARs in five sediment samples. Pesticides dichlorodiphenyldichloroethane (DDD) and 1,1,1-dichloro-2,2-bis(4-chlorophenyl)ethylene (DDE) exceeded criteria in three and two samples, respectively.

Pesticides were not detected in surface water or subsurface soils.

No herbicides were detected in any media.

3.1.6 Dioxins and Furans

For surface soil and surface water, the maximum value of the dioxin/furan toxicity equivalency factor (see Section 3.2.5 for definition) exceeds the applicable criteria of 0.004 micrograms per kilogram ($\mu g/kg$) for residential soil and 0.00001 $\mu g/L$ for surface water. The toxicity equivalency factor RME for subsurface soil also exceeds the soil criteria.

3.2 Background Statistical Summary and Data Evaluation

This section summarizes the results of the statistical analysis of the background analytical data for surface soil, subsurface soil, sediment, surface water, and groundwater at DDMT. Table 3-1 presents definitions for statistical terms presented in the following sections and summary statistics tables. Statistical summaries of background values for all detected parameters are provided in Section 5 (see Table 5-1). Complete statistical tables of all analyzed data are presented in Appendix F.

Comparisons between perimeter and offsite soil samples are made in the following sections to confirm that there are no gross (i.e., order of magnitude) differences in concentrations between samples taken at the DDMT perimeter and offsite. Such differences would indicate that the samples may have intersected previously unknown waste disposal operations and therefore are not valid background data.

Surface water and sediment samples were taken at the distinct locations (e.g., Audubon Park) discussed in Section 2.2.2. Because these locations are upgradient of DDMT and therefore not potentially impacted by DDMT waste management operations, statistics from each location group were not evaluated to determine if there were distinct location-specific sample populations. Differences in the concentrations between locations are indicative of the ambient variability of constituents in the urban Memphis environment and are not an indicator of potential impact from DDMT operations.

3.2.1 Metals

Appendix F-1 provides a listing of the statistics for background metals for all sample media. Table 3-4 presents station-specific detected metal data for all media. The matrix-specific distribution of the metal data is discussed in the following sections.

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				Sinc	66.7 =	50.1 =	51.9 =	73 J	73.8 J	87.3 J	56.9 J	74)	82.2 J	49.8 J	81.4 J	75.1	37.4 J	89.5 J	70.4 J	54.2 J	35.6 J	65.3 J	65.6 J	51.4 J	51.7 J	39.1 J	63	88	8	62=	60.7 =	73.1 =	68.3 J	15.3 J	59.9 J	43.2 J	55.6 J	66.91	79.5 }	76.2 J	17.51
				muibensV	34.7 =	26.8 =	29.2 =	31=	26.8=	28 =	24.3 =	30.8 =	21.4 =	24 ==	28.1 =	26.4 =	19.1 =	27.6 =	22 =	25.4 =	17.7 =	30.9 =	35.2 =	23.2 =	21.5 =	19.2 =	56	24	28	26.1 =	30.3 =	31=	30.6 =	30.4 =	24.8 =	26.2 =	26.9 =	29.3 =	31.3=	23.1 =	17=
:				anvilledT																											·										
				muibo2		-																																			
				Silver						1.5																	1		_									.42 J	.56 J		
-		<u>-</u>	- · [muinsis2	. 1	ļ	-		_				_	1			_		.3]		1	.5 J		ı	1.	.41.5	0.40	0.46	0.30		-	.32.1	. *	1 :	Į		_	₹1.			
	•	•		mulssato¶	= 0811	1150=	f 0501	= 0011	1340=	1460=	835 J	1310=	1300=	878-1	964 J	999 J	707 J	1100=	893 J	848 J l	701 J	832 J	1450=	806 J	734 1	641 J	1013	910	1115	889 J	1360 =	1010 J	11401	1150 J	I 286	879 J	1160 J	1480=	990 J	814 J	716 J
				Nickel	18.4=	14 =	15.2 =	17.9=	20.9=	19.5 =	18.7 =	18.6 =	12.9 =	16.7 =	21.2=	15.2=	10.6=	17.6=	17.5 =	18.1=	11.1=	17.8 =	21.4 =	14.6=	14.4=	10.4 =	16.	15	81	20.4 =	20.6 =	22.3=	17.9 =	22.4 =	19.3 =	18.9 =	18.9=	18.6=	17.5 =	20.4 =	17.7 =
				Mercury						.23 =			.11=				.41 =				.1.3						0.21	0.21	0.23						111.						
•	•			. szanagaak.	524 =	859 =	= 669	713 =	750=	772 =	= 229	330 =	925 =	549 J	548 J	505 J	492 J	781 J	625 J	654 J	1080 =	644 =	447=	708 =	648=	411=	652	632	119	= 609	494 =	936=	695 =	= 646	812=	721 =	634=	772 =	1030 J	552 J	1570)
				Magnesium	3200=	= 0651	2150=	2720=	2620=	2610=	2540 =	2870=	1170=	2270=	= 0962	2310=	1370 =	= 0997	2550=	2550=	1110=	3170=	5890 =	2030=	1980=	1460=	2308	2065	2551	2720=	2880=	3170=	2930 =	3370=	2510=	2550=	2440=	2960=	2310=	2610=	1250=
	ata	_	2	Lead	17.2 =	<u> </u>	15.3 =	25.1 J	Н		Н	\dashv	73.3 J	11	15.5 =	30.5 =	24.2 =	28.8=	22.5 =	15.2 =	12.1 =	14.8 =	15.1 =	15=	13.5 =	Н	21	22	21	11.9 =		13.2 =	22.7 J		⊢	H	_	\vdash	┝┯	111	10.4 =
4	Station-Specific Detected Metal Data	Background Sampling Program	Defense Depot Memphis Tennessee	aori	26100=	15800=	18600=	21500=	Н		19400 =	Н	12800 =	18400 =	23000 =	19100=	12000=	21400 =	13700=	= 00681	10800 =	24500=	22800=	· 15900 = [14800=	Н	18523	16945	20100			24900 =	22900 =	24700=	⊢	⊢	20900=	23900=	23500=	┉	10300=
Table 3-4	ific Detec	nd Sampl	oot Mem	Соррег	19.7=	12.6=	13.8=	18.6 J	18.2 J	19.2 J	17.4 J	20.1 J	19.1 J	17.9=	23.3 =	20.1 =	10.7 = [21.2=	13.9=	18.4 =	7.3 = [20=	. = 71	13 =	17 =	9.8	_17	91	18	17.6=	17.6=	21.1=	19.9 J	23.1 J	17.6 J	15.5 J	17.8 J	20.2 J	19.7=	18.1=	
	tion-Spec	3ackgrou	lense De	Sobalt	9.1.3	10.2 J	9.2.1	9.4]	9.9 J	8.9 J	12.3=	8.5 J	9.8 J	8.8 J	9.3 J	9.1	10.6=	11.7 =	7.3	9.7 J	7.6 J	11.4 =	9.4.1	6.7 J	6.8 J	5.7 J	6	6	01	8.9 J	9.4.1	11.6 J	11.4.5	20.4 =	9.2.1	8.1	9.8 J	9.8 J	20.2 =	8.8 J	7.6 J
	Sta	- 1	ă	Chromium, Total	17.7=	14.6 =	14.3=	15.7 J	14.3 J	15.9 J	16.1 J	13.5 J	11.13	12.2 =	14.3 =	14.4=	= 6.6	= 14.1 =	14.9 =	13 =	8.4 ==	17 =	16.2 =	12.4=	11.8 ≈	= 1.01	14 T	12	15	13=	16.8=	14.4=	15.2.3	15.4 J	12.4.1	13.61	14.1.3	14.4 J	16.3=	11.2 =	10.2 =
				Calcium	642.3	686 J	191	2520 J	2030 J	2340 J	2050 J	1490 J	686 J	2050=	699 J	7490 =	668 J	1410=	30600=	= 0961	424 J	940 J	1030 J	1580=	1360=	863 J	2920	1617	4222	983 J	745 J	1130 J	623 J	1420 J	10701	2200 J	1240 J	587 J	730 J	1450=	2630=
				om imba O				188.					.81 J							189			-		1 99:		89.0	0.74	0.63			-				71.1		117.			
				Beryllium	.61 J	.53 J	.561	.58 J	.59 J	.59 J	.56 J	6.3	.52 J	£ 74.	19.	.54 J		153.	.45 J	51.5							0.55	0.53	0.56	.57 J	.62 J	f 19	.59 J	. 69 <u>.</u>	.59		.51	54.1	54.J	.53 J	L 59.
				muined	117=	144=	146=	128=	157 =	144=	134 =	= 091	141=	95 =	135 =	= 101	77.1 =	127 =	116=	117=	124=	121 =	140=	131 =	128 =	95.1 =	126	117	135	154=	211 =	166=	120=	243=	195 =	90.8=	= 201	95 =	113=	126 =	236=
				SinsenA	11.9=	10.3=	8.6=	11.2=	20.8 =	= 1.61	9.6 ≔	12.3 =	27.7=	= 9'9	= 8:11	7.5 ==	7.4=	11.3=	7.3=	8.I =	4.2 =	13.9=	8.8 =	=6	6.5=	6.2 =	11	01	12	10.4 =	9.4 =	11.7=	12.1=	[4:] =	8.5=	4.9=	7.9=	11.7 =	9.5=	8.4=	3.5=
				yaomitaA				3.5.1																			3.5.		3.5												
				munimul A.	17000=	12900=	15300=	14500=	11600=	12400=	9410=	14300 =	10300 =	= 0188	13900 =	=00611	= 0918	12800=	9410=	= 0566	8930=	13500 =	18500=	= 00801	=0616	8360=	50611	11123	12687	= 11800 =	13300=	13900=	14500=	13700=	= 11500=	9820=	=00001	14300=	14900=	= 0206	8200=
				nottano.J\nottanS	BS01	BS02	BS03	BS04	BS05	BS06	BS07	BSOS	BS09	BSIO	BS11	BS12	BS13	BS14	BS15	BS16	BS17	BS18	BS19	BS20	BS21	BS22	IIV	Offsite	Perimeter	BS01	BS02	BS03	BSO4	BS05	BS06	BS07	BS08	BS09	BS10	BSII	BS12
				Matrix	Surface Soil	(тр/кд)	5																							Subsurface Soil	(mg/kg)										

			əmiX	71.3 J	29.1	4	33.5 J	72.9 J	49.3 J	70 J	32.1 J	39.7 J	30.9 J	57	57	58	12.3 J	15.6 J	10.4 J	12.3 J	9.7 J	8.4 J	7630 J	89.9 J	90.5 J	87.9=	59.4=	49.4=	59.9 =	= 191	46.8=	53.5=	19.5=	78.1=	43.7 =	73.7 =	27.8 =	129=
			muibsaaY	- 82	24.2 =	=81	31.7 =	27.1 =	21.2 =	25.9 =	15=	27.5 =	= 9.81	26	24	27	4.7 J	4.9 J	4.4 J	5.6 J	9.2 J	4.5 J	7.5 J	6.1.3	8.6 J	31.51	18.91	25.3 J	31.5	13.4 J	27.8 J	16.61	13.7 J	18.8 J	28.9 J	17.3 J	6.4 J	22.1 J
			mvilladT																												.52 J		.561					
			muibo2																						•													120 J
			ZIJAGL											0.49	0.49											.89 J												
			muinələ2											0.32		0.32								.37 J		1.5.1			1.13		· ·		_		.37 J			
-			muizzatoA	f 198	10801	181 J	522 J	1030 1	586 J	817.1	ir 909	483 J (499 1	902	807	996	1		1		1					1080 J	494]	1040 J	812 J	-	838 1	8113	269 1	674 3	997 J			
			Mickel	19.7 =	19.1 =	12.6=	17.6=	20.4 =	18.8=	20.2 =	9.9=	20=	9.1	18	1.7	61									37.4 =	18.1 =	12.41	14=	16.6=	5.3.1	13.9 =	13.9=	5.8.1	14.5=	19.1 =	811		19.1 J
			Метситу											0.11		0.11															•			2=				
			. sesanagnaM	1020 J	T 609	231 J	1968	821 =	506=	948=	£16 =	1580=	256=	770	879	199	±08	73.3=	70.2 =	=001	= 19	99.I =	2610=	422 =	213=	= 999	328=	406=	618=	853=	= 159	587 =	227 =	= 199	433 =	221 =	59.3=	210=
			muisəngaM	= 0067	2680=	= 0591	2240=	2950=	2820=	2850=	1200 =	1650=	1240=	2449	2249	2649	211 J	101 J	51.2 J	57.2.1	54.7 1	66.6 J	803 J	812.1	1730 =	2530=	1240 J	1930 =	1860=	2420=	=0191	1430=	474 J	1380 J	2060 =	1370 J	2950=	1610 J
	ata	_ 21	bes.d	15.5 =	┡	10.5 =	7.8=	13.3 =	9.5 =		€6.9	13=	8.6=	12	12	12	3.2 J	1.7.1	2.3 J	2.9 J		43.8 J	133 J	16.5 J	291 J	\dashv	┥	┥	12.4)	-	Н	29.2 J	14.1	31.5 J	Н	H	"	43 =
4	Station-Specific Detected Metal Data	Background Sampling Program Defense Depot Memphis Tennessee	Iron	23200 =	⊢	12300 =	15800 =	22400 =	18800 =	22100=	9380=	17200 =	8340=	19242	18129	20355	3330=	3480 =	5410=	6480 =	4980=	4080=	= 00/91	13400=	-	┪	┥	Н	19500 =	8210=	18100=	Н	7920=	11800 ==	=	${f H}$	╗	9520=
Table 3-4	ific Detec	id Sampli oot Memp	Соррег	21=	17.2 =	12.4=	11=	= 9.61	15=	= 02	7.4=	10.5 =	= 6	91	15	17			1.7.1				21.7 =	7.1 =	112=	26.6 =	:3.9 =	:4.2 = T	16.5 =	2.8.1	12.6 =	12.1 =		19.1 =	13.5 =	512.1	1291	1250 J
	ion-Spec	ackgroui fense Dep	MadoO	18.6	12.2 =	6.5 J	9.3 J	10.5 J	7.6 J	8.7 J	5.2 J	14.3 =	5.1	10	10	=			1.2.1				7.5	4.2.3	5.3.1	10.8 J	6.91	9.7.1	9.4 J	3.5 J	1.6.1	7.8 J	4.7 1	8.4 J	8.8 J			
	Sta	B De	Chromium, Total	12.1 =	12.2=	9.3=	15.8=	12.3=	13.1 =	11.8 =	8.7 =	18=	10.3 =	13	13	14	4.1)	5.5 3	5.6 1	4.8 J	14.13	4.1.3	11.43	9.8 J	39.7 J	16.1 =	9.8=	14.2 =	15.7 =	11.5 =	15.4 =	10.4 =	8.8=	174=	14.2 =	-6	5.8=	9.6 J
			Calcium	10601	1550=	10401	1590=	1510=	1650=	11401	765 J	11001	\$11.1	1216	1197	1236	290 J	426 J		134 J		289 J	20000 J	14200 J	27800 J	3060=	1680=	1160 J	1340 J	26800 =	1480=	1900=	1150 J	950 J	710 J	3450=	7650 =	4120 J
			muimbs2	_	.73.1			-						0.72	0.71	0.72		_					38.2 =		1.3 =									3.9 =			·	_
			Beryllium	£ 59.	.49 J		.S9 J			-				0.59	0.58	0.59										.7.5		.52 J	.77 J		1 539.				.S7 J			
ľ			титая	187 =	135 =	= 811	89.9 =	177 =	121 =	161	136=	= 961	94.7 =	150	152	148	17.9 J	6.8 J	4.7 [3.7 J	4.9.1	1.7.1	23.1 J	18.2 J	30.6 J	126 =	70.9=	119=	115=	25.9 J	104 =	119=	40.7 J	137 =	92.2 =	196	14.3 J	115 J
			oinsen A	13.4=	8=	= 1.9	3.6=	11.l =	7.7=	12.3 =	3.4=	6.5 =	3.1 =	6	8	6	1.5 J	1.6.1					3.8 ≔	4.9=	3.4=	7.1.3	5.7 1	3.9 J	5.1.3	2.4 J	7.6 J	11.11		10.8 J	10.1	7.8 =	4.7=	10.3 J
			γnominn.A.																	3.9.1					3.7.1													\exists
			munimulA	12400=	10200=	1600 =	12300=	= 00801	8200 =	11200=	6820 =	8230 =	7380=	10915	10136	11693	1490=	553 J	592 =	517=	537 =	490 J	1961	879 J	1220=	= 00911	= 0859	10100=	9840=	1440=	12100 =	9460=	3300=	8720=	14200 ≕	6920 =	1140=	8460 =
			Station/Location	BS13	BS14	BS15	Н	BS17	BS18	BS19	BS20	BS21	BS22	Ail	Offsite	Perimeter	BW01	BW02	BW03	BW04	BW05	BW06	BW07			\dashv	┪		BW13	BW14	BWIS	BW16	21MB	BWIB			BW21	BW22
			Matrix	Subsurface Soil	(continued)												Sediment	(тв/кв)																				

		ontZ	100	47	S S	2603	77	2										64=				146.1					221 J					144	221		\$		146	
		muibensV	15	202	74	7	15	72	9										15.3	13.2.1	14.8 J	39.4 J	15.2 J									20					20	
		@willedT	0.54	0.56	0.52									T				Ī		T									,	<u> </u>		\vdash		T	T			
		mulbo2	120				120			9530=	147001	14900	17900	1720n =	170001	12400 1	2300 1	12400=				2890 J	i	8850=	8940 =	= 0869	<i>€770</i> =	= 0889	= 0608	7350=	7460 =	10697	6876.7	8895	12367	7633.3	2890	15205
		Silver	0.89					0.89															1.8.1		1.8)							æ: −	T	8:			1.8	
		Selenium	0.84	0.37		0.37		1.30						T			<u> </u>									1							T	T				
-	- -	mutssato¶	779	547	825		<u> </u>	857		3280 J	4800 J	5420=	3070 1	31301	2790 J	6280=	6310=	6730=	3190 J	3230 J	3570 J	5130=	3590 1	733 J	1000	2550 J	1980	2320 J			<u> </u>	3637	2283	298	0440		3742	3748
		Nickel	15	13	4	37	7	13											11.91	10.2 J	6.9 J	19.91	8.1.3			1						=					11.	
		Mercury	2.00	5.00																						1	1											
		Мапрапезе	436	442	619	1082	163	554	85	399=	320=	326=	62.4 =	46.5=	306=	134 =	308=	363=	744=	635=	= 699	1140=	= 659	58.2 =	= 9.19		197 =	223 =	125 =	119=	131=	328	204	9	368	125	769	243
		Magnesium	1216	1305	1520	1115	1977	9661	06	3840 J	5470=	5410=	= 01.09	6570=	= 0959	4140 J	4180 J	4380 1	3300 J	3170 J	3300 J		3260 J	ᅥ	\pm	1361	1470.1	1530 J	3170 J	3280 J	3210 J	3851	1500	2715	4233	3220	3574	5760
	5 8 5	bss.l	36	20	24	147	29	14	11	-	-					<u>-</u>	1	13.7 = 4	,	┞	6.8= 3		6.5 = 3		7	7		-		3	3	6			14		8	
	Table 3-4 Station-Specific Detected Metal Data Background Sanipling Program Defense Depot Memphis Tennessee	aori	11539	12573	15500	20267	7807	15062	4627	2130=	1070=	941=	628=	460 =	808 =	346=	1420=	-	\vdash	6820 =	Н	\dashv	╣	734=	830=	=0001		1510=	803=	792 =	847 =	3052	1190	782	1252	814	9954	9001
	Table 3-4 ilc Detected d Sampling ot Memphi	Соррет	135	1 91	Н		930		7 7	2	=	6	٩	4		_	-	<u> </u>	7	89	⊣	76.4 = 20	7	7	∞ 	= '	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	╁	4	ᆛ		37 3				\dashv	76 9	\exists
	Tales Tales	Cobalt	7	7	8	7 9	۴	8	. 1	_		<u> </u>		-		-	<u> </u>				75	76	+	+	+	$\frac{1}{1}$	+	+	= - 	2	12						7	\dashv
	Station Bacl	LetoT	61	99	Н	20	8	13	. 9				-						1=			18=	+	-	+	+	+	+	1			18					<u>8</u>	\dashv
		Chromium,	_	_		Н	\dashv			= 00	= 00	= 00	= 0	= 0	= 0	= 0	= 0	= 0	0= 18.1)=(Н	\dashv	<u> </u>	_ 						_		Н	1.1	0	33		\dashv	-[
		Calcium	17 7429	Щ	Щ		5073	12808	285	22200=	24500 =	23400 =	27900=	26600=	27300=	33400=	33600=	34800=	8830=	8630=	8730=	9370=	8810=	e300 =	6500=	44107	4440.1	4420	9170=	9220=	9380=	15999	4447	6400	33933	9257	8874	25317
		Cadmium	14.47	3.90	Н	19.75		99					L									\dashv	+	$\frac{1}{1}$	+	+	+	+	$\frac{1}{1}$	4	\dashv	\dashv	\dashv			\dashv	$\frac{1}{1}$	_
		Beryllium Beryllium	H	Н	\dashv	7	\dashv	1 0.66		1.1	9.1	5.3	4.1	ſ	[f Z	2.1	2.1) [[t	1 (15	_	<u>.</u>	- -: :	- -::			2 :		<u>.</u>	<u> </u>					 	+	-
			H	06		24			®	49.1 J	71.9 J	67.5 J	59.4 J	88 1	68.7 J	J 54.2 J	Н	J 95 J	\dashv	= 71.9 J	\dashv		╅	33.1.)	33.91	1020	7	†	+	┪	7	63	5 	35	77	4	- - -	62
		olnssrA	9 8	10	6	\dashv	8	2	_							6.8 J	8.4 J	9.6	8.1.3	=	9.6 J	13.6=	10.8=	4	+	+	+	` -	00	6.8 J	7.7 J	<u> </u>	\dashv	_	80	-	= - 	4
	:	ynomitnA	2 3.8	0	\dashv	3.7	_	4	3.9	0	=				=			=	-	_	_		<u> </u>		<u> </u>	<u> </u>		<u> </u>	<u> </u>		_	_	-	\dashv	4	$\frac{1}{1}$	_	$\frac{1}{2}$
		тыттијА	5042	ᅥ	\dashv	-	-+	4	4	279	= 009	577			266 =			549	2640	2470	5910 J) 1690	2790	775	600	2 2	3 3	5	<u>,</u>	<u>*</u>	<u></u>	╅	\dashv	╣	-	367	4	4
		nothero. Turotheri &	Ν	Audubon	Botanical	Cane	Chickasaw	MOIT	Nanconnah	BW01	BW02	BW03	BW04	BW05	BW06	BW07	BW08	BW09	BW10	BW1	BW12	BW13	BW14	CI M SI	0 K	BW19	D 101 10	21 40	DW 20	BW2I	BW22	₹	Audubon	Botanical	Cane	Chickasaw	MOH	Nonconnah
		Matrix	Sediment (continued)							Total Surface Water	(ug/L)																			1.				<u> </u>			<u>.</u>	

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		mulbo2	9480 J	14300 J	13400 J	17500 J	16200	16000 J	12200 J	11600 J	100611	_			ļ	-	10616	9030	7160	6720 J	6720 J	7210 J	7230 J	7230 J	10769	6866.7	0116	11900	7223.3		14480	45200 1		-	<u> </u>	L	_		<u> </u>
		Silver	_							L					L			L													_	L		ļ.	ļ.				
		Selenium] 	J	=		1.4]	-17									=		12		_	_	1.50			1.40	_	_	38	╀				L		L	
		multzeno4	3590 J	4370 J	4600 J	3630 J	3120 1	3220 J	6330=	5780=	6450=	2520 J	2450 J	2620 J	2710 J		1050 J		1330 J	1760 J	1600			L	1381	1563	1050	6187		2575	3755	1330 J	4040 J	962 J			849 J	858 J	1350 J
		Nickel							118=													i			118			118				25.61	12.1.3	9.4 J					
		Mercury																																					
		Manganese	340=	162 =	68.4 =	48.6=	40.3=	31.9=	713=	137 =	156=	308 =	351=	422=	= 622	288=	39.9 =	32.4 =		38.7 =	36.6=	86.9=	75.1 =	93.2=	176	38	36	335	85	320	115	143=	296=	17.2 =	75.6 =		326=	228 =	112=
		Magnestum	3830 J	5290 =	4770 J	6550=	6270=	=0/19	4190 3	3980 J	4060 J	2440 J	2470 J	2470 J	2350 J	2310 J	2620 J	2540 J	15001	1220 J	1330 J	3040 J	3080 J	3030 J	3432	1350	2580	4077	3050	2408	5480	= 0016	= 0919	5250=	6470=	2000 =	9500=	= 0998	20698
	ā ě	besJ						\dashv	11.3 =																11			11.				7.6 = 19	-	-	٦		=	8	-
	Station-Specific Detected Metal Data Background Sampling Program Defense Depot Memphis Tennessee	nori	632=						<u>"</u>	274 =			272 =	267=										118=	109			1157	811	270	632	3970= 7	⊢	5190=	598 3		2280 J	648=	1120 1
Table 3-4	ile Detect d Sampli ot Memp	Соррег										_	-					 			F											-	315=		4.4]	-	3.8 J		2 J
	on-Spect ackgroun ense Dep	Cobalt	-					1	1								-			Ė												12.3 J	├	2.2.1	H		9.5.1		
	Statt B. Def	Chromium, Total				16.7 J								_					-						11						17	34=	╁	20.3=		-			
		Colcium	22000 =	23600 =	\dashv	⇥	25600=	25200 =	34200=	30800=	32400 =	7730=	7860 =	7870 =	7510=	7380=	6320=	6280 =	200 J	3710 J	3930 J	8720=	= 0568	= 0088	15062	3947	6300	32467	823	0/9/	24117	┝	⊢	9950= 2	14000 =	22900=	34700=	17400=	16500=
		Cadmium	22	23	20	27	য়	52	*	30	32	7	178	7	7.	7	9	79	4.	3.	36	87	88	88	=		٩	3	20		7	\$		66	14	22	34	71	191
		Betyllium				_	\dashv	+	+										<u> </u>							1	_					<u> </u>	-		21.5		.35.1	_	
		anthe8	39.5 J	58.8 J	48.3 J	56.61	.51	52.4 J	<u>\$</u> .	48.6 J	50.9 J	34.8 J	34.8 J	34.8 J	36.1	35.7 J	23 J	26.5 J				33.2 J	33 J	32.3 J	4		23	99	33	35	52	66.71	42.9 J	49.5 J	47.6 J	┞	Н	99.3 1	91.11
		oinse1A	36	35	4	*	3	-	_	┪	7.2 J SC	34	34	34	3	35	2	26		,		5.1 J 33	5.2.1 3	\dashv	ۅ	-	-			,	;	99	42	49	47		12		16
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		YaomitaA	Ц		_	16.4 J	+	$\frac{1}{1}$		-															9	_	_				16.4	11	<u> </u>	1	1		1 17.2 J		
		muntimulA				_	\downarrow		280=					I 161			 						_		236	_	4	280		191		2670=	235 J	718 J	287 J		586 J		_
		Station/Location	BWOI	BW02	BW03	BW04	BW05	BW06	BW07	BW08	BW09	BW10	BWII	BW12	BW13	BW14	BWIS	BW16	BW17	BW18	BW19	BW20	BW2I	BW22	ΑII	Audubon	Botanical	Cane	Chickasaw	МОН	Nonconnah	MW16	MM19	MW24	MW28	MW30	MW45	MW46	MW48
		Matrix	Dissolved Surface	Water	(ng/L)																											Groundwater	(ng/L)						

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Matrix	rdwater	4	nued)						
	Grou		1000		_	_			Notes
	Station/Location Antimony Arsenic Calcium Calc	Station/Location Antimony Antimony Arachium Chromium, Chromium, Copper Iron Lead Magnestum Cadmium Copper Iron Lead Magnestum Copper Iron Lead Magnestum Cadmium Copper Iron Iron Iron Iron Iron Iron Iron Iro	MW49 Steatlon/Locatic Antimony Artenium Artenium Calcium Calci	X Station/Locatic Andminum Andmony Andmony Arsenic Chromium Arsenic Chromium Chromi	Ashardium Ashardium Selenium Selenium Selenium Selenium Antercury MW49 MW49 MW49 MW50 MW50 MW50 MW50 MW50 MW70 Assessment WW50 WW52 WW53 WW52 WW53 Arrentinum Arrentic MW49 MW50 MW67 MW67 MW73 MW	Autominum	Americanic Ame		

Notes:
Blank cells indicate not detected at the CRDL.
Group value reported as the arithmetic average.
"=" = detected value
J = estimated value
ND = not detected
MOH = Medal of Honor
CRDL = contract-required detection limit

Soil

Figure 3-1 shows the spatial distribution of the total metal concentration at each surface soil location. Typically naturally occurring (calcium and magnesium) and anthropogenic (chromium and arsenic) metals are shown individually in Figure 3-1. The basic statistics for shallow soil metal concentrations in the perimeter and offsite soil groups (shown in Figure 3-2) indicate that there is a trend of somewhat higher concentrations in samples taken along the perimeter of DDMT relative to those taken offsite (see Appendix F-4).

Differences in the concentrations of metals between the offsite and perimeter soil groups may result from natural differences in soil type or past and present land management activities at DDMT that could alter the natural distribution of metals (e.g., grading and tilling). The statistical significance of the differences in metal concentrations between the offsite and perimeter sample groups was initially evaluated using a statistical t-test. T-tests are used to determine whether two sample populations are from the same parent population by evaluating the statistical significance between mean concentrations in the sample populations (Davis, 1973).

However, the commonly used statistical t-test assumes that both the perimeter and offsite data sets are normally distributed. This is not the case for some constituents. The statistical summary provided in Appendix F shows that many of the surface soil constituents are not normally distributed for the combined data set. Because the t-test is not valid for some of the constituents, the appropriate statistical test is the Wilcoxon test.

The Wilcoxon Rank Sum test (equivalent to the Mann-Whitney U test) is a nonparametric, two-sample test that is independent of the underlying data distribution and sample size. The Wilcoxon Rank Sum tests the null hypothesis that the distributions of two populations are equivalent. The alternative hypothesis is that one distribution lies to the right of the other.

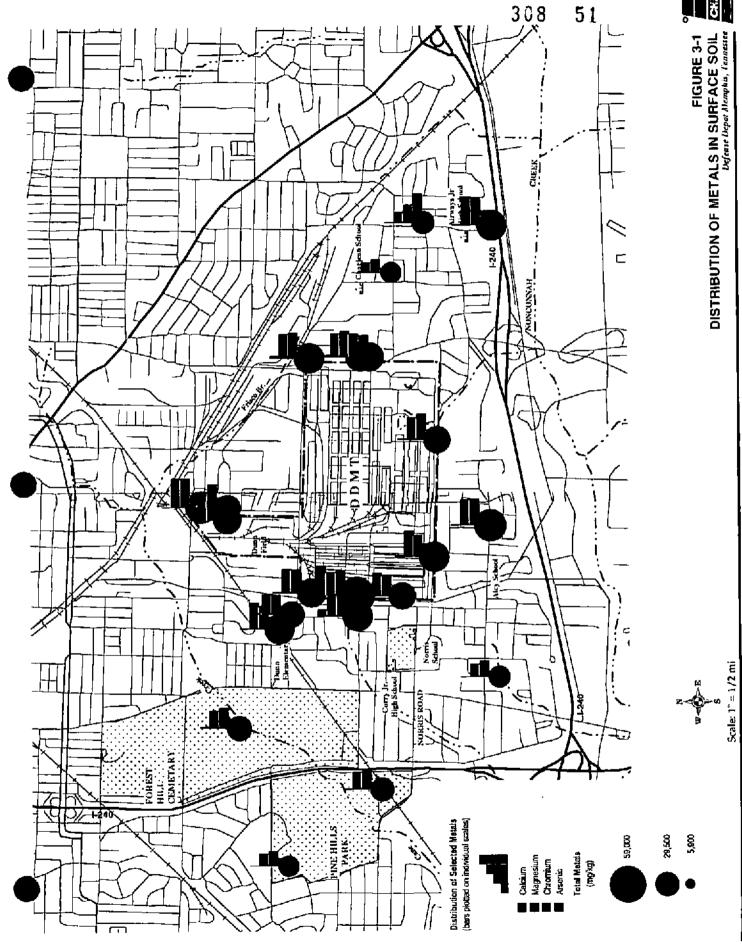
To perform the test, data from both sets are combined and ranked from low to high; the ranks for tied values are averaged. The calculated sum of ranks for each data set are used to calculate simple linear rank statistics, which are then compared with statistics from the normal distribution. Scores that exceed expected values for a normal distribution lead to rejection of the null hypothesis and acceptance of the alternative hypothesis that the groups are from different populations. The Wilcoxon Rank Sum test was implemented using the SAS Procedure NPAR1WAY.

Sections F-4 and F-5 of Appendix F present the Wilcoxon test results for surface and subsurface soil, respectively. Results of the Wilcoxon test showed that for all constituents except chromium and potassium, the perimeter and offsite data were similar and the combined data set was used to establish the background value. Background values for chromium and potassium were developed using only the offsite data. Wilcoxon test results for subsurface soils indicate that the perimeter and offsite soils are from one population for all constituents.

Variations in metal concentrations in surface soil may result from land management activities or from natural variation in the soil type. Two lines of evidence suggest that the differences result primarily from grading or other reworking of the soil. First, the lowest concentrations of leachable metals, such as calcium, iron, and zinc in perimeter soil samples, were associated with samples in the northeast portion of Dunn Field (BW01, BW02, and

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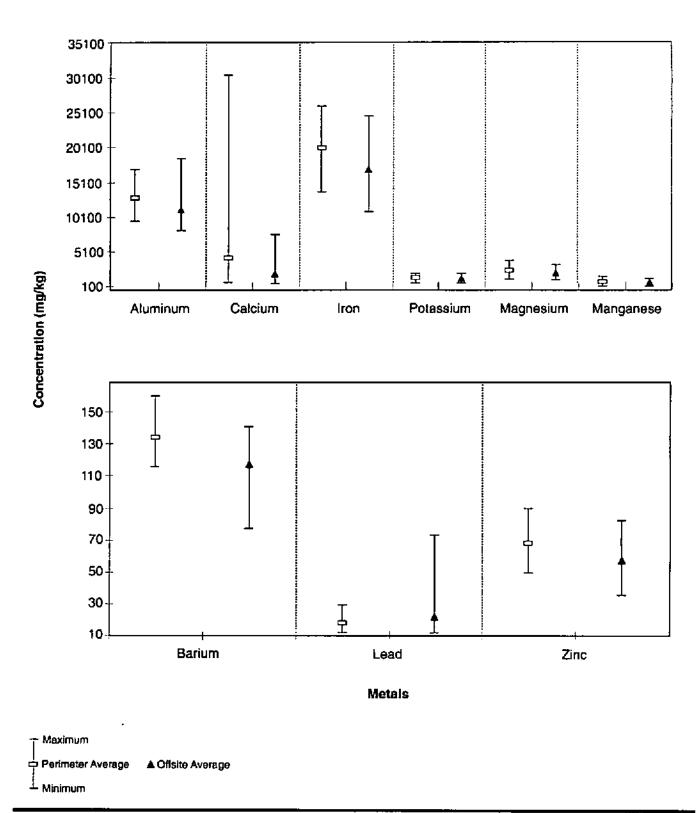
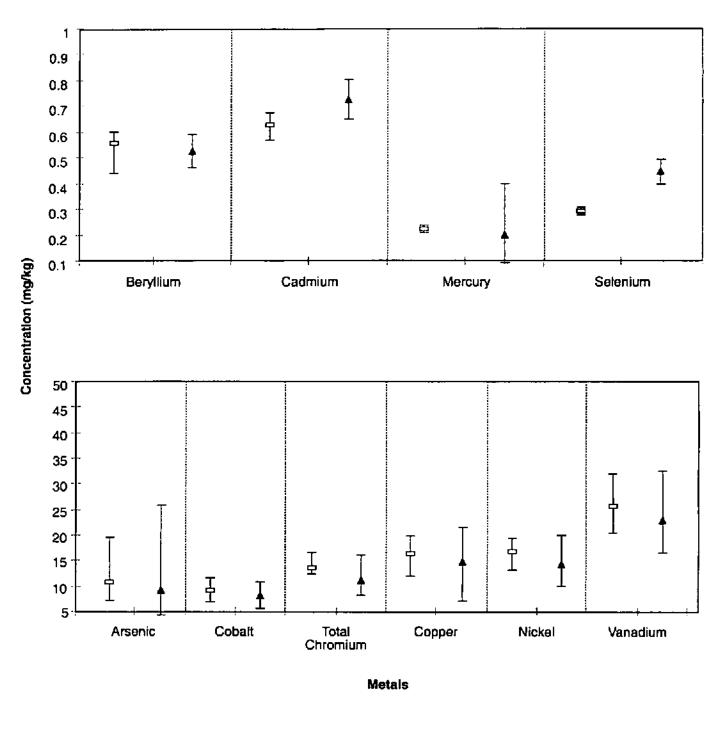


Figure 3-2
Perimeter and Offsite Metals Data
Detense Depol Memphia, Tennessee



Meximum

□ Perimeter Average

■ Minimum

Figure 3-2 (continued)
Perimeter and Offsite Metals Data
Defense Depot Memphis, Tennessee

BW03) taken from undisturbed Falaya and Memphis Silt Loam (see Figure 3-3). Because these soils are undisturbed, the lower values are likely to be associated with loss of naturally occurring metals as a result of leaching. Soil associated with grading (Graded Land in Figure 3-3) has been disturbed and possibly replaced with soil from depth or other sources that are not depleted in these metals. Second, the uniformity of metal concentrations at depth (4 to 6 feet bgs) indicates that the natural soil material below the disturbed horizon has uniform chemical constituency.

Figure 3-4 presents background arsenic data as well as arsenic data from surface soil samples taken during the background, BRAC, and screening site sampling efforts undertaken in the fall of 1996 and the spring of 1997. Data from these sites are included with the background data to support the interpretation that most of the arsenic concentrations in surface soil, including the background arsenic concentrations, are below 20 mg/kg. The BCT reviewed these data and concluded that a value of 20 mg/kg was an appropriate value for arsenic background concentrations in surface soil.

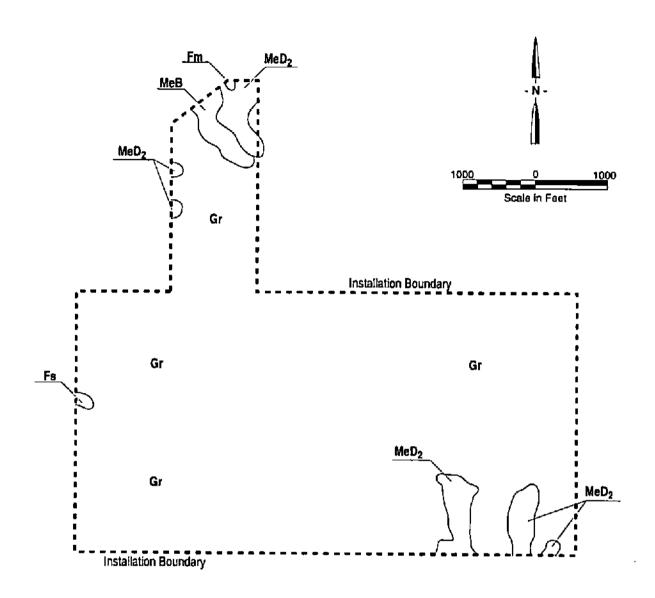
Surface Water, Sediment, Groundwater

Figures 3-5 through 3-7 show the spatial distribution of total and selected individual metals in surface water, sediment, and groundwater for each of the sample location groups (see Appendix F-1 for metals that were analyzed from each location). Total metal concentration was used as a relative indicator of the variability of metal contamination between locations. Individual metals were selected on the basis of toxicity and exceedance of ARARs or risk-based criteria as discussed in Section 3.1 and plotted as location-specific arithmetic averages. The total unfiltered inorganic loading of surface water at background locations is highest in Cane and Nonconnah Creeks and lowest in ponds at the Audubon Park, Botanical Gardens, and Chickasaw Gardens. The pond at Medal of Honor Park contained total chromium, lead, and the highest concentrations of arsenic (13.6 μ g/L) and barium (185 μ g/L). Other metals detected in Medal of Honor Park include silver, the highest concentration of copper (76.4 μ g/L), nickel, vanadium, and zinc. Lead, arsenic, and zinc were also detected in Cane Creek.

The total metal concentration in sediment was also highest in Cane Creek, but was considerably lower in Nonconnah Creek even though surface water concentrations there are the highest of the background locations. The highest concentrations of total lead (147 mg/kg) and zinc (7,630 mg/kg) were also found in Cane Creek. Total metal concentrations in Medal of Honor Park were also relatively high among the background locations.

Unlike the surface soil sample locations, the surface water, sediment, and groundwater sample locations are upgradient of DDMT and not potentially affected by DDMT waste management operations. The variation in metal concentrations between the sample groups results from differences in ambient background concentrations. A statistical evaluation of the background metal concentrations between the groups was not performed since these variations are expected in an urban industrial setting and are not potentially affected by DDMT waste management operations. Box and whisker plots showing the distribution of the surface water, sediment, and groundwater metal data are presented in Appendix C.

Surface water data are presented for the dissolved (filtered) and total metals (unfiltered); unfiltered groundwater samples were taken.



LEGEND

Fm Falaya Sill Loam

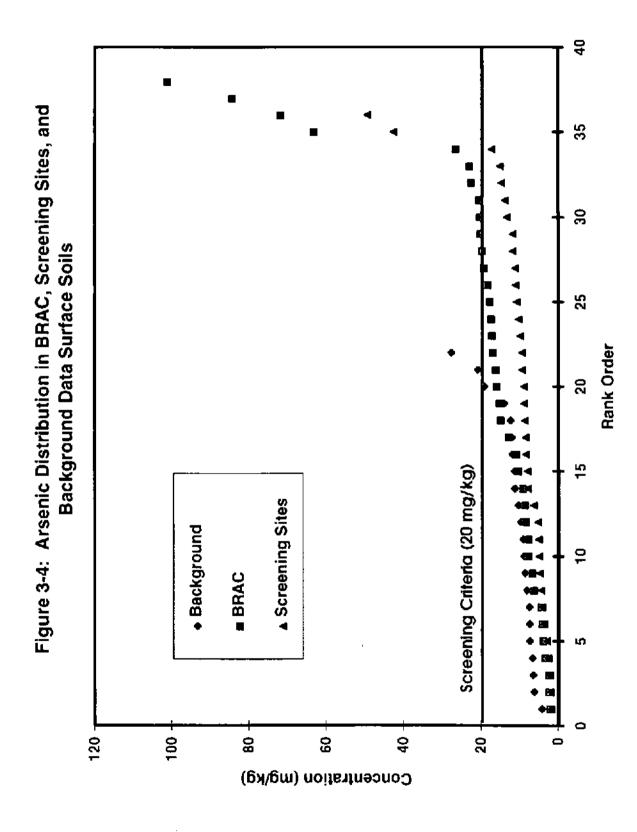
Fs Filled Land-Sitty

Gr Graded Land

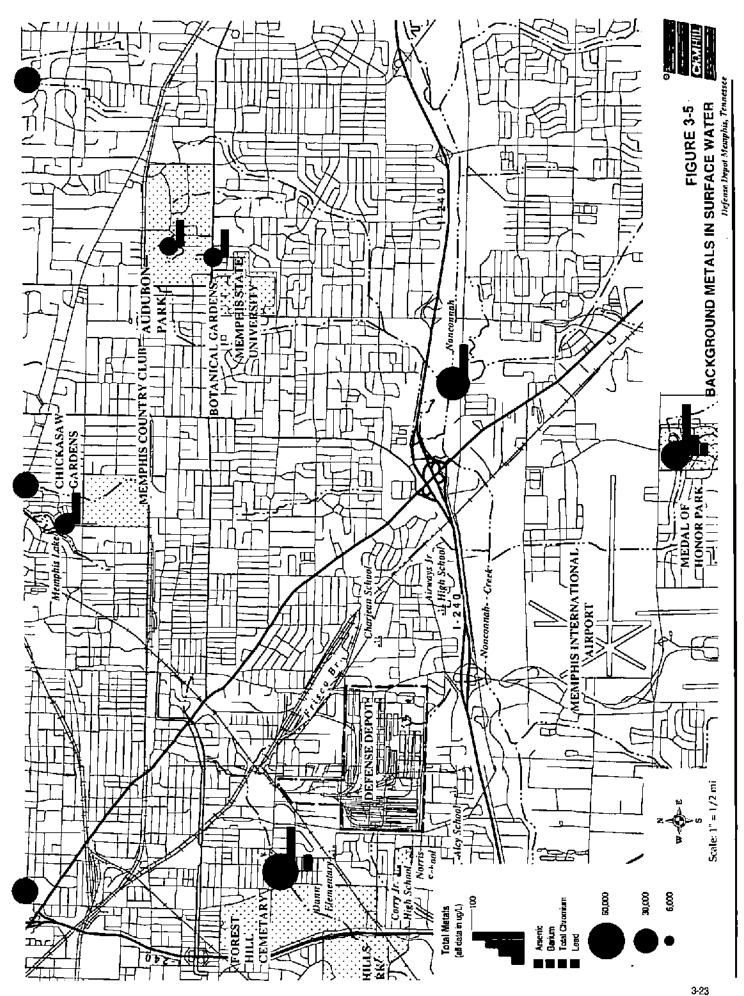
MeB Memphis Sit Loam

MeD₂ Memphis Silt Loam

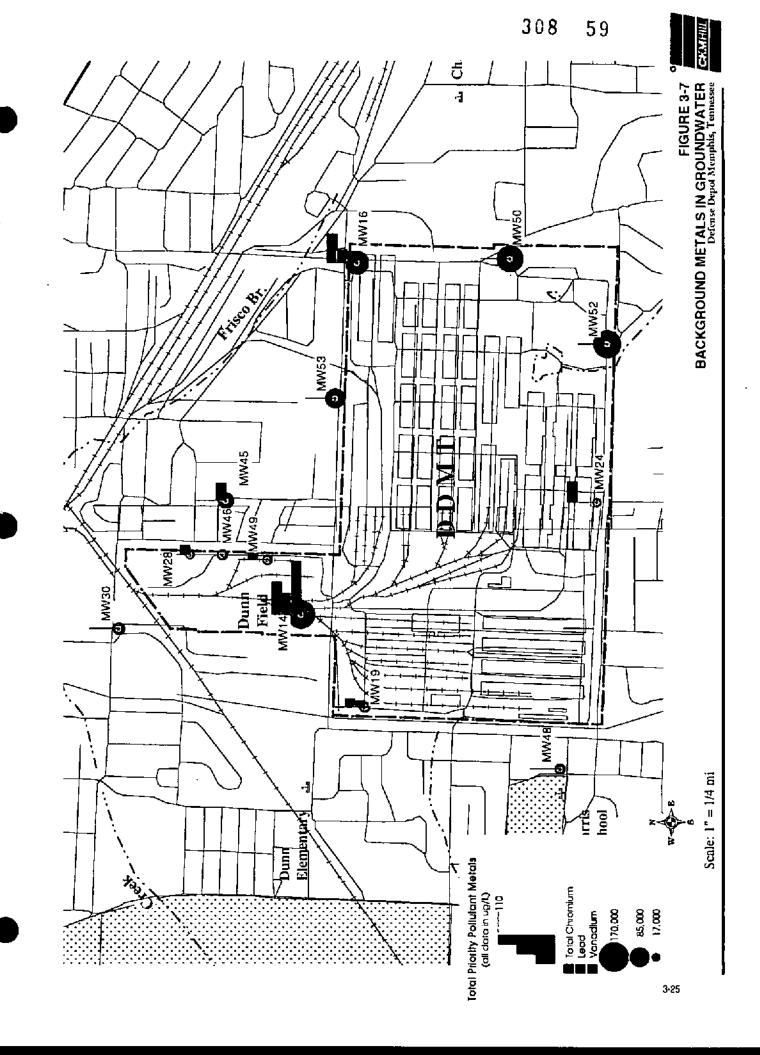
SOURCE: Modified from USDA, Soil Conservation Service, 1970.



ORO 113627.RR.ZZ/012.XLS



3-24



3.2.2 Volatile Organic Compounds

Table 3-5 presents the VOC data summarized by individual stations. Sporadic concentrations of VOCs were estimated in concentrations below CRDL in all media. Analysis of perimeter versus offsite soil data presented in Table 3-6 indicates that with the exception of two MEK (2-butanone) detections, almost all VOC surface and subsurface soil detections occur in the perimeter samples. Xylenes were found in 10 of the surface soils samples at low concentrations (< 9 μ g/kg) possibly resulting from automobile emissions entrapped in soil pore spaces. The correlation between xylene concentrations and the DDMT perimeter sample locations may result from the higher traffic on roads (Airways Boulevard, Ball Road, Perry Road, and Dunn Road) that surround DDMT relative to less traveled offsite residential streets.

Although there are a greater number of VOC detections and, in the case of xylene, generally higher values in the perimeter soil surrounding DDMT, the magnitude of the perimeter relative to offsite concentrations of about 100 percent RPD (see Table 3-6) does not indicate impact from waste management operations. Perimeter and offsite background soil data are therefore combined into one statistical data set.

MEK (five detections) and total xylenes (two detections) were estimated at concentrations below 2 μ g/L in surface water. MEK was also detected in low concentrations (less than 10 μ g/kg) in 10 sediment samples. Chloromethane (3 μ g/kg) and toluene (<14 μ g/kg) were also detected in one and three sediment samples, respectively.

VOCs associated with organic solvents 1,1,1-trichloroethane (1,1,1-TCA) and 1,1-dichloroethane (1,1-DCA) were detected at concentrations less than 2 μ g/L in groundwater from monitoring well MW-45. Data from this well were retained in the background database since MW-45 is upgradient from potential DDMT groundwater sources.

Summary statistics for VOCs are presented in Section 5 (see Table 5-1).

3.2.3 Semivolatile Organic Compounds

Table 3-7 indicates that a range of SVOCs was detected in 15 surface soil, 8 subsurface soil, and 15 sediment samples. Most of the compounds are typically associated with coal tar distillation, dye production, diesel oil, and unburned hydrocarbons. Phenol, which was detected in highest concentrations in surface and subsurface soils, is associated with the use of disinfectants and industrial solvents.

SVOC concentrations were significantly higher in surface soil samples BS04 (located outside the northeast corner of the DDMT property fence) and BS15 (located along the western perimeter of the Main Installation). Phenol concentrations were also elevated at BS01 (Dunn Field), BS08 (DDMT southwest perimeter), and BS09 (residential area 1.5 miles east of DDMT). Other SVOC concentrations in surface soil samples were estimated at below the CRDL. SVOC values for perimeter and offsite surface soil samples are summarized in Table 3-8. With the exception of phenol, mean surface soil SVOC values are higher in the perimeter samples than offsite (see Appendix F-6).

The range and concentrations of detected SVOCs decrease from surface to subsurface soils. Concentrations of fluoranthene and pyrene in subsurface soil samples are about a factor of seven lower than their corresponding surface soil samples. Phenol concentrations do not

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			Table							
	Detecte	d Volat	tile Oı	rgani	с Сот	npounds				
		kgroun				_				
		se Dep								
<u> </u>	Deter	T Dep	1710	I	a ren	litessee			T	
Matrix	Station/Group	1,1,1-Trichloroethane	1,1-Dichlarvethenc	Carbon Disuilide	Chloromethane	Methyl Ethyl Ketone (2-butanone)	Tetrachloroethylene (PCE)	Toluene	Total Xylenes	Trichtoroethylene (TCE)
Groundwater	MW45	1 /	2 J							
(ug/L)	ALL	1	2				1			1
Surface Water	BW01		L	Ļ		2.1				
(ug/L)	BW07	ļ				2 J			<u> </u>	
	BW08					2 J				
	BW09					1 J		<u></u>	1.1	
	BW12							<u> </u>	1.1	
	BW21					1.7		<u> </u>		
	All					1.6			1	
	Cane					1.7			1	
	Chickasaw					1				
	мон								1	
	Nonconnah					2				
Surface Soil	BS01								41	
(ug/kg)	BS02			2 J				2.3	91	
	BS03								11	
	HS04							 	41	
	BS05								2 J	
	BS07								2 J	
	BS08								2 J	
	BS11	 				2 J		 		-
	BS15		\neg	2 j				 	2 j	-
	BS19	 						_	11	
	BS22				\dashv	 -		\vdash	11	
	All			2		2	*	2	2.B	
	Off		+		\dashv	2			1	
	Perimeter			- 2				2	3.25	
Sediment	BW09				31	1.1				
ug/kg)	BWIO			\dashv	+	7 J			\vdash	
	BWII	 -	-	-	\dashv	4.]				
	BW12	+	-			10 J			+	
	BW13		- 			7 J		_	 	
	BW14			-+		2 J				
	BW16	 	- 		\dashv	4.)				
	BW17	 	+		+	31		_		
	BW18	┝──┤	\dashv			5.7	_	2 J		

	-		Table	3-5			_			
	Detecte	d Volat	ile Or	gani	c Con	npounds				
		kgroun		_		-				
ľ		se Dep								
	Deten	Je Dep	1 1110	1 191 1 1 1 1 1 1	1	nessee		· ·		1
Matrix	Statlon/Group	1,1,1-Trichloroethane	1,1-Dichloroethene	Carbon Disulfide	Chloromethane	Methyl Echyl Ketone (2-butanone)	Tetrachloroethylene (PCE)	Taluene	Total Xylenes	Trichloroethylene (TCE)
Sediment	BW21					5 J		14 J		
(continued)	BW22					-		10 J		
	All				3	5		9		
	Auduboa					4		2		
	Botanical					4				
	Cane				3	l i				
	Chickasaw .					- 5		12		
	мон					6				
Subsurface Soil	BS01								21	
(ug/kg)	BS04			2.J		_			2 j	
	BS08			11					11	
	BS15							 	ᇳ	
	All		一	1.5			-		1.5	
	Perimeter			1.5					1.5	
Notes:	-						-			

Blank cells indicate not detected at the CRDL.

Group values are expressed as arithmetic means.

MOH = Medal of Honor

J = estimated value

CRDL = contract-required detection limit

		Table 3-6				
	Surface Soil P	erimeter and Offsit	e VOC Co	oncentrati	ons	
	Ba	ckground Samplin	д Ргодгаг	n		
		ense Depot Memph	-			
	<u> </u>	<u></u>				l
			Carbon Disulfide	Methyl Ethyl Ketone (2-Butanone)	Toluene	Total Xylenes
Matrix	Group	Data	•	2		20.
Surface Soil	All	Mean Detected	2	2	2	2.8
(ug/kg)	L	Number Detects	2	1	1	10
	Offsite	Mean Detected	ND	2	ND	1
		Number Detects	0	1	0	2
	Perimeter	Mean Detected	2	ND	2	3.3
		Number Detects	2	0	1	В
	Percent Relative I	Difference*:	NA	NA	NA	106%
Subsurface Soil	All	Mean Detected	1.5	ND	ND	1.5
(ug/kg)		Number Detects	2	0	0	4
	Perimeter	Mean Detected	1.5	ND	ND	1.5
		Number Detects	2	0	0	4

(Mean Perimeter - Mean Offsite)/((Mean Perimeter + Mean Offsite)/2)

Notes:

ND = not detected

NA = not applicable

Table 3-7
Detected Background SVOCs
Background Sampling Program
Defense Denot Mounthis Tennocoo

	Ругеле		501		1500=	F 68	270 J			140 J	320 J	85.1	180 J	170.1	70.1	120 J	272	166	333		150.1			43 J	170.1	= 0000	1400 =	1 030	7007	2	1000	70007	1200 1	780 J	1360	300	2790	149.3
	Риелог	5400=	140.1	52.1				14000 =	= 0099								5238	0099	4898	51.3		76 J	700 J	51.)				1				1			22		2	
	Phenanthrene				=019	49 J	1091			130.1	120 J		79 J	140 J	37.1	110.1	159	120	179		68 J				87.1	= M60	=00			1 034	1005	10001			1651	150	2696	1600
	Naphthalene																									1303									130		130	
	enervq(b.2-2,1,1)onebl				= 002		130 J			86 J	130 J		63.1	63 J		84 J	179	001	239		42 J				Z.	= 00/1	1001		. 00.	130.7	1 000	6070			428	≡	705	620
	эпэтоиГТ																								. 020	10/8	130.1								200		200	
	Пиотавтиеве		49 1	}	=0091	1011	330.1		-	180 1	350 J	1 06	200 J	220 1	76.1	700 1	310	205	369	_	150 J			109	180	[∓ 00]/	I= MCI		1 077	3101	10050	1 CONC7	400	2002	1294	330	2927	1133
	Dibenzofuran																									380	47.7			1					211		211	
	Dibenz(a,h)алthrасепе			į	260 J					36 J	56 J						117	46	260						-	3/2	1051	1				1			415		415	
	Di-a-Octylphthalate																				47.3														47			
	Сргузепе				940=	65 J	180 J			903	210 J	66.1	1001	120 J	401	86 J	190	113	241		88				110	3000 E	\$30 ≈	5	(A)	7 5		(M)			735	126	1380	1200
Tennesse	Carbazole				f 29												.9		29								Se								592		592	_
Defense Depot Memphis Tennessee	bis(2-Ethylhexyl) Phthalate																										1007	400							480			
efense Depo	Benzyl Butyl Phthalate					}	ĵ	j														•									•	Ì						
ă	Вепzo(k)Пиотапthene				180 =	45.1	170.1			130 J	200 1	52.1	89 j	1103		150 J	192	133	239		75.1				81.7	=M67	390=	T		7007	7041	7807	1		624	170	066 5	980 T
	Benzo(g,b)perylene				820=	41.3	150.5			94 J	150 J	37.1	72.1	681		86 J	691	92	230		48 J				69	= Mg/	3201		1.05	101	11007	080	1		452	125	730	680
	эпэфэлятолы(d)охпэЯ				= 006	51.1	180 J			1401	210 J	59 1	91 }	110.1		130 J	208	135	566		59.1				82.1	# 15007 1007	2305		. 55	1001	1707	740.7			699	235	107;	940
	Benzo(a)pyrene				= 096	47 J	140 J			87.1	200 J	48 J	58.1	94 J		44]	186	95	790		<u>£</u>			1	75.1	=0007	330	Ť		\$ 5	1000	780)			632	107	1055	980
	Вепхо(в)апійгаселе				710=	44 J	120 J			73.1	160 J	43 J	60.1	93 J		59 J	[5]	84	205		65 J			1	3 5	= MX7	±0//	Ī		1301	1000	- D&			820	130	1245	990
	апээвтийлА				196												96		96						30,7	= 000;	310.1								955		955	
	Асепарайрую				f 06I			i									190		190																			
	Acenaphthene																								. 025		760								415		415	
	noits20.1\noits12.	BS01	BS02	BS03	BS04	BS05	BS06	BS08	BS09	BS10	BS12	BS13	BS14	BS15	BS16	BS20	All	Offsite	Perimeter	BW01	BW02	BW03	BW04	BW05	BW07	D W 08	BWO	DW 10	DW 14	DWI	0410	DW20	BW21	BW22	All	Audubon	Cane	Chickasaw
	Matrix	Surface Soil	(ug/kg)										_							Sediment	(ga/gu)								-					_1				

								į į	Dete Backg Defense	Table 3-7 cted Backgrous ground Samplin e Depot Mempl	Table 3-7 Detected Background SVOCs Background Sampling Program Defense Depot Memphis Tennessee	Cs am exsee										
	пойвооЛлойва2	Асепарийстве	Асепарћиђујеве	Апфласепе	Benzo(a)anthracene	Denzo(a)pyrene	Benzo(h)fluoranthene	Benzo(g,h)perylene	апэфлятолії(А)охпэй	Benzyl Butyi Phthalate bis(2-Ethylbexyl)	Phthalate	Chrysene	Di-a-Octylphthalate	леть (а,h) япітасепе	Dibenzofuran	Пиотавтhеле	Fluorene	Ideno(1,2,3-c,d)pyrene	Уарћіћајеве	Рћепапсћге	Phenol	Pyrene
Matrix					+	+		1		+	007	2000		-		220	-					260
	MOH			-		+	$\frac{1}{1}$	+	- - !	*		3 8	5	<u> </u>	-	105		42		89	95	97
	Nonconnah			1	65	3	8)	84	2	+	1	8	+	 				!		-	840= = 0 8 0	
Subsurface Soil	BS01					+	+	+	+	-		+		 -		45.5				_		42.1
(ug/kg)	BS04			_		$\frac{1}{1}$	1		+	1		+	<u> </u> -	+			 				= 00061	
i 1	BS07			-		+	+	+	<u> </u>	1		\ 	<u> </u>		 -		T				3900=	
	BS08					1	+		<u> </u>	+			+								580=	
-	BS09			+		- 	1			+	<u> </u>	 	-		-				:		= 0/1	
	BS14			\dashv			1	+	- -	+	+	\ 		<u> </u>		44.1	-		_			39 J
	BS15			\dashv		+	+	$\frac{1}{1}$	+	-	+	<u> </u>	-					-	_	-	= 089	
	BS16			\dashv	+		+	+	+		+	+				45					4295	41
	All		+	+	-		+	+	+	 	<u> </u>										580	
_(Offsite			+	+	1	+	+	1	<u> </u>	-	 -				45					5038	4
	Perimeter			+	+	+	+	$\frac{1}{1}$	 		<u> </u>	 		 -					_			
Groundwater	MW24			+		1	+	+	1	\ 	<u> </u>	+										
(ug/L)	All							-		 												
Notes:																						
Surface coil subs	Surface soil subsurface soil, and sediment units are in micrograms	iment units a	ire in microg		per kilogram.											•						
Surface water and	Surface water and proundwater units are in micrograms per liter.	are in micro	grams per lit																			
Blank cells indica	Blank cells indicate not detected at the CRDL.	ie CRDL.																				
Group values are	Group values are expressed as arithmetic means	retic means																				
=" = detected value	9																					
J = estimated value	v																					
MOH = Medal of Honor	Honor																					

					Table	e 3-8								ļ
ļ		Compa	rison (of Peri	meter	and (Offsite	:SVO	C Data					
•		-		kgrou										
			Defen	_		_								
			Deten	JC DC	, , , , , , , , , , , , , , , , , , ,	777	1000							
Metrix	Sample Group	Statistic	Benzo(a)Anthracene	Benzo(a)Pyrene	Berrzo(h)Fluoranthene	Benzo(g,h,l)Perylene	Benzo(k)Fluoranthene	Chrysene	Dibenz(a,h)antbracene	Fluoranthene	Indeno(1,2,3-c,d)Pyrene	Phenanibrene	Phenol	Pyrene
Surface Soil	All	Number Detections	9	9	9	9	9	10	3	11	7	9	5	11
(ug/kg)	All	Меал	151	186_	208	169	192	190	117	310	179	159	5238	272
	Offsite	Number Detections	4	4	4	4	4	4	2	4	3	3		4
	Offsite	Mean	84	95	135	92	133	113	46	205	100	120	6600	166
	Perimeter	Number Detections	5	5	5	5	5	6	1	7	4	6	4	7
	Perimeter	Mean	205	260	266	230	239	241	260	369	239	179	4898	333
	Percent Rela	tive Difference	B4 %	93%	66%	86%	57%	72%	140%	57%	82%	40%	-30%	67%
Subsurface	All	Number Detections								2			6	2
(ug/kg)	A!I	Mean								45			4295	41
_	Offsite	Number Detections									<u> </u>		1	
	Offsite	Меал											580	
	Perimeter	Number Detections								2			5	2
	Perimeter	Mean	I							45			5038	41
	Percent Rela	tive Difference	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159%	NA

Notes: Blank cells indicate not detected

NA = not applicable

substantially decrease in the subsurface soil samples, most likely because of leaching of water-soluble phenol and adsorption of other insoluble SVOC compounds in the surface soil (CRC, 1971). Five out of six phenol detections in subsurface soil are from perimeter soil samples and are all higher than the single offsite phenol detection also in BS09.

The generally low number of surface and subsurface soil detections does not allow a meaningful statistical comparison, but the uniformity of the elevated perimeter SVOCs suggests that two populations of SVOCs are present. Where SVOCs are present in both perimeter and offsite samples, the difference in mean values is less than 100 percent, which is indicative of differences between industrial and residential and open field areas rather than impact from waste management operations.

The range of SVOC compounds detected in sediment is similar to that of surface soils. However, mean concentrations of SVOCs in sediments are generally 3 to 10 times higher than those observed in surface soils. An exception is phenol, which is depleted in sediments most likely because of its water solubility. Bis(2-ethylhexyl) phthalate is a common laboratory contaminant. However, the single-sediment bis(2-ethylhexyl) phthalate detection at BW10 (480 μ g/kg) exceeds 10 times the maximum blank concentration (36 μ g/kg); therefore, the value cannot be dismissed as laboratory contamination (EPA, 1994).

The phthalate concentration (estimated at below the detection limit) in groundwater at monitoring well MW-24 is likely associated with laboratory contamination, since phthalates are typically introduced in field and laboratory handling. However, SVOCs were not detected in laboratory or field QA blanks.

3.2.4 Pesticides, Herbicides, and PCBs

Table 3-9 presents pesticide and PCB concentrations detected in soils and sediment. The distribution of pesticides and PCBs in surface soil is graphically presented in Figure 3-8. Pesticides and PCBs were not detected in surface water or groundwater. No herbicides were detected in any background matrix. Pesticides were primarily detected in soil samples along the perimeter of DDMT, most likely associated with historic pesticide application by facility personnel. Alpha-chlordane, gamma-chlordane, and dieldrin were most frequently detected. Chlordane, dieldrin, and heptachlor epoxide were detected in two offsite locations, BS09 and BS12 (in a residential area just west of DDMT). PCBs (Arochlor 1260) were detected at two perimeter sample locations, BS05 and BS06, along the eastern fenceline of DDMT. No PCBs were detected offsite.

The Wilcoxon statistical analysis to compare perimeter and offsite data for selected pesticides in surface soil is presented in Appendix F, Section F-6. This evaluation shows that the data sets are similar except for dieldrin.

For purposes of establishing background concentrations representative of industrial land uses, application of pesticides and herbicides was considered a facility maintenance activity rather than a waste management operation. Therefore, perimeter and offsite pesticide data were combined into a single data set.

The highest background pesticide detection, heptachlor epoxide at 230 µg/kg, was detected in sediment at the Audubon Park (BW18) lake, which receives surface runoff from the park area. Alpha-chlordane, gamma-chlordane; dieldrin; p,p'-dichlorodiphenyldichloroethane

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Detected Pesticides and PCBs
Background Sampling Program
Defense Depot Memphis Tennessee

Defense Depot Memphis Tennessee									
Matrix	Station/Group	Alpha- Chlordane	Dieldrin	Gamma- Chlordane	Heptachlor Epoxide	ΩΩΩ-,ď· d	p.p'-DDE	P,p'-DDT	PCB-1260 (Arochlor 1260)
Sediment	BW07		11=					1	1
	BW08	4.3 J		13 =		6.1 J			
	BW09	5.2 J		58 J		_			
	BWII	4.9 J		6.1 J		_		·	j
	BW13					6 J	5.8 J		
	BW14	3.6 J		7.9 =		·			
	BW16					2.8 J	7.2 =		
	BW18			i -	230 ≂				
	All	4.50	11	21.25	230	4.97	6.50		
	Audubon				230				
	Botanical					2.80	7.20		
	Cane	4.75	11	35.50		6.10			•
	мон	4.25		7.00		6.00	5.80		
Surface Soil	BS01		4.9 =)
	BS02		84 =						
	BS03		24 =			-		1	
	BS04		1 062			-			
	BS05	5 =	110 =	2.9 J			110 =	47 =	100 J
	BS06	3.5 J	360 =	2.3 J			160 =	74 =	110 J
	BS07	4 J	4.4 J	16 J		6.7 J			
	BS08		3.6 J						
	BS09	29 J		26 =	7.7 J				
	BS10		3.3 J						
	BS11		86 =				,		
	B\$12	5.7 J	53 =	7.9 J				9.4 J	
	BS14		190 =						<u> </u>
	BS15		66 =						
	BS16		73 =				_		
	All	9.4	114	11.02	7.70	6.70	135	43.47	105.00
	Offsite	17.4	47.4	16.9	7.70			9.4	
	Perimeter	4.2	131	7.1		6.7	135	60.5	105.0
Subsurface Soil	BS04		370 =					7.2 J	
	BS06		3.5 J				1.5 J		
	BS08		6 =						
	BS22	2.6=		2.2 =					
	All	2.6	126	2.2			1.5	7.2	
	Offsite	2.6		2.2					
	Perimeter		126				1.5	7.2	

Notes:

Blank cells indicate not detected at the CRDL. Units are in µg/kg.

PCBs = polychlorinated biphenyls CRDL = c

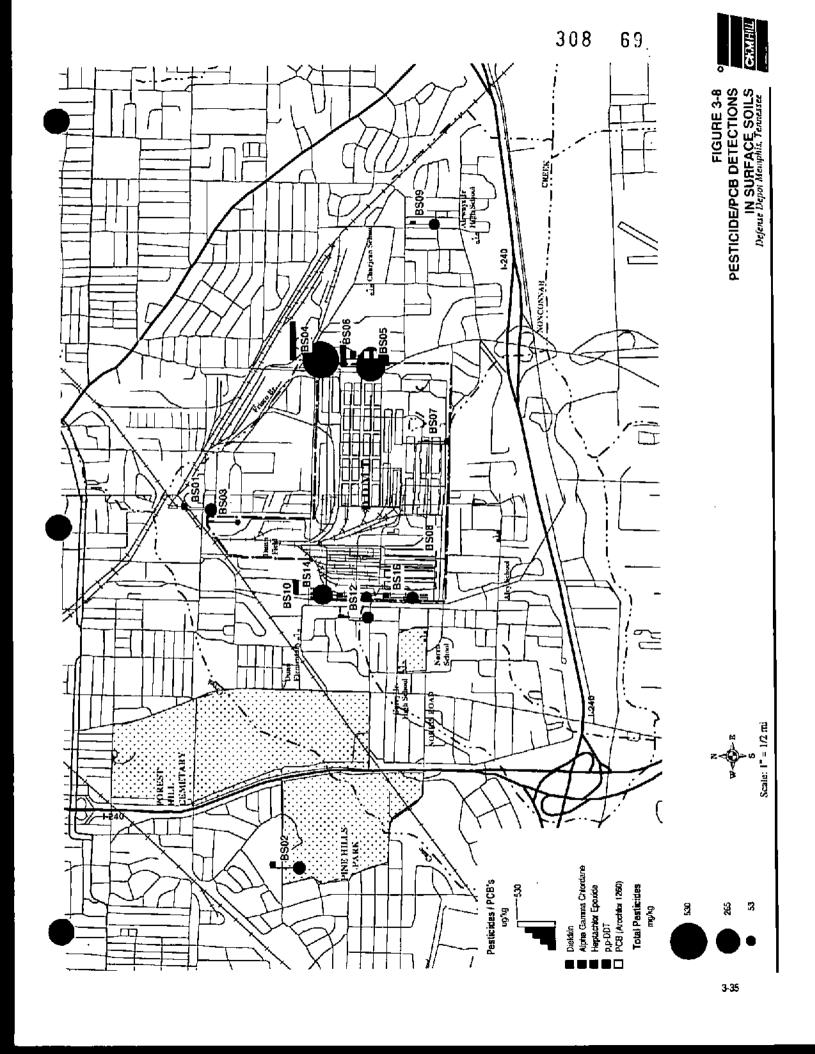
MOH = Medal of Honor

CRDL = contract-required detection limit DDD = dichlorodiphenyldichloroethane

"=" = detected value
J = estimated value

DDE = 1, 1, 1-dichloro-2, 2-bis (4-chlorophenyl) ethylene

DDT = dichlorodiphenyltrichloroethane



(p,p'-DDD); and p,p'-DDT (dichlorodiphenyl-trichloroethane) were detected in sediments at the Botanical Gardens, Cane Creek, and Medal of Honor Park.

The BCT performed an evaluation of the background values in a meeting on July 2, 1997 (see discussion in Section 3.3 below). The value for dieldrin was revised from 530 μ g/kg to 86 μ g/kg on the basis of the maximum of the three offsite dieldrin detections.

Pesticide/PCB background statistics are summarized in Section 5 (see Table 5-1) and presented in full in Appendix F-2.

3.2.5 Dioxins and Furans

Polychlorinated dibenzo-p-dioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs) are two related classes of aromatic heterocyclic compounds. The toxicity of dioxins and furans varies between the congeners. Total dioxin toxicity is typically expressed in terms of a toxicity equivalency factor (TEF), which normalizes each congener toxicity to that of the most toxic congener—2,3,7,8-tetrachlorodibenzo-p-dioxin. TEF values reported herein were calculated according to the I-TEF/89 scheme (EPA, 1989).

Dioxin concentrations in surface soil were evaluated to assess whether there was a significant difference in concentration between the perimeter and offsite sample groups. The distribution of the surface and subsurface soil TEFs is shown in Figure 3-9. Table 3-10 presents the results of a t-test evaluation and indicates that the t-statistic for 1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin exceeds the critical t-value at 95 percent confidence. The t-test results for more prevalent octachlorodibenzo-p-dioxin and the TEF values indicated that for these congeners and total toxicity, it cannot be determined that the two groups are from different sample populations. Because there were a low number of detections of 1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin (two in the perimeter group), background statistics were calculated for the combined perimeter and offsite datasets.

Detected dioxin/furan values are presented in Table 3-11. Background statistics for detected dioxin/furan data are summarized in Section 5 (see Table 5-1). A complete presentation of the dioxin/furan background statistics is included in Appendix F-3.

The distribution of the average TEF at each surface water and sediment sample location group is shown in Figure 3-10. TEF values are highest at Audubon Park, the Botanical Gardens, and Nonconnah Creek because of detections of multiple dioxin/furan congeners in Audubon sample locations BW16 through BW19, Botanical Gardens sample location BW16, and Nonconnah Creek sample location BW03 (see Table 3-11).

Dioxin concentrations in surface water were reported in concentrations of parts per trillion (nanograms [ng] per liter), while concentrations in sediment are reported in parts per billion (µg/kg). Surface water concentrations reported for unfiltered surface water samples are therefore very sensitive to inclusion of suspended sediment. An analysis comparing the turbidity of the water samples with the total dioxin/furan concentrations, represented by the TEF, was performed to determine whether dioxin concentrations in water were controlled by inclusion of suspended materials. Turbidity was used to provide a relative measurement of the amount of suspended material. Figure 3-11 presents the correlation between turbidity and total dioxin concentrations. The low correlation coefficient (R²) of 0.24 indicates that there is no significant correlation between the concentrations in the two

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	•	Table 3-1	0								
	Surface Soil D	ioxin/Furan l	Population '	Testing							
Surface Soil Dioxin/Furan Population Testing Background Sampling Program Defense Depot Memphis Tennessee											
	Defense I	Depot Mempl	his Tenness	ee							
GROUP	STATISTIC	1,2,3,4,6,7,8- HEPTACHLORODIBENZ O-p-DIOXIN	OCTACHLORODIBENZO P-DIOXIN	DCTACHLORODIBENZO FURAN	DIOXINFURAN TOTAL EQUIVALENCY FACTOR						
All	Minimum	0.07	0.75	0.045	0.001						
	Maximum	0.39	23.33	0.393	0.023						
•	Mean	0.14	5.52	0.163	0.006						
	Stand, Dev.	0.13	5.08	0.199	0.005						
	N	6	22	3	22						
Offsite	Minimum	0.07	0.99	0.045	0.001						
	Maximum	0.10	23.33	0.045	0.023						
	Mean	0.08	6.77	0.045	0.007						
	Stand, Dev.	0.01	6.34	0.000	0.006						
	N	4	11	I:	11						
Perimeter	Minimum	0.12	0.75	0.050	0.001						
	Maximum	0.39	10.61	0.393	0.011						
	Mean	0.26	4.27	0.222	0.004						
	Stand, Dev.	0.19	3.25	0.000	0.003						
	N	2	11	2	11						
Statistics	S_p^2	0.057	4.796		0.0048						
	T	3.56	1.23		1.21						
	T Critical [®]	2.13	1.73		1.73						

Notes:

^a95 percent confidence level, 2-tailed T distribution

Units are in micrograms per kilogram
-- indicates not applicable because of infrequent detections

	'		Datasi	Table 3-11 led Dioxin/l	Furanc				
				nd Samplin					
			Defense De						
	 	т.	Determe ne	por mempu	is remitess	T T			
Matrix	Station/Location	1,2,3,4,6,7,8- Heptachlorodibenzo-p- Dioxin	1,2,3,7,8- Pentachlorodibenzo-p- Dioxin	1,2,3,7,8- Pentachlorodibenzo Furan	2,3,4,7,8- Pentachlorodibenzo Furan	2,3,7,8- Tetrachlorodibenzo Furan	Octachlorodibenzo-p- Dioxin	Octachlorodibzeno Furan	Dioxia/Furan Toxicity Equivalency Factor
Surface Soil	BS01					ļ	5.632 =		0.005632
	BS02	.122 J					4.108 J	.05 J	0.004158
	BS03						1.391 J		0.001391
	BS04					ļ <u> </u>	10.614 =		0.010614
	BS05						3.227 J		0.003227
	BS06						4.576 J		0.004576
1	BS07						8.781 =	_	0.008781
	BS08						1.257 J		0.001257
1	BS09						2.942 J_		0.002942
i	BS10_		-				.989 1		0.000989
	BS11]					1.274 J_		0.001274
	BS12	.071 J					4.411 J	.045 J	0.004456
	BS13	1					6.702 =		0.006702
	BS14						.747 J		0.000747
	BS15	.39 J					5.597 =	.393 J	0.00599
•	BS16						.991 J_		0.000991
	B\$17						3.136 J		0.003136
	BS18						11.711 =		0.011711
	BS19	.0 9 9 J					23.325 =		0.023325
	BS20	.075 J					8.488 =		0.008488
	BS21					·	6.489 =		0.006489
	BS22	.071 J					5.026 =		0.005026
	All	0.14					5.52	0.163	0.0055
	Offsite	0.08					6.77	0.045	0.0068
	Perimeter	0.26					4.27	0.222	0.0043
Subsurface Soil	BS01						4.445 J_		0.004445
	BS03						1.249 J		0.001249
1	BS04						2.948 J		0.002948
1	BS06						1.642 J		0.001642
	BS07						1.75 J		0.00175
1	BS09	L					3.439 J		0.003439
l l	BS10						9.435 =		0.009435
	BS11						.209 J		0.000209
	BS12						1.683 J		0.001683
]]	BS13						2.141 J		0.002141
1	BS14						.645 J		0.000645
{	BS15						5.432 =		0.005432
	BS17						2.869 J		0.002869
	BS19	T	<u> </u>	<u> </u>	T	<u> </u>	7.619 =		0.007619

			Backgrou	Table 3-11 ted Dioxin/i nd Samplin pot Memph	g Program				
Matrix	Station/Location	1,2,3,4,6,7,8- Heptachlorodibenzo-p- Dioxin	1,2,3,7,8- Pentachlorodibenzo-p- Dloxin	1,2,3,7,8- Pentachlorodibenzo Furan	2,3,4,7,8. Pentachlorodibenzo Furan	2,3,7,8- Tetrachlorodibenzo Furan	Octachlorodibenzo-p- Dioxin	Octachlorodibzeno Furan	Dioxin/Furan Toxicity Equivalency Factor
Subsurface Soil	BS20						2.498 J		0.002498
(continued)	BS21						1.378 J		0.001378
1	BS22		_				1.458 J		0.001458
	All						2.99		0.0030
	Offsite						3.27		0.0033
	Perimeter						2.59		0.0026_
Sediment	BW07						.431 J		0.000431
	BW08						.483 J		0.000483
	BW10						.761 J		0.000761
	BWII						1.484 J		0.001484
	BW15						1.1 J		0.0011
	BW16	.067 J					3.655 1		0.003655
	BW17	.064 J					2.536 J		0.002536
	BW18	.583 J			.002 J		7.707 =		0.008707
	BW19						8.556 =		0.008556
	BW20						1.608 J		0.001608
	BW22_						.498 J		0.000498
	All	0.24			0.002		2.62		0.0027
	Audubon	0.32			0.002		6.27		0.0066
•	Botanical	0.07					2.38		0.0024
	Cane						0.46		0.0005
	Chickasaw						1.05		0.0011
	мон						1.12		0.0011
Surface Water	BW03	1 890.		.057 J		.024 J	.384 J		0.005634
i	BW04		:				.254 J		0.000254
	BW09	1 880.							
	BW10						.645 J		0.000645
	BWII					.011 J	.635 J		0.001735
	BW 12						.597 J		0.000597
H	BW13	· .043 J					1.225 J		0.001225
	BW14						.843 J		0.000843
1	BW15						.206 J		0.000206
	BW16			.027 J	.024 J	.013 J	.232 J		0.014882
	BW17	.184 J	.046 J	.037 J	.05 J	.031 J	1.135 J		0.031085
	BW18					.01 J	.669 J		0.001669
	BW19					.007 J	.892 J		0.001592
	BW20						.299 J		0.000299
	BW21						.374 J		0.000374

				Table 3-11			_	• ""	
ļ			Detect	ted Dioxin/I	Furans				
			Backgrou	nd Samplin	g Program	ı			i
			Defense De	pot Memph	is Tenness	ee			
Matrix	Station/Location	1,2,3,4,6,7,8- Heptachlorodibenzo-p- Dioxin	1,2,3,7,8- Pentachlorodibenzo-p- Dioxin	1,2,3,7,8- Pentachlorodibenzo Furan	2,3,4,7,8- Pentachlorodibenzo Furan	2,3,7,8- Tetrachlorodibenzo Furan	Octachlorodibenzo-p- Dioxin	Octachlorodibzeno Furan	Dioxin/Furan Toxicity Equivalency Factor
Surface Water	BW22						.267 J		0.000267
(continued)	All	0.08	0.046	0.040	0.037	0.016	0.58		0.0041
	Audubon	0.09	0.046	0.037	0.050	0.016	0.90		0.0114
	Botanical			0.027	0.024	0.013	0.22		0.0075
	Cane	0.09							
	Chickasaw						0.31		0.0003
	мон	0.04				0.011	0.79		0.0010
	Nonconnah	0.10		0.057		0.024	0.32		0.0029

Notes:

Blank cells indicate not detected at the CRDL.

MOH = Medal of Honor

"=" = detected value

J = estimated value

CRDL = contract-required detection limit

BW02 BW03 BW04 BW05 **BW06** BW07 BW08 BW09 BW10 BW12 BW13 BW14 **BW15** BW16 BW17 BW18 BW19 BW20 BWII BW21 BW01

30 88 88

0.645

46 21

5.634 0.254

(UTV) yribidaa)

(netil\msrgooiq) Pioxin/Puran TEP

Sample Location

2 1

0.597 1.225 0.843

148 148 148

0.206

31.085 1.669 1.592 0,299 0.374 0.267

Figure 3-11 Analysis of Correlation Between Dioxin in Surface Water and Turbidity Defense Depot Memphis, Tennessee

media, probably because of the low observed concentrations and other potential analytical artifacts in reporting such low concentrations. Outlier TEF values at Audubon Park (BW17), Botanical Gardens (BW16), and Nonconnah Creek (BW03) discussed above are also identified in Figure 3-11.

Dioxins are widespread in environmental media originating primarily from atmospheric depositions that result from waste incineration/burning activities. In general, dioxins in such emissions are dominated by octa-CDD. Furthermore, if a source-related contribution exists, a series of dioxins such as 2,3,7,8-TCDD and other lower chlorinated congeners are expected in the samples. Most of the background detections were octa- and hepta- isomers, indicating that the observed concentrations could be from atmospheric deposition, rather than from a localized source contribution. There were no detects of 2,3,7,8-TCDD in any of the 76 samples tested (22 sediment, 14 surface water, 20 deep soil, and 20 shallow soil samples).

At very low concentrations (detected concentrations below the mean detection limits), the presence of the reported chemical is uncertain. Additionally, most but not all of the detected dioxins and furans were also detected in the field and trip blanks at concentrations similar to the sample concentrations (see Section 4.5.1, Table 4-2). Following EPA CLP protocol (see Section 4.5.1), dioxin and furan values less than 5 times the maximum blank concentrations were reported as undetected in the database. This could be because the dioxin isomers have very low solubility (20 to 483 ng/g) due to a very high carbon-based sediment partition coefficient (log Koc = 7), and therefore high resistance to chemical and biological breakdown. It is possible for these chemicals to strongly adhere to the analytical equipment and hence be detected in several samples at low concentrations. Low solubility is also the reason for suspecting that the observed surface water concentrations are from suspended particulates in the surface water. Therefore, the detected dioxin/furan concentrations do not appear to be source related and are likely from atmospheric deposition and runoff from the surrounding soil depositions into the sediments.

Elevated TEF values in the surface soil samples indicate that the dioxin/furans result from surficial deposition rather than from other sources (such as laboratory input), because dioxin/furans are quickly sorbed onto soil particles and are not expected at depth under normal conditions. Low-level detections in the subsurface soil could be a result of other factors (such as an analytical artifact).

3.3 BCT Evaluation

During the BCT meeting of July 2, 1997, BRAC, screening site, and RI site data were evaluated relative to applicable criteria and background concentrations. A suite of chemical constituents was identified for which concentrations exceeded the applicable criteria, but the background concentration also exceeded the criteria. For these "sensitive" constituents, background was considered an important evaluation criterion. To present a conservative evaluation, the background concentrations for these chemical constituents were modified by removing outliers (see Appendix C). In all instances, removal of outliers resulted in a lower, more restrictive background criterion. The results of the BCT evaluation of sensitive parameters are summarized in Table 3-12. Modified background values identified in this table were used in evaluation of the data.

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Table 3-12

Background Data Modified by the BCT Background Sampling Program

Defense Depot Memphis Tennessee

		1 1	Initial	Modified	
Chemical	Matrix	Units	Background	Background	Comments
Arsenic	SB	mg/kg	17	Γ	
Arsenic	SD	mg/kg	12		17 detections. No outliers.
Arsenic	55	mg/kg	21.8	16.5	Offsite locations only. Dropped outlier of 27.7.
Arsenic	SW	mg/L	18		No outliers
Arsenic, Dissolved	5W	mg/L	12.4		No outliers
Barium	SB	mg/kg	300		No outliers
Barium	SS	mg/kg	253	234	Offsite locations only.
Beryllium	SS	mg/kg	1.1		No outliers. Perimeter and offsite values nearly identical.
Cadmium	SD	mg/kg	28.9	<u> </u>	Only 3 detections.
Chromium	SB	mg/kg	26.4		No outliers.
Chromium	SD	mg/kg	38	20	Drupped 2 outliers (174 and 40).
Chromium	55	mg/kg	27.4	24.8	Based on offsite mean of 12.4.
Соррег	SD	mg/kg	271	58	Dropped 2 outliers (512 and 1250 both are J qualified)
Dieldrin	SS	mg/kg	530	86	Nonparametric distribution Maximum value proposed. Atternate value is maximum of three offsite dieldrin detections.
b'b,-DDD	SD	mg/kg	6.1	 	
P'b,-DDD	SS	mg/kg	6.7		
p.p'-DDE	SD	mg/kg	7.1		
p.p'-DDE	SS	mg/kg	160		
p,p'-DDT	SS	mg/kg	74	Ī	
Lead	SD	· · · · · · · · · · · · · · · · · · ·	69	35.2	Removed 2 audiers.
Lead	SS	mg/kg	42.6	30	Offsite values only with 73.3 mg/kg outlier removed.
Lead	SW	mg/L	18.6		Twice mean detected. No outliers.
Lead, Dissolved	5W	mg/L	11.3		Maximum detected. Only one detected.
Mercury	SD	mg/kg	4		Only one detection.
Nickel	55	mg/kg	33	30	No outliers. Offsite values only.
Nickel	SB	mg/kg	37		No positive outliers.
Vanadium	55	mg/kg	52	48.4	No outliers. Offsite values only.

Notes:

Values presented in bold-face will be used in evaluation of DDMT data.

SS = Surface Soil

SB = Subsurface Soil

SW = Surface Water

SD = Sediment

TAB

4.0

4.0 Quality Assurance/Quality Control Overview

The purpose of the data quality evaluation process is to assess the effect of the overall analytical process on the usability of the data. The two major categories of data evaluation are laboratory performance and matrix interference. Evaluation of laboratory performance is a check for compliance with the method requirements: the laboratory either did or did not analyze the samples within the limits of the analytical method. Evaluation of matrix interference is more subtle and involves the analysis of several areas of results including surrogate spike recoveries, matrix spike recoveries, and duplicate sample results.

Two separate sets of data were evaluated, and the results of both of these evaluations are presented in this section. As discussed in Section 2.1, soil, sediment, and surface water samples were collected as part of the DDMT Background Sampling Program in October 1995. These samples were analyzed for VOCs, SVOCs, pesticides/PCBs, herbicides, TAL metals, and dioxins/furans. Groundwater samples were collected during the DDMT groundwater sampling event in February 1996. All samples were analyzed using Level C QC (Level C is equivalent to EPA level 3 QC) as described in the *Generic Quality Assurance Project Plan* (CH2M HILL, 1995b). EPA Level 3 QC requirements include collecting and analyzing field and laboratory QC samples at a specified frequency. The data from these samples are used to evaluate laboratory performance and matrix interference, as well as to monitor potential field and laboratory contamination.

Section 4.0 is divided into 11 subsections. Sections 4.1 and 4.2 provide a discussion of the field and laboratory QA/QC samples. Section 4.3 provides an overview of the data review and the validation process. The remaining sections provide a summary of QA/QC parameters and data quality conclusions.

4.1 Field QA/QC

Sampling requirements for EPA Level 3 Field QC include field blanks and duplicate field samples. Three types of field blank QC samples were collected to detect and monitor the existence and magnitude of contamination problems potentially introduced by field errors. The three types are as follows:

Trip Blank (TB). Trip blanks were used to monitor any possible VOC contamination introduced to samples during shipping and handling. The blanks are 40-milliliter vials of ASTM Type II water that are filled in the laboratory, transported to the site with the sample bottles, and returned to the laboratory with VOC samples for analysis. The trip blank containers were not opened in the field. One trip blank sample was included with each shipping container that contained samples requiring VOC analysis.

Equipment Rinseate Blank (EB). Equipment rinseates are samples of organic-free water that is passed through and over decontaminated sampling equipment. The samples were used to monitor the effectiveness of the decontamination process. Equipment rinseate samples were collected at a rate of one per day per sample matrix. Because surface water

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samples were collected directly into the laboratory containers, rinseate samples were not required for this medium. The equipment rinseate samples were analyzed for the same parameters as the associated field samples.

Field Blank (FB). The field blank consisted of a sample of the organic-free water that was used for the final rinse during equipment decontamination. This blank was used to monitor contamination that may have been introduced by the rinse water. The field blank was analyzed for the same parameters as the field samples.

Duplicate field samples were collected at a frequency of 10 percent of the samples collected per matrix. Field duplicates consisted of an original (or native) sample and a replicate sample that were collected from the same location at the same time. These samples were used to monitor sampling precision.

4.2 Laboratory QA/QC

QA/QC samples analyzed by the laboratory during the DDMT background sampling included method blanks and spiked samples. The type and frequency of each QA/QC sample is detailed in the analytical method. Results of these QA/QC samples and laboratory performance data (e.g., instrument calibration) were used to evaluate data quality during the data review and validation process.

Method blanks were analyzed each day prior to analysis of field samples. A method blank is a sample of ASTM Type II water that is analyzed by the same process as the corresponding field samples. Method blanks were used to monitor both laboratory performance and contamination potentially introduced during the analytical process.

Laboratory QC samples can be categorized as organic or inorganic QC samples. The two types of organic QC samples are as follows:

- Surrogate Spikes. Surrogate compounds are the structural homologs of target compounds and are expected to behave in a similar manner during analysis. Surrogate spike recoveries were used to monitor both matrix effects and laboratory performance as well as to estimate laboratory accuracy.
- Matrix Spike/Matrix Spike Duplicates (MS/MSDs). MS/MSDs were used to estimate
 the effect of the specific sample matrix on sample analyte recovery, as well as on
 accuracy and precision. MS compounds are found on the Target Compound List (TCL).
 The field sample was split into thirds, and two portions were spiked with known
 quantities of TCL compounds to ascertain the effects of the specific sample matrix on
 the recovery of these analytes. MS/MSD samples were collected and analyzed with 5
 percent of the samples from each matrix (i.e., soil, surface water, sediment, and
 groundwater).

The three types of inorganic QC samples include:

Laboratory Control Standard. A laboratory control standard (LCS) consists of an ideal
matrix (usually ASTM Type II water) that has been spiked with a known amount of the
analyte of interest; the LCS was prepared (digested) and analyzed with the field
samples. The LCS is designed to monitor the efficiency of the overall analytical

procedure (including sample preparation); the resulting analyte recoveries must fall within pre-established acceptance limits.

- Spiked Samples. Pre-digestion spikes are analogous to the MS/MSD spike recovery for organic analyses because they measure the effects of the sample matrix on the recovery of a known quantity of analyte after sample preparation and analysis. If the pre-digestion spike recovery did not fall within the acceptance window of 75 to 125 percent, then a post-digestion spike was added and the sample reanalyzed. The post-digestion spike monitors instrument performance and matrix effects. If both the pre- and post-digestion spike recoveries fell outside the acceptance limits, the data were flagged to indicate the non-conformance.
- Laboratory Duplicate Samples. Field samples were split in the laboratory, and the
 duplicate results were used to estimate precision. These samples are not replacements
 for field duplicate samples. Laboratory duplicate samples are analogous to the
 MS/MSD because they measure the effects of the sample matrix on precision after
 sample preparation and analysis. If the precision of the duplicate results was greater
 than 20 percent relative percent difference (RPD), then the results were qualified to
 indicate poor duplicate precision.

4.3 Data Review and Validation Approach

Before the analytical results were released by the laboratory, both the sample and QC data were carefully reviewed to verify sample identity, instrument calibration, detection limits, dilution factors, numerical computations, accuracy of transcriptions, and chemical interpretations. Additionally, the QC data were reduced and the resulting data were reviewed to ascertain whether they were within the laboratory-defined limits for accuracy and precision.

The data packages were reviewed by the project chemists using the process developed by EPA (EPA, 1994 a/b). The data review and validation process is independent of the laboratory's checks and focuses on the usability of the data to support the project data interpretation and decisionmaking processes. Areas of review included holding time compliance, initial and continuing calibration, spiked sample results, method blank results, and duplicate sample results. A data review worksheet was completed for each data package.

Samples that were not within the acceptance limits were indicated with a qualifying flag, which consists of a single or double-letter abbreviation that indicates a problem with the data. Although the qualifying flags originate during the data review and validation process, they are included in the data summary tables so that the data will not be used indiscriminately. The following flags were used in this text:

- U Undetected. Analyte was analyzed for but not detected above the method detection limit.
- UJ Detection limit estimated. Analyte was analyzed for but qualified as not detected. The result is estimated.
- J Estimated. The analyte was present, but the reported value may not be accurate or precise.

 R Rejected. The data are unusable. (Note: Analyte/compound may or may not be present.)

As required by the EPA, organic sample results that are greater than the method detection limit (MDL), but less than the contract-required quantitation limit (CRQL), are qualified with a J for estimated. Similarly, inorganic sample results that are greater than the IDL, but less than the CRDL, are qualified with a J.

Once the data review and validation processes were completed, the entire data sets were reviewed for chemical compound frequencies of detection, dilution factors that might affect data usability, and patterns of target compound distribution. The data sets were also evaluated to identify potential data limitations, uncertainties, or both in the analytical results.

4.4 Holding Times

The holding times for each parameter were evaluated according to EPA CLP requirements. The holding time for metallic analytes is 180 days (except for mercury, which is 28 days). All holding time requirements were met for elemental targets. The holding time for pH measurement is 6 hours. All samples were received by the laboratory outside of the holding time and were therefore qualified as estimated. However, pH measurements were taken in the field during sample collection (see Table 2-6). The holding time for VOC samples is 14 days from date of collection to analysis. For other organic analyses (i.e., SVOCs, pesticides, herbicides, and PCBs), the extraction holding time is 7 days and the analysis holding time is 40 days. All organic holding times were met except in cases where samples were reextracted out of holding time in order to investigate low surrogate or low internal standard recoveries. All results from samples re-extracted out of holding time were qualified as estimated.

4.5 Potential Field Sampling and Laboratory Contamination

As discussed in Section 4.1, trip, equipment rinseate, and field blanks were used to monitor potential contamination introduced during field sampling, sample handling, and shipping activities. In addition to field blank samples, duplicate field samples were collected to provide information about sampling and analysis precision and accuracy. One duplicate sample was collected for every 10 field samples.

Also as discussed in Section 4.1, laboratory method blanks were analyzed. A laboratory method blank is ASTM Type II water that is treated as a sample because it undergoes the same analytical process as the corresponding field samples. Method blanks are used to monitor laboratory performance and contamination introduced during the analytical procedure. One method blank was analyzed for every 10 samples, or one per analytical batch, whichever was more frequent.

According to EPA (1994 a/b), concentrations of common contaminants detected in samples at less than 10 times the maximum concentration in the blanks can be attributed to field sampling or laboratory contamination rather than to environmental contamination from site activities. Concentrations of less common blank contaminants are multiplied by 5 rather than 10. Common contaminants include acetone, methylene chloride, and phthalates.

Acetone and methylene chloride are used as extraction solvents in the laboratory and are common laboratory contaminants. Acetone and methylene chloride were detected in the field samples at concentrations greater than 10 times the highest concentration detected in the corresponding blanks. However, acetone and methylene chloride can probably be attributed to field sampling or laboratory contamination because they were detected in the majority of the blanks and samples at similar concentrations, indicative of systematic contamination.

Phthalates are used as plasticizers. The most common phthalates are bis(2- ethylhexyl) phthalate (BEHP) and di-n-butylphthalate (DNBP). These are often introduced into samples during handling. Wearing latex gloves, the field samplers transfer the soil samples from the sampling equipment (i.e., split spoons or stainless-steel spoons). Latex gloves are used when handling groundwater sampling equipment such as pumps, hoses, and bailers. Also, laboratory personnel wear latex gloves when handling samples during the analytical process. The latex gloves are coated with plasticizers to facilitate release of the gloves from the skin. Therefore, the BEHP and DNBP can be attributed to field sampling or laboratory contamination. Similarly, other phthalates (e.g., butylbenzyl phthalate, diethylphthalate, and di-n-octylphthalate) were detected in samples but not in corresponding field or laboratory blanks. These sample results are most likely attributable to field sampling or laboratory contamination rather than to environmental conditions.

Inorganic target analytes (metals) were detected in field and laboratory blanks at concentrations at or near the IDL. These results can be attributed to instrument "noise" and are not indicative of contamination (see Section 4.9).

4.5.1 Soil, Sediment, and Surface Water

Table 4-1 summarizes the target compounds detected in the soil, sediment, and surface water field and laboratory QC blanks. An evaluation of blank contamination compared with field sample results for soil, sediment, and surface water is presented in Table 4-2.

These samples were analyzed for dioxins and furans using EPA Method SW-846/8290, which is a sensitive method with low MDLs. Concentrations of dioxins and furans were detected in the field and laboratory blank samples as well as in the field samples. These low concentrations of dioxins and furans can be attributed to background or instrument noise and are not indicative of environmental conditions. Dioxin and furan concentrations less than 5 times the maximum concentration in associated blanks were qualified (in the database) as undetected.

Bromomethane (two of eight laboratory method blanks) and carbon disulfide (one of six equipment rinseate blanks) were detected in selected field and laboratory blank samples at concentrations equal to or less than the reporting limits. These target compounds were not detected in the field samples; these results can therefore be attributed to laboratory contamination.

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Table 4-1
Summary of Target Compounds in the Field QA/QC Samples
Background Sampling Program
Defense Depot Memphis Tennessee

			Frequency of	Maximum	
Blank Type	Fraction	Target Compound	Detection	Concentration	Units
ТВ	VOC	Acetone	4 of 6	5 J	μg/L
		Methylene Chloride	1 of 6	9 JB	
FB	VOC	Acetone	l of 1	7 J	
	Dioxin/Furans	2378-TCDD	1 of 1	0.031	
		123678-HxCDD	l of i	0.007	
RS	VOC	Acetone	6 of 6	91	
		Methylene Chloride	2 of 6	1 JB	
		Carbon Disulfide	1 of 6	2 J	
	SVOC	Bis(2-ethylhexyl)phthalate	1 of 6	2 J	
	Dioxin/Furans	2378-TCDD	2 of 6	0.033 BJ	ng/L
		2378-TCDF	1 of 6	0.011	
		23478-PeCDF	l of 6	0.008 J	
		123478-HxCDF	2 of 6	0.010 J	
		123678-HxCD	1 of 6	0.008 BJ	
		123678-HxCDD	2 of 6	0.014 BJ	
		123789-HxCDD	1 of 6	0.013 BJ	
		234678-HxCDF	2 of 6	0.007 J	
		123789-HxCDF	1 of 6	0.009 J	
	1	1234678-HpCDF	2 of 6	0.025 BJ	
		1234678-HpCDD	l of 6	0.031 J	
		1234789-HpCDF	1 of 6	0.008 J	
		OCDD	l of 6	0.637 BJ	

Notes:

I indicates an estimated value.

B indicates the analyte was found in the associated blank as well as in the sample.

QA/QC = quality assurance/quality control

TB = trip blank

FB = field blank

RS = equipment rinseate

µg/L = microgram per liter

ng/L = nanogram per liter

VOC = volatile organic compound

SVOC = semivolatile organic compound

				1				
<u>(*)</u>	Evaluation of Fiel	d Samples	Field Samples and QC Blank Detections	Detections				
	Defense	Depot Men	Defense Depot Memphis Tennessee	نه				
		Total				Maximum		
		Number	Minimum	Maximam		Blank	;	
	Field Samples	Field ID	Concentration Detected in Field	Deterted in Field	Maximum Blank	Concentration	Attributable to	
	Analyzed	Samples	Samples	Samples	Concentration	common cont)	Contamination	Units
	2.5	6	63	1200	36	360	Yes (dilution)	lig/kg
	25	12	52	260	011	1100	Yes	1
,	24	25	10	16		50	Probably	
	25	25	01	16	7	70	Probably	
ļ	27	ΟI	0	0.583	0,012	0.06	Na	
- 1	27	8	0	70.0	0.023	0.115	Yes	
ı	77	2	0.003	0.005	0,016	0.08	Yes	
١	27	7	0.003	0.003	0.007	0.035	Ycs	
7	27	7	U	0.004	0.011	0.055	Yes	
1	22	8	O.	0.013	0.011	0.055	Yes	
\dashv	22	4	0	0.004	0.01	0.05	Yes	•
\dashv	27	80	0	0.008	0,011	0.055	Yes	_
\dashv	27	-	0.004	0.004	0,013	0.065	Yes	
+	7.7	2	ō	0.002	0.002	0.01	Yes	
+	27	2	Ω	0.002	Q	CI X	Na	
\dagger	27	4	0	0.005	0.013	0.065	Yes	
7	27	2	0.002	0.003	S.	NU	N.	
	27	9	()	0.004	0.005	0.025	Yes	
ı	27	6	Û	0.004	0,002	0.01	Ycs	
ı	7.7	18	0	11.654	0.039	0.195	No	
ı	7.2	_	O	0	Q	Ω̈́	Na	
- 1	63	6	350	410	36	360	Probably	
	63	61	350	420	110	0011	Yes	
J	49	43	10	27	2	50}	Yes	
J	49	49	01	29	7	710	Yes	
Į	- 31	24	0	0.39	0.012	90:0	No	
	15	7	0	0.1	0.023	0.115	Yes	
	15	2	0	900'0	0.011	0.055	Yes	
	15		0	0	10'0	\$0.0	Yes	
	15	1	0.004	0,004	1100	0.055	Yes	
ıl	18	1	0	0	0.002	10,0	Yes	
	<u> </u>		0.004	0.004	0.013	0.065	Yes	
	51	5	0	0	0.005	0.025	Yes	

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Table 4-2	Evaluation of Field Samples and QC Blank Detections	Background Sampling Program	Defense Depot Memphis Tennessee

		Units	ng/kg		μp/L	<u>:</u>	_	ng/I,	<u>.</u>			_	1	_	Υ	-	_	_		_	_	Υ-	Τ'-	
	Allribuluble to Field/1,ub	Contamination	Νo	νo	Yes	Yes	Yes	ž	Yes	Yes	Yes	Yes	ź	Yes	Yes	Yes	Yes	Š	Yes	ž	Yes	Yes	ů.	No
Maximum Blank	x \$ (x 10 for	common cont)	0.195	CIN	360	450	06	.0.155	0.46	0,285	0.23	0,165	80.0	61.0	0.32	0.2	125	SIN	0,25	0.04	0.215	0.055	3.185	CIN
	Maximum Blank	Concentration	0.039	ND	36	45	6	0.031	0.092	0.057	0.046	0.033	0.057	0.038	0.064	0.04	2.5	ND	50'0	0.008	0.043	0.011	0.637	ND
Maximum	Detected in Field	Samples	23.325	0.393	310	25	10	0,184	0,213	0,143	0.095	0.095	0.123	0,093	0.134	611.0	0.046	650'0	0.125	0.05	0,043	1,0,0	6.038	0
Nünimum Concentration	Detected in Field	Sumples	0.165	0	3	10	-	. 0	0	0	600.0	0	0	0	0	0.008	0	0.027	0	0	0	0	0	0
Fotal Number Detected in	Field	Samples	*	S	14	56	16	11	20	þ	8	12	13	8	11		3	4	7	4	91	01	24	-
Total Number	Field Samples	Analyzed	15	25	72	56	261	28	28	28	28	28	28	28	28	38	28	28	28	28	28	28	28	28
	Turnel Commence Money	Tarket Cumpound Mame	Cetachioradibenza-p-dioxin	Octachlorodibenzofuran	bis(2-chythexyl)phthatate	Acetone	Methylene chloride	1,2.3,4,6,7.8-Heptachlorodibenzo-p-dioxin	1,2,3,4,6,7,8-Heptachlandibenzofuran	1,2,3,4,7,8,9-Heplachlorodibenzofuran	1,2,3,4,7,8-Hexachloordibenzo-p-dioxin	1,2,3,4,7,8-Hexachlorodibenzofuran	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	1,2,3,6,7,8-Hexachlorodibenzofuran	1,2,3,7,8,9.Hexachlorodibenzo-p-dioxin	1,2,3,7,8,9-Hexachlorodibenzofuran	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	1,2,3,7,8-Pentachlorodibenzofuran	2,3,4,6,7,8-Hexachlorodibenzofuran	7.3.4,7,8-Pentachlorodibenzofuran	2,1,7,8-Tetrachloroditenzo-p-dioxin	2,3,7,8-Tetrachlorodibenzofuran	Octacitlorodibenzo-p-dioxin	Octachloradi benzofu pn
	Samula Matrix	דר	4		Surface Water	I		Surface Water			-	<u>1</u>	1	<u>1</u>	1	1		<u>-1</u>	स्य	<u> </u>	त्या	CI	기)

Notes: QC = quality cantrol 1g/kg = microgram per kilogram 1g/L = microgram per liter ng/L = nanogram per liter

cont = contaminants

Compounds found in soil, sediment, and surface water blanks that should be attributed to field sampling or laboratory contamination include:

- Acetone
- Methylene chloride
- Bis(2-ethylhexyl)phthalate
- Di-n-butyl phthalate
- Selected dioxins and furans as summarized in Section 4.5.1 (see Table 4-2)

4.5.2 Groundwater

Tables 4-3 and 4-4 summarize the target analytes and compounds detected in the field and laboratory QC blanks associated with the groundwater sampling event.

Several inorganic analytes were detected in QC blanks. Silicon was detected in several method blanks but not in field blanks. Silicon can be attributed to dissolution of the borosilicate glass beakers used in the sample digestion process. Target metals detected in groundwater field and laboratory blanks are summarized in Table 4-3. Sample results less than 5 times the maximum concentration detected in associated blanks were attributed to contamination and were qualified (in the database) as undetected.

Chloroform and tetrachloroethene were detected in one equipment rinseate blank each and 2-butanone was detected in two of the equipment rinseate blanks. Presence of these compounds in the equipment rinseate blanks is indicative of incomplete decontamination of field sampling equipment. Sample results for these target compounds at concentrations less than 5 times that in the associated equipment rinseate blanks were attributed to field sampling contamination and were qualified as undetected.

TABLE 4-3
Target Analytes Detected in Laboratory and Field Blanks for the Groundwater Sampling Background Sampling Program
Defense Depot Mamphis Tennessee

Analyte (inorganic)	Detected / Analyzed	Highest Concentration	000	
			CRDL	Probable Source
Aluminum	24 / 38	124	200	Field contamination
Barium	31 / 37	3.1	200	Field contamination
Calcium	35 / 3 7	211	5,000	Field contamination
Chromium	3 / 13	9.5	10	Field contamination
Copper	9/20	3.2	25	Field contamination
Iron	36 / 39	410	100	Field contamination
Lead	4 / 20	14	3	Field contamination
Magnesium	12/30	68	5,000	Field contamination
Manganese	27 / 37	8.9	15	Field contamination
Nickel	1 / 13	16	40	Field contamination
Sodium	37 / 37	10,100	5,000	Field contamination
Zinc	39 / 39	63.4	20	Field contamination

Notes:

The total number of blanks analyzed are not the same because of the varying number of laboratory method blanks prepared per analyte.

Concentration values are presented in µg/L.

TABLE 4-4
Target Compounds Detected in Laboratory and Field Blanks for the Groundwater Sampling
Background Sampling Program
Defense Depot Memphis Tennessee

Compound	Detected /	Highest		
(organic)	Analyzed	Concentration	CROL	Probable Source
BEHP	B / 36	45	10	Sample handling
DNBP	16/36	26	10	Sample handling
Acetone	51 / 59	12	10	Laboratory contamination
Methylene Chloride	42 / 59	3	10	Laboratory contamination
2-Butanone	2 / 29	2	10	Field contamination
Chloroform	1/29	1	10	Field contamination
Tetrachloroethene	1 / 29	2	10	Field contamination

Note:

Concentration values are presented in µg/L.

Compounds found in groundwater samples that should be attributed to field sampling or laboratory contamination include:

- Acetone
- Methylene chloride
- BEHP
- Di-n-butylphthalate
- Di-n-octylphthalate
- Butyibenzylphthalate
- Diethylphthalate

4.6 Surrogate Spike Recovery

Surrogate spike compounds were added to every sample analyzed for the organic parameters including field and laboratory blanks as well as field environmental samples. Surrogate spike compounds are the structural homologs of target compounds and are therefore expected to behave in a similar manner during analysis.

Surrogate spike recoveries were used to monitor both laboratory performance and matrix interference. Surrogate spike recoveries from field and laboratory blanks were used to evaluate laboratory performance because the field blanks represent an "ideal" sample matrix. Surrogate spike recoveries for field samples were used to evaluate the potential for matrix interference. For field samples, when the surrogate spike recoveries fell outside the target acceptance windows of the method, the samples were re-analyzed. If the surrogate spike recovery was still outside the acceptance window for the re-analyzed sample, then the sample results were qualified as affected by matrix interference.

The VOC surrogate recoveries for surface water, soil, and groundwater samples were clustered within a window of about 85 to 115 percent, which is within the target acceptance limits of the method. A greater variation (and hence broader range of recoveries) in surrogate spike recovery was observed for the other organic analyses, but this is typical of these analyses and is reflected by the broader target acceptance limits of the method. Except for SVOC analyses, samples with surrogate recoveries outside the acceptance limits are flagged as estimated. For SVOC analysis (where there are eight surrogates), the method allows one surrogate recovery to be outside the acceptance limits before requiring sample results to be qualified.

Many surrogate recoveries of zero were a result of sample dilution. Samples were diluted because of high target content or matrix interference, and surrogate compounds were not added to the diluted sample. Sample results with low surrogate recoveries that resulted from dilution were not qualified.

4.6.1 Soil, Sediment, and Surface Water

The majority of surrogate spike recoveries for sediment, soil, and surface water were within the target acceptance limits of the method, which indicates that the matrix did not influence the overall analytical process or the final numerical sample result.

4.6.2 Groundwater

As above, the majority of surrogate spike recoveries for groundwater were within the target acceptance limits of the method, which again indicates that the matrix did not influence the analytical process or sample result.

The pesticide/PCB results for one sample, IDWW01 (MA251010), exhibited extremely low surrogate recoveries in both the original (22 percent and zero percent recovery) and the repeat (42 percent and zero percent recovery) extracts. IDWW01 was a sample from the holding tank for equipment decontamination water. The decontamination water contains cleaning agents and surfactants (soap) that typically interfere with the laboratory extraction process. Final results for the pesticide/PCB fraction of this sample were qualified as estimated.

4.7 Matrix Spike Recoveries

For organic analysis, three aliquots of a single sample are analyzed: one native and two spiked with matrix spike compounds. Unlike the surrogate spike compounds, matrix spike compounds are found on the method compound list. For inorganic analysis, two aliquots of a single sample are analyzed: one native and one spiked with target analytes. Spike recovery is used to evaluate potential matrix interference with and accuracy of the analytical process. The duplicate spike results are compared to evaluate precision.

More than 90 percent of matrix spike recoveries were within the target acceptance ranges of the method, which indicates that the specific sample matrices did not influence the overall analytical process or the final numerical sample result.

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4.8 Duplicate Sample Results

Duplicate sample analyses were used to evaluate the precision of the analytical data. Approximately one duplicate field sample was collected for every 10 field samples. Both the native and duplicate samples were analyzed for the same parameters. EPA (1994 a/b) sets advisory limits of 20 RPD for water and 35 RPD for soil when both values are more than 5 times the CRDL for inorganic analytes or the CRQL for organic analysis. If either one or both of the values is less than 5 times the CRDL or CRQL, then duplicate results should be within plus or minus the CRDL or CRQL for water, or plus or minus 2 times the CRDL or CRQL for soil. Overall, the field duplicate results indicate that precision was not compromised by either the matrices or the field sampling techniques.

4.8.1 Soil, Sediment, and Surface Water

Target analytes were detected 73 times in field duplicate samples for soil, sediment, and surface water. Two of these had RPDs that were outside of the criteria described above. They are summarized in Table 4-5.

TABLE 4-5
Soil, Sediment, and Surface Water Field Sample Duplicate Precision Outside Acceptance Criteria Background Sampling Program
Defense Depot Memphis Tennessee

Sample ID	Element	Native Concentration	Duplicate Concentration	RPD
SD240	Copper	13.5	20.8	43
SD220	Manganese	227	131	54

Note:

Concentration values are presented in mg/kg

4.8.2 Groundwater

Target analytes were detected 35 times in field duplicate groundwater samples. Six of these had RPDs that were outside of the criteria described above. They are summarized in Table 4-6.

TABLE 4-6
Groundwater Field Sample Duplicate Precision Outside Acceptance Criteria
Background Sampling Program
Defense Depat Memphis Tennessee

Sample ID	Element / Compound	Native Concentration	Duplicate Concentration	RPD
MW241	Aluminum	718	973	30
MW241	tron	5,190	7,450	36
MW311	Trichloroethene	680	1,100	47
MW311	1,1,2,2 - Tetrachloroethane	420	280	40
MW311	(Total) 1,2 - Dichloroethene	760	480	45
MW311	Chloroform	35 (J)	23 (J)	41

Note:

Concentration values are presented in µg/L.

4.9 Results for Metals Near the Instrument Detection Limit

The IDL is the constituent concentration that produces a signal greater than 5 times the signal/noise ratio of the instrument and is a calculated value rather than an experimentally demonstrated value. Therefore, sample results at or near the IDL may be caused by instrument noise or low-level background shifts rather than an analyte signal.

The samples were analyzed for the TAL list of metals (or parts thereof) consisting of antimony, aluminum, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, lead, iron, magnesium, manganese, mercury, nickel, potassium, selenium, silver, sodium, vanadium, and zinc.

Concentrations of metals near the IDL were reported for many of the target metals. These data were evaluated before they were used in the risk evaluation and report preparation process.

The sample results were reported in terms of the CRDL. Sample results that were above the IDL, but less than the CRDL were qualified as estimated values. The reporting limit, or CRDL, is typically 5 to 10 times the concentration of the IDL. Results at or near the CRDL are more "viable" sample results and are not suspect in the same way as results reported at or near the IDL.

4.10 Precision, Accuracy, Representativeness, Completeness, and Comparability (PARCC)

Precision—is defined as the agreement between duplicate results and was estimated by comparing duplicate matrix spike recoveries and field duplicate sample results. More than 90 percent of matrix spike recoveries was less than 20 percent RPD. More than 90 percent of RPDs for duplicate field sample results was less than 20 percent for water and 35 percent for soil samples, indicating that sample matrix did not interfere with the overall analytical process.

Accuracy—is a measure of the agreement between an experimental determination and the true value of the parameter being measured. For the organic analyses, each of the samples was spiked with a surrogate compound; and for inorganic analyses, each sample was spiked with a known reference material before digestion. Each of these approaches provides a measure of the matrix effects on the analytical accuracy. Accuracy can be estimated from these analytical data but cannot be measured directly. More than 95 percent of the spike recoveries was within the method acceptance limits; therefore, there was no evidence of matrix interference.

Representativeness—this criterion is a qualitative measure of the degree to which sample data accurately and precisely represent a characteristic environmental condition. Representativeness is a subjective parameter and is used to evaluate the efficacy of the sampling plan design. Representativeness was demonstrated by providing full descriptions in the project scoping documents of the sampling techniques and the rationale used for selecting sampling locations.

Completeness—is defined as the percentage of measurements that is judged to be valid

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compared with the total number of measurements made. A goal of 95 percent usable data was established in the project scoping document and more than 99 percent of the data was determined to be valid.

Comparability—is another qualitative measure designed to express confidence for comparing data sets. Factors that affect comparability are sample collection and handling techniques, sample matrix type, and analytical method. Comparability is limited by the other PARCC parameters because data sets can be compared with confidence only when precision and accuracy are known. Data from this investigation are comparable with other data collected at the site because only EPA methods were used to analyze the samples, and Level 2 QC data are available to support the quality of the data.

4.11 Data Quality Evaluation Conclusions

Conclusions of the data quality evaluation process are as follows:

- The laboratory analyzed the samples according to the EPA methods stated in the work plan as demonstrated by acceptable instrument calibration and blank spikes.
- Concentrations of acetone, methylene chloride, and phthalates (including BEHP, di-n-butylphthalate, di-n-octylphthalate, butylbenzylphthalate, and diethylphthalate) can all be attributed to field sampling or laboratory contamination rather than to environmental contamination.
- Sample results for metals above the IDL but less than the CRDL may be attributed to instrument noise and not to site-related activities.
- Sample results for organics above the MDL but less than the CRQL should be considered indicative of the presence of that compound but at an estimated concentration.
- Spike recoveries and duplicate sample results indicate that the specific sample matrix did not interfere with the analytical process.

The data can be used in the project decisionmaking process without further qualification.

TAB

5.0 Summary and Conclusions

Soil, sediment, surface water, and groundwater were sampled in locations unaffected by DDMT waste management operations and analyzed for a wide range of organic and inorganic chemical constituents. A background statistical database has been developed to identify background concentrations of contaminants at DDMT that will be used to determine whether site-specific waste management operations or releases of hazardous materials at DDMT have contributed contaminants exceeding background levels.

Metals and SVOC, pesticide, and dioxin/furan compounds were detected at concentrations exceeding risk-based preliminary screening criteria, as summarized below.

Matrix	Background Constituents Exceeding Screening Criteria
Soil	Arsenic, barium, beryllium, manganese, and selenium, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-c,d)pyrene, phenol, and dioxin/furan TEF
Sediment	Antimony*, arsenic, cadmium, total chromium, copper, mercury, lead, silver*, zinc, acenaphthene, anthracene, benzo(a)anthracene, benzo(a)pyrene, chrysene, dibenz(a,h)anthracene, fluorene, fluoranthene, naphthalene, phenanthrene, and pyrene
Surface water	Aluminum, arsenic, total chromium, copper, iron, nickel ^a , lead, silver ^a , zinc, and dioxin/furan TEF
Groundwater	Antimony*, arsenic*, barium, beryllium, copper, lead, vanadium, 1,1,1-trichloroethane; 1,1-dichloroethane; and trichloroethylene
*All concentrations are	estimated.

Background values for all detected constituents are presented in Table 5-1. Complete statistical tables were developed for all media and are presented in Appendix F.

Surface and subsurface background soil samples were taken from locations along the DDMT perimeter and off DDMT property to evaluate the potential impact that normal operation of the DDMT facility, excluding waste management operations, has had on background soil concentrations. Perimeter DDMT sample locations are representative of an industrial environment, whereas offsite background locations are associated with residential or recreational environments. DDMT perimeter surface soil concentrations were higher for metals, VOCs, SVOCs, pesticides, and PCBs, but the difference between perimeter and offsite concentrations was less than 100 percent RPD. Elevated xylene and phthalate concentrations at the DDMT perimeter are likely a result of increased vehicular traffic around the facility. This difference in concentration is expected when comparing industrial land use with residential and recreational land uses and does not suggest impact from waste management and disposal operations.

ORO113627.RR.ZZ/031.DOC

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		y	Analyses	Detects	I.≣ I	i ii.	ן ו	90	<u>18</u>				
No. and a		Units	Š	No.	<u>:</u>	Maximum Detected	Mean Detected	Ü	 				
<u> Matrix</u>	Constituent		Z	Z.	Σ	<u> </u>	Σ	<u> </u>					
Surface Water	· · · · · · · · · · · · · · · · · · ·	Metals	1 43		200		0536						
Surface water	Aluminium, Total	µg/L	22	18	266	16900	2538		TMDV				
	Aluminum, Dissolved	4	22	2	191.0	280.0	235.5	471.0					
	Antimony, Dissolved	4	22		16.4	16.4	16.4		TMDV				
	Arsenic, Total	4	22	- 11	6.6	13.6	9.0		TMDV				
	Arsenic, Dissolved	4	22	6	5.1	7,4	6.2		TMDV				
	Barium, Total		22	22	26.2	185.0	62.6		TMDV				
	Barium, Dissolved		22	19	23,0	99.4	43.6		TMDV				
	Calcium, Total		22	22	4410	34800	15900	31800					
	Calcium, Dissolved		22	22	3710	34200	15100	30200					
	Chromium, Dissolved		22	1	16.7	16.7	16.7	33.4					
	Chromium, Total		22	2	18.0	18.1	18.1	36.1	TMDV				
	Copper, Total		22	5	10.4	76,4	37.3		TMDV				
	Iron, Total		22	22	346	20800	3051.7	6103.5	TMDV				
ŀ	Iron, Dissolved		22	. 6	118	2040	600.5	1201	TMDV				
	Lead, Total		22	6	5.5	16.7	9.3	18.6					
	Lead, Dissolved				l	22	1	11.3	11.3	11.3	22.6		
	Magnesium, Total				22	22	1470	6710	3850.9	7701.8	TMDV		
	Magnesium, Dissolved				22	22	1220	6550	3432.3	6864.5	TMDV		
	Manganese, Total		22	22	46.5	1140	328.1	656.2	TMDV				
	Manganese, Dissolved		22	21	32	713	176	352	TMDV				
	Nickel, Total		22	5	6.9	19.9	11.4	22.8*					
	Nickel, Dissolved	1	1				22	1	118	118	118		TMDV
	Potassium, Total		22	19	733	6730	3640	7280	TMDV				
	Potassium, Dissolved		22	17	1050	6450	3360	6720	TMDV				
	Selenium, Dissolved			22	2	1.4	1.6	1.5	3.0*	TMDV			
	Silver, Total		22	2	1.8	1.8	1.8		TMDV				
	Sodium, Total		22	18	2890	17900	10700		TMDV				
	Sodium, Dissolved	[22	17	6720	17500	10800		TMDV				
	Vanadium, Total		22	5	13.2	39.4	19.5		TMDV				
	Zinc, Total		22	3	64.0	221.0	143.7	287.3	TMDV				
	Zinc, Dissolved		22	ı	205.0	205.0	205.0		TMDV				
Surface Soil	Aluminum	mg/kg	22	22	8160	18500	11905		TMDV				
	Апітолу		22	I	3.5	3.5	3.5	7.0	TMDV				
!	Arsenic		22	22	4.2	27.7	10.9		BCT				
ļ	Barium		22	22	77	160	126	234	BCT				
	Beryllium		22	15	0.5	0.6	0.5	1.1	TMDV				
	Cedmium		22	4	0.6	0.8	0.7		TMDV				
,	Calcium		22	22	424	30600	2920		TMDV				
	Chromium, Total		22	22	B.4	17.7	13.7	24.8					

	Table 5-1									
Statistics for Detected Background Constituents										
Background Sampling Program										
Defense Depot Memphis Tennessee										
<u> </u>	Detense Depoi	MENT	11112 1	emie						
Matrix	Constituent	Units	No. Analyses	No. Detects	Minimum Detected	Maximum Detected	Mean Detected	Background Value	Background Basis	
Surface Soil	Cobalt	mg/kg	22	22		12.3	9.1	18.3	TMDV	
(continued)	Copper		22	22		23.3	16.7	33.5	TMDV	
	Iron	!!	22	22	_	26100	18520	37040	TMDV	
	Lead	Į l	22	22	11.7	73.3	21.3	30	BCT	
•	Magnesium	1	22	22	1110	3200	2308	4616	TMDV	
į.	Manganese		22	22	330	1080	652	1304	TMDV	
	Mercury		22	4		D.4	0.2	0.4	TMDV	
į	Nickel		22	22	10.4	21.4	16.5	30	ВСТ	
	Potassium		22	22	641	1460	1013	2025	TMDV	
	Selenium Silver		22	3	0.3	0.5	0.4	0.8		
	Vanadium		22	1	1.0	1.0	1.0	2.0*	TMDV	
	Zinc		22	22	17.7	35.2	26.1	48,4	вст	
Subsurface Soil	Aluminum		22	22	35.6	89.5	62.8	126		
Pagnzariate 2011	Arsenic		22 27	22	6820	14900	10915	21829		
	Barium		22	22	3.1 90	14.1	8.5	17.0	TMDV	
	Beryllium		22	22 14		243 0.7	150 0.6	300		
	Cadmium		22	3	0.3	0.7	0.5	1,2	$\overline{}$	
	Calcium		22	22	511	2630	1216	1.4 7 2432	TMDV	
	Chromium, Total	1	22	22	8.7	18.0	13.2	26.4	TMDV	
	Cobalt	{	22	22	5.0	20.4	10.2	20.4	TMDV	
	Copper	{	22	22	7.4	23.1	16.3	32.7	TMDV TMDV	
	Iron	!	22	22	8340	24900	19240	38480		
	Lead	1	22	22	6.9	22.7	12.0	23.9		
	Magnesium	1	22	22		3370	2450	4900		
	Manganese	1	22	22	231	1580	770	1540		
	Mercury	1	22	$\overline{}$	0.1	0.1	0.1	0.2		
	Nickel		22	22	9.0	22.4	18.3	36.6		
	Potassium		22	22	483	1480	900	1800		
	Selenium		22	— il	0.3	0.3	0.3	0.6		
	Silver		22	2	0.4	0.6	0.5	1.0		
	Vanadium		22	22	15.0	31.7	25.6	51.3		
<u></u>	Zinc	i i	22	22	30.9	79.5	57.0	114		
Sediment	Aluminium		22	22	490	14200	5042	10085	TMDV	
	Antimony		22	2	3.7	3.9	3.8	7.6	TMDV	
	Arsenic		22	17	1.5	11.1	6.0	12.0		
	Barium		22	22	3.7	137.0	59.0	118	TMDV	
	Berylüum		22	5	0.5	8.0	0.6	1,3	TMDV	
	Cadmium	1	22	3	1.3	38.2	14.5	28.9	TMDV	
	Calcium	 	22	20	134	56800	7430	14860		

	Table 5-1									
	Statistics for Detected Background Constituents									
Background Sampling Program										
<u>l</u>	Defense Depot	_	_	_						
<u> </u>	Defense Depoi	TVICIII	1113	Circ		·			<u> </u>	
Matrix	Constituent	Units	No. Analyses	No. Defects	Minimum Detected	Maximum Detected	Mean Detected	Background Value	Background Basis	
Sediment	Chromium, Total	mg/kg	22	22	4.1	174		20	BCT	
(continued)	Cohalt]	22	14	1.2	10.8	6.8	13.6	TMDV	
	Copper		22	16	1.7	1250	135	58	BCT	
	Iron		22	22	3330	30700	11540	23080	TMDV	
	Lead		22	21	1.7	291	36.0	35.2	вст	
	Magnesium	1	22		51.2	2950	1220	2440	TMDV	
	Manganese	1	22	22	59.3	2610	436	871	TMDV	
]	Mercury		22		2.0	2.0	2.0	4.0	TMDV	
	Nickel		22	13	5.3	37.4	15.2	30.5	TMDV	
ļ	Potassium]	22	9	269	1080	780	1560	TMDV	
	Selenium	-	22	4	0.4	1.5	0.8	1.7	TMDV	
	Silver		22	1	0.9	0.9	0.9	1.8	TMDV	
	Sodium		22]	120	120	120	240	TMDV	
	Thallium		22	2	0.5	0.6	0.5	1.1	TMDV	
	Vanadium	J	22	22	4.4	31.5	15.0	30.0	TMDV	
<u> </u>	Zinc		22	22	8.4	7630	399	797	TMDV	
Groundwater	Aluminum	μg/L	12	5	235	2670	899.2	1798	TMDV	
	Antimony]	12	1	17.2	17.2	17.2	34,4°	TMDV	
	Barium		12	12	42.9	307.0	111.9	223.8	TMDV	
	Beryllium		12	2	0.2	0.4	0.3	0.6	TMDV	
	Calcium]	12	12	9950.0	49200.0	26437.5	52875.0	TMDV	
	Chromium, Total]	12	2	20.3	34.0	27.2	54.4	TMDV	
	Cobalt		12	5	2.2	19,6	12.4	24,8	TMDV	
	Copper		12	4	2.0	315.0	81.3	162.6	TMDV	
	Iron]	12	9	598.0	7960.0	3364.0	6728,0	TMDV	
	Lead]	12	3	2.5	7.6		9.4	TMDV	
	Magnesium		12	12	5250.0	24000.0	13022.5	26045.0		
	Manganese		12		17.2	917.0	280.0		TMDV	
	Nickel]	12	3	9.4	25.6.	15.7	31.4	TMDV	
	Potassium] [12	9	B49,0	4040.0	1747.7	3495.4	TMDV	
-	Selenium] [12	t]	2.9	2.9	2.9	5.8	TMDV	
	Sodium	į [12	4	32300.0	74600.0	53325.0	106650	TMDV	
l	Vanadium	[12	4	14.8	7.3	3.0	6.0	TMDV	

		Table 5-	1							
1				nd Ca	netitue	nte				
	Statistics for Detected Background Constituents Background Sampling Program									
1		-	_	_						
[Defense Depo	t Memp	his T	ennes						
					Minimum Detected			11e	<u>:5</u>	
					je		72	Background Value	Background Basis	
			ses	, i	<u> </u>		3	ַ ק	$\overline{\mathbf{z}}$	
1			Analyses	Detects	₽	₽ p	et		5	
		ی ا	Y Dig	l ĕ l	<u>Ē</u>	im cte	ı ı	- 2	E	
		Units	No.	No. 1	_ <u>≅</u>	Maximum Detected	Mean Detected	1 2	ack	
Matrix	Constituent				Σ	ΣΩ	Σ	æ	<u> </u>	
Surface Soil	Volatile O Carbon Disulfide		ompo 22	unas 2	-1	-				
Surface Son		μg/kg	22	4	2 2	2	- 4	2	NP	
	Methylethyl Ketone (2-Butanone) Toluene	-	22	 	2	2	<u> </u>	2	NP	
	Total Xylenes	┥	22	10	- 1	9	2.8	9	NP	
F.ub.u	Carbon Disulfide	┥	22	2	1	2	2.8 1.5	2	NP NP	
Subsurface Soil	Total Xylenes	┥	22	4	- 4	- 2	1.5	4	NP NP	
Surface Water	Methylethyl Ketone (2-Butanone)	µg/L	22	5			1.6		NP	
Juliace Water	Total Xylenes	ا ۲۳۳	22	2	1		1.0	- 1	NP	
Sedimeni	Chloromethane	µg/kg	22		- 3		3	3	NP	
	Methylethyl Ketone (2-Butanone)	ן ^{יייי} ן	22	10	 - - 	10	4.8	10	NP	
	Taluene	┥	22	3		14	8.7	14	NP	
Groundwater	1.1.1-Trichloroethane	μg/L	12	1		<u>-</u>			NP	
	I.1Dichloroethene	┤┍╸	12	1	2	2	2	2	NP	
	Tetrachioroethylene (PCE)	┥	12	1	- 7			_	NP	
	Semivolatile Or	zanic Co	mpou	nds	<u>-</u>					
Surface Soil	Acenaphythylene	μg/kg	22	1	190	190	190	190	NP	
ŀ	Anthracene	┥~~~	22	1	96	96	96	96	NP	
	Benzo(a)anthracene	┪	22	9	43	710	151	710	NP	
·	Benzo(a)pyrene	1	22	9	44	960	186	960	NP	
	Benzo(b)fluoranthene	┪.	22	9	51	900	208	900	NP	
	Benzo(g,h,i)perylene	1	22	9	37	820	169	820	NP	
	Benzo(k)fluoranthene	7	22	9	45	780	192	780	NP	
	Carbazole	┦ ┆	22	1	67	67	67	67	NP	
	Chrysene		22	10	40	940	190	940	NP	
	Dibenz(a,h)anthracene	7	22	3	36	260		260	NP	
Į	Fluoranthene	7	22	11	49	1600	310	1600	NP	
	Ideno(1,2,3-c,d)pyrene	7	22	7	63	700	179	700	NP	
	Phenathrene]	22	9	37	610	159	610	NP	
	Phenol]	22	5	52	14000	5238	14000	NP	
	Pyrene		27	- 11	50	1500	272	1500	NP	
Subsurface Soil	Fluoranthene]	22	2	44	45	45	45	NP	
	Phenol		22	6	580	19000	4295	19000	NP	
	Pyrene		22	2	. 39	42	41	42	NP	
Sediment	Acenaphthene		22	2	59	770	415	770	NP	
ļ	Anthracene		22	2	310	1600	955	1600	NΡ	
	Benzo(a)anthracene		22	6	64	2900	820	2900	NP	
	Benzo(a)pyrene		22	7	64	2500	632	2500	NP	
	Benzo(b)fluoranthene	<u></u>	22	7	59	2600	669	2216.046	LN	

	Table 5-1										
Statistics for Detected Background Constituents											
Background Sampling Program											
j)	Defense Depot Memphis Tennessee										
Matrix	Constituent	Units	No. Analyses	No. Detects	Minimum Detected	Maximum Detected	Mean Detected	Background Value	Background Basis		
Sediment	Benzo(g,h,i)perylene	μg/kg	22	7	48	1800	452	1800	NP		
(continued)	Benzo(k)fluoranthene		22	7	75	2300	624	2300	NP		
	bis(2-ethylexyl)phthalate		22	1	480	480	480	480	NP		
	Carbazole		22	2	83	1100	592	1100	NP		
	Chrysene		22	8	88	3200	735	3200	NP		
1	Dibenzo(a,h)anthracene		22	2	130	700	415	700	NP		
i	Dibenzofuran		22	2	42	380	211	380	NP		
	Di-n-Octylphthalate		22		47	47	47	47	NP		
	Fluoranthene		22	10	60	7100	1294	7100	· NP		
	Fluorene		22	2	130	870	500	870	NP		
	Ideno(1,2,3-c,d)Pyrene		22	7	42	1700	428	1700	ΝÞ		
	Naphthalene		22	1	130	130	130	130	ΝÞ		
	Phenanthrene		22	6	68	6900	1651	6900	NP		
	Phenol		2.2	5	51	200	86	200	NP		
	Pyrene		22	10	43	6800	1360	2882	LN		
Groundwater	Benzyl Butyl Phthalate	µg/L	12	- 1	2	2	2	4	NP		
	Pestio	cides/PCBs					<u> </u>				
Surface Soil	Alpha-Chlordane	μg/kg	22	5	3.5	29.0	9.4	29.0	NP		
ŀ	Dieldrin		22	14	3.3	530	114	86	BCT		
	Gamma-Chlordane		22	5	2.3	26,0	11.0	26.0	NP		
	Heptachlor Epoxide		22	1	7.7	7.7	7.7	7.7	NP		
	p,p'-DDD		22		6.7	6.7	6.7	6.7	NP		
	p.p'-DDE	i	22	2	110	160	135	160	NP		
	p,p'-DDT		22	3	9.4	74,0	43.5	74.0	NP		
	PCB-1260 (Arochler 1260)		22	2	100	110	105	110	NP		
Subsurface Soil	Alpha-Chlordane		22	1	2.6	2.6	2.6	2,6	NP		
	Dieldrin		22	3	3.5	370.0	127.0	370.0	NP		
ļ	Gainma-Chlordane		22	1	2.2	2.2	2.2	2.2	NP		
	p.p'-DDE		22	1	1.5	1.5	1.5	1.5	NP		
	p.p'-DDT		22	1	7.2	7.2	7.2	7.2	NP		
Sediment	Alpha-chlordane		21	4	3.6	5.2	4.5	5.2	NP		
	Dieldrin	i	22	1	11.0	11.0	11.0	11.0	NP		
	Gamma-Chlordane		22	5	6.1	2000.0	417.0	2000.0	NP		
	Heptachlor Epoxide		22	1	230	230	230	230	NP		
	p.p'-DDD		22	3	2.8	6.1	5.0	6.1	NP		
	p,p'-DDE		22	- 2	5.B	7.2	6.5	7.2	NP		

Table 5-1 Statistics for Detected Background Constituents Background Sampling Program **Defense Depot Memphis Tennessee** Minimum Detected **Background Value Mean Detected** lo. Analyses Background Detects Maximum Detected Inits Matrix Constituent Dioxin/Furans Surface Soil Octachlorodibenzofuran μg/kg 22 0.045 0.39 0.16 0.393 ΝP Octachlorodibenzo-p-Dioxin 22 22 0.747 23.33 5,52 9,72 LN 22 0.071 1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin 0.39 0.14 0.390 NP 22 22 0.001 Total Equivalency Factor 0.020.01 0.010 LN Subsurface Soil Octachlorodibenzo-p-Dioxin 22 17 0.209 9,44 2.99 9,44 NP 17 22 Total Equivalency Factor 0.000 0.01 0.00 0.006 LN ng/L 0.02 Surface Water 2,3,7,8-Tetrachlorodibenzofuran 22 0.007 0.03 0.031 NP 2,3,4,7,8-Pentachlorodibenzofuran 22 0.024 0.05 0,04 0.050 NP 1,2,3,7.8-Pentachlordibenzofuran 22 0.027 0.06 0.04 0.057 NP 1.2.3.7,8-Pentachlorodibenzo-p-Diaxin 22 0.046 0.05 0.05 0.046 NP Octachlorodibenzo-p-Dioxin 22 15 0.206 1.23 0.58 1.225 NP 1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dixoin 22 0.043 0.18 0.10 NP 0.184 15 Total Equivalency Factor 22 0.000 0.03 0.00 0.018 LN

0.002

0.431

0.064

0.000

0.002

8.56

0.58

0.009

0.002

2.62

0,24

0.003

0.002

8.56

0.583

0.009

NP

NP

NP

NP

22

22

22

11

μg/kg

Because of the low number of detections, the background value, based on twice the mean detected value, exceeds the maximum detected value.

Notes:

Sediment

BCT = Background value established by BCT review of data.

1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin

2,3,4,7,8-Pentachlorodibenzofuran

Octachlorodibenzo-p-Dixoin

Total Equivalency Factor

TMDV = Twice mean detected value.

NP = Background is the maximum value based on nonparametric distribution.

NO = Background is the UCL95 value based on a normal distribution.

LN = Background is the UCL95 value based on a lognormal distribution.

UCL95 = 95th percentile upper confidence level on mean concentration

µg/L = micrograms per liter

mg/kg = milligrams per kilogram

µg/kg = micrograms per kilogram

ng/L = nanograms per liter

Dioxins and furans were detected in most perimeter and offsite soils and at generally higher concentrations at the surface than at depth. Dioxins were also detected in sediment and surface water samples, with the highest detected concentrations exceeding EPA Region III risk-based criteria at the Botanical Gardens and Audubon Park. Most of the background detections were octa- and hepta isomers, indicating that the detections likely resulted from atmospheric deposition rather than isolated surface sources.

Validation of the data indicated that the results for the following soil, sediment, and surface water parameters should be attributed to field or laboratory contamination:

- Acetone
- Methylene chloride
- Bis(2-ethylhexyl)phthalate
- Di-n-butyl phthalate

Likewise, the results for the following groundwater parameters should be attributed to field or laboratory contamination:

- Acetone
- · Methylene chloride
- BEHP
- Di-n-butylphthalate
- Di-n-octylphthalate
- Butylbenzylphthalate
- Diethylphthalate

Dioxin and furan isomers were also identified in field and laboratory blanks. Background dioxin concentrations less than 5 times the maximum blank concentration were reported as not detected. Holding times, matrix recoveries, and duplicate analyses were all within CLP performance requirements.

TAB

6.0

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TAB

Appendix A

Appendix A
Soil Boring Logs



PROJECT NUMBER BORING NUMBER

113627. BS. ZZ SS-51/SB-09-5 SHEET | OF |

	<u> </u>	
PROJECT DOMT - BACKGEOUN	D SAMPLING LOCATION	MEMPHS, TN - Dunn Field
ELEVATION	DRILLING CONTRACTOR THISTATE	TESTING SERVICES
DRILLING METHOD AND EQUIPMENT COMT	HUOUS SAMPLINE WITH 3-4"	D HSA - CME 55
WATER LEVELS NOT ENCOUPIERED	START 09 OLT 95 FINISH	64 OCT 45 LOGGER S. BRUER / MGM
	OOU DECEDITION	COMMENTS

DRILLIN	DRILLING METHOD AND EQUIPMENT CONTINUOUS SAMPLING WITH 3-4" ID HSA - CME 55 WATER LEVELS NOT ENCOUNTERED START 69 OCT 95 FINISH 69 OCT 95 LOGGER 5. BRUER / MGM									
WATER	LEVELS	707								
<u></u> ≩=		SAMPLE		STANDARD PENETRATION	SOIL DESCRIPTION	COMMENTS				
DEPTH BELOW SURFACE (F1)	INTERVAL	NUMBER AND TYPE	RECOVERY (F1)	TEST RESULTS 6"-6"-6"	SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT. RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS AND INSTRUMENTATION				
1 20	- 5		-		TOP 1.5 INCHES = TOPSOIL	START 1432				
-		55-51 AND 55-514	1.0	_	SILTY CLAY (CL), light brown, dry, with a trace of mots.	- collected 1991 - how = oppm				
1, _	1.0				_	- first run from _				
'		个		•	_	\$ ft + 1ft bas				
					_	not enough sample, offset borehole				
					_	approx. If for				
-	1				_	second run from				
	1					off to 1th pas -				
2 -	1]			_	7				
-	1	۾			SILTY CLAY (CL), light brown	j ·				
-	1	OLLECTED		!	the trace					
-	1	AT .	4.0	-	dry to moist, with a trace					
-	ł	<u> </u>			of roots -					
3 -	4	٥,			_	-				
.	1	107			-					
	1	w			-	-[
١.]	ير			-	.]				
	j	SAMPL			_					
		N]				
4 -	1	11	1	ļ						
'	1					1				
-	1				_	1				
1	1		1		-	1				
						1,				
5-	50	- Y	 		Summer of the Control State burning	SB-09-5/MS-MSD - collected 1451				
.	┨	7			SILTY CLAY (CL), light brown, moist, with a trace of roots	- collected 1451				
	-	ې کې	, _		Moist, Adian or Lines of Legal	- hnu = oppm				
) [.	1	٥	1.0			-				
` .	1	58	1		,	_				
	6.0	<u> </u>	<u> </u>		BORING TERMINATED AT 6 FEET	STOP 1456				
					(8.30)	REV 11/89 FORM D15				

CHEMHÎLL

PROJECT NUMBER 113627. BS. モモ

BORING NUMBER 55.52/53-10-5 SHEET

OF !

PROJE	ст _	DDr	<u> </u>	BACKGROU	AND SAMPLING LOCATION I	TEMPHIS, TN - Over
ELEVA	TION				DRILLING CONTRACTOR TRISTATE	TESTING SERVICES
DRILLI	NG ME	THOD A	ND EQUI	PMENT CO	NTINUOUS SAMPLING WITH 3-7	4" ID HSA - CME 55
	TEVE				START 6400795 FINISH 65 C	LOGGER S. BRUER MGM
DEPTH BELOW SURFACE (F1)	\vdash	SAMP		STANDARD PENETRATION	SOIL DESCRIPTION	COMMENTS
품유	¥	NUMBER AND TYPE	RECOVERY (FT)	RESULTS	SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY	DEPTH OF CASING, DRILLING RATE,
I E H	INTERVAL	A B C	SE	6"-5"-6"	OR CONSISTENCY. SOIL STRUCTURE. MINERALOGY	DRILLING FLUID LOSS. TESTS AND INSTRUMENTATION
ÖÖ	 	 	<u> </u>	(N)		<u>. </u>
.	-				TOP 1.0 INCH = TOPSOIL	START 1535
] .	-	55-5	2 1.0	,	SILTY CLAY (CL), light brown	<u>55-52</u>
] .				_	dry to moist, with a trace	- collected 1547
.]				of roots	- hnu = \$ ppm
	<u>J.</u> O].	!	·	- collected a split
'		一本				Sample -
	1				-	
7	1	I			-	<u>.</u>
-					_	<u>.</u>
] -					-	
2-		11			_	_ 1
-						
		ι d			7	<u> </u>
		COLLECTED		ł	~ ~ ~ ~ ~ ~ ~	+
		ן ני	4.0	_	SILT (ML), brown to gray, -	4
3 -		ુ .		- 1	dry to moist	-
				ľ		
1		2			-	_
1				İ	-	
1		백		İ	-	}
4		P-MPLE			-	1
4 -	ŀ					7
4		5				7
4	i			+	1	1
_					1	-
1					-[
<u>ا</u>	5.0	V			†	-
7	Ī				SILTY CLAY (CL), light brown,	<u>58-10-5</u>
1		h	1		moist, with a trace of roots	- collected 1555 -
1	- 1	- (1.0	_		- hnu = Pppm
1		- 10			_	
1	b. 0	58].	-	
	<u>,, ,, , , , , , , , , , , , , , , , , </u>				BORING TERMINATED AT 6 FEET	STOP 1559
					A DAN	



PROJECT NUMBER 113627. BS. 老王 BORING NUMBER

SS-53/5B-11-5 SHEET /

OF !

SOIL BORING LOG								
ROJEC	T D	DM1	- ī	BACKGROU	NO SAMPLING LOCATION M	TEMPHIS, TN - Ounn Field		
EVAT	ON				DRILLING CONTRACTOR TRISTATE T	ESTING SERVICES		
RILLIN	G METI	INA COH	D EQUI	MENT COL	ITINUOUS SAMPLING WITH 3-14"	ID HSA - CME 55		
ATER I	LEVELS	No.	<u> </u>	KONNTERE	D START \$900T 45 FINISH \$90	LOGGER S. BRUER MGM		
<u>≥.</u> -		SAMPLE		STANDARD	SOIL DESCRIPTION	COMMENTS		
DEPTH BELOW SURFACE (F1)	1	Ē	HY	PENETRATION . TEST RESULTS	SOIL NAME, USCS GROUP SYMBOL, COLOR.	DEPTH OF CASING, DRILLING RATE.		
FA CA	HVA	TYF	OVE		MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE.	DRILLING FLUID LOSS. TESTS AND INSTRUMENTATION		
r E	INTERVAL	NUMBER AND TYPE	RECOVERY (FT)	6"-6"-6" (N)	MINERALOGY			
	6				TOP I INCH = TOPSOIL	START 1608		
		55-53	1.0		SILTY CLAY (CL), light brown,	55-53		
					dry to moist, with a trace -	- collected 1618		
4					of roots	- hnu = ppm		
,	J. D				_			
΄ Τ		$ \Lambda $		İ				
					-			
				1				
-		-			•			
-					-			
, _								
2-		[2]			_			
		COLLECTED			SILTY CLAY (CL), light -			
		77						
-	i	ુ	4,0	_	brown, dry to moist, -			
_					with a trace of roots -			
3 –		0 2			-			
_]					<u>_</u>			
		Pr E						
٦		ξ						
-		SAM			_			
-		``			-			
4 -]				
.				1	_			
ا					_			
]								
٦					-			
1	5.0	W			-			
5	3.0	 		1	SILTY CLAY (CL) light brown	<u>58-11-5</u>		
-					SILTY CLAY (CL), light brown with gray motiling, moist,	- collected 1627		
-		λ.	, ,		with a tree at and	- hau = & PPM		
_		=	1.0		MILE ALENA	MAK - TFF		
		α0.			_			
	6.0	ا ب			BORING TERMINATED AT 6 FEET	STOP 1632		



PROJECT NUMBER 113627. BS. ZZ

BORING NUMBER

55 54 / 5B - 12 5 SHEET

/ OF /

					<u></u>	
PROJE	ст]	190	<u>17 - </u>	BACKGRO	DUND SAMPLING LOCATION	MEMPHIS TNING
ELEVAT	TION _				DRILLING CONTRACTOR T21 STATE	TESTINE SERVES
DRILLIN	NG ME	THOD A	ND EQUI	PMENT Ce	NTIMUOUS SAMPLING WITH 3-14	ID HSA - CME SC
WATER	LEVE	s N	OT S	NOUNTER	ED START ID OF 45 FINISH ID O	1745 LOCATE 5 TRUES/ MAM
<u>≩</u> =		SAMP	LE	STANDARD	SOIL DESCRIPTION	COMMENTS
DEPTH BELOW SURFACE (FT)		<u> </u>	T≽	PENETRATION TEST	· 	
E ₹	INTERVAL	NUMBEH AND TYPE	RECOVERY (FT)	RESULTS	MOISTURE CONTENT. RELATIVE DENSITY	DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS,
	ME	J ₹	<u>គ</u> ្គ	6"-6"-6" (N)	OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	TESTS AND INSTRUMENTATION
	ō		1 ===	- '	TOP 1.5 INCHES = TOPSOIL	
-	ł				1 or 1.5 mans 2 1075dic	START OBSO
!	[SILTY CLAY (CL), light brown	<u>\$5-54</u>
_		35-59	1.0	-	dry, with some roots and	
			1		trace limit is	_
	1.0		1 :		trace limestone/chert gravel - (Possible FILL)	- hn4 = \$ ppm
'	1.0	 	┼──		- (10331BLE FILE)	
1 -{		17			_	
] -			1			-1
]]]	-
]			i i			-
1 1					-	-
2		l 🚊	l i		·	
1 -		CTED			<u>_</u>	
] -			1 1			
1 1	i	נסררפ			SILTY CLAY (CL), light	†
		0	4.이	_	brown with gray mutiling,	_
1 7					moist	_
3 –		10	1 1		_	_
		ž				
	ĺ					1
		P.E			7	-1
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J	ĺ	11	ı		-[-
_],	5.0	$\sqrt{ }$		ŀ	-	_
5					SILTY COM (1) INTO	
+	1	,		l	SILTY CLAY (CL), light	<u>SB-12-5</u>
4		۲.	1.0	_	brown with gray mottling,	- collected 090+
-		주	'		moist	- hnu = Oppm
		SB-12- S	- 1		1	<u> </u>
6	9. O	<u>v</u> .			BORING TERMINATED AT GERT	STOP COLD



11. 0.

PROJECT NUMBER : BORING NUMBER : 55-55/58-13-5 SHEET 1 OF /

					SOIL BORIN	IG LOG
	C±	M		BACKERO	NAD SAMPLING LOCATION M	1 EMPHIS, TN - BING 144
					DOUGH CONTRACTOR TRISTAGE T	CATING SERVICES
DRILLII	NG METH	HOD AN	D EQUIP	MENT CON	TIMUOUS SAMPLING WITH 3-14	ID HSA - CME 53
WATER	LEVELS	No.	T_E	KONHTER	LED START 14 OCT 95 FINISH 14 5	KT 95 LOGGER S. BRUER/MIGT
Š÷		SAMPLE		STANDARD PENETRATION	SOIL DESCRIPTION	COMMENTS
### ###	=	_ H	EHY	TEST	SOIL NAME, USCS GROUP SYMBOL, COLOR.	DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS,
DEPTH BELOW SURFACE (FT)	ERVAL	NUMBER AND TYPE	RECOVEHY (FT)	6"-6"-6"	MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE.	TESTS AND INSTRUMENTATION
SUF	Ξ	P N N	E F	(N)	MINERALOGY	START 1010
] "			•	1.5 THENES OF TOPSOIL	
]		ŀ		SILTY CLAY (CL), light	
	1	55.55	1.0	_	brown, dry, with a tace	55-55 - collected 1017
	1				of roots and rounded,	• • • • • • • • • • • • • • • • • • • •
	┥				fine-grained, chert gravel	- hau = of ppm -
-	1.0	1			<u> </u>	_
	4	1			-	-
	4]		-	-
	_				-	-
]				_	<u>-</u>
		!			_	_
) [_]	7	﴿	1			_
	1	Ш			SILTY CLAY (CL), light	
	1	7			hown to light brown	_
	-	립	4.0	_	with gray motting, dry	, -
	-	0 .			SILTY CLAY (CL), light brown to light brown with gray mottling, dry to moist	-
3 -	4	Ŭ			_	-
	_	ا			_	-
	_	ا فِي ا			-	-
]	-				<u>.</u>
		W.			_	
Ι.	1	14				
4-	7	SAMPLE				_
	1	S			-	-
	1				-	-
	4				-	-
	4				-	
5-	5.0	<u> </u>	-	<u> </u>		-
	1	1.			SILTY CLAY (CL), light	5B-13-5
]	10		-	thrown with gray mothing,	- collected 1025
]	<u>~</u>	1.0	-	moist	- hnu = pppm
	1	65				
1	140	52	1		BORING TERMINATED AT 6 FEET	STOP 1037

STOP 1037

BORING TERMINATED AT 6 FEET



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6.0

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SB

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PROJECT NUMBER

13627. BS.ZZ

BOAING NUMBER SS-56/SB-14-5 SHEET

1 0

SOIL BORING LOG PROJECT DDMT - BACKGROUND SAMPLING LOCATION MEMPHIS, TN - BILL ELEVATION DRILLING CONTRACTOR TRISTATE TESTING SERVICES DRILLING METHOD AND EQUIPMENT CONTINUOUS SAMPLING WITH 3-4" ID HSA - CME 55 WATER LEVELS NOT ENCOUNTERED START 16 OCT 95 FINISH 16 OCT 95 LOGGER S. BRUER/MGM SAMPLE STANDARD PENETRATION TEST RESULTS SOIL DESCRIPTION COMMENTS DEPTH BELL SURFACE (F RECOVERY (FT) NUMBER AND TYPE SOIL NAME USCS GROUP SYMBOL COLOR. MOISTURE CONTENT. RELATIVE DENSITY OR CONSISTENCY. SOIL STRUCTURE, DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS.
TESTS AND INSTRUMENTATION 6-6-6 MINERALOGY 1.5 ENCHES OF TOPSOIL START 1044 SILTY CLAY (CL), light <u>55 - 56</u> 55-56 1.0 brown, dry, with a - coilected 1055 trace of roots - hnu = ppn 1.0 Z OLLECTED SILTY CLAY (CL), light 4.0 brown to light brown with gray mottling, dry 3 moist +0 ٥ 2 Ų, AMPL

> SILTY CLAY (CL), light brown with grey motteng, moist

BORING TERMINATED AT 6 FEBT ST

SB-14-5

- collected 1101

- hru = pppm

STOP 1103



PROJECT NUMBER 113627. BS.ZZ

: BORING NUMBER -15-5 SHEET

OF.

SOIL BORING LOG

PROJECT DDMT - BACKGROUND SAMPLING LOCATION MEMPHIS, TN DRILLING CONTRACTOR TRISTATE TESTING SERVICES ELEVATION ____ DRILLING METHOD AND EQUIPMENT CONTINUOUS SAMPLING WITH 3-74" ID HSA - CME 55

ا ہج		SAMPLE		STANDARD	SOIL DESCRIPTION	COMMENTS
DEPTH BELOW SURFACE (FT)		-	RECOVERY (FT)	PENETRATION TEST RESULTS	SOIL NAME, USCS GROUP SYMBOL COLOR. MOISTURE CONTENT. RELATIVE DENSITY	DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS.
SULF	INTERVAL	NUMBER AND TYPE	HECC (FT)	6*-6*-6* (N)	OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	TESTS AND INSTRUMENTATION
	٥				1.5 THEHES OF TOPSOIL	START 132B
]					SILTY CLAY (CL), light brown, dry, with a	<u>55-57</u>
4		55.57	1.0	_	brown, dry, with a	- collected 1334
					trace of roots	- han = ppm
, 🚽	1.0				!	
,		1				
j					· .	
]						
	Ì					
,]		ĬΙ				
2]		ďΘ				
]		CT6			SILTY CLAY (CL), 1:4H-	•
]		i W	4.D		brown to light brown -	
]		01-L	1-		with grey mottling, dry	•
、]		٥			to moist, increasing	
۶ ٦		F			silt content with	
7		z			increasing depth	
1		w.			·	
1		7		•		
, 1	j	<u>4</u>	•		 	
۹ –		Š				,
4					-	
1						
†						
1	S. 0	., ∣		!	-	
5	2.0	¥		-	SILTY CLAY (CL), light	SB-15-5/5B-15-5a
1		5 8			brown with gray mothling,	- collected 1340
1		2 2	1.0		to rown with grey mottling, moist, very silty	- hnu = & PPM
1		1	1			
4		58 53		_	BORING TERMINATED AT 6 FEET	STOP 1344



PROJECT NUMBER
113627. BS. ZZ

SS . 5 B / SB . 16 . 5 SHEET

/ OF (

PROJECT DDMT - BACKGROUND SAMPLING LOCATION MEMPHIS TN/S, of bil										
ELEVAT	10N <u>—</u>			_	DRILLING CONTRACTOR TRISTATE	Test	ING SERVICES			
DRILLIN	WATER LEVEL AND DATE NOT ENCOUNTERED START 16 DET 95 FINISH 16 DET 95 LOGGER S. BRUER MGM									
WATER	LEVEL A	ND DA1	re <u>No</u>	ENIDUM.	TERED START 10 OLT 95 FINISH 10 C	<u>st 5.5</u>	LOGGER S. BRUER MGM			
¥E	<u> </u>	SAMPL	£	STANDARD PENETRATION	SOIL DESCRIPTION		COMMENTS			
DEPTH BELOW BURFACE (FT)	INTERVAL	TYPE AND NUMBER	RECOVERY [FT]	TEST REBULTS 6"-6"-6" (NI	SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC	DEPTH OF CASING. DRILLING RATE. DRILLING FLUID LOSS. TESTS AND INSTRUMENTATION			
	•				1.5 INCHES TOPSOIL		START 1405			
-	1. 🗢 🕆	SS-58	1.0	_	SILTY CLAY (CL), light brown, dry, with a trace of roots		55-58 -collected 1409 - how = \$ppm			
,										
2 -		OLLECTED				SILTY CLAY (CL), light brown.				
3 -		NOT COLL	4.0		to light brown with gray - motting, dry to moist, with	:				
₹ -		-SAMPLE					- - -			
5-	<u>ς</u> . □	V								
-	6.0	SB - 16 - 5	1.0	-	SILTY CLAY (CL), dock brown with gray mothing, moist, very silty, with a trace of - roots BORING TERMINATED AT 6 FEET		5B-16-5 - collected 145 - hnu = & ppr			



PROJECT NUMBER	BORING NUMBER	
113627. BS. ZZ	SS 59 / SB-17-5 SHEET	1 OF 1

PROJEC	τ <u>ν</u>	DM3	ــــــــــــــــــــــــــــــــــــــ	BACKGRO			PHIS. TN/E. of DOMT	
ELEVATION DRILLING CONTRACTOR TRISTATE TESTING SERVICES								
DRILLING METHOD AND EQUIPMENT CONTINUOUS SAMPLING WITH 3-14" TD HSA - CME 55 WATER LEVEL AND DATE NOT ENCOUNTERED START 18 OCT 95 LOGGER S. BRUFF! MCM								
WATER	EVEL A	ND DAT	Not		TERED START 10 OCTST FINISH 10 C	<u> </u>		
≱ 		SAMPLE		STANDARD PENETRATION	SOIL DESCRIPTION]	COMMENTS	
DEPTH BELOW SURFACE (FT)	INTERVAL	TYPE AND NUMBER	RECOVERY (FT)	TEST RESULTS 6"-6"-6" (N)	SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC	DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS AND INSTRUMENTATION	
	6				INCH TOPSOIL		START ISOB	
	1.0	55-S9	j. 0	-	SILTY CLAY (CL), light brown, dry, with a trace of roots		= - collected 1516 - hau = ppm	
		٨					-	
- -		OLLECTED —	4.0	-	SILTY CLAY (CL), light trown, dry to moist, with a trace roots		-	
3 -		E NOT C			Mith a trace roots		-	
4 -		SAMPL			- -			
- - 5	5.0	V						
,	٠.d	SB-17-5	1.0	-	SILTY CLAY (CL), light brown, dry to moist, with a trace of roots Boring TERMINATED AT 6 FEET		SB-17-5 - collected 1522 - unu = 9 pph STOP 1530	
. ,					DOMING I EKMINATED AT IN HEET)	プレイ ログ	



PROJECT NUMBER

BORING

113627. BS.ZZ

55-60/5B-18-4 SHEET

1 OF

PROJE	ст <u>»</u>	Drit	<u> - 7</u>	BACKGRO	SAMPLING LOCATION M	EMP	HIS TN/ Dung Flames
ELEVA	TION				DRILLING CONTRACTOR TRISTATE	TEST	ING SERVICES
					FINUOUS SAMPLING WITH 3-4"		
WATER	LEVEL			STANDARD	TERED START 11 OCT 95 FINISH 11 C	oct 4	5 LOGGER S. BRUER MAM
₿E	 	SAMPLI	1	PENETRATION TEST	SOIL DESCRIPTION		COMMENTS
DEPTH BELOW BURFACE (FT)		TYPE AND NUMBER	HECOVERY (FT)	RESULTS 6"-6"-6" /NI	SOIL NAME, COLOR, MOISTURE CONTENT. RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC	DEPTH OF CASING. DRILLING RATE, DRILLING FLUID LOSS, TESTS AND INSTRUMENTATION
	10		1		INCH TOPSOIL		START 0916
	1,0	55-10-	1.0	_	SILTY CLAY (CL), light brown, dry, with a trace of roots, fine to medium- grained quartz send, and fine-grained linestone gravel (FILL)		SS-60 - collected 0924 - hnu = φppm
L -		NOT COLLECTED	3.5	_	- with some engular to rounded, fine-grained chart gavel and asphalt SILTY CLAY (CL), light tooms, dry to moist, with a trace of roots		
3 -	4.0	SAMPLE N					- - - - -
5		SB-18-1/M5/ MSD	20	_	SILTY CLAY (CL), light trown, dry to moist, with a trace of roots		SB-18-4/MS/MSD - collected 0930 - hau = 4 ppm
-	b.0				BORING TERMINATED AT 6 FEET		STEP 0948



PROJECT NUMBER | BORING NUMBER | 113627. BS. ZZ | 55-61 | 58-19-5 SHEET | OF |

					<u> </u>				
PROJECT POMT - B ACKGROUND' SAMPLING LOCATION MEMPHIS TN / Quan Flementing									
ELEVATI	ю»					<u>ा</u> हरा	 -		
DRILLING METHOD AND EQUIPMENT CONTINUOUS SAMPLING WITH 3-4" ID HSA . CME 55 WATER LEVEL AND DATE NOT ENCOUNTERED START 11 OCT 95 FINISH 11 OCT 95 LOGGER S. BRUER MGM									
WATER	LEVEL A	ND DATE	Not	ENCOUNTE	START 11 OCT 95 FINISH 11	<u> </u>			
, s		SAMPLE		STANDARD PENETRATION	SOIL DESCRIPTION		COMMENTS		
DEPTH BELOW SURFACE (FT)	INTERVAL	TYPE AND NUMBER	RECOVERY (FT)	TEST RESULTS 6"-6"-6" IN)	SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC	DEPTH OF CASING. DRILLING RATE. DRILLING FLUID LOSS. TESTS AND INSTRUMENTATION		
	6	<u>, </u>			TACH TOPSOIL		START 1000		
-	1.0	ડક-બ	1.0	-	SILTY CLAY (CL), light brown, dry, with a tree of roots		55-61 -(allected 1003 - hnn = Øppm		
\ -	\ <u>`</u>	N			-	1]		
-							-		
]				<u> </u>				
7 -						}			
-	ĺ	ĒΡ				1			
	Ì	ECT		1		1			
-	1	оссестбр	4.0	_		1	_		
-	1	٥٦	,		•	1	_		
3 -	1	b					-		
-	,	2			CLAYEY SILT (ML), light	1	-		
-	1	١.			brown, moist, with a	-	-		
-	1	PLE			+rec of roots	┪	-		
] -	-	AMP		1		-	-		
4 -	-	À	[┥	-		
-	{					-	-		
-	1					4	-		
-	1					-{			
.	ł					-	-		
5-	5.0	<u> </u>	ļ			-	-		
	1	ν.	}			1	<u>58 - 19-5</u>		
.		1	1.0	_		4	-rollected 1007		
.		Ī				1	- hnu = pppm		
] _]	56]		1			
	4.6	1		1	POPLING TERMINATED AT 6 FRET		STOP IOIL		



| BORING NUMBER | BORING NUMBER | 113627 BS. 22 | SS-62 | SB-20-SSHEET / OF /

PROJECT DDMT - BACK GROUND SAMPLING LOCATION MEMPHIS, T.N/West of D									
ELEVAT	10N				DRILLING CONTRACTOR TRASTATE	T≌ST	ING SERVICES		
DRILLIN	IG META	105 ANI	PEQUIPI Colk	MENT CONT	THUDUS SAMPLING WITH 3-4				
WATER	LEVEL			STANDARD	ERED START II OXT 45 FINISH II	OLF 4	5 LOGGER 5. BRUFF MGM		
₹£	 -	SAMPL	7	PENETRATION	SOIL DESCRIPTION	_	COMMENTS		
DEPTH BELOW BURFACE (FT)	INTERVAL	TYPE AND NUMBER	RECOVERY (FT)	RESULTS 6"-6"-6" (N)	SDIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	EYMBOLIC	DEPTH OF CASING, ORILLING RATE, ORILLING FLUID LOSS, TESTS AND INSTRUMENTATION		
-	0		•	ļ į	I INCH TOPSOIL		START 1057		
- - - -	Į, o	55-W	1.0	-	SILTY CLAY (CL), light brown, dry, with some sand- to culolie-sized concrete frequents and a trace of sand-to gravel-sized asphalt frequents -		55-62 -collected 1102 -hnn = \$ ppm		
' -		 			(FILL)		- - -		
2-		COLLECTED	4.0	_	SILTY CLAY (CL), light brown, dry				
3 -	:	Haz.			_				
4 -		- SAMRE			-		- - - -		
5-	ς.0	V	_		SILTY CLAY (CL), dark -		58-20-5		
-	6.0	SB.20.5	J. D	_ 	brown, moist, very silty -		- collected 1108 - hnn = coppr		



BORING NUMBER PROJECT NUMBER 55-63/58-21-5 SHEET 1 OF 1 113627.BS.ZZ

PROJECT DDMT - BACKGROUND SAMPLING LOCATION FEM PHIS TIN FIRE HILL C. C.											
ELEVATION DRICKING CONTRACTOR											
DRILLIN	DRILLING METHOD AND EQUIPMENT CONTINUOUS SAMPLING WITH 3-14" ID HSA - CME 55 WATER LEVEL AND DATE NOT FINCOUNTERED START II OCT 55 FINISH II OCT 45 LOGGER S. BRUER MGM										
WATER	EVEL A			STANDARD	SOIL DESCRIPTION	<u></u>	COMMENTS				
DEPTH BELOW SURFACE (FT)	INTERVAL	TYPE AND NUMBER	RECOVERY (FT)	PENETRATION TEST RESULTS 6"-6"-6"	SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC	OEPTH OF CASING, DRILLING FLATE, DRILLING FLUID LOSS, TESTS AND INSTRUMENTATION				
3 -	1.0	MRE NOT COLLECTED			SILTY CLAY (CL), light Drown to light gray with orange mothling, dry, with a trace of fine-grained, rounded chert gravel and routs (Possible Fill)		55-63 - collected 1321 - hnu = 4 ppm				
5	5,0	5B. 21-5	1.0		SILTY CLAY (CL), dark brown with grey mottling, moist, with a trace of roots BORING TERMINATED AT 6 FEET		SB-21-5 - collected 1329 - hau: \$ppm STOP 1334				



	SOIL BORING LOG										
PROJEC	:. <u>D</u>	DM.	T - ਦ	ACKGROU	IND SAMPLING LOCATION 1	7EM	PHIS TN/Perco S+				
ELEVAT					DRILLING CONTRACTOR TRISTATE		HG SERVILES				
			DEQUIPM		DAUGERS WITH 3" ID T	PUCKE	TS				
WATER	LEVEL A	TAG CH	16 101		FERED START II OCT 95 FINISH II	OCT 9	5 LOGGER S BRUER/MGM				
₹F		SAMPL	E .	STANDARD PENETRATION	SOIL DEBCRIPTION	_	COMMENTS				
DEPTH BELOW SURFACE (FT)	INTERVAL	TYPE AND NUMBER	RECOVERY (FT)	TEST RESULTS 6"-6"-6" (N)	SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OH CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	6YMBOLIC LOG	DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS AND INSTRUMENTATION				
	0				I INCH TOPSOIL		START 1430				
	1.0	5526	0.5	_	SILTY CLAY (CL), light brown, dry to moist with a trace of roots	} - -	55-64 - collected 1445 - - how = 0 ppm -				
, -		1			-						
2 -		(OLLECTED		_	SILTY CLAY (CL), light to dark brown, dry to moist						
3 -		Fax		İ	-		-				
4 -		Samre			- - - -						
5 +	5.0	V			SILTY CLAY (CL), dark		SB-12-5/SPLIT -				
	6.0	4	0.5		BORING TERMINATED AT LO FEET		- rollected 145B - hnu = Opp				
					THE PROPERTY OF PARTY OF PERTY	!_	5102 1504				



113627. BS. ZZ | SS-65/58-23-5 SHEET | OF |

PROJEC	PROJECT DDMT - BACKGROUND SAMPLING LOCATION MEMPHIS, TN / Years & Ellisten St.										
ELEVATI						Tasn					
DRILLIN	DRILLING METHOD AND EQUIPMENT HAND AUGERS WITH 3" ID BUCKETS WATER LEVEL AND DATE NOT ENCOUNTERED START 11 DCT 95 FINISH 11 DCT 95 LOGGER 5 BRUER MGM										
WATER	EVEL A	ND DAT	N B7	BTANDARD	······································	<u> </u>					
DEPTH BELOW BURFACE (FT)	INTERVAL	TYPE AND NUMBER	RECOVERY (FT)	PENETRATION TEST RESULTS 6"-6"-6"	SOIL DESCRIPTION SOIL NAME, COLOR, MOISTURE CONTENT. RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC	COMMENTS DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS AND INSTRUMENTATION				
-	0	55-65	0.5	_	SILTY CLAY (CL), light brown dry with angular to rounded madium-grained lineston each chert gravel (FILL)		55-65 -(0)(school 15)5 - hnu = pippon -				
		<			SILTY CLAY (CL), light	•					
)		COLLECTED -			- - -						
3 - -		MPLE NOT		:	, -		-				
- - - -	:	SAMI			- - -		- - - -				
5	50	13.5	D.S	_	SILT (ML), light gray with orange mettling, moist		5B-23-5 -(0)lected 1540 - hnu = ppm				
-	6.0	28- 3	0.5		BORING TERMINATED AT 6 FEST		STOP 545				



PADJECT NUMBER

BORING NUMBER

113627. BS. ZZ

55-66/58-24-5 SHEET 1 OF 1

PROJE	CT	MO	<u>T- 7</u>	ACK GROL	HD SAMPLING LOCATION M	LEMP	PHIS TN / Perry & Noon
ELEVA?					DRILLING CONTRACTOR TRISTATE		TING SERVICES
			D EQUIPA			NCKE	⋾>
WATER	LEVEL A			STANDARD	TERED START 11 OCT 95 FINISH 11 C	<u>ъст 9</u>	5 LOGGER S. BRUER MGM
ěΕ	<u> </u>	SAMPI		PENETRATION]	COMMENTS
DEPTH BELOW SURFACE (FT)	INTERVAL	TYPE AND NUMBER	RECOVERY (FT)	RESULTS 6"-6"-6" (N)	SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC	DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS AND INSTRUMENTATION
	0	ł			INCH TOPSOIL		START 1600
- - 1 -	1.0	55 de	0.5		SILTY CLAY (CL), 1:ght brown, dry		55-66 -collected 1604 -hnu = oppm
٠ - -		\					
3 -		T COLLECTED			-		
1		AMPLE NO					
4 -	5.0	5					
	5. 0	+	0.5	~_	SILTY CLAY (CL), dark brown, moist BORING TERMINATED AT 6 FEET		5B-24-5 -1011ected 1625 - hau = pppm STOP 1630



PROJECT NUMBER | BORING NUMBER | 113627. BS. 22 | SS-67/SB-15-15 SHEET | OF |

SOIL BORING LOG

						_						
PROJEC	τ <u>.</u> Σ	DMI	r - 1	3 ACKGRE	NP. SAMPLING LOCATION M	<u>⊆mp</u>	415. TN / Charjean Scho					
ELEVAT					DRILLING CONTRACTOR TRISTATE							
					THUOUS SAMPLING WITH 3-14"							
WATER	NATER LEVEL AND DATE NOT EMIGUATERS START 12 OCT 95 FINISH 12 OCT 95 LOGGER 5 BRUER/MGM											
₹F	<u> </u>	SAMPLE		PENETRATION TEST	SOIL DESCRIPTION	1						
DEPTH BELOW BURFACE (FT)	INTERVAL	TYPE AND NUMBER	RECOVERY (FT)	AESULTS 6"-6"-6" (N)	SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	LOG	DEPTH OF CASING. ORILLING RATE, DRILLING FLUID LOSS. TESTS AND INSTRUMENTATION					
	0				I JUCH TOPSOIL		START 0835					
-		55-457	1.0	-	SILTY CLAY (CL), light brown, dry, with a trace of roots		SS-67 /MS/MSO - - collected OB46 - hnu = of ppm					
١	1.0				<u>-</u>		- not exough soil recovered in first					
-		*					one fact cod collected top one tot soil for -					
2 - 2 -		outecrap			- -		- -					
3 -		Colli	4.0	-	·		- -					
-		HOM					- -					
- + -		S AMPLE			- - -		- -					
-	5.0	Y			· ·		- - -					
5-	,,,,	5-5	٥.٧		SILTY CLAY (CL), dark brown with gray mottling, moist, with a truce of muts		SB-25-5 -					

- hou = ppm

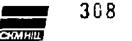


PROJECT NUMBER

SS-68/58-26-5 SHEET

1 05 /

PROJECT DDMT - BACKGROUND SAMPLING LOCATION MEMPHIS TN /ACTUAL TO											
ELEVAT	DRILLING CONTRACTOR TRISTATE TESTING SERVICES ORILLING METHOD AND EQUIPMENT CONTINUES SAMPLING WITH 3-14" FD HSA - CME 55										
ORILLIN	G MET	HQD AN	D EQUIPA	ENT CONT							
WATER	LEVEL .			ENCOUNT	START 17 DCT 95 FINISH 12 4	×CT 9	S LOGGER S. BRUDE MAM				
ĕE	 	SAMPL		PENETRATION	BOIL DESCRIPTION	ļ	COMMENTS				
DEPTH BELOW BURFACE (FT)	U INTERVAL	TYPE AND NUMBER	RECOVERY (FT)	FESULTS 5"-6"-6" (N)	SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC	DEPTH OF CASING, ORILLING RATE, DRILLING FLUID LOSS, TESTS AND INSTRUMENTATION				
			1		INCH TOPSOIL		START 0925				
],⊅	55-6e ^g	1.0	-	SILTY CLAY (CL); light brown, dry, with a trace of roots		= collected 0930 - how = pppm				
2		Coll Ecrep	4.0								
3 -		Lox					- - -				
\$ - 1		SAMPLE					- - - -				
5		58-76-5c 58-76-5c	1.0	-	SILTY CLAY (CL), dark brown with gray mattling, dry to maist with a trace of roots BORING TERMINATED AT 6 FORT		5B-26-5/5B-26-59 -collected 0936 -hnu = 0 ppm				



SS-69/58-27-5 SHEET (OF PROJECT NUMBER 113627. BS. ZZ

PROJEC	τ_ <u>Τ</u>	DMIT	1	BACKGRO	OUND SAMPLING LOCATION	MEC	IPHIS TH / Alen Elemont			
ELEVAT	10N				DRILLING CONTRACTOR TRISTATE	T = 5T1	NG SERVICES			
DRILLIN	IG METH	IOD AND	EQUIPM	ENT CONT			HSA - CME SS			
WATER LEVEL AND DATE NOT ENCOUNTERED START 12 OCT 95 FINISH 12 OCT 95 LOGGER 5. BRUER MGM										
*.		SAMPLE	i	STANDARD PENETRATION	SOIL DESCRIPTION	_	COMMENTS			
DEPTH BELOW BURFACE (FT)	INTERVAL	TYPE AND NUMBER	RECOVERY (FT)	TEST RESULTS 6"-6"-6" (N)	SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	BYMBOLIC	DEPTH OF CASING. DRILLING RATE, DRILLING FLUID LOSS. TESTS AND INSTRUMENTATION			
	٥				I INCH TOPSON		START IDIS			
	1.0	55-69	ما	_	SILTY CLAY (CL), light brown, dry, with a trace of roots	,	-collected 1022 -			
- -		\					-			
<u>ہ</u> ۔		(OLL ECTED	4.0	•	-		-			
3 -		HoT:			- - -		_ - -			
4 -		SAMPLE			• •		- - -			
5-	S.o.	V	_		SILTY CLAY (CL), dork		SB- 27-5/ SB- 27-52			
1	4.0	5B-17-58	Į.D	-	brown with gray mottling, moist		- collected 1027 - how = dopm			
		. I		ı	BOOKER TERMINATED AT IS SECT	π⁻ !	ベルント ウェル			



PROJECT NUMBER

113627.85.22

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PROJECT DDMT - BACKGROWND SAMPLING LOCATION MEMPHIS TN/FOREST HILL CO.											
	ELEVATION DRILLING CONTRACTOR TRISTATE TESTING SERVICES										
	DRILLING METHOD AND EQUIPMENT CONTINUOUS SAMPLING WITH 3-14" ID HSA - CME 55										
WATER	WATER LEVEL AND DATE NOT ENCOUNTERED START 12 OCT 45 FINISH 17 OCT 95 LOGGER 5. BRUER MAM										
	<u> </u>	SAMPL	. <u>E</u>	PENETHATIO	· · · · · · · · · · · · · · · · · · ·	-	COMMENTS				
DEPTH BELOW SURFACE (FT)	O INTERVAL	TYPE AND NUMBER	RECOVERY (FT)	######################################	SOIL NAME. COLOR. MOISTURE CONTENT. RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE. MINERALOGY. USCS GROUP SYMBOL	SYMBOLIC	DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS AND INSTRUMENTATION				
-	-	ł			I THEH TOPSOIL		START 1240				
 - - 1	1.0	55-70	1.0	-	CLATEY SILT (ML), light gray with brown and orange mottling, dry to moist, with a trace of roots		-collected 1247 -hnn = pppm				
					-						
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1		olle cted									
3 -		OT CO	4.0				-				
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- - -		5 AM					- - 1				
1							_ _ _				
<u> </u>	5,0		_								
		B-28-5	.D	_	CLAYEY SILT (ML), light gray with Drown motting, thoist, with a trace of roots		SB- 18-5 - collect 1255 - hnu = 9 ppm				
	م.	<u>v</u>			BORING TERMINATED AT LO FEET		<u>Stop 1259</u>				



PROJECT NUMBER

BORING NUMBER

SS-71 SB-19-5 SHEET 1 OF 1

PROJECT DOMT - BACKGROUND SAMPLING LOCATION MEMPHIS, TH / BACKGROUND SAMPLING LOCATION MEMPHIS, TH / BACKGROUND SAMPLING											
ELEVATION ORILLING CONTRACTOR TESTANG SERVICES											
	DRILLING METHOD AND EQUIPMENT (SATINUOUS SAMPLING WITH 3-14" ID HSA- CMESS										
WATER LEVEL AND DATE NOT ENCOUNTERED START 12 OCT 95 FINISH 12 DCT 95 LOGGER S BRUFE MUM											
[<u> </u>		SAMPLE		STANDARD PENETRATION	SOIL DESCRIPTION		COMMENTS				
DEPTH BELOW BURFACE (FT)	INTERVAL	TYPE AND NUMBER	RECOVERY (FT)	TEST 	SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC LOO	DEPTH OF CASING. DRILLING RATE. DRILLING FLUID LOSS. TESTS AND INSTRUMENTATION				
	0				I INCH TOPSOIL		START 1340				
-	1.0	<i>ς</i> ς.ηι	1.0	J	GLAYEY SILT (ML), light gray with brown and orange mothing, dry to moist, with a trace of roots		- rullected 1345 - han = \$ A7m				
`		$\lceil \Lambda \rceil$				j	_				
-					-		- -				
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3 -		lo.T			_		_				
-		AMPLE N	1		-		-				
4 -		, 5			- -		- - -				
	5.0	₩									
	6.0	5B-24-5	1.0	_	CLAYEY SILT (ML), light gray with brown and orange mottling, most, with a trace of fine-grained, rounded. Busitz send and roots BORING TERMINATED AT 6 FEET		5B-29-5 -cullected 1350 - hnu = 4 ppm				



PROJECT NUMBER 308 130 113627. BS. ZZ SS-72/SB-30-5 SHEET / OF /

PROJECT_DDMT-BACKGROUND SAMPLING LOCATION MEMPHIS TN /AIC POR											
ELEVAT	ELEVATION DRILLING CONTRACTOR TESTING SERVICES										
					TINUOUS SAMPLING WITH 3-14	<u>"</u> =1	D H5A - CME 55				
WATER	LÉVEL A			EMCSUMT	ERED START 12 OCT 95 FINISH 12	DCT 9	5 LOGGER S. BRUER MEN				
₽£	<u> </u>	SAMPL	1	PENETRATION	SOIL DESCRIPTION	1	COMMENTS				
DEPTH BELOW SURFACE (FT)	INTERVAL	TYPE AND MUMBER	АЕСОVЕЯY (FT)	RESULTS 6"-5"-6" (N)	SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OF CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	SYMBOLIC	DEPTH OF CASING. DRILLING RATE, DRILLING FLUID LOSS. TESTS AND INSTRUMENTATION				
ļ <u>ļ</u>	D	}			I THEN TOPSOIL		START 1420				
1	1.0	55.72	. J.D	J	CLAYEY SILT (ML), light grey with orange mottling, moist, with a trace of routs	•	55-72 - collected 1424				
` J		1			_		•				
2 -		Δ 3 .			j						
		7			7	j	To the second se				
1		COLLECTB			1	l	- .				
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1					4		-				
_ 1.	5.0	J I			-	1	-				
5 }		<u>, </u>	1.0	-	CLAYEY SIET (ML), light gray with onenge mottling, moist, with a trace of roots		5B-30-5 -collected 1428 - hru = &ppm				
1		SB		1	Append or present and a						
					SORING TERMINATED AT GEET	[_	STOP 1433				

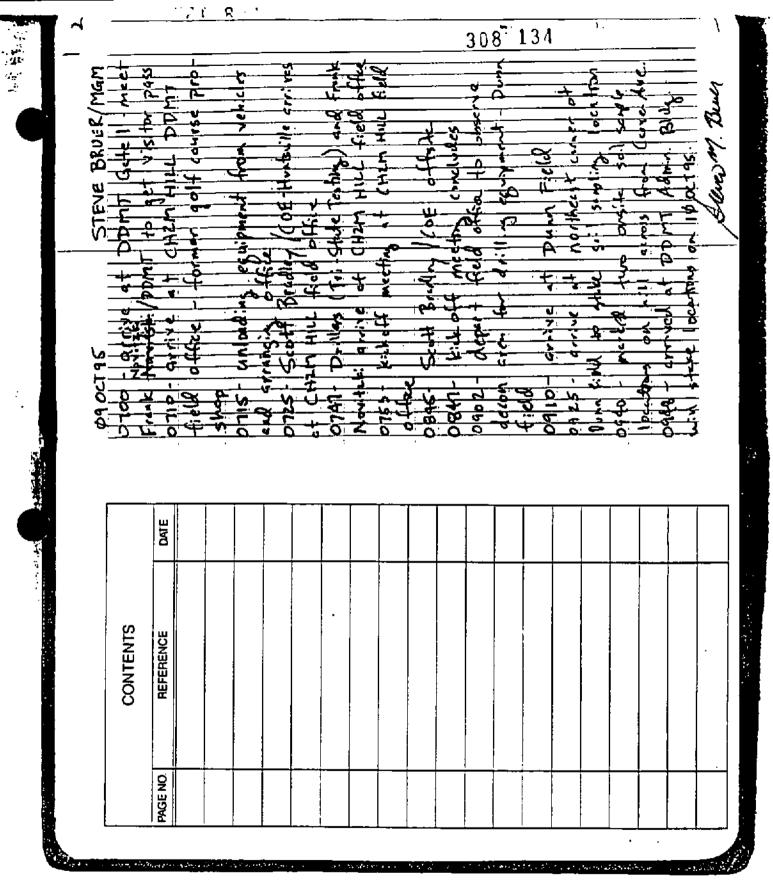
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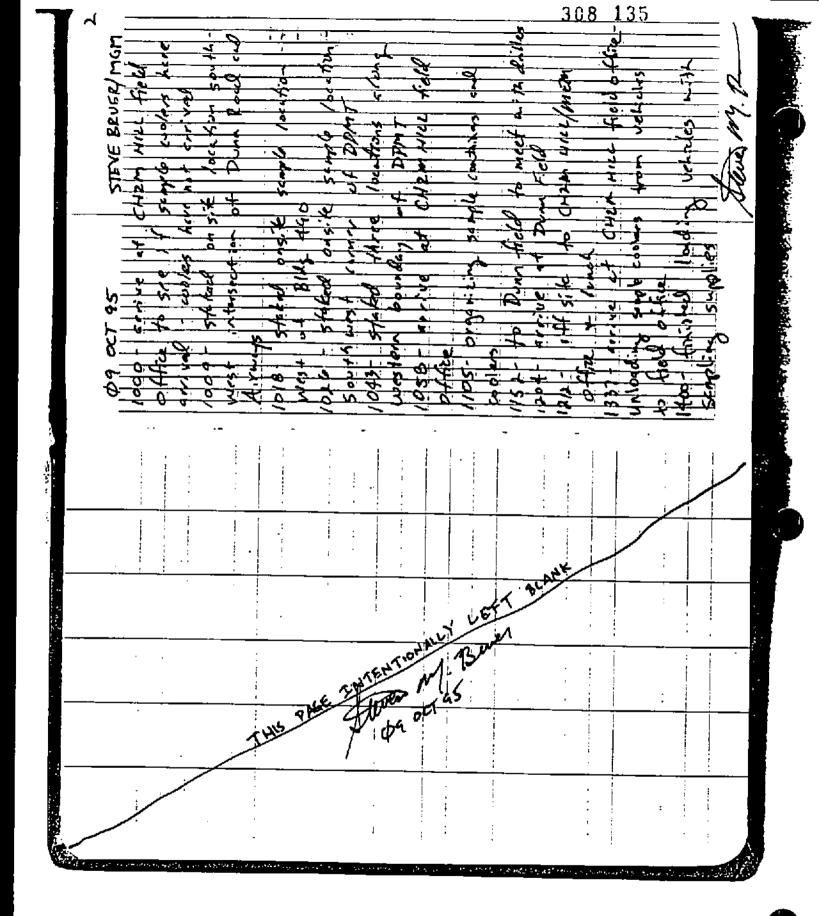
Appendix B

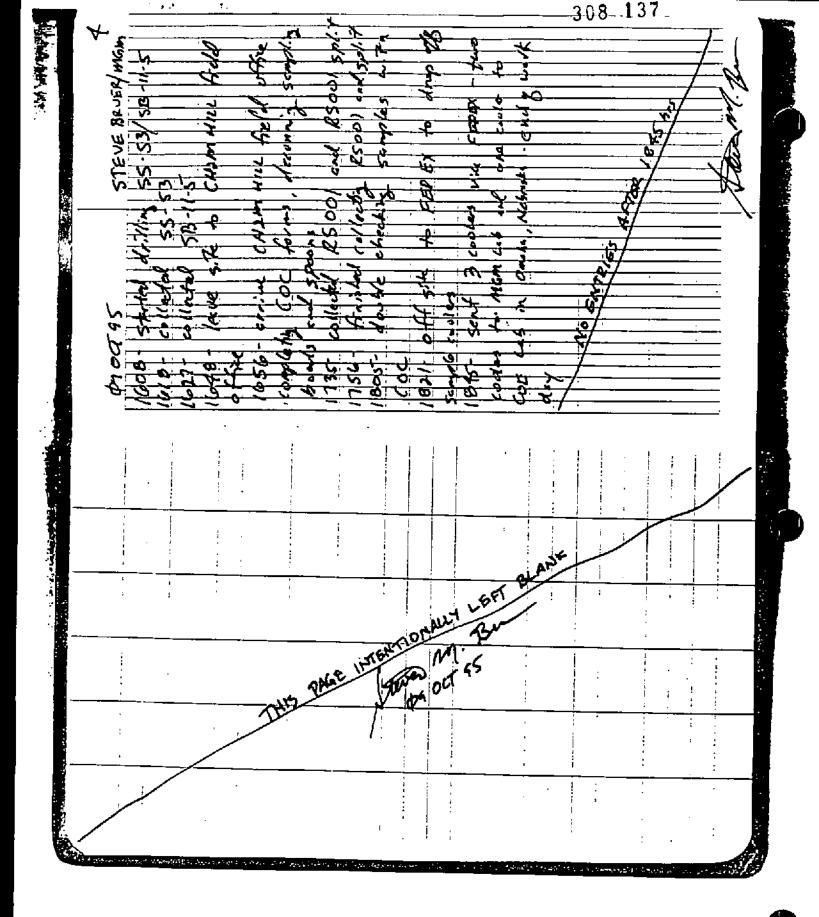
Appendix B Field Sampling Logbooks

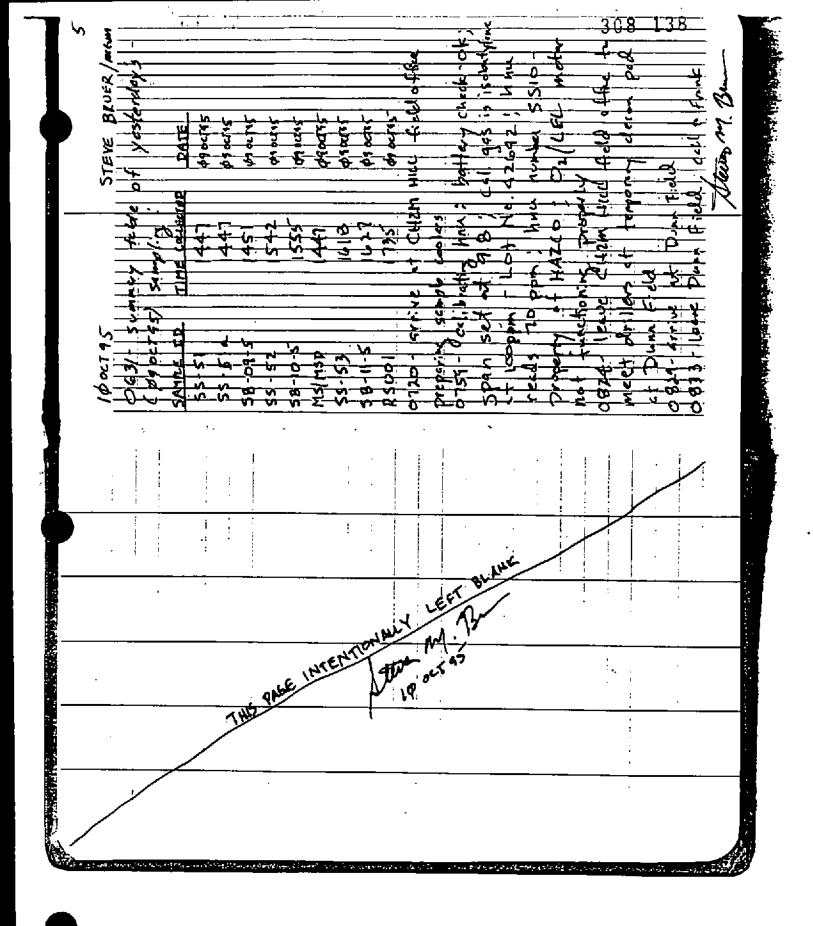
DDMT Background Sampling

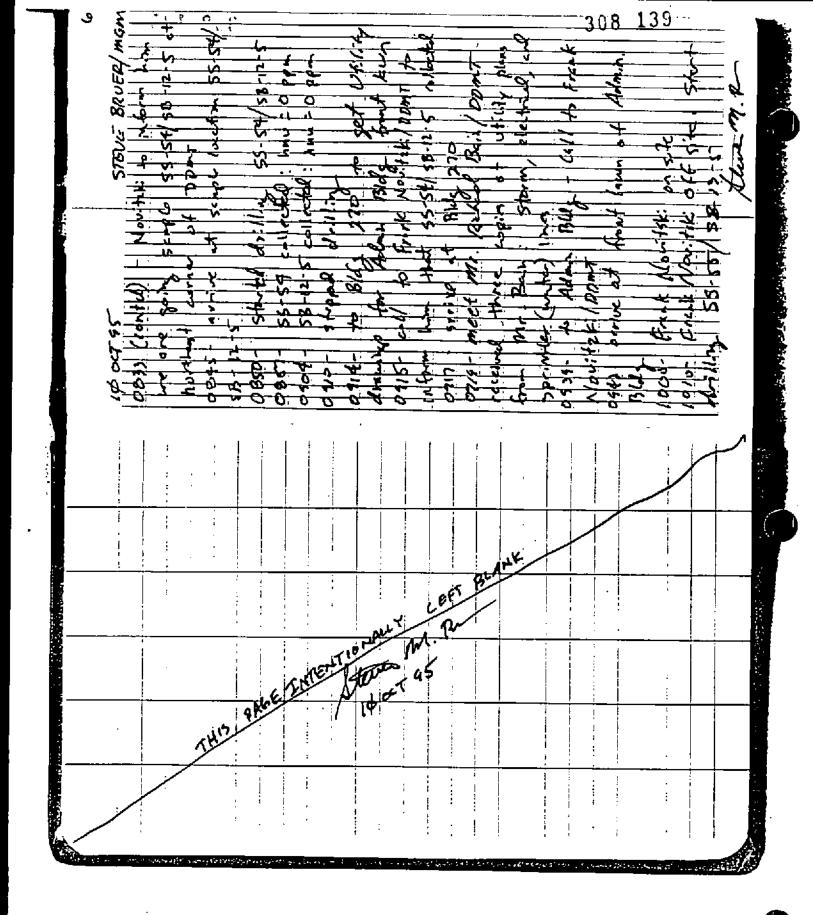
Soil Sampling 10/9/95 - 10/17/95

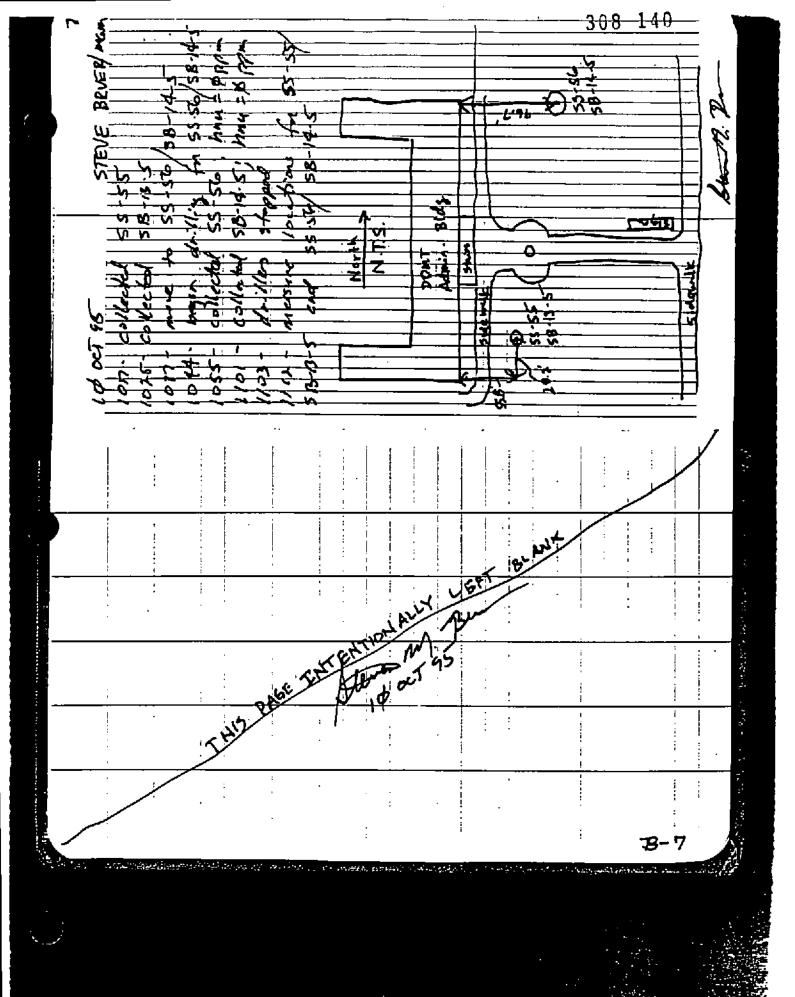


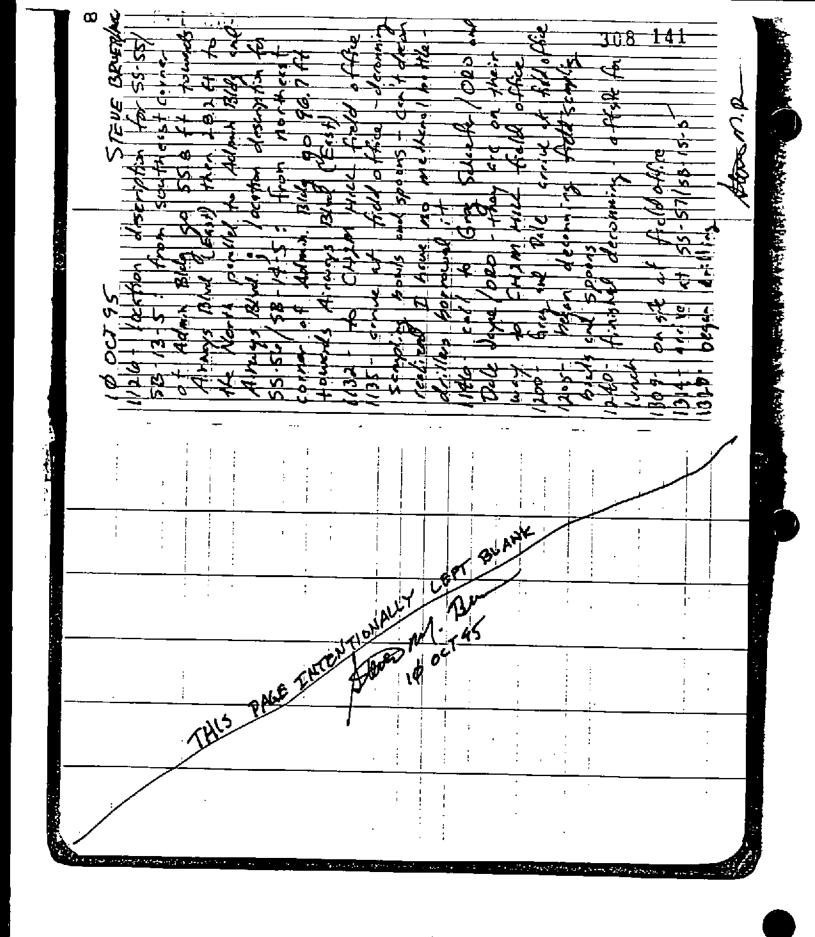


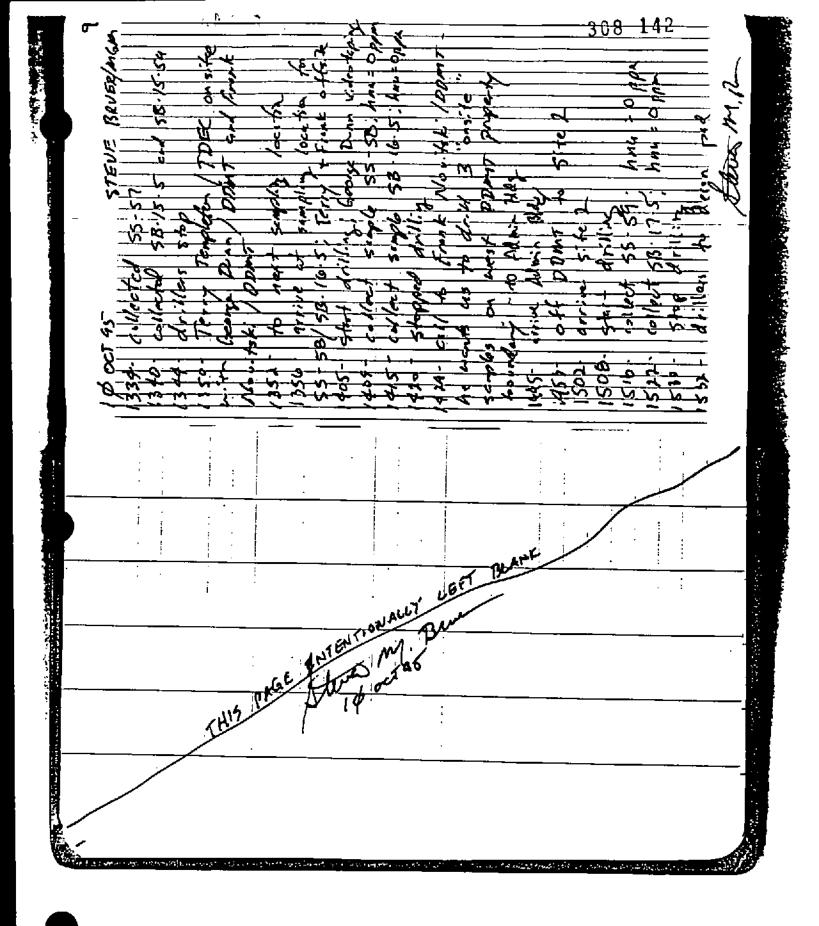


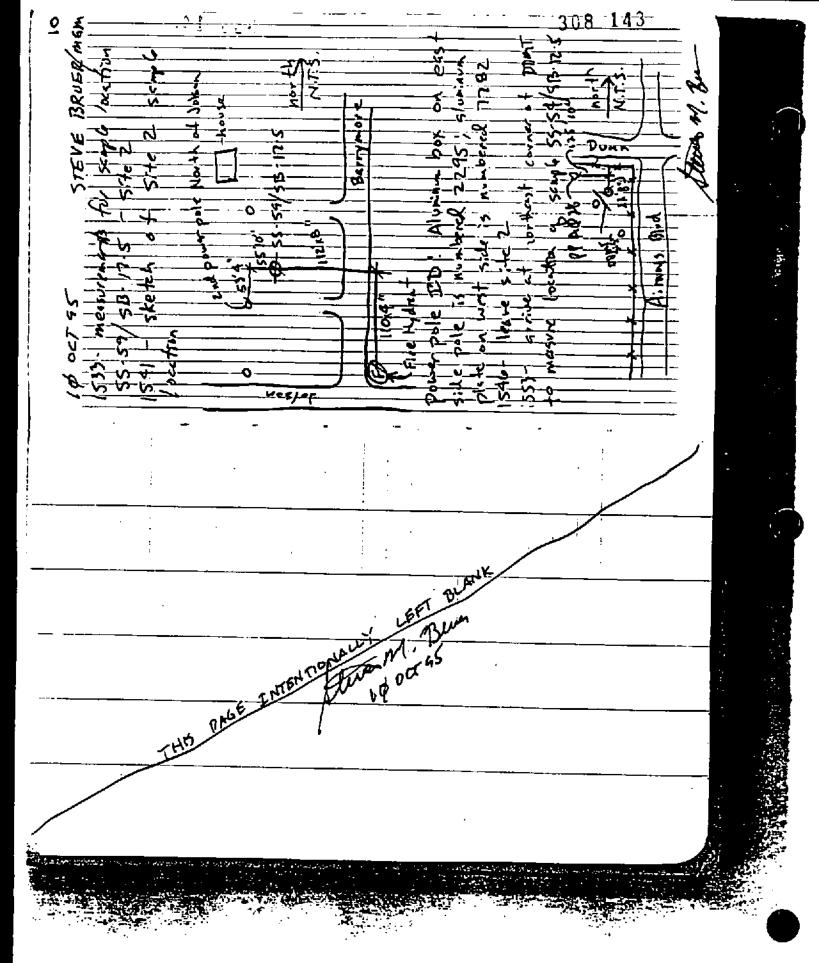


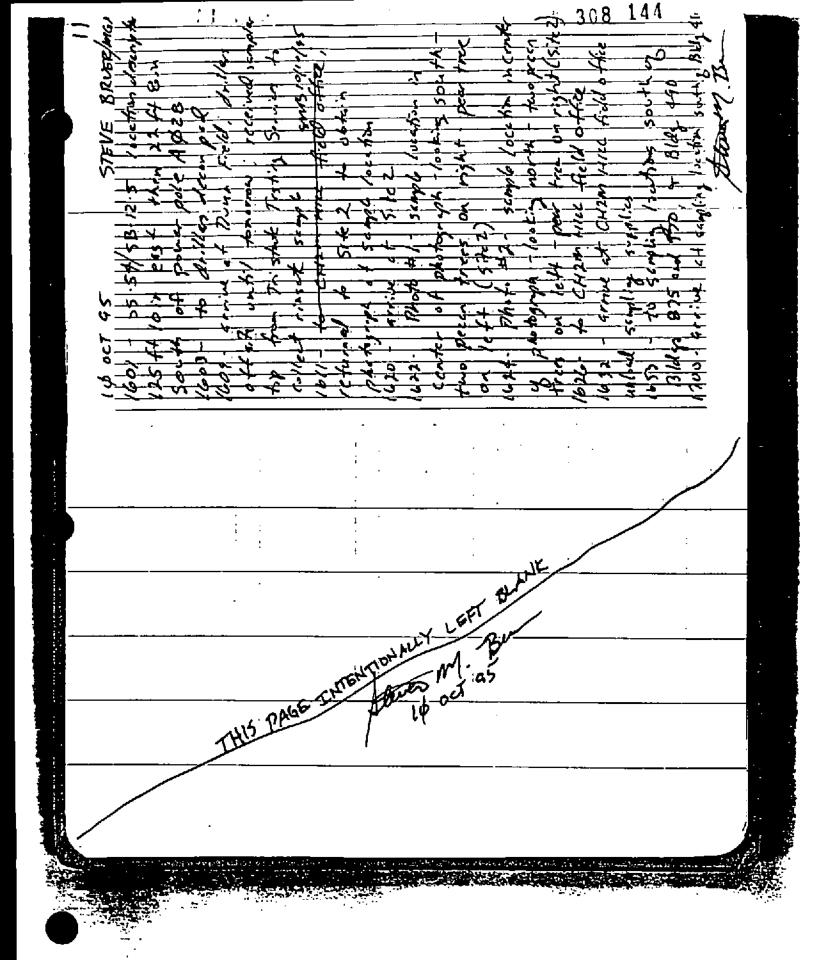


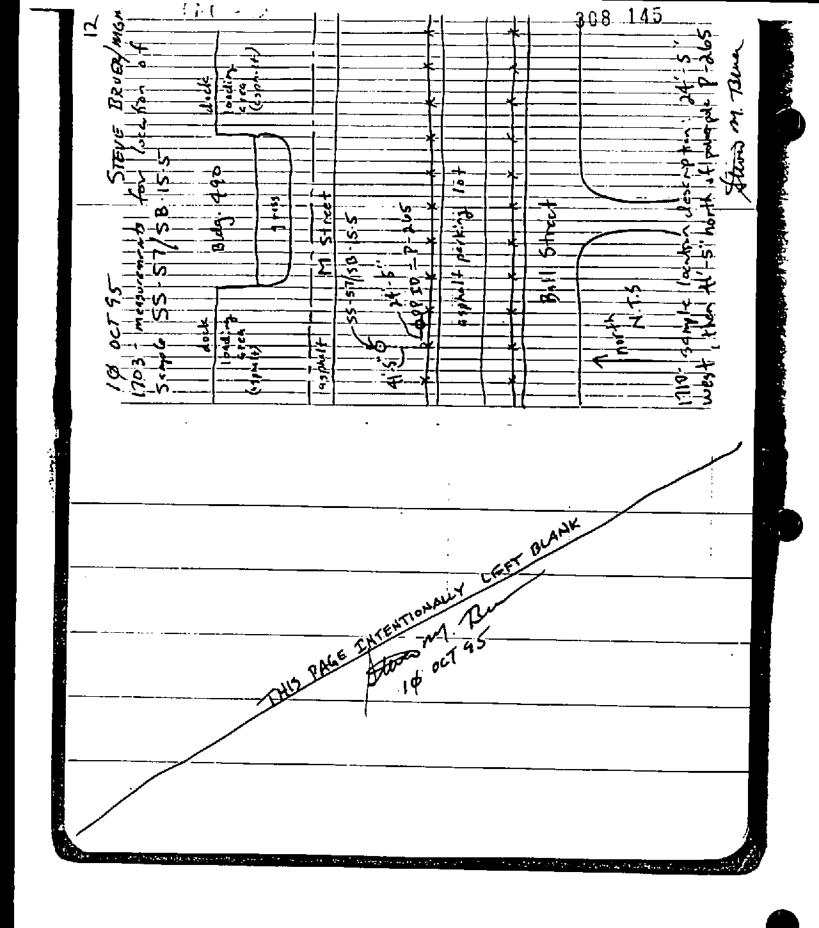


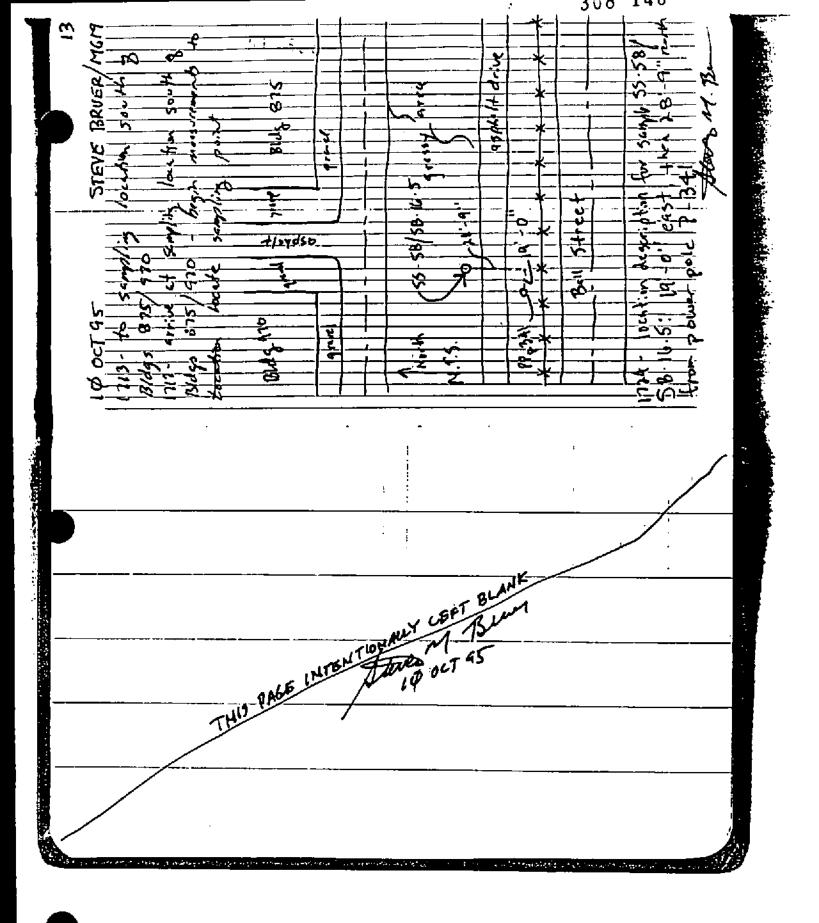


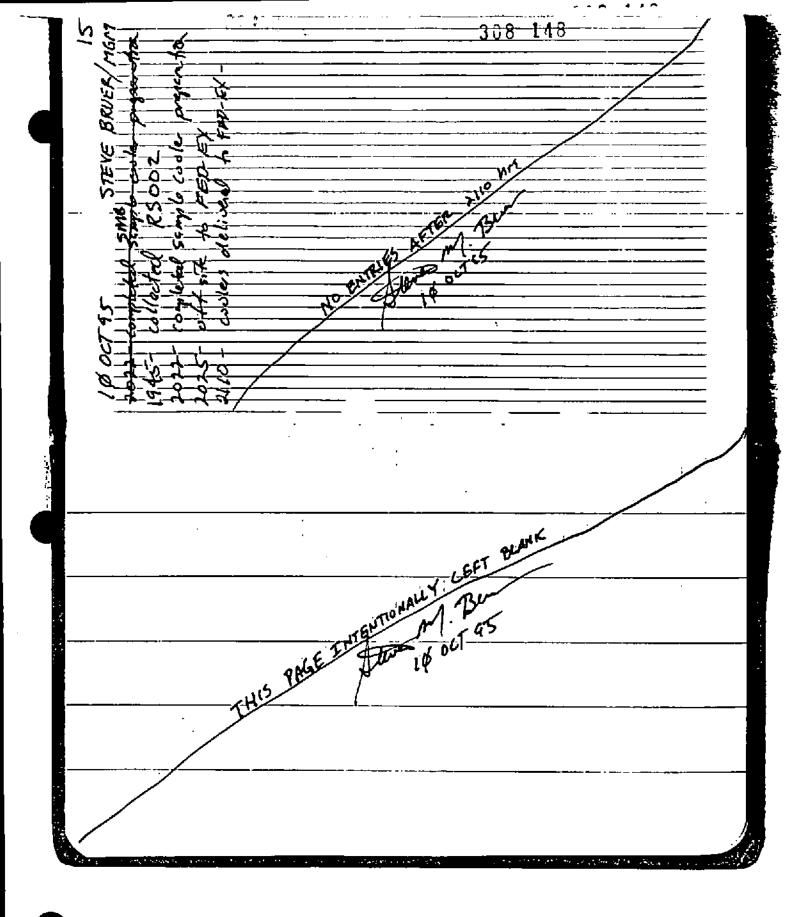


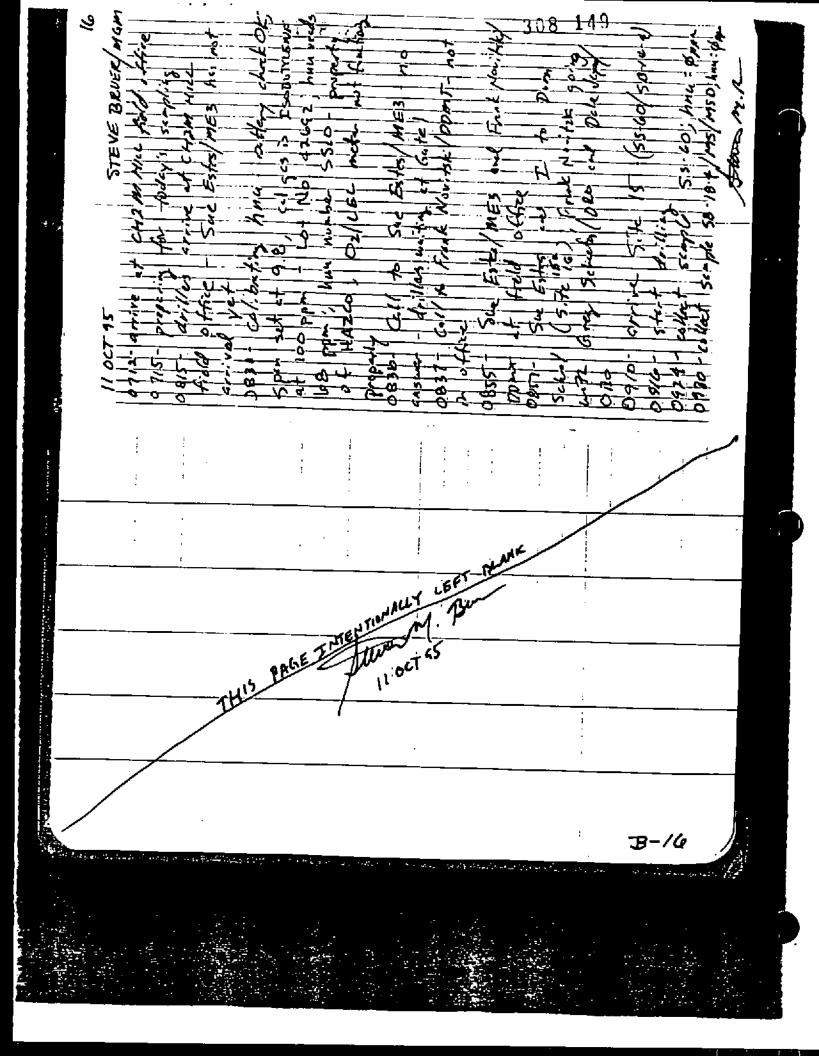


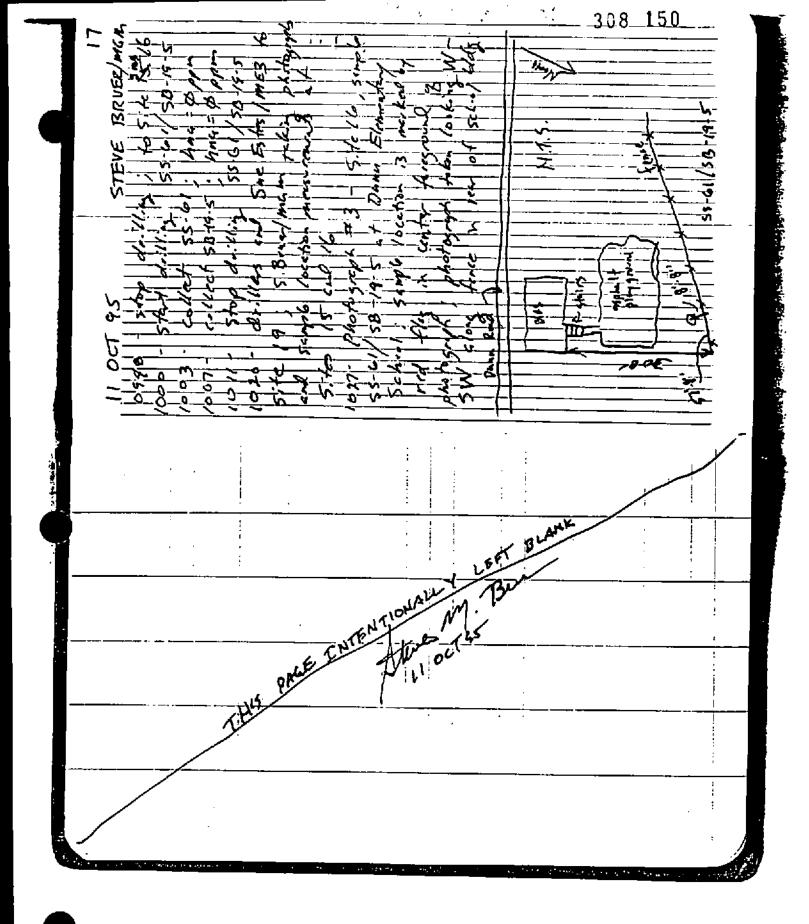


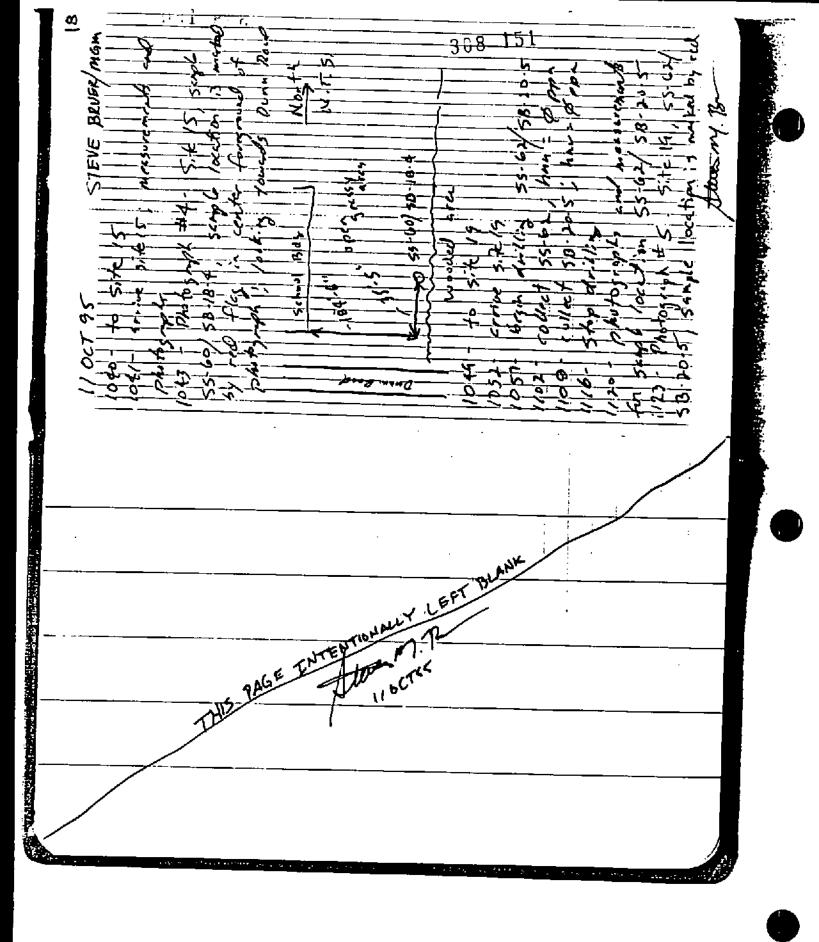


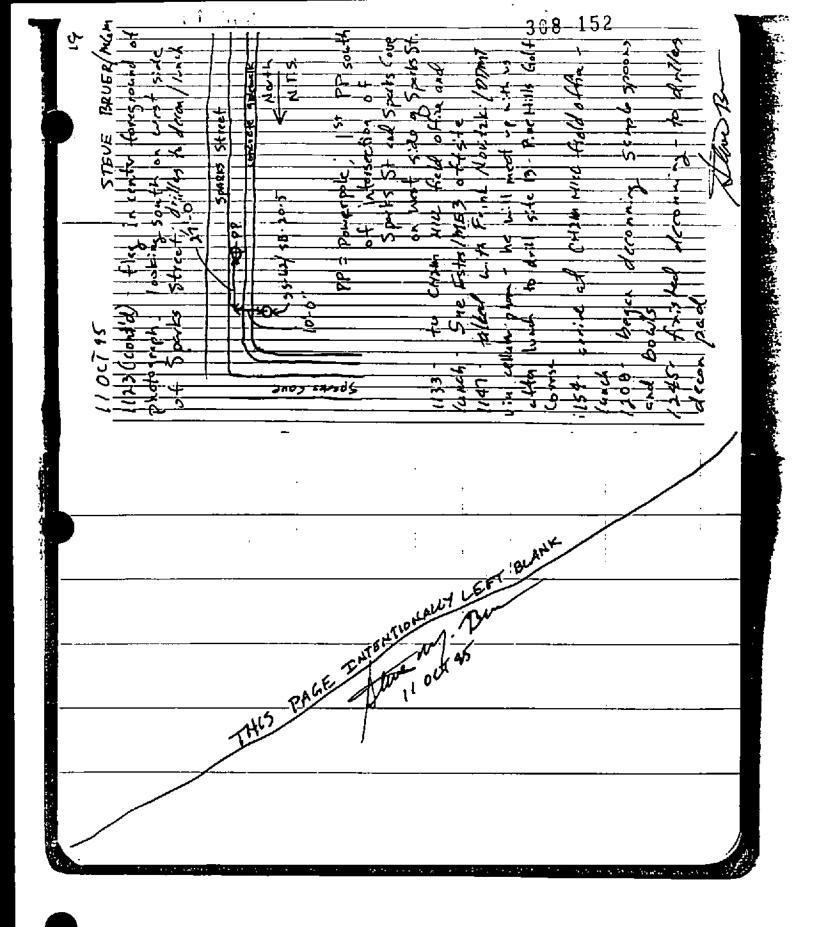


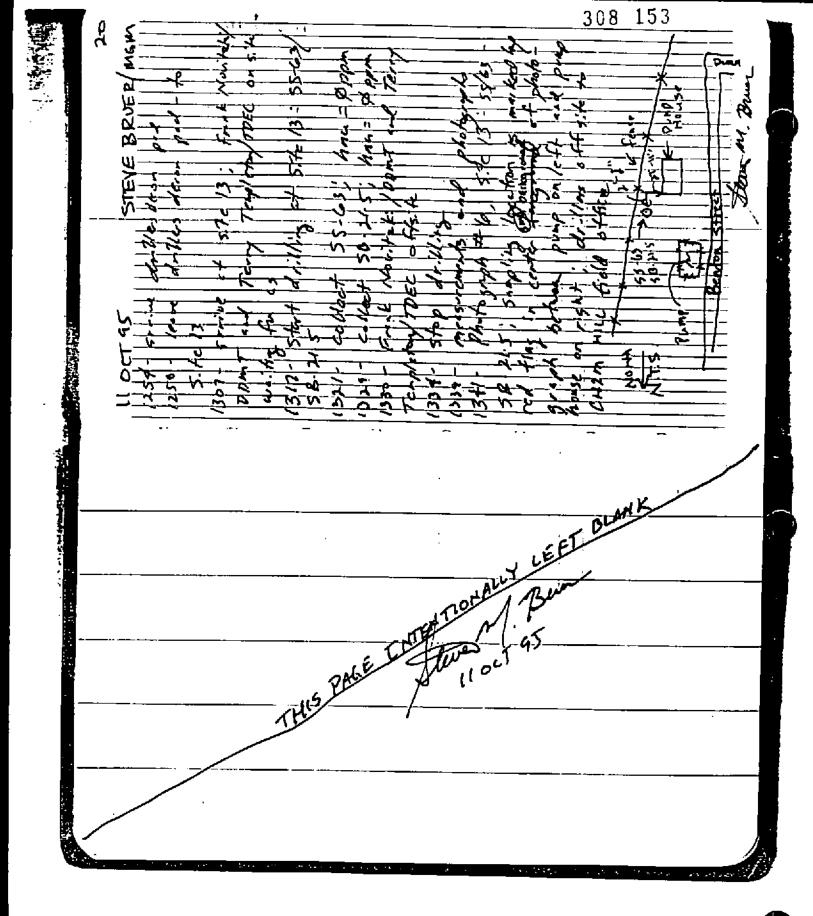


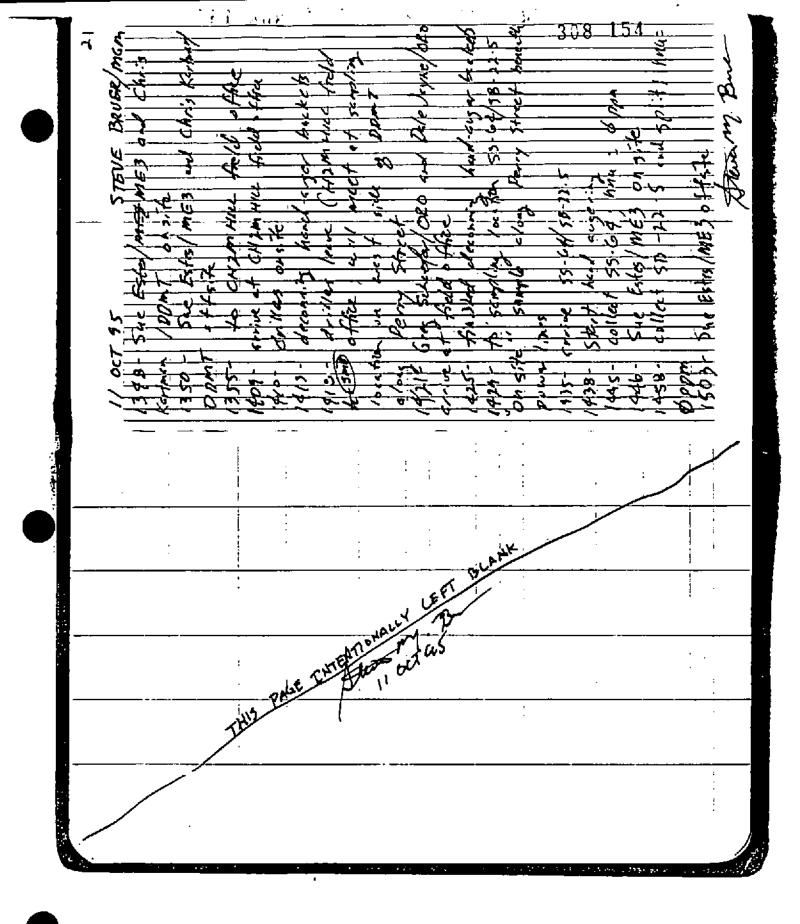


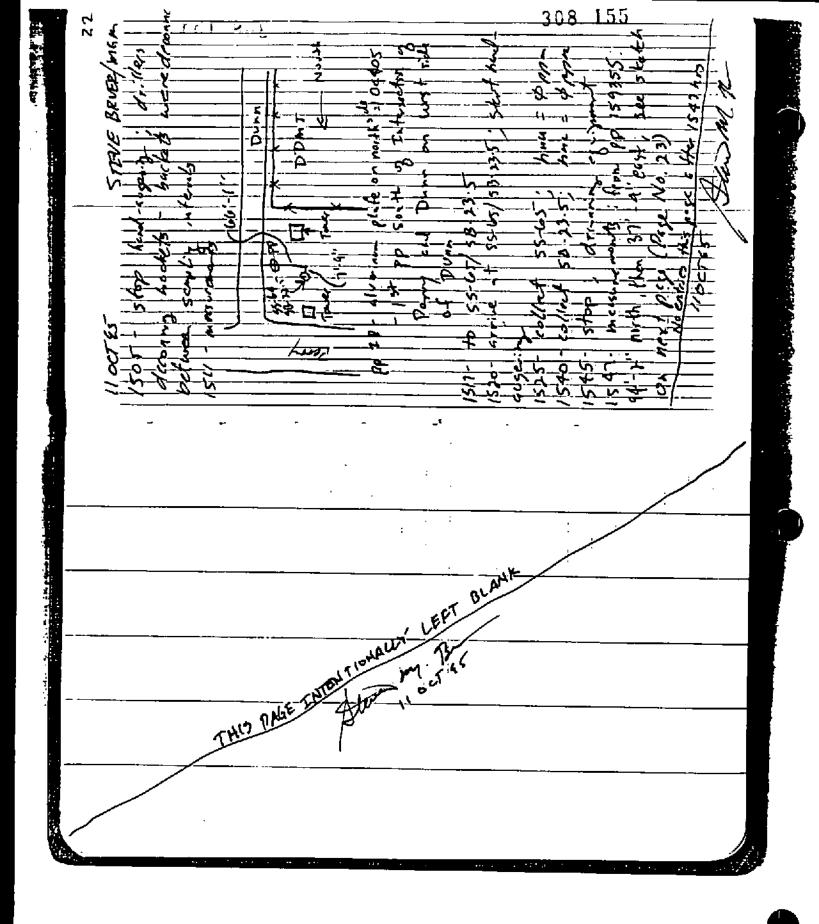


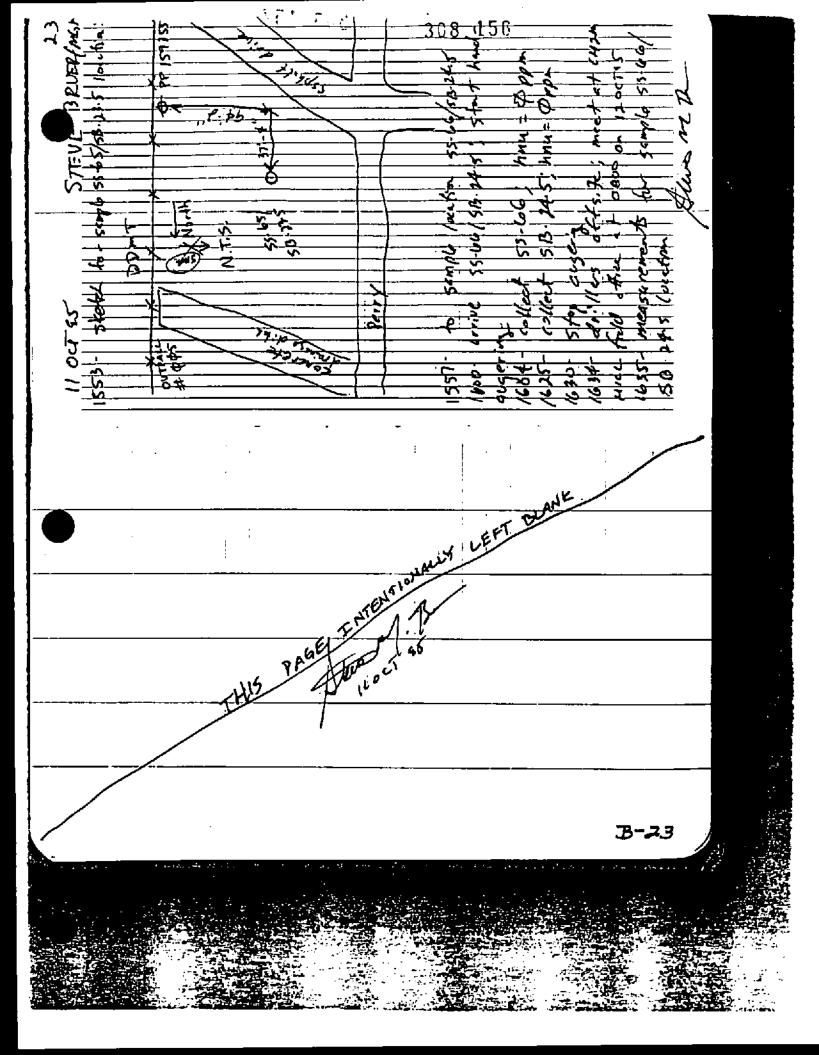


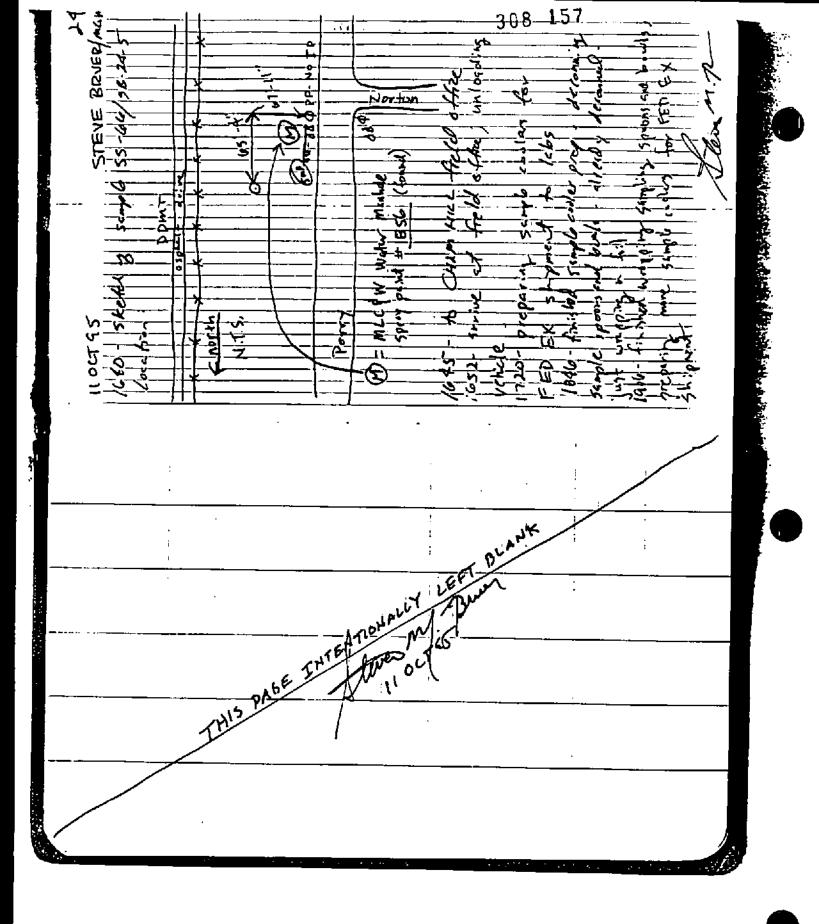


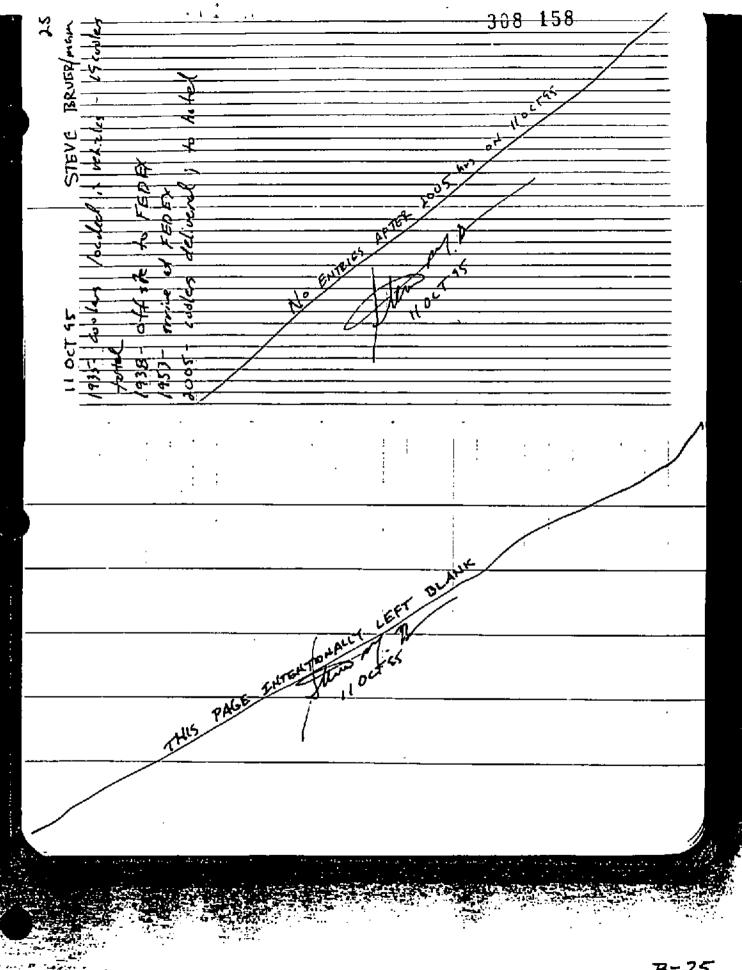


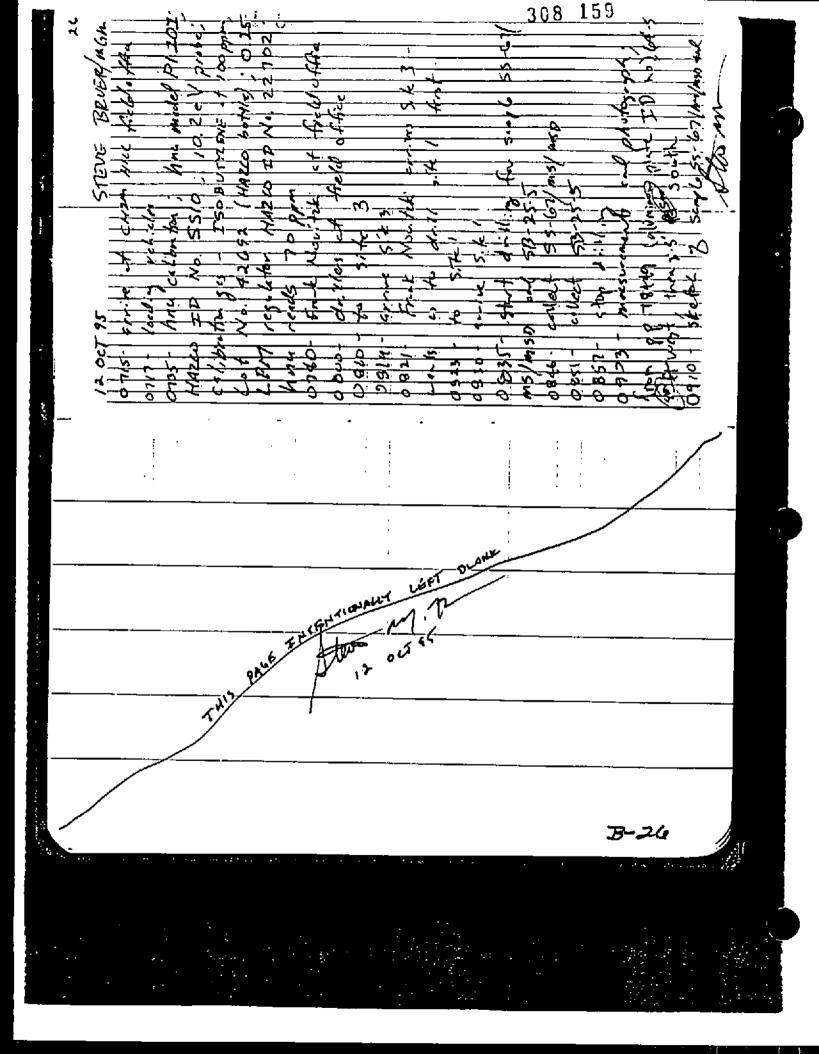


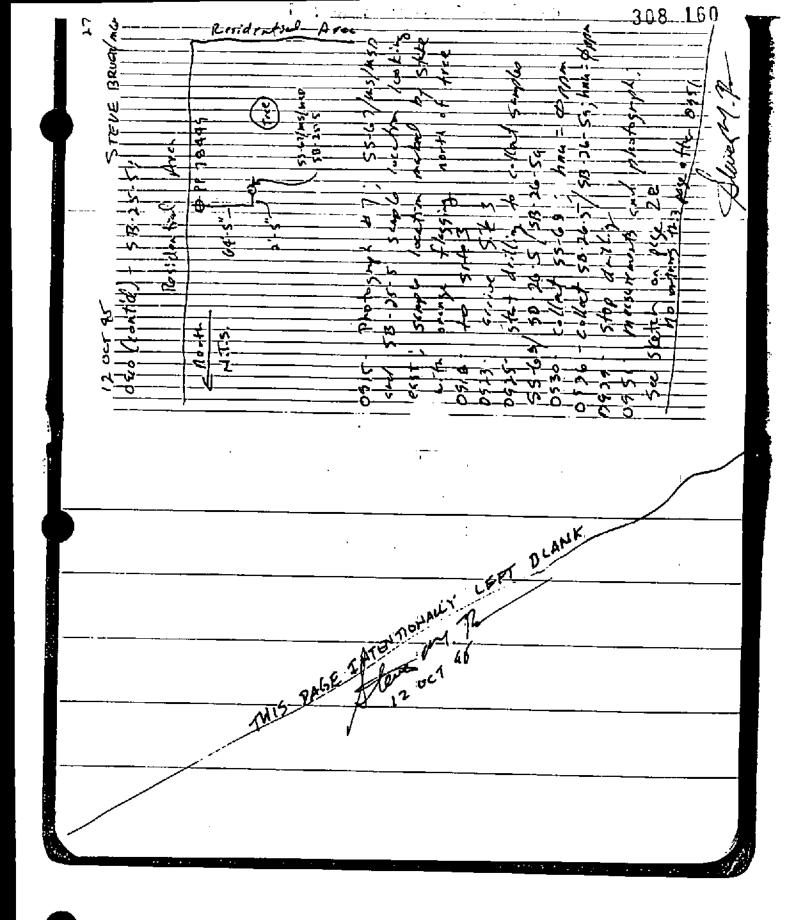


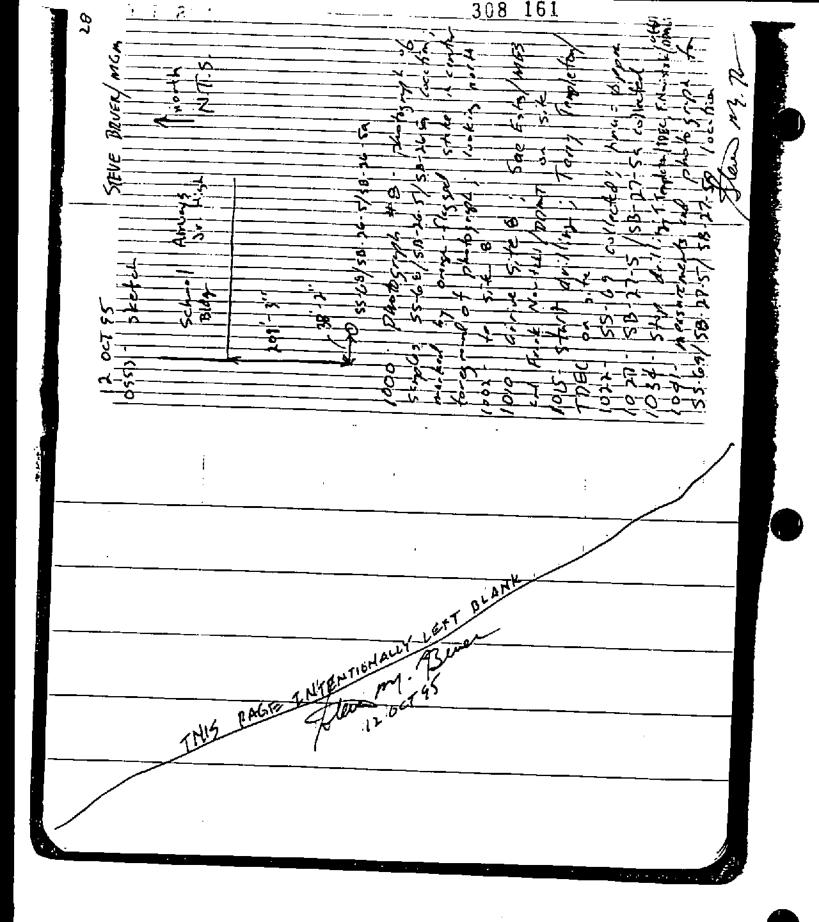


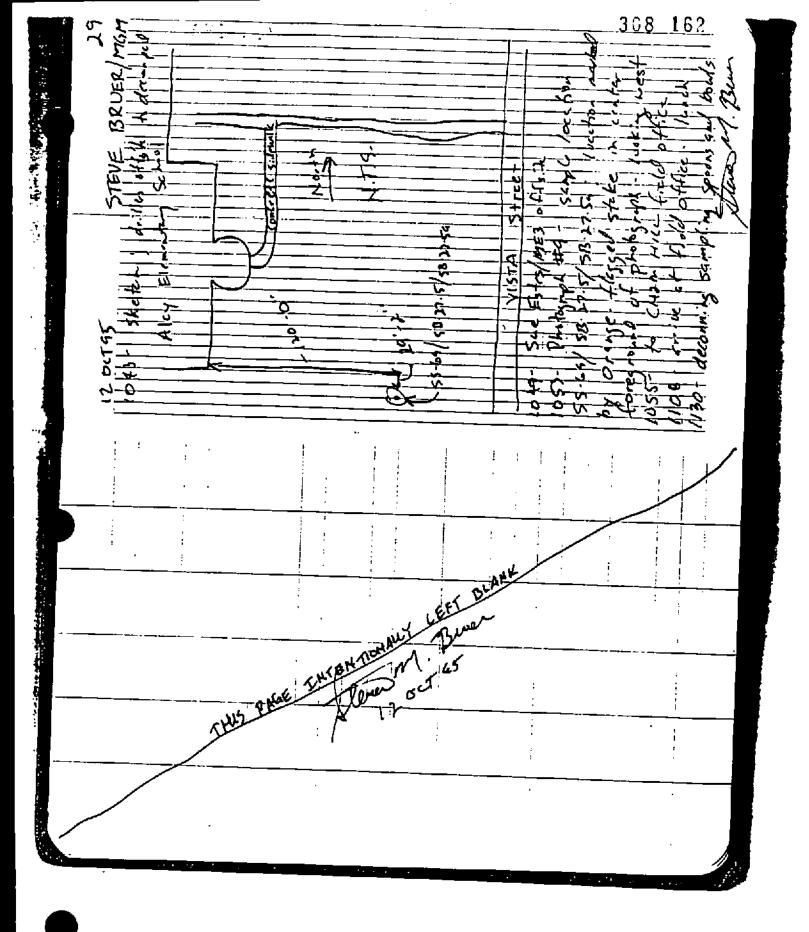


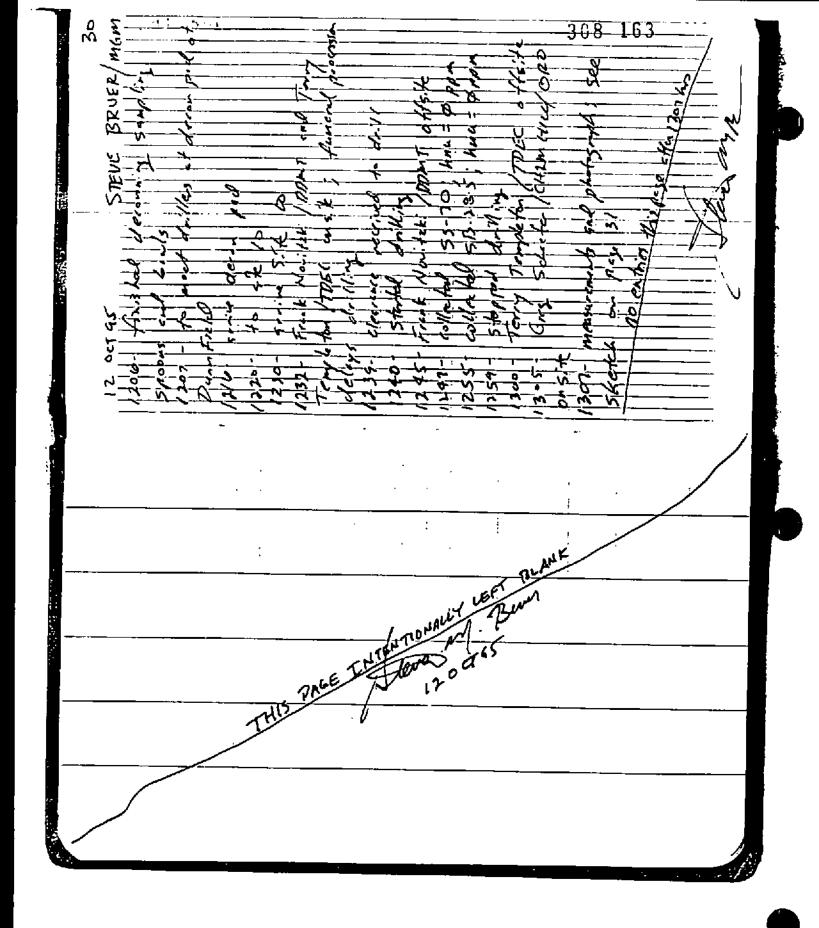


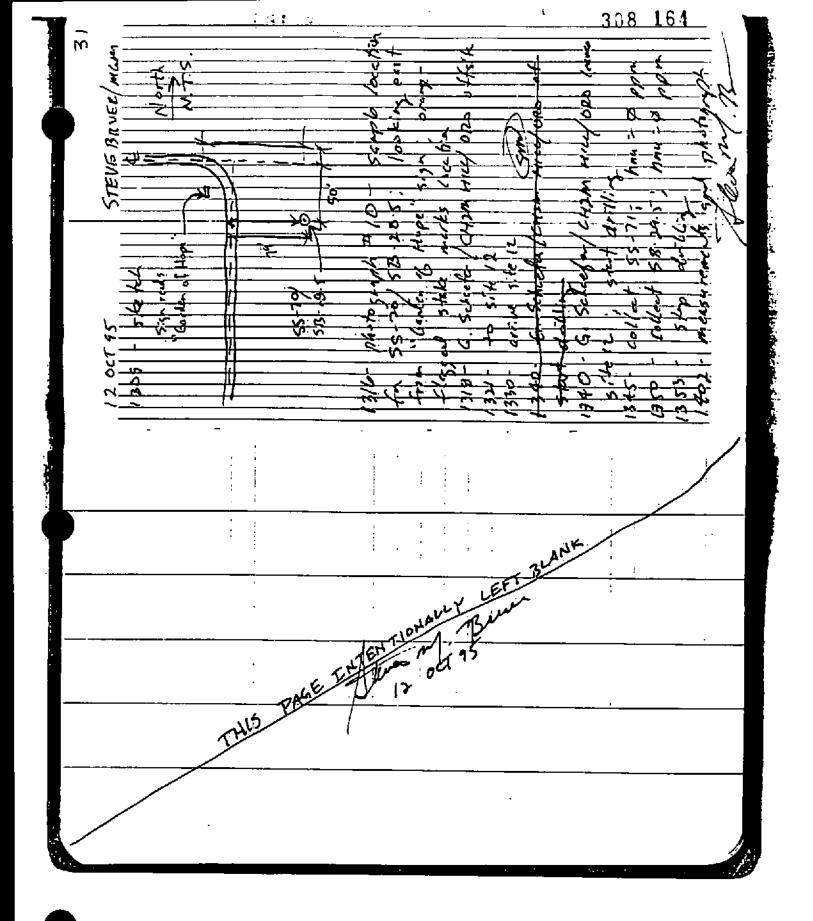


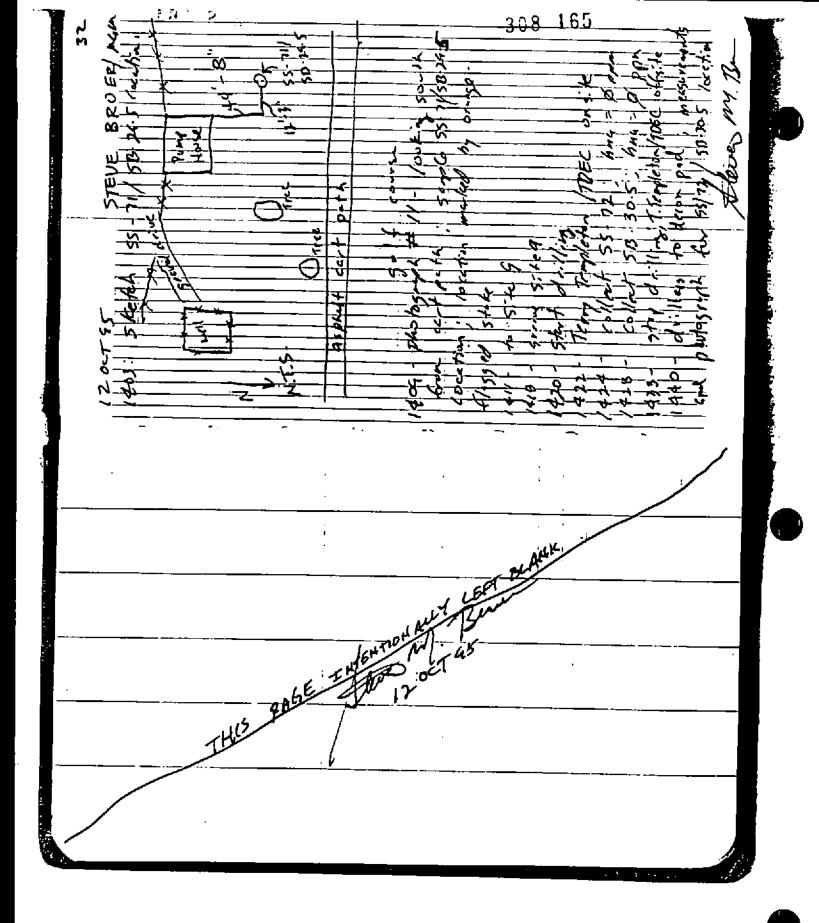


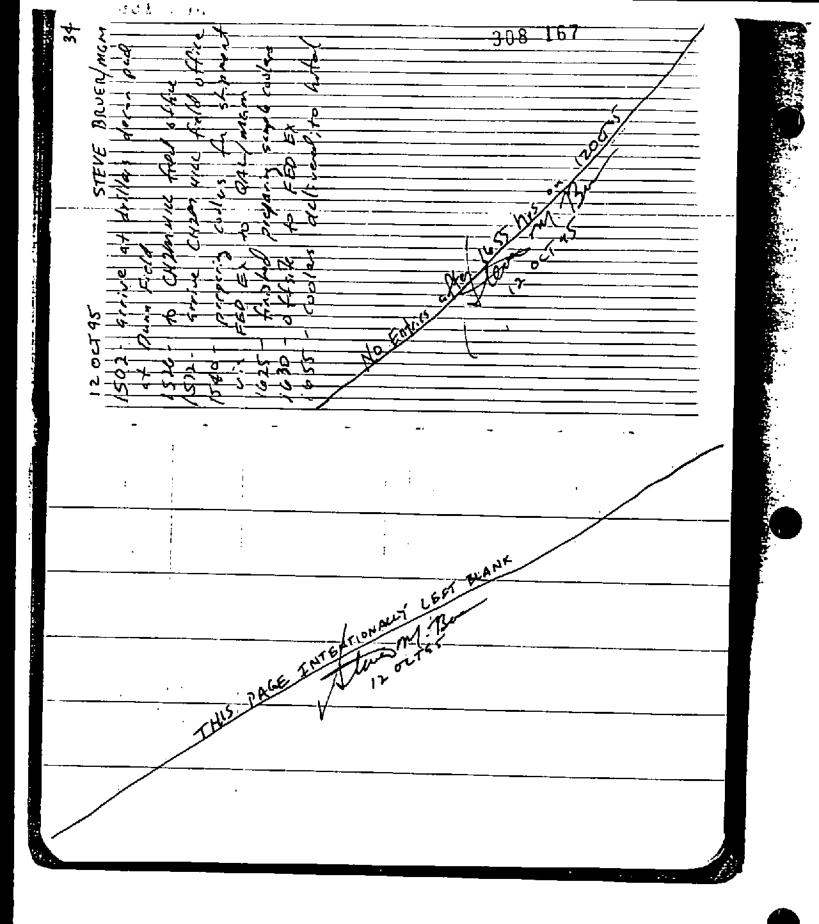


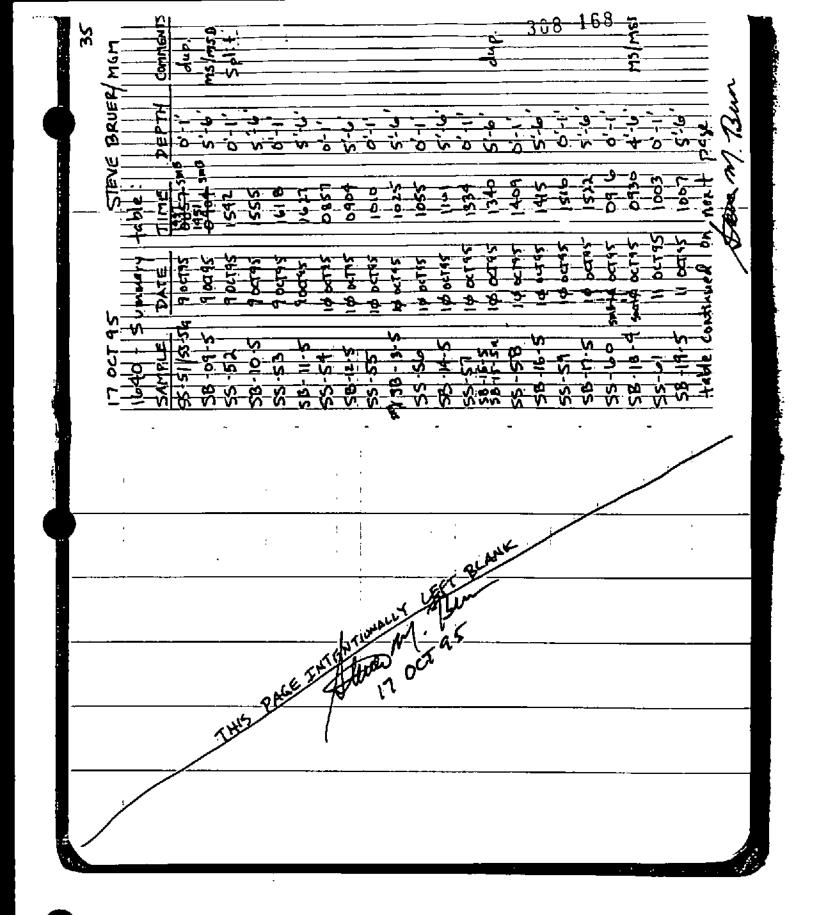


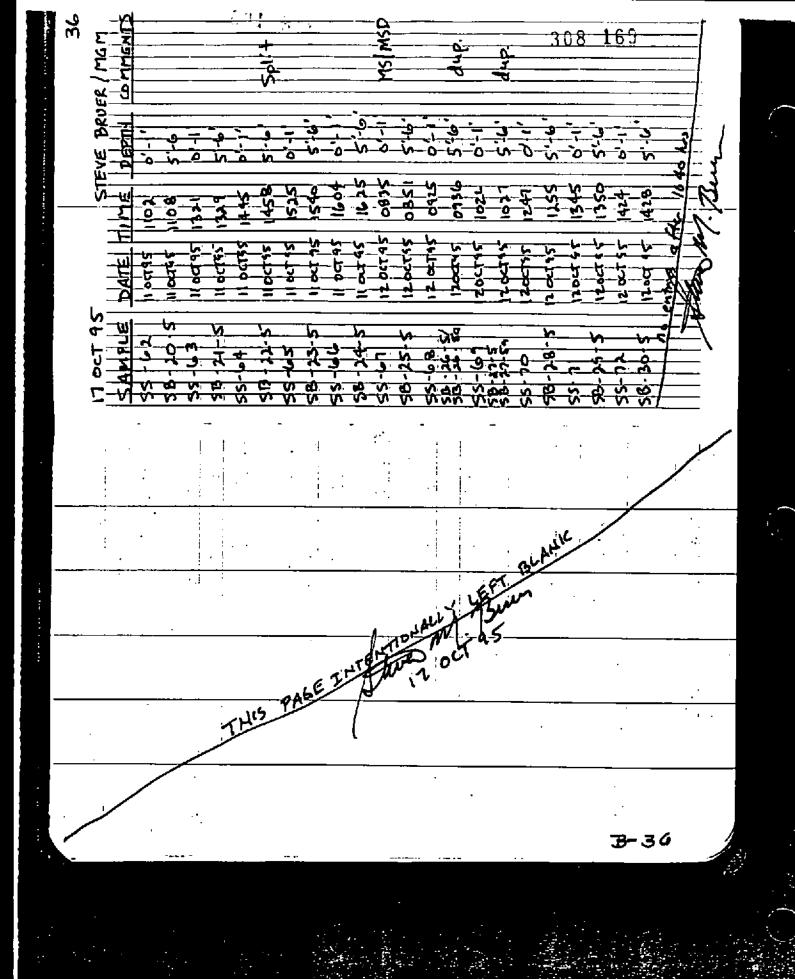










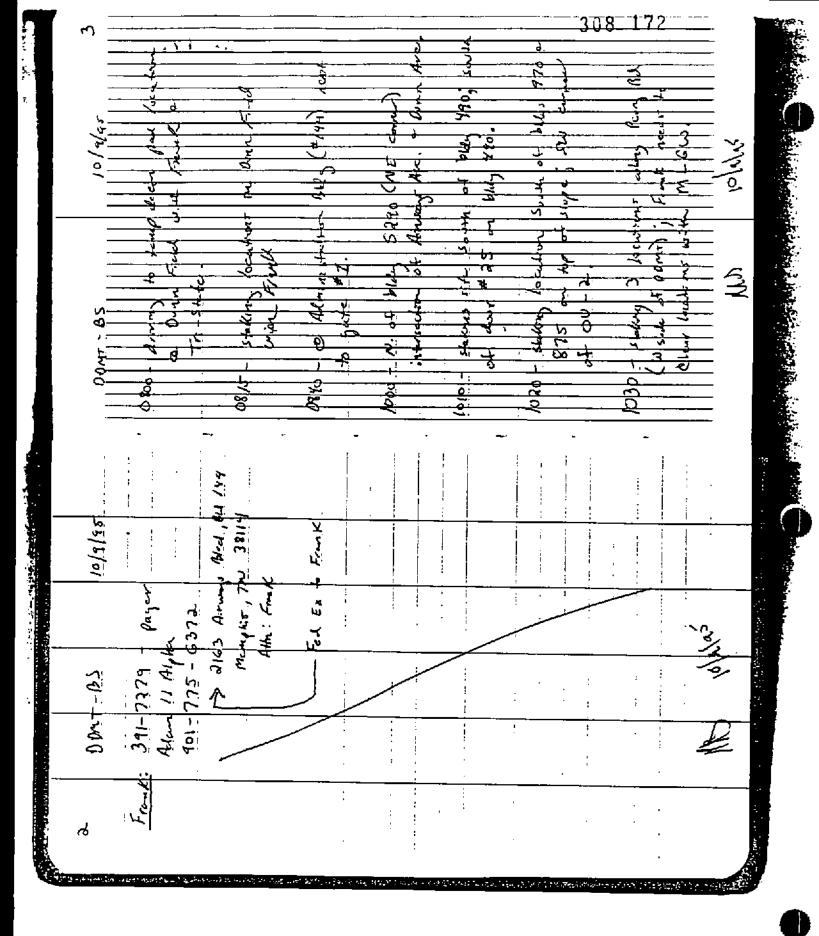


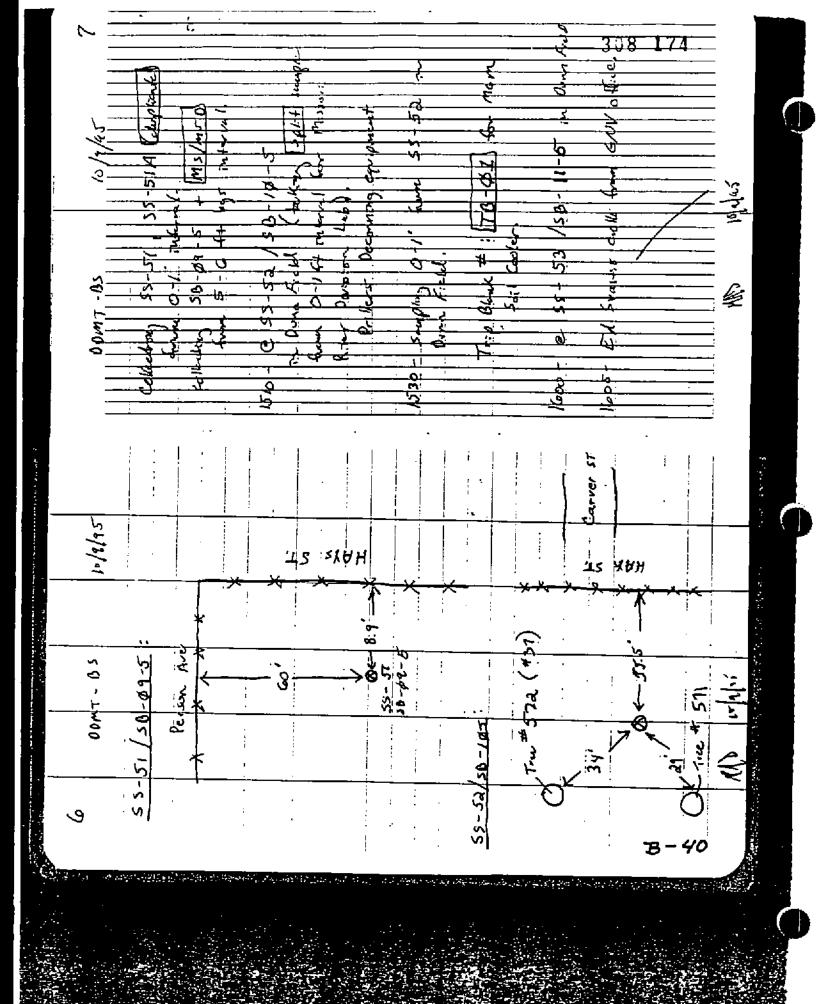
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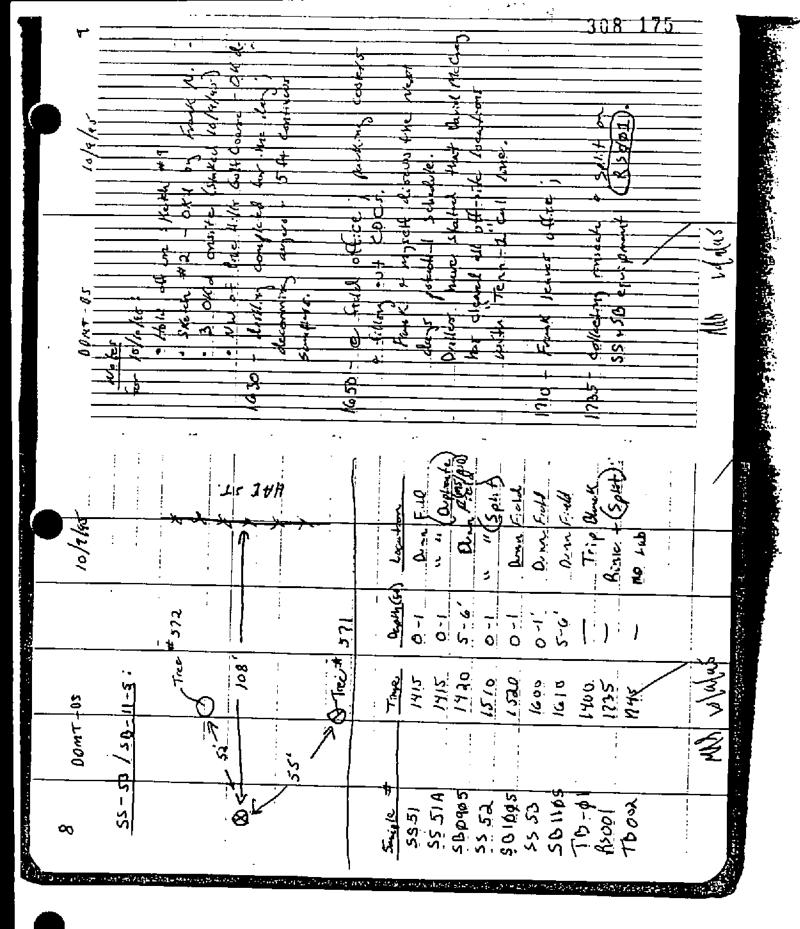
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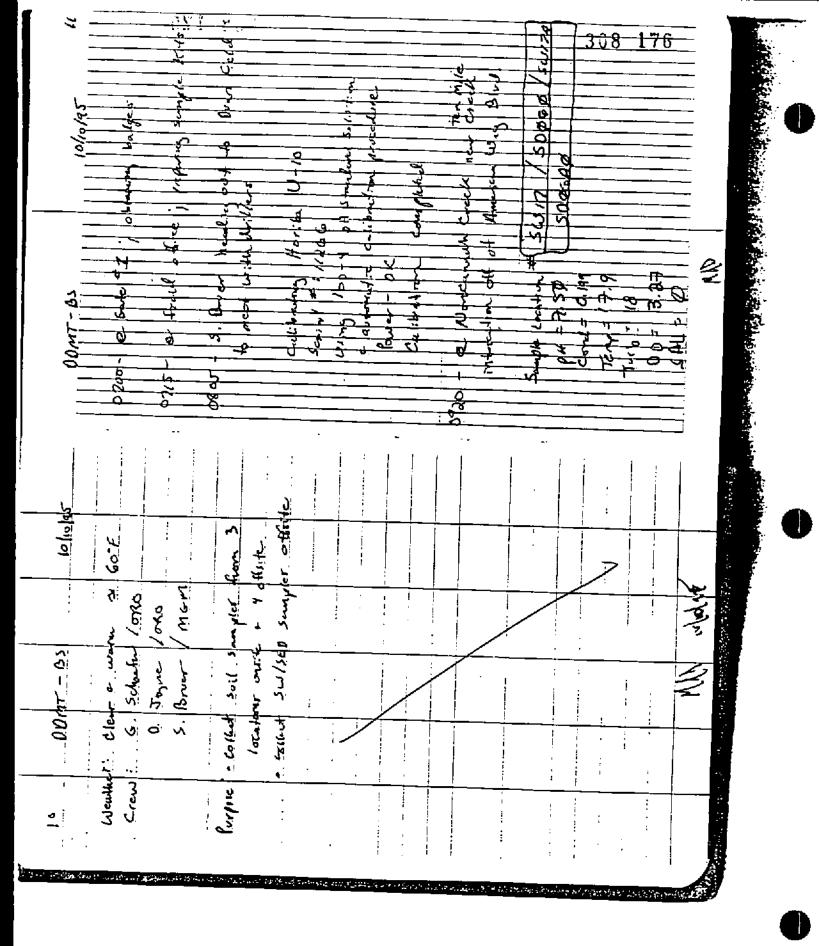
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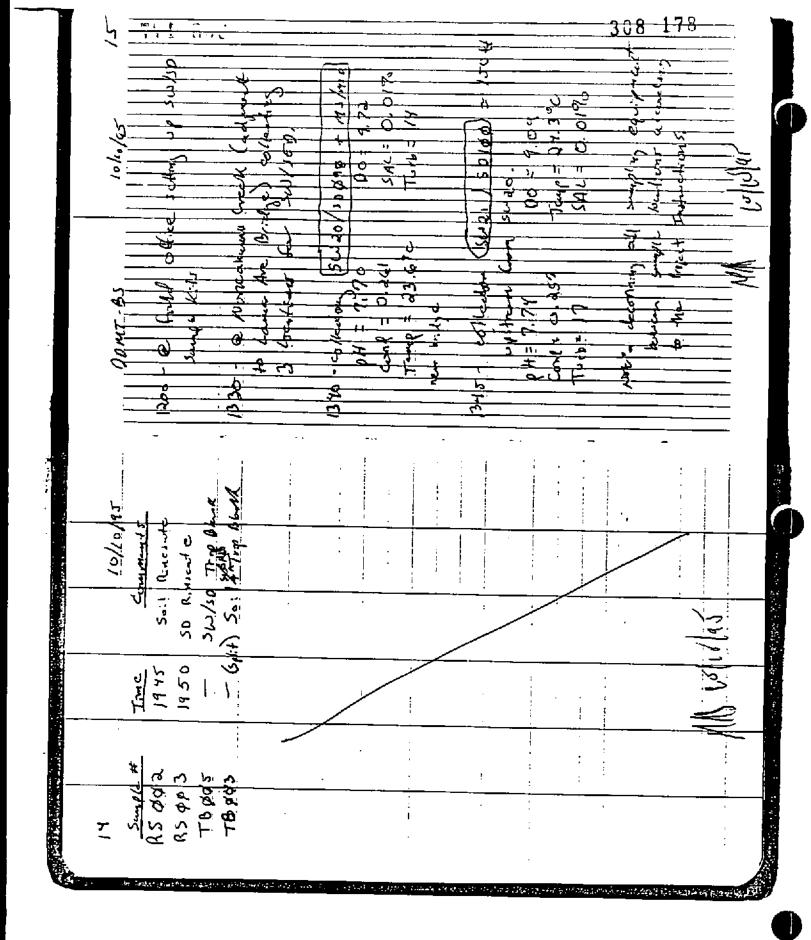


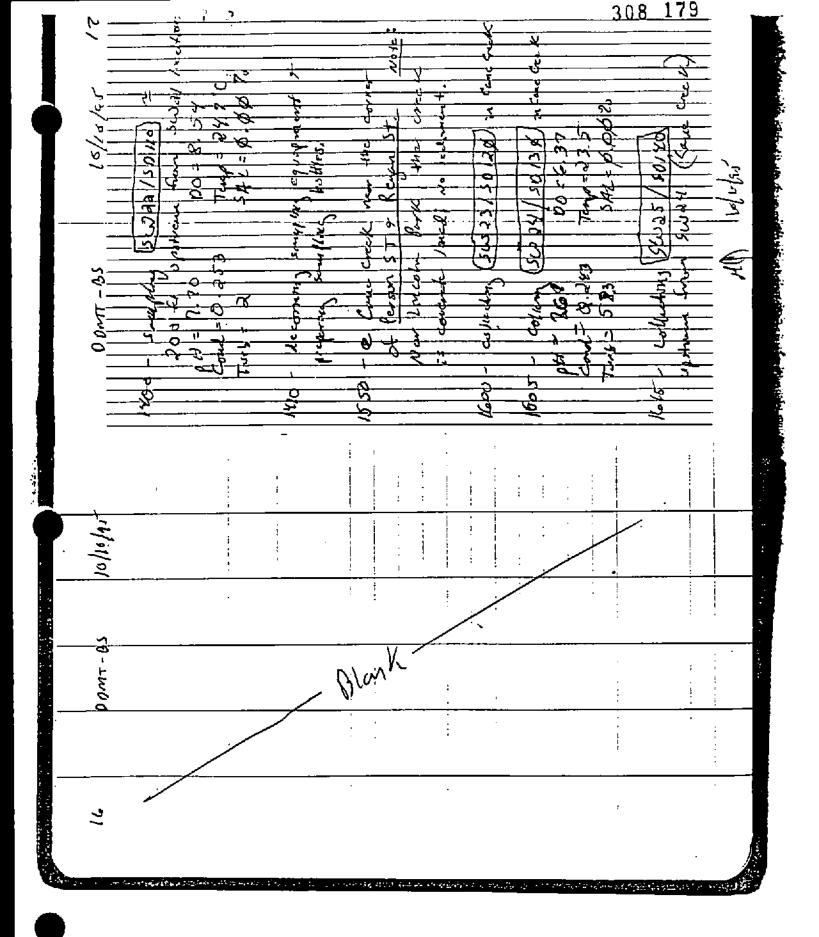


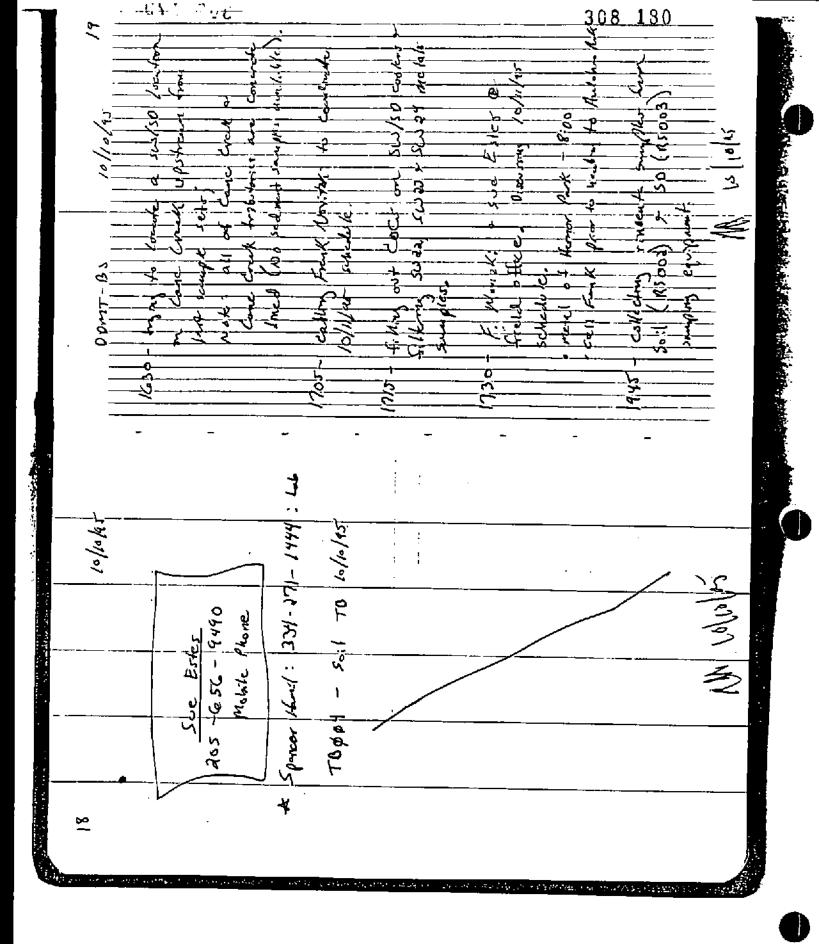


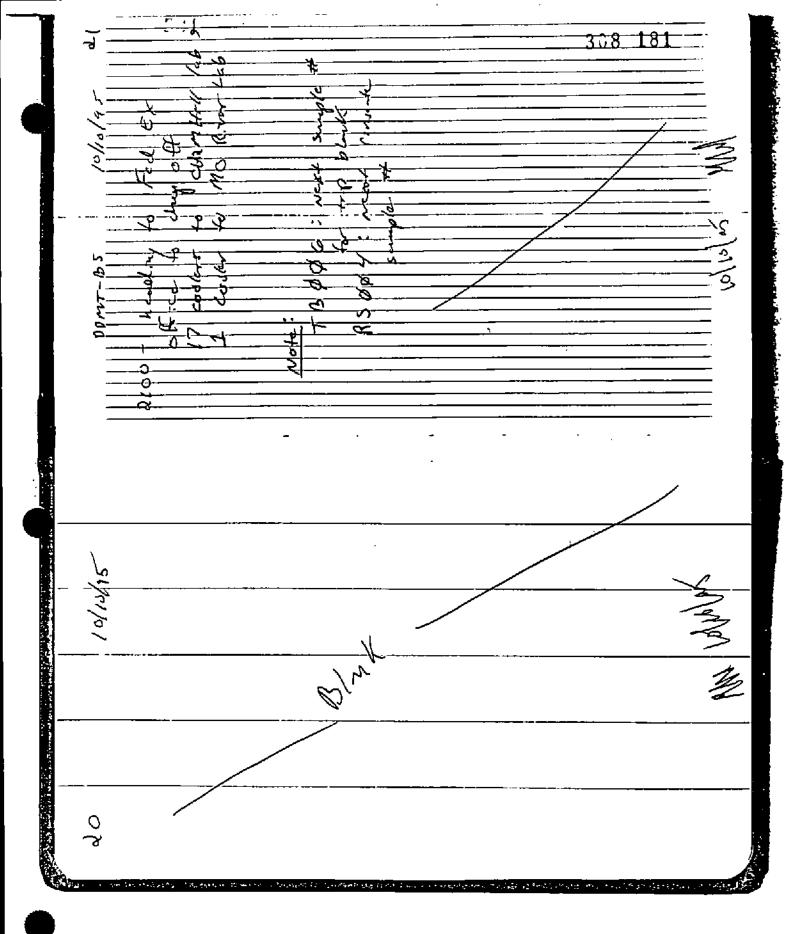
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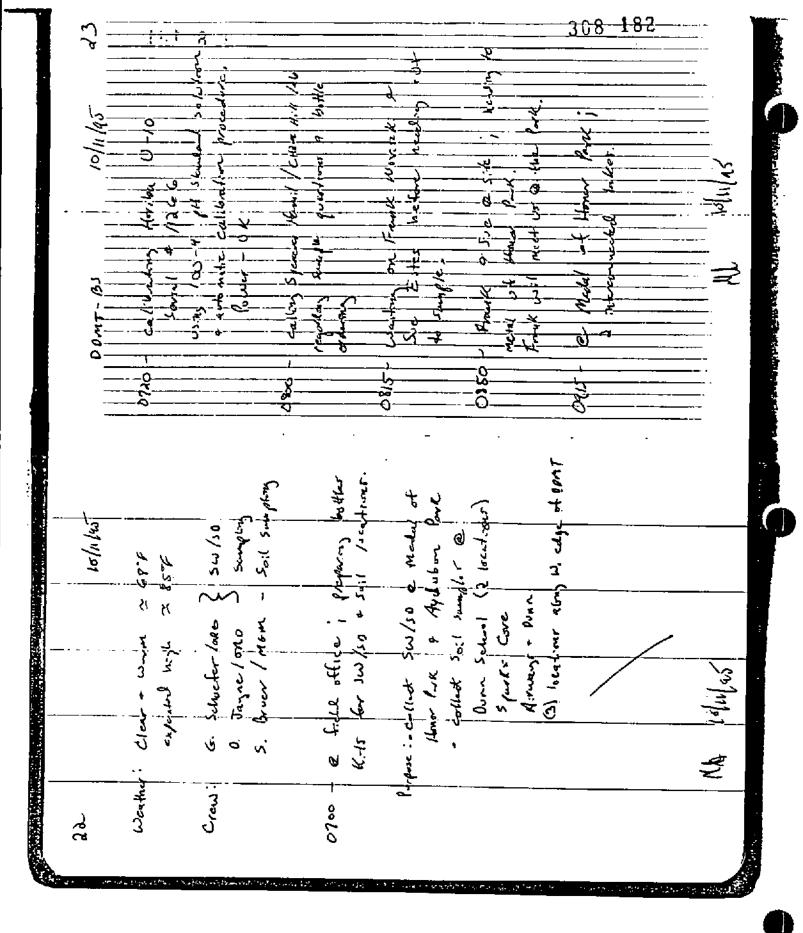
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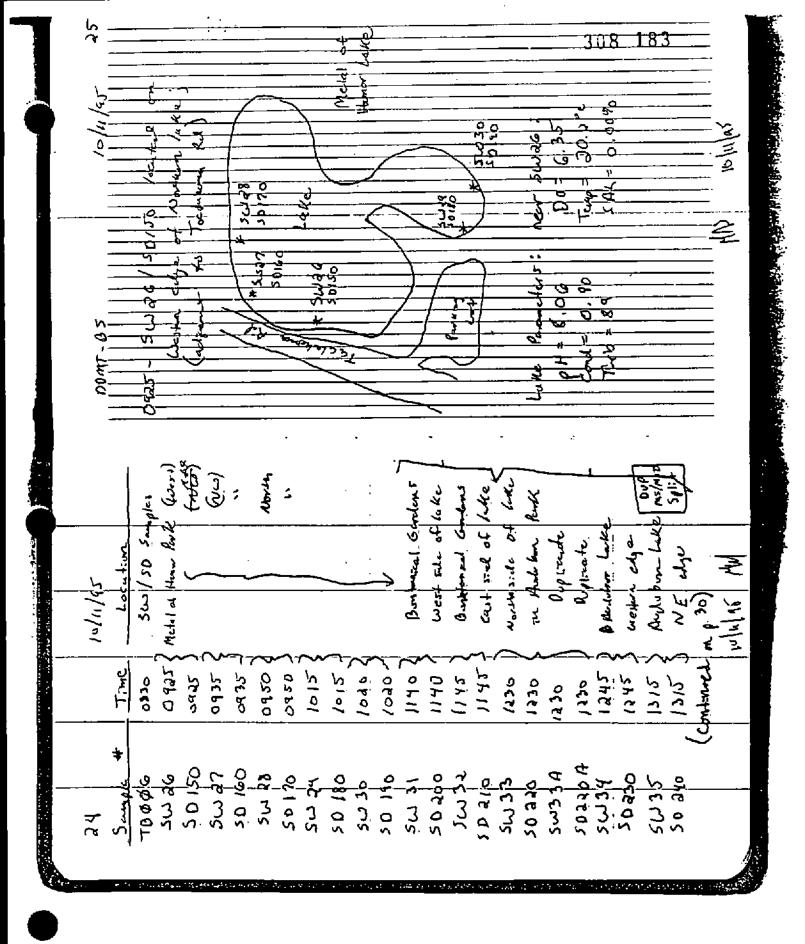


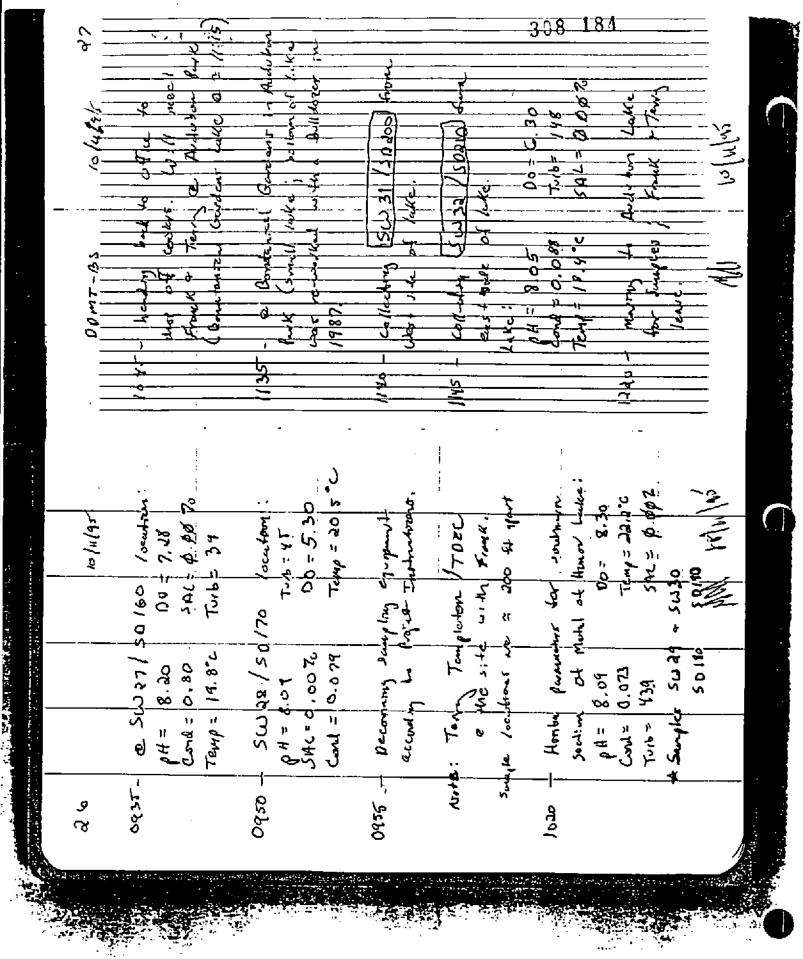


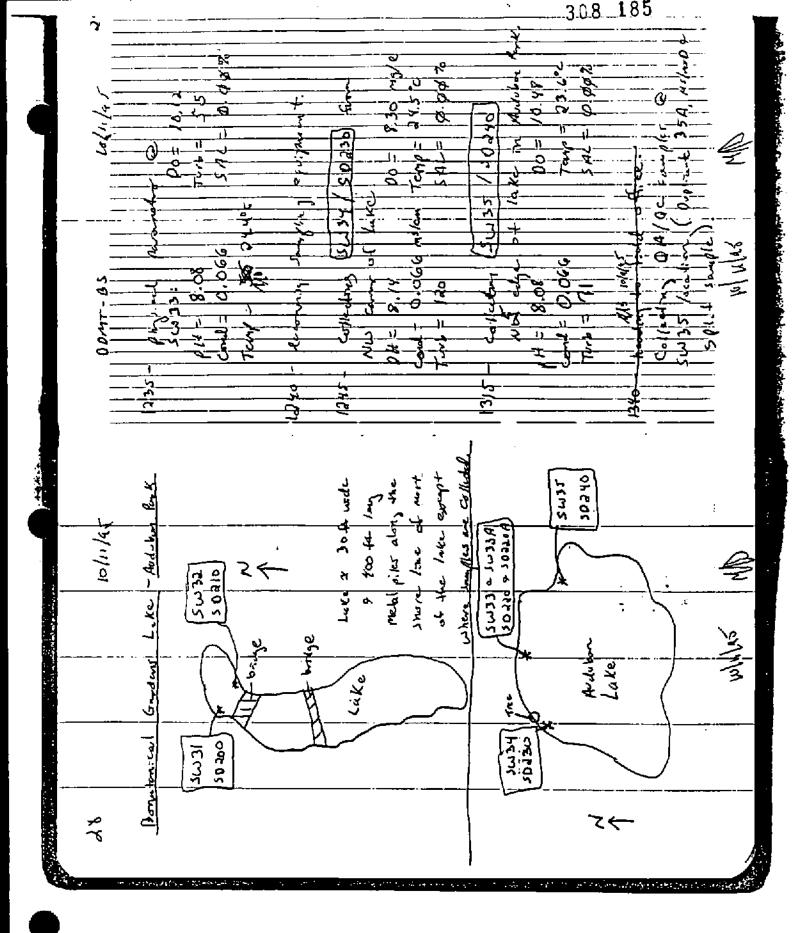


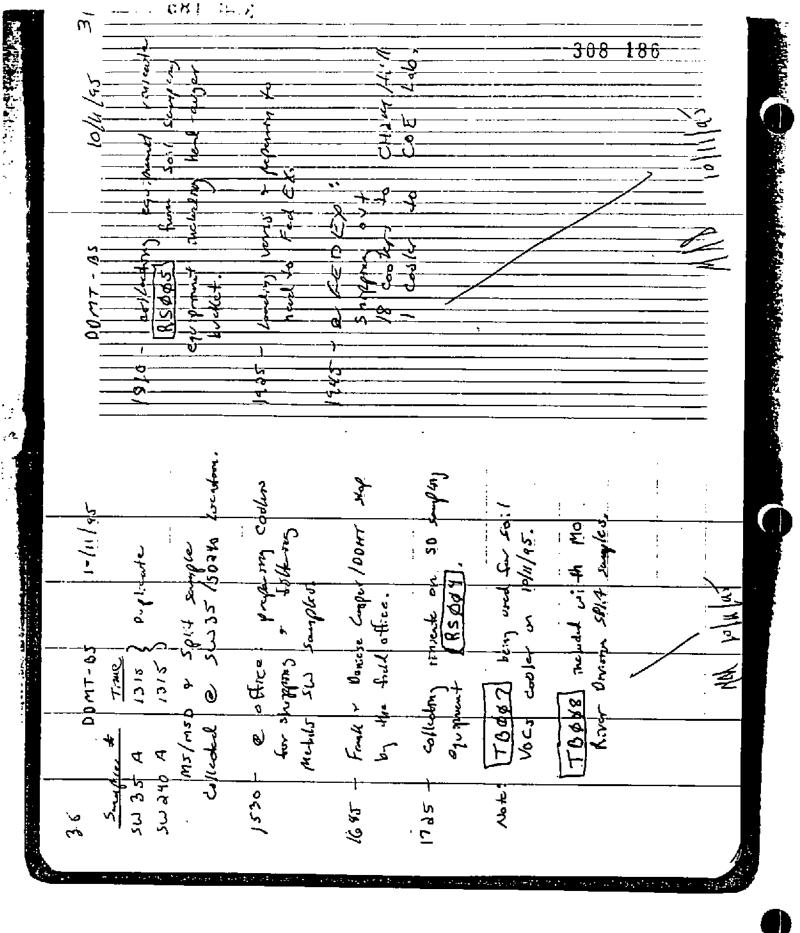




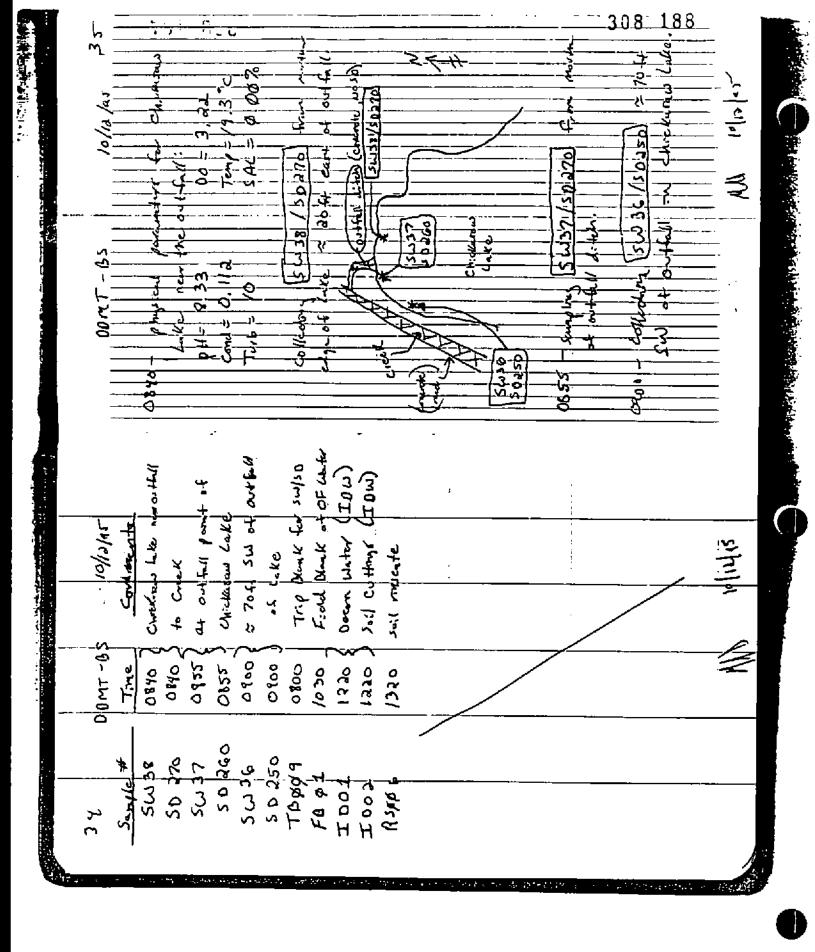


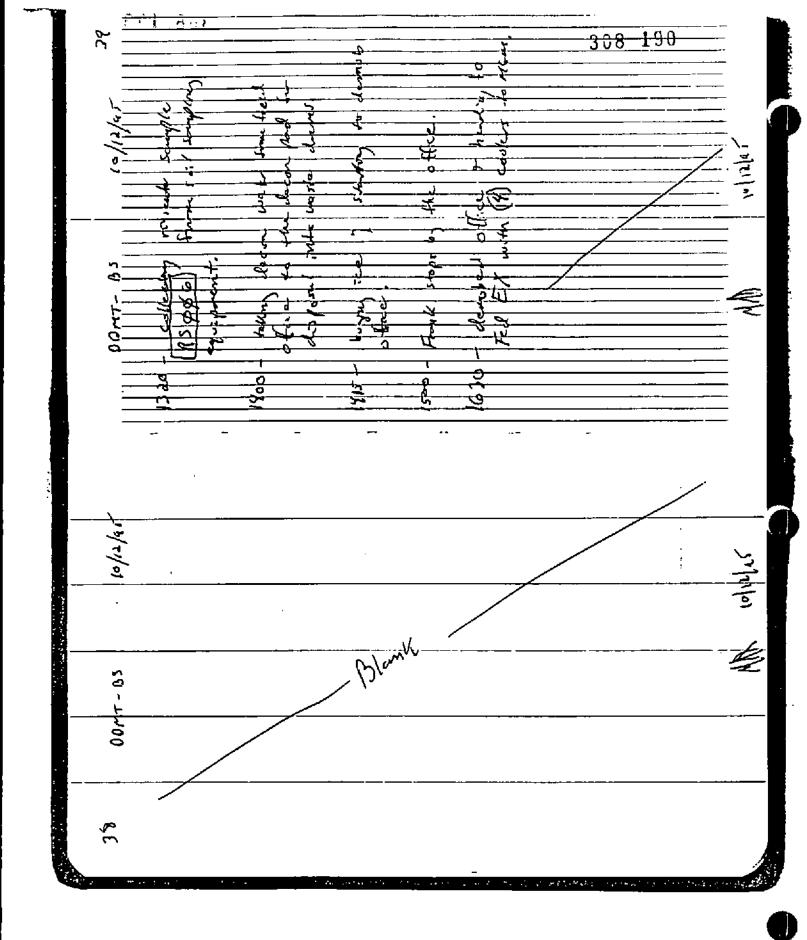






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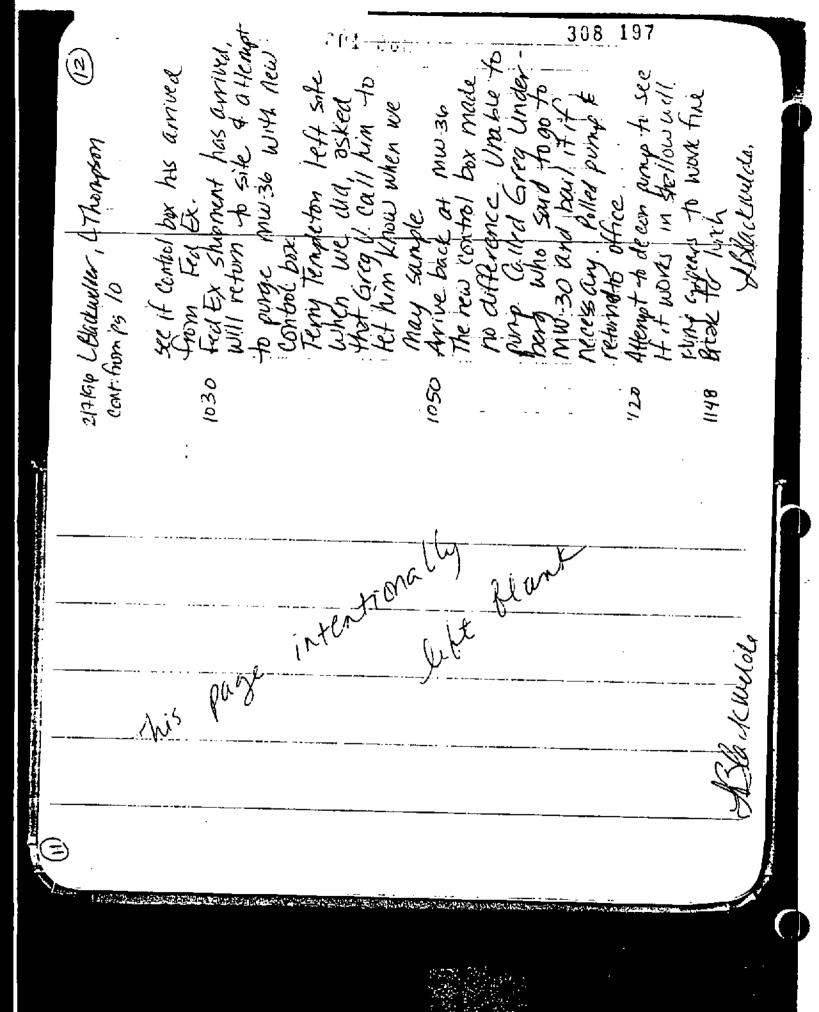
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	7	2	1321	1324	1328	1333	1334	1342	34		至四

sand collected Say Say * Unstable readings varied from 68 나 333

47190 Challwelder, CThompson

1300 Arrive at sit of nwise to purge and sumple will. Using coruntos # 4515022

3 Bayn purply - purplest

3t 49f7

- middle of scircord interval.

Purply for 4 minutes, then

stepping and see water in

though Stowed for see water in

though Stowed for see water in

Wither 15: Vay cloudy orange Water duschlanging. Damin in color

Water is gething much 1338

Collect Sande MW301-5voc 2 4th amber glass, Metals- 1the plassin Pump of Y-pull pump from

1338

1350

doposablebule - wasted 3 till bulles of water 9 used 4th to sample XBack wede Collected vole sample using

198

308

199 196 196 196 308 (gg) Same thing ,50 ME Warpend & waking 2/8/96 L. Block W. (Har, L. Then air agay Stopping Ane into Albalan La After discharging unch 6t1 n omarea to by again. Grenzy minit Aschanging NSCUSS DUN Pure has overload 2 Horn rotunes in Ducked 132 1202 1380 1214 Jun page interdiorally blank A Bleckiduse, 63

1420 Amive at Ste of Well Chiw 45) 200 1430 Begin baller with ap.

1443 The tubiality of the water
1443 The tubiality of the water
Seens much highor their
water checkey & change a
batteres with no difference
1510 Affectors no not cease
1520 Affectors no not cease 1350 Malyted parametes for Wolfs of Svocs Clean gless jar to let at for a few mylutes so We poured water into total metals-L'Backwaly Pe4/008s Habiches 1443 The 181 FC pH Cond Turb + Do Sel #bales 196 81 6150.379 > 949 291 281 3 1433 180 6120.342 100 97700 & Work appears much none turbers. (2)240/que l'Addeuverder L'itherpeson Well Ringe & Sample Broad WellC 146 9.80 00) 219 9.64 001 138 9070-9 Will volume calculation ABBCKWULLE 67.915 - 55.391 - 12.56 (12.50) (0.16) - 2.00 Fine 46+ Casing diameter = 1-06 81 6.15 0.379 > 1 1743 3 18.0 6.12 0.342 1451 5 179 6.18 0.349 157 6.0 6.11 0.370 1594 8 18.0 6.14 0.379 End of data DTW = 55.39 ; TD = 67.95 MW451)

308 - 201 Contained Containers, load up and leave site site to stopped at Dun Trid to transfer purpe water to in the task, in the stank, i large poly tank. At Sale of truck Vell sampling log and " Fromtoring Well purging log. 21994 UBlackwelder LThompson (28) into appropriate presenced 210 /av at office 7:10 notey # 312046 USING Auto Cal sediment can settle and we can decant water Pack Samples. Recorded Punge & Sample Information for Well C on Monitorina 7:30 Calibrate, Water Checker on, Monitoring Algarandy rack sand leave who Wooedure. 1600 1545 intentionally his lost

211090 OTHERPORY LOLCICE WHITE Wellipugning Los MWZY

DTW = 106.43' TD = 113.64' Well Volume Callulation 113.64 - 106.43' = 7.21' (7.21)(0.10) = 1, 15 gailons Casing diameter = 2"

0.00 0.00 000 0.00 0.00 000 0.00 1350 1 17,7 7.01 0.146 >999 (1352 3 19,7 6.70 0.196 >999 (1352 5 19,7 6.70 0.198 | 751 (1355 6 19,9 6.06 0.165 345 (1402 12.20.1 6,25 0.183 | 199 1402 12 20.1 6,05 0.182 1 1405 15 20.0 6.26 0.182 1 1408 19 20.1 6.13 0.182 141422 19.9 6.26 0.181

Decon pung. Collect Sample Containers for My 24. Record information from Mw 23 on Montains Well Aug and Sample loop 2/10/00 (Black) When Mongen 1300

At location of MW-24
Well has no lock
Set up to pure 4 samps well
Using Shing # 22413
Set pure at 104 feet.
Pure on 53 orth
Sample VOMS W/ tetlor
gisposable buller,
And up and leave sike
Replaced Vole with a POCK: WITH A 1414 1410 マング

Back at sike office food purg & sande internation

X Rackweda,

F Klacking de

& Blackwelder	& Electronice,
Por metals	
MW-9 MW-9	
SVOC. MEMB (TAL)	
1 Well G(MW <2) 808	y Van
Metals (TAC) Pest/Res Hebicides	tional left
Well F (MWSD) VOC SVOC	- nit
and MW-9. The QL sundes today.	js - 70-28
at site office.	-th
2111AB L BLALWELDER, LThompson (50)	4)

Procedure 1 dution Lot #827. OEZG PUND ON CHUNG OS # 22993 OEZG PUND ON CHUNG OS # 22993 OEXG DTO = 87.26" Weather conditions, Cold, chai, windy, low 40's BOS L'AUX FOR MULSO (Well I) Set Day vit simple Fond 448 Timb - Ch - 10 to 720 Do meter multinachoning 0743 Calibrak UND Water Checker Strucky redny fuctioning between -10 and 120 211160 CELACKWEITH, L'Thornpson Cal bation farmeters Ch. 1-1548 500 900 0.03 603 600 Well page & sample room - Well F 250 (3876) - 620 (3876) - 620 Time Vol T'C PH (Ord Turb. 5.91 0836 670 616 0840 250 4.95 | 0.934 |>999 Liberkunder 620 0.835 614 0.320 5.09 0.370 Well Worn Colculation Casing diameter-120 = 855 mc 375 - 12 077 0839 6 17 7 0842-9 170 21 8420 71 5480

204

WELK	Well Ping and Sarage (every 4	4 50 y		George Wells	1777	·	09/5/ 09/5/	ogis leave sk	رتقت	Tell	12 3 C	on p	ten)
Casing OTW=	Casing dameks 2" OTW = BUYE,	1986	80.46°			?	\$	and sound	202	2 2 20	describector's He well fung	trec's	J. Salas
Well 18367	Well Volume Callulation 10367-8040'= 2321	23.5	letion","			S	<u> </u>	Strange	TO RES	45	rye and sample will	Mell Comment	25
The VI 70	1.00.00) T	i, #	B 2	_ <u>_</u>	· ·		40 <i>7</i> /	Com		\$ 55. 5.55.	We 30 to 11439	77	;;;; ;;;;;;;;;;
101 101 102 3	· ·	49	549 0.182 576 0.634		000	- 	1000	200	£ &	7 2 3	300	a Pat	
1018 6	6.9	3/2/2	0.793	_	0.03		1:34	Sande	,	20 2	10/6, W/ parley	_	(H.f.(m)
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	17.3		6.795	0/0	0.00		15.38	Crafe.	, c/ ,	7	Transfer	Ť,	· · · · · · · · · · · · · · · · · · ·
)		· - · - ·	***************************************				5	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2	12 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	d described on	767	·····
			- ·· ····· ·- ··	··· ·· · · · · · · · · · · · · · · · ·		- 		lued for Careet NW 38	12 ×	1 Samoly	dry no	Hegarding	308
				· ·			•		0	E.	execute	at	2-05

The Astron Mills and the Company and the second as a second contract of the company of the company of the contract of

B		# 1 T			Z 2	3.08206	
2113/96 L'Hackward LThorago	ORGE, CH Site of inter 16 preparts	183 Set Chiendles # 2002 at	CECCEPTED PUNY 12 TOPPED ACT SESSO PROPERTY 16 TO THE TOP TO THE THE TOPPED TO THE TOPPED TO THE TOPPED TO THE TOPPED TOP	Sion Heary - 6/4 A	Pung off -1211 ping to the disposate bulk.	Cost (and truck frameshe) Oras At sate office 10 pear Country + 20193 according to providive on pase 4 Transter information to	•-
ė		· -	Set. 2000 600	0.02 0.02 0.02			
noson				4504			
ithe		Well rolume alactions 74, 80 58172 - 15.98 (15/18)(0.10): 2.55		0.588 0.4.84 0.6.81	······································		٠. د
wader)	22.25	22 Galler	PH (Cond 5.50) Del7			100	222
LBlack Puge	assing dianter = 0700 = 59.20	18)(81.		135	, , , , , , , , , , , , , , , , , , ,	1. Sin 0. 1. 11. 180	
218 the Colacterader Chronyson MW-16 Ange & Sanple Acord.	Cissin Ouro OT	Weil 74.	The Vil 7°C 932 1 145 931 2 145	84675 125 6 85. 9 174 6	>	A	? ? =
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The water than the contraction

72,5 two 2 to which to set suples.

13 45 100 Talk to but to muss.

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1400 Talk to but to but to but to be and to be a few to be 1145 Collect Sumple of MWZOI 0945 Look ing Ray mo -20, 1025 Located map -20, 10. 2 97, 92 10 to at merzy. Wist propor to Simple 1200 med back to 827 (Langling 0750 HWW Modest # Pr. 101 SN 301298 . 2 ero Span @ 100 ppn w/1 sharpling 357 6 9.8 E 55 ppn 00155 Bayer Cooper well & 19 E 26, well & 19 E Fersonal: Dale Jane / CHEMHILL-OFE Weather: cloudy 45°P. Chane Jan.: Ampose: Simple wells 37 253. 06:40 W.L. In musty = 87.42 870C TD = 94 36 870C 0930 Called 600 510Ck multiple 8.37 1. ords Auto calibrate Horbia 16-10 Water Quality Clicker OBOAMINE at 5371. Boy a setting Whipment ready. te suple.

0715 At 8271, Begin Calibrating instrument 0720 Aws calinete Horba.
Water Questy, Justine of Het.
SN 307009. All paravila collection
Of (Exp dat "/" 1973 Solution)
0728 Calinete Hole Mod (7270) Personnell Dule Sayne Schzuthill-OPC Mits Muubb Schzuthill-OPC Wenthur ! Cloudy 50°F Single wells I'st. 308 208 Sink well A FIZ and not 34. Set span Isobuty fac.

Set span e 98 @ S. Span

1.755 mos to wells H & zet to 1

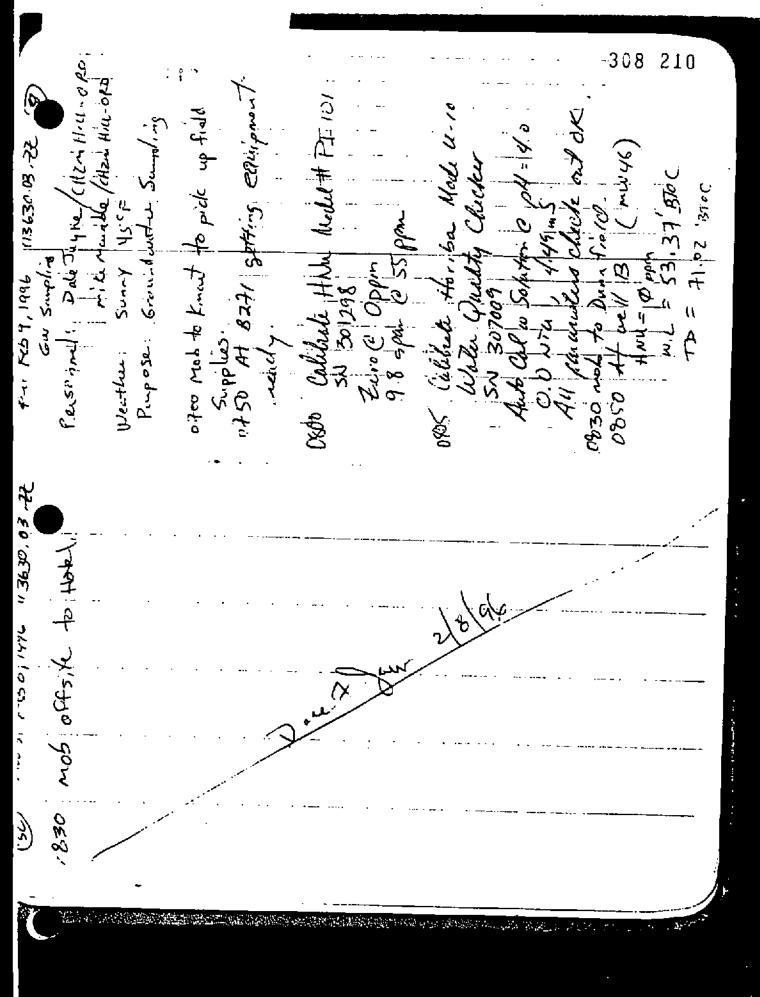
The open Lell H. Nord to set to 1

The open Lell Scholale changed, Will 113630.03.42(2) Del 7. 2/2/16 W.C. = 46,78 870C tero @ Oppin SN 301298 then allowed well to received for 35 minutes to get a sediment free collected simple muzery 1620 mw28 w 6 = 5-9 10 TD = 68.84 well (up or well nuly 2 15 broken and new 25 to be ruplated. 1800 Back at field office getting 1830 moles tauly for feel ox. Colleges 5 well volumes and Estlet Soule # May 81. 4 time 1 1630 1 - metals 6 W Samples

1345 Collect Sample # 5 MWS-12 :: and Field Chapliale # MWS-14 A :: 1340 Finish plusing well, with celledy well to recover to collect vocs Thus Feb 8, 1996 113630,03 722 (31) 1625 - mod back to 624 P(BS, Helsicides)
1400 Docon punp and collect
rinsult RSOOS - cocs, succs
motods, post/arss Helbiciolos, Al. 1400 most to 837 for decom.
1450 Most to well I have polytanks.
1500 Stop at Dut Reld and dump polytanks. How Celled Suplit mu 481 for 1730 med to put unter (decon) in John Wat Land 1800 Packing Supks. HOU = POPE - 10 94 1155 Purp Kenned, must be the surpling crent.
1120 Back of 8311, Will mob to lund.
520c Well A pupuing to sample.
1220 Purp A Bayli Will mob to 160. Decorred purp 10/300' louder.
Will give the parp to Train #2
(Lee a was Linda) to simple a dap 1115 Dalver Purp to Frante and

up pure and decom

0940 Back at 8371. Teber deliverell Grund FOS controller will hook 0855. Pluge wolan = 13 gallous, Decedo to wait file use con pump the well decided to wint for purpland 1126 30 OX LES TD = 157.62' BTOC W. L = 139,96 '8TOC Will mist to must abbil a gas smy i (as) ow sampling OGOO At crell my 34 HOLK DEPLY



1620 and at 827/. Trianstanting devor E. Conto to 55 gulls duming on that 1) sun field.

5 amples and stip to Feber
1900 Mob Sach to Hotel Shipped
6 coolars. Last of duly entries. 150 vocs, Suces, 174St/18185, Harbicillei, 550 med its Dung Field to endy 1515 CORED Serpslyth muy 71 TAL inchals. I ims/insp/ Fr. Feby, 1996 113630.03.22 Frage mate. Gorso Collect Surple # Inwy61 735 To lock sund # mw 497
the motings
The motings

polytonks But-at B371., Decoming pump. 1136 J. 103. 22 ouss Back of Bath with decen HAW = 40.06 18TEC 420 pt well to will proport to south "30 Findul deconing, nob to - Date of June 2/3/4; 1950 Ant well D. (my 49) 121.28 41)1d = 1 ppm = 1/4) Fried to buy repe. Bilding 919 1350 Fub to well H. and Herbicidos. 1130 Carch ا کا کانی ا

Cellention : same that all sold in the part of the sold sold in the sold of th 2845 At well mu 38.16.14 prepare to Sample. 134.83 8700. TD 1/3.88 5700. 0730 Heyen calberty gusting Sun Feb 11, 1966 113630.03 L2 (39) Rensonce 18 Dall Cayne (comm + 111. -0100) Mille Manado /CHEM #111. -0100 - Horiba Water Quality Meter Rups se Ground with sampling 0720 Aring 24 18 29) -1250 collect semple of mus 322 sors, pest/RBS, Hers, TALMARS.

1245- mol to B37/.

1300 Luch to B37/.

1320 Rack at B37 (5 will get ready

1420 post the purp observab.

1420 mol mwxox 19. IMUS Could not purp well , + did
not leure endush worken. Wie
leure to person endish worken. Wie
so 1+h. & person from 19
Socos Finished Simpling mulg.
Socos pesst pess Harbiades.
Socos Rock of 8271 pack.
Socos Rock of 8271 pack.
Socos Rock of 8271 pack.
Socos Rock of 8271 pack.
Socos Rock of 8271 pack. flux = 10pm W.L. = 16.46' 870C TIS= 107.22 BTOC A LA LA COLONIA CONTRACTOR CONTRA (2) FIS 10, 1996 1136.35. 03.25 Ger Sampling and Hay 29/0//2 /2/10/9C الله الم

CHANTE MUNICULING WEDESAMERING OF

Installation DDMT	Well Number MW-1G
site/Project Groundwater investigation	Sample ID NumberMWIG /
Project Number 113630.03, 22	Sample Start 2113 /9/4 0850
Sampled by LThungson CBK-Ckwidder	Sample End 2/13/96 0905
Original Static Water Level 58.22 n 8100	Final Static Water Level 58.17 h BTOC
Screen Interval 58 - 73 h BTOC	
Time Temperature pH Canquistivity Turbidity 0850 17:4 6:58 0:030 757	DD Salinity Are parameters 20% of purge values? Y // N OOZ Repurge? Y // N Number of repurge volumes
	1
on motor	not functioning
Submersible X Dedicated Bladder Bailer X Tel No Pump Stadder Pump Bladder Pump Bailer X Tel No Pump Pump X Pump Pump Pump Pump X PVC Sampling Equipment (Make, Model, Etc.) Coundfos # 22993 Sampling Equipment Dacontaminated ? (Y) II If dump or discrete caller, depth(s) where numb set 72 h 8100 Weather Cold (Icax) Cop. 40 Lab Analyses TAC VOC X SVOC X Metals X Pesticides/PCBs X Heri Other Metals: Filtered Unfiltered Both Field Dublicates (N)	, Disposable Tetlon briter for 1845
Split Sample 7 (9)	
MS/MSD 7 1 (1)	•
Comments	

Installation	DMT			_ Well N	umper	14/92		
Site/Project	D04			_ Sampi	e IO Number _	mw19:	Z	
Project Number	13630.	<u> ۲۶. در</u>		Sampi	e Start <u>-24 7</u>	17/96	ine 0930	_
Sampled by	Le Jayru	elmike 1	Hara Le		e End <u>sate</u>		tree 0930	
Original Static Water Levi				Fina	i Static Water Lev	el <u>~ A</u>		
Time Temperatu		Conductivity	<u> </u>	. OO	; Salinity	Are parameters	20% of purge values?	ı
0855 16.0	5.45	0.195	10	7.82	0.01	Redurge? Y	/(N)	
0857 15.8		0.154	449	7.89	0.00	Number of reou	rge volumeNA	
0905 15-8		0.190	999	7.86	0.00			
0912 15.8	5.92	0.201	999	7.86	0.00			
		1 1		<u> </u>	<u>;</u>			
Sampling Melhod								
Submersible D	ndicated Bla er Pump P	dder Baile ump	SS T Telep	Centinfu	gai Perista mp _ Pu	ulic Hand mpPump_	Gas Lift/ Oispiacement _	
Submersible D	er Pump P					nic Hand mpPump_		
Submersible D Pump Bladd	er Pump P	Disposi				ulic Hand mpPump_	Oispiacement _	
Submersible Displaced Standing Education (Mail	er Pump P	D15,2051.2 N N	66 Tet	bn Ba		ulic Hand mpPump_	Oispiacement _	
Submersible D Pumb Bladd Sambling Educament (Mak	er Pump P	D15,2051.2 N MD 54! N	66 Tet			ulic Hand mpPump_	Oispiacement _	
Submersible Distance Pump Sladd Sampling Educament (Max Sampling Educament Occo) Dumo or Occorete device:	re Pump P re. Model. Etc.) intamunated 7 Teptn(s) where pu	D15,2051.2 N MD 54! N	66 Tet	bn Ba		ulic Hand mp Pump -	Oispiacement _	
Submersible Dand Pump Bladd Sampling Educament (Max Sampling Educament Deco Dumo or Dactete defler) Weather	re Pump P re. Model. Etc.) intamunated 7 Teptn(s) where pu	D15,2051.2 N MD 54! N	A "	bn Ba	<u>slee</u>	ulic Hand mp Pump .	Oispiacement Pump	
Submersible Bladd Pump Bladd Sampling Educament (Max Sampling Educament Deco Dumo or October devier) Weather Lab Analyses	is. Model. Etc.) intaminated 7	D15,2050,)1 N mo set	A "	ibn ba	<u>slee</u>	mo Pump .	Oispiacement Pump	
Submersible Pump Bladd Sampling Educament (Max Sampling Educament Deco Dump or Discrete deviet) Weather	is. Model. Etc.) intaminated 7	DIS 2050	A "	ibn ba	<u>slee</u>	mo Pump .	Oispiacement Pump	
Submersible Pump Bladd Sampling Educament (Max Sampling Educament Occo Dumo or Discrete deffer) Weather Lab Analyses VOC SVOC Other	intaminated 7 Tepin(s) where pu	DIS 2050	A n	ibn ba	<u>slee</u>	mo Pump .	Oispiacement Pump	
Submersible Pump Bladd Sampling Educament (Max Sampling Educament Occo Dumo or occurete devier) Weather Lab Analyses VOC SVOC Other Metals: Piltered	intaminated 7 Tepin(s) where pu	DIS 2050	A n	ibn ba	<u>slee</u>	mo Pump .	Oispiacement Pump	
Submersible Pump Bladd Sampling Educament (Max Sampling Educament Occo Dumo or occurete devier) Weather Lab Analyses YOU SVOC Other Metals: Filtered Field Qualicates Y / Max	intaminated 7 Tepin(s) where pu	DIS 2050	A n	ibn ba	<u>slee</u>	mo Pump .	Oispiacement Pump	

法国道(C-PRY HIVE MONDORING WEDESAMPONGADOR

InstallationDDmT	- Well Number	MW19	(
Site/Project			
Project Number 113630: 03.72	. Sample Start <u>::re</u> (7/10/96 2	
Sampled by Jale Jayur / mile Mua.	Semple End Like	2/10/96	
Original Static Water Level 87.70 metoc Screen Interval 83./ 93./ metoc	final Slatic Water Le	veiNA	л ВТ <u>ОС</u>
Time Temperature : pM Conductivity Turbidity	00 Saliniw	. Are parameters 20% of ourge values?	A.
1608 17.8 6.25 0.228 705	9,60 2.00	Recourge? Y / 🔊	0
	<u> </u>	Number of requires volumes	
. !	!		
Submersible Dedicated Bladder Pump Bailer SST TENS Pump Bladder Pump Pump Bailer SST TENS PVC Sampling Equipment (Make, Model, Etc.)		artic. Hand Gas Lift/ ump Displacement: Pump Pump	Other
Sampling Equipment Decontaminated ? (Y)/ II			
If pump or discrete patter, depth(s) where pump set	201		
Weather Suny S	55	·	
Lab Analyses VOC SVOC Metals Pesticides/PCBs Other	Heroicides TPH =	Oioxin√Furans	
Metals: Filteren _ Unfilteren _ Both	 -		
Field Dupucates 7 / (1)			
Solit Sample / / (N)			
MS/MSD V (AT)			
			

、適同で、RYIHIUE MONAURING WEDESAMBEING LOGE

Installation DOMT	Well Number	NW-24	
SHEIPPROJECT Grandwater nuestraction	Sample ID Number		
Project Number	Sample Start des -	2/10/96 - 1415	
Sampled by L. Blackwelder, 1. Thankson	Sample End <u>:::</u>	110/96 1430	
Original Static Water Level 106.43' h 8100	Final Static Water Leve	, 106.53	н втос
Time Temperature : pH Constitutity : Turbidity	DD Salinity	Are parameters 20% of burge values?	0
1414 199 6.26 0.181 131	- 0.00	Regurge? Y / 🔊	
		Number of reputge volumes	
	<u>:</u>		
Sampling Method SS Submersible Dedicated Bladder Balter Form Pump Pump Pvc	Contriuga: Penstar Pumb:Pun	ric Hand Gas Lift/ — np: Displacement	Other
Samoling Equipment (Make, Model, Etc.) Con ndfos # 22993	Nisposabl	Commo	
Sampling Equipment Decontaminated ? (1) N	7		
if pump or discrete galler, depth(s) where pump set 104 + 9100			
Weather Cool clouder orecay app 66) :r	•	
Lab Analyses			
VOC / SVOC X Metals X Pesticipes/PC8s X Heri	bladdes 🗶 TPH 💳	Dioxin/Furans 🚍	
Other			
Matais: Filteren Unfitteren Both			
Field Duolicates N			
Solit Samole 2 N			
MS/MSD (1/11)			
Comments			
		·	

CHAN HILLE WONDERING WEEKS WILLIAMS TO BE STORED TO STORE STORE STORED TO STORE STOR
\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Do 4 Well Number 7000 ZA
Sample ID Number MW Z C 1
Project Number
Sampled by Dale Jayre / mike Mareble Sample End date 7/1/96 1630
Original Static Water Level 59,10 metro: Final Static Water Level NA
Screen Interval 54.3 - 69.3 metoc
Time Temperature) pH Consustivity Turbidity 00 Salinity Are carameters 20% of ourge values?
11.7 (D.184 999 0.11 C 00 Repurse? V (A)
1635 154 1581 0.122 999 8117 0.00
1645 15 8 5 PH 0 16 1 8.20 0.00
1652 15.9 5.76 0.186 999 8.11 10.00
1657 16.0: 5.67:0.184 999 8.04 0.00
Submersible Dedicated Bladder British SS:
Pump Stander Pump Pump Baile Tel Centrilugal Peristantic Hand Gas Litty Pyc
Samoning Equipment (Make, Model, Etc.) Displacement - Pump
Sampling Equipment Decontaminated ? O. 7. 12
If dumo or discrete datier; depth(s) where dumb set
Weatner 45
Lab Analyses
TPH Diographyses
Metals Silvera
Field Duoticates Y / N
Split Sample / (N)
HS/MSD / / /
Attiments

CARTE MONDORING WEBESAMERING LOCK

Installation DDAIT	. Well Number	nw·30 .
SILE/Project Groundwater Investigati	CM Sample ID Number _	MW301
Project Number 113430.02 32	Sample Start 2250 -	217/96 - 1356
Sampled by L. Thorapson L. Blackwelder		
Original Static Water Level 45.53 HETDE Screen Interval 39 - 59 HETDE	Final Static Water Lev	Sanged directly after pu Are parameters 20% of purpo-tribues?
Time Temperature pH Commercivity Turbidity	00 Satinity	Are parameters 20% of purge failues? Y/N
1321 14 1 406 0243 >999	4.13 0.01	Repurge? Y / N
1324 16.2 5.80 0349 7999	8.00 0.00	Number of repurge volumes
1329 16.8 637 2275 876	792 0.01	
1322 123 1270 220	2.11 0.01	
1337 17.2 6.66 0.275 186		
1346. 174 6.54 0.274! 120	0.07	
1350 17.4 6.64 0.278 57 1354 17.5 6.65 1.240 25	8.01 0.01	
1354 17.5 6.05 0.276 35	8.03 0.01	
Submersible Dedicated Bladder Pump Bailer SS Tef Pump Sampling Equipment (Make, Model, Etc.) Sampling Equipment Decontaminated ?		mp Pump Displacement Pump
.		
If oump or discrete patter, papth(s) where pump set54 #BI	<u>roc</u>	
Weather Cloudy breezy app 52	<u>-</u>	
Lab Analyzes		
VOC / SVOC / Metals / Pesticides/PCBs	Herbicides TPH	Oloxin/Furans 🚞
Other		
Metals: Filtered Unfiltered Both		
Field Dualicates V / N		
Spilit Sample V (N)		
MS/MSD 7 / (B)		
Comments		
	·	
		

A HE CAN ELLE MONDORING WERESAMERING COURSE

Installation DDMT	Well NumberW	w 30	0
Site/Project GROWD WATER Densingation	Sample ID Number		
Project Number 113630.03.22		10 96 - 1245	
Sampled by Bob Trobbly Jeff Dillence	Sample End :::E Z		<u> </u>
Original Static Water Level 45.75 natoc	Final Static Water Level _	45,60	<u>n 810c</u>
	DD Sailnity	Are parameters 20% of purge values? (n Œ
1248 18.6 5.82 282 26 7	164 0.01	Recourge? 💇 / N	
		Number of repurpe volumes	
	:		
Sampling Method Submersible Oedicated Bladder Baller Teff Pump Bladder Pump Pump Pump Sampling Equipment (Make, Model, Etc.) O V V Soc 2 1 5 Sampling Equipment Decontaminated? O V V Soc 2 1 5 Journal or discrete baller, depoints) where pump set 5 1 1 BTDC Weather Overcast, For, Wist, 55%	Centrologai Penstanic Pump Pump	Hand Gas Litt/ — Pumb Oisotacement — Pump	Other
Lab Analyses	_		
VOC TO SVOC Metals Pesticides/PCBs Herbic	rdes才 「PH 二	Dioxin/Furans II	
Other			
Field Duppicates / / N			
Solit Sample (N)			
MS/MSD / / (N)		<u>د ۸</u>	
Comments OTHER ANALYTES Provious	SLY Cod (pa	ed on 2/7/90	<u></u>
		·	_U

A SEC TO THE CONTROL NO WELL SAME OF THE S

Installation DOMT	Well Number WELL C CMW-45)	
SHEPProject Groundwater Investigation	Sample ID Number	
Project Number 113430.03.22	Sample Start === 2/8/96 - 15/0	
Sampled by L. Thompson, L. Blackwelder	Sample End ::: 2/8/90 -me /530	_
Original Static Water Level 55.39 #8100	Final Static Water Level	1 8100
Time Temperature (pH Consuctivity : Turbidity	OD Salinity Are parameters 20% of purge values?	Y/ N
Sec Montoning Well Auraing Log table of parameters. Sample immediately tollowing purchase	Collected Number of redurge volumes	
The state of the s		
	1	
	·	
Sampting Method Submersible Dedicated Bladder Bailer SS Tel Pump Pump Pump	Centurgal Peristatic Hang Gas Lift/: Gas Lift/: Pump Pump Oisotacement: 1	Other
	Pump -	
Sampling Equipment (Make, Model, Etc.) Tefton bailer Sampling Equipment Decontaminated ? (Y) 1:	-app 1 gt capacity	
If Dump or discrete pailer, depth(s) where pump set		
Weather Cloudy breezy, app 55		
Lab Anatyses		
VOC X SVOC X Metals X Pesticides/PCBs Ø Her	rbicides Z TPH _ Diaxin/furans _	
Other	<u></u>	•
Metals: Filtered Unfiltered X Both		
Field Outlicates 2 1 N		
Split Sample Y (N)		
MS/MSD Y / (9)		
Comments		
	·	
•		

SC-1771 HILLEMONDEURING WEBESAMPUNGGUOG

InstallationDom T	Well Number MU46 /81	
Site/Project	Sample ID Number MWH63	
Project Number <u>/ 136 30 · 03 - 본론</u>	Sample Start 21/2 7/9/6 - 101 0930	-
Samples by Dale Jane / mile Mena 64		
Sampled by	Sample End 2 9 66 0 930	
Original Static Water Level 53.37 neroc	Final Static Water Level	<u>न 870</u> 0
Screen Interval 62 _ 72 _ 5700		Λ
Time Temperature I pM Conductivity Turbidity	OD Salisity Are parameters 20% of purge values?	(4)
10906 14.7 : 5.75 0.111 257	1 q , 2 7 0 . W Repurge? Y / (N)	,
0 70 16.0 1 5.92 0.146 577	8.50 0.00 Number of redurge volumes N3	/1
0914 17.5 6.05 0.26 10	8.35 0.01	
	1 :	
	l i	
Sampling Method Submersible Dedicated Bladder Bailer Telipromp Bladder Pump Pump Pump Power For Submers Sampling Equipment (Make, Model, Etc.) Grund Fox Submers Sampling Equipment Decontaminated ? (V) In	Duonn	Other
/0/	BIOC	
Weather Summy 5		
Lab Anaryses VOC \(\sum \text{SVOC} \sqrt{ Metals} \) Pesticides/PCBs \(\sqrt{ Pesticides/PCBs} \)	Herbicides TPH TOO Diaxov Furans T	
Other	<u></u>	
Metals: Fitered . Unfiltered . Both		
Field Duplicates (N)		
Split Sample / / N		
Split Sample / / N		
\sim		
MS/MSD · (1)		

CHAN HILLEWONDFORM GRADE SAME UNGSTON

Installation Down	Well Number
Site/Project	Sample ID Number
Project Number <u>- 13630 - 63 - 77</u>	Sample Start 22ta 2/F /96 1ma
Sampled by Dile Jague / mile Mustle	Sample End 13te 2/8/9/
Original Static Water Cevel 78.94 nation	Final Static Water Level N 46 RETOC
Time Temperature i pH Conductivity Turbidity	OD ; Salinity Are parameters 20% of ourge values?
1543 16.5 6.76 0.110 1 (.76	9,59 10, ∞ Redurge? Y / €
1545 17.4 6.33 0.212 264	
1553 19.1 6.11 0.248 36	8.30 0.00 B
1555 19.2 : 6.32 0.257: 10 :	8,76 :0.00
Submersible Dedicated Bladder Bailer Telephone Bladder Pump Bladder Pump Pump Bailer Pvc Sampling Equipment (Make, Model, Etc.) Sampling Equipment Decontaminated ? (7) N If pump or discrete paller; depth(s) where pump set	sible Pump and DISposable Fetlon Bailer for VOCS
Lab Analyses	
VOC > SVOC Metals Pesticides/PCBs	Herbicides TPH Dioxin/Furans
Other	
Metals: Fillerea Unfilterea Solh	
Field Duplicates // / (N)	
Spirt Samore : / (1)	
MS/MSD / (1)	
Comments	

E PANTILLE MONDORING WEBSAMPUNG LOG

A THE THE WALL OF THE CONTROL OF THE PARTY O	
Installation DDm / Sita/Project Do Y	Well Number MW 49 (D)
Do 4	
Site/Project	Sample ID Number
Project Number 113630 , 03 . 22	Sample Start 1112 1/9/96 1235
Sampled by Dale Jayne / mike Marable	Sample End 1735
Original Static Water Level 70.06 h 8700	Final Static Water Level NA n 9100
Screen Interval 80 _ GO ASTOC	
Time Temperature (pH Conductivity Turbidity	DO : Satinity Are parameters 20% of purge values?
1216 171 6.07 8.105 201	9.23 · C · LO Repurge? 7 / (N)
1222 18.9:5.52 0.213 31	B.L. O.JO Number of repurge volumes NA
19.115.95 0.772: 10 1	858 p. 20
1230 ,9,1 5,91 0,772 10	2.73 10.00
1234 18.9 5.90 0.222 10	8-92 0.00
0.00	, <u>,</u>
Sampling Method Submersible Dedicated Bladder Baller Tel Company Standard Pump Pump Standard Pump Pump Pump Pump Pump Pump Pump Pump	Builto To VOLS
MS/MSD / E/	
Comments	
	·•

CHANDINE MONROHING WEFE SAMERING FORE

InstallationDDMT	Well Number WCII = (MW-50)
Site/Project 7113630.03. 22	Sample ID Number MM W50/
Site/Project 7113630.03. Et Project Number Groundwater Invistigation	Sample Start - 2/11/6,6 100 0900
Sampled by LHACKWELDER, LThompson	Sample End
Original Static Water Level 85.96 heroc	Final Static Water Level 87.26 h Brood
Time Temperature (pH Conductivity : Turbidity	OO Salinity Are parameters 20% of purge values?
CB54 18.4 6.01 6.796 10	O.O.3 Repurge? Y N
	Number of repution volumes
	
00 00/0 0/0	
DO meter not hunction	ing
Sampling Method Submersible Y Dedicated Bladger Bailer X Tel Pump Pump Pump Pump X Pvc: Sampling Eculoment (Make, Model, Etc.) Grundlos # 2299	
Sampling Equipment Decontaminated ? (Y)	
If oump or discrete patter, depth(s) where pump set 120 n 9100	
weather Cold clear, goshy wind	арр 45 :
Lab Analyses	
VOC 🖈 SVOC À Matais 🔀 Pesticides/PCBs 😇 Her	rbicides 👱 TPH 🚃 Oloxin/Furans 🚍
Other	
Metals: Filtered Untittered X Both	
Field Durphcates / / N	
Spiti Sample V / N	
MS/MSD + / (N)	
Comments	

AREC : S. H. LE NOVINUENNE WERESSAMPENCE FOR

InstallationDDMT	Wall Number Will 6 (MW-52)
Site/Project Grounky yeter Investigation	Sample ID Number MUS21
Project Number 113630.03.22	Sample Start - 211 466 171: 1824
Sampled by Thompson Blackwelder	Sample End 118 Z/11/5/L 1030
Original Static Water Level 80, 46 n 8700 Screen Interval 94 - 104 18700	Final Static Water Level 81 - 20 n 810
Time Temperature : pH Conductority : Turbidity	00 Sailnity Are parameters 20% of purge values?
1024 17.3 6.16 0.795 10	
	Number of repurge volumes
,	
	<u> </u>
Do Meter	not hunctioning
Submersible Z Dedicated Bladder - Saiter X Tel X Pump Z Bladder Pump Pump Pump Sampling Equipment (Make, Mogel, Etc.) Coundfor # 1269	- comp _ routh _ publications _
Sampling Equipment Deconstrainated ? (Y)/ 1/2	
Weather Clear, Cold, breezy, app 45	DC :e
Lab Analyses	
VOC 🔀 SVOC 🗴 Metals 🖄 Pesticides/PCBs 🗷 Hi	erbicides 🔀 TPH 🚞 Dioxin/Furans 🚍
Other	
Metais: Filtered Unfiltered X Both	
Field Duplicates Y / (N)	
Solit Sample 😗 / 🕟	
rs/msD	
Comments	

C-77/HILEWONDORUS SULTES SUSTEIN	(Numer 308 226
Installation DDMT	Well Number MW53 (Well E)
Sita/Project & Pourblester Bustyan	Semple ID Number MW531
Project Number	Sample Siars =12 2/13/96 /520
Sampled by Bob Trebde, TEFF D. I prese	Sample End -111 2/13/96 - 1600
Original Static Water Level 73.84' neroc	Final Static Water Cevel 73.60 48100
Time Temperature 1 pH Consuctivity 1 Turbidity	8:75 0.01 Repurge? Y / (f) Number of redurge volumes S VOLS TOTAL
Sampling Method Submersible X Dedicated Bladder - Bailer X Tel Pump Pump Pymp Pymp - SS Tel Pymp Pymp Pymp Pymp Pymp Pymp Pymp Pymp	Pump ——
Sampling Equipment (Make, Model, Elc.) Gruss 57 15 16 by Sampling Equipment Decontaminated 7 (7) 11	MERINE LAND ! DA LOZING DOLLAR
If pump or discrete patier, depth(s) where dump set 76.0 - 910	£
Westher 5 mmy, Breezy, 60°F	
VOC X SVOC X Metais X Pesticides/PCBs X: He	rbicides 🗶 TPH 🔼 Gioxin/Furans 🚉
Metals: Fillered . II Unfiltered # Both	<u> </u>
Field Outhcates V	
Split Sample / / N	_
comments Collect 3x the Sample P using a disposible bailer	en my msD - collect vocs
using a disposible bailer	

TAB

Appendix C

Appendix C

Box and Whisker and Probability Plots for Metals

Appendix C Contents

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Box and Whisker and Probability Plots for Me	tals
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C-5 All Surface Water Locations	
C-6 All Sediment Locations	
C-7 All Groundwater Locations	
Figure	
C-1 Definition of Box and Whisker Plots	C-2

Appendix C

Box and Whisker and Probability Plots for Metals

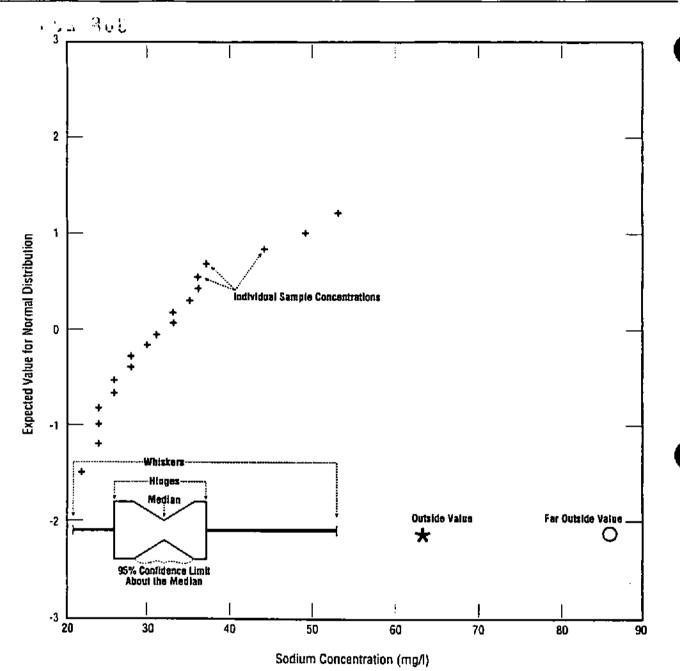
Both probability and box and whisker plots are presented to represent the distribution of metal constituents in soil and groundwater. The plots do not present rigorous statistics but rather represent a graphical presentation of background data distributions. Plots were presented only for metals because the infrequent detection of organic constituents does not permit meaningful graphic presentation of the data distribution.

Elements of the probability and box and whisker plots are presented in Figure C-1. Probability plots are used to determine how well data fit a theoretical distribution such as the normal or lognormal distribution (Helsel and Hirsch, 1991). The concentration of each metal is converted to standard normal (value minus the sample mean divided by the sample standard deviation) quartiles and plotted against the concentration. If the data are perfectly normally distributed, the data plot will be linear. Departures from normality are indicated by departures of the plotted data distribution from a straight line.

Box and whisker plots are used to provide visual summaries of the center, the variation, and the skewness of the data as well as any data outliers (Helsel and Hirsch, 1991). The hinges of the plot mark the first and the third population quartiles. The "pinched" portion of the plot between the hinges and the median covers the range of the 95 percent confidence limit about the median. The median splits the ordered numbers in half, and the hinges split the remaining halves in half again. The term Hspread is comparable with the interquartile range or midrange. It is the absolute value of the difference between the values of the two hinges (Systat, 1992). The whiskers show the range of values that fall within 1.5 Hspreads of the hinges. Outlier values that exceed or are less than the absolute value of 3 times Hspread from the upper or lower hinge, respectively, are plotted with an open circle. Outlier values between the whisker values and the absolute value of 3 times Hspread from the upper or lower hinge, respectively, are plotted with an asterisk.

Surface water and groundwater are in units of micrograms per liter ($\mu g/L$). Soil data are in units of milligrams per kilogram (mg/kg).

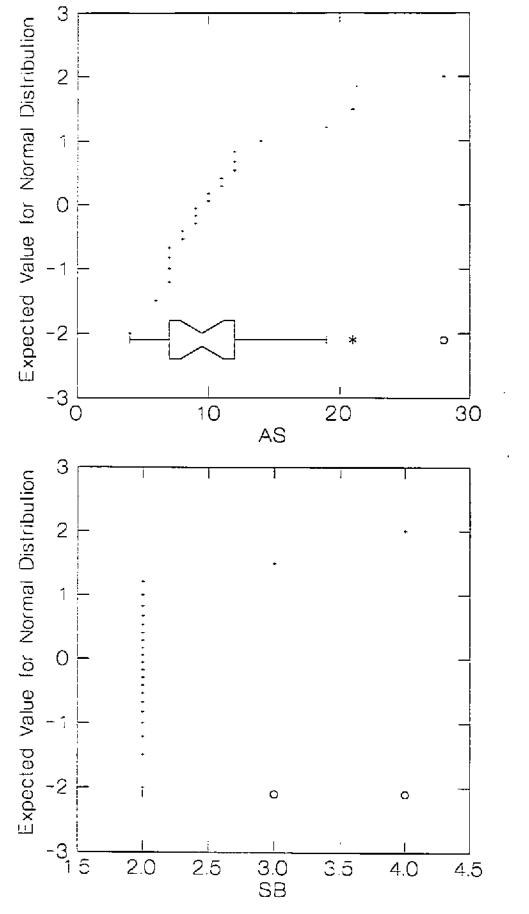
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From: SYSTAT for Windows: Graphics, Version 5 Edition. Evanston, IL: SYSTAT, Inc. 1992. 636 pp.

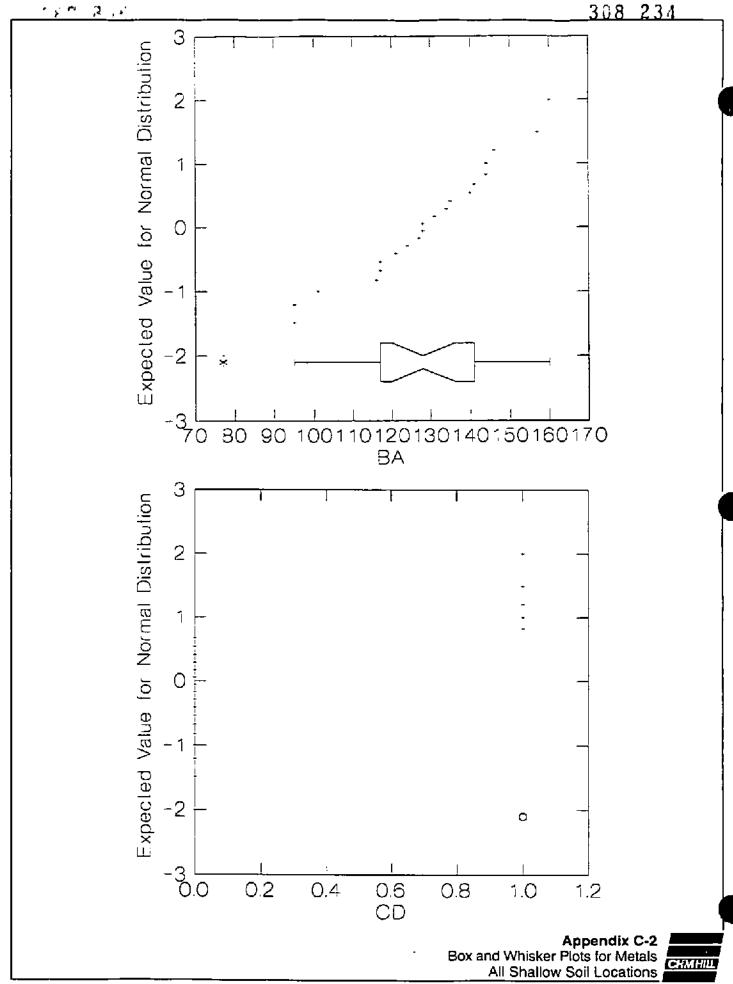
Appendix C-2
All Shallow Soil Locations

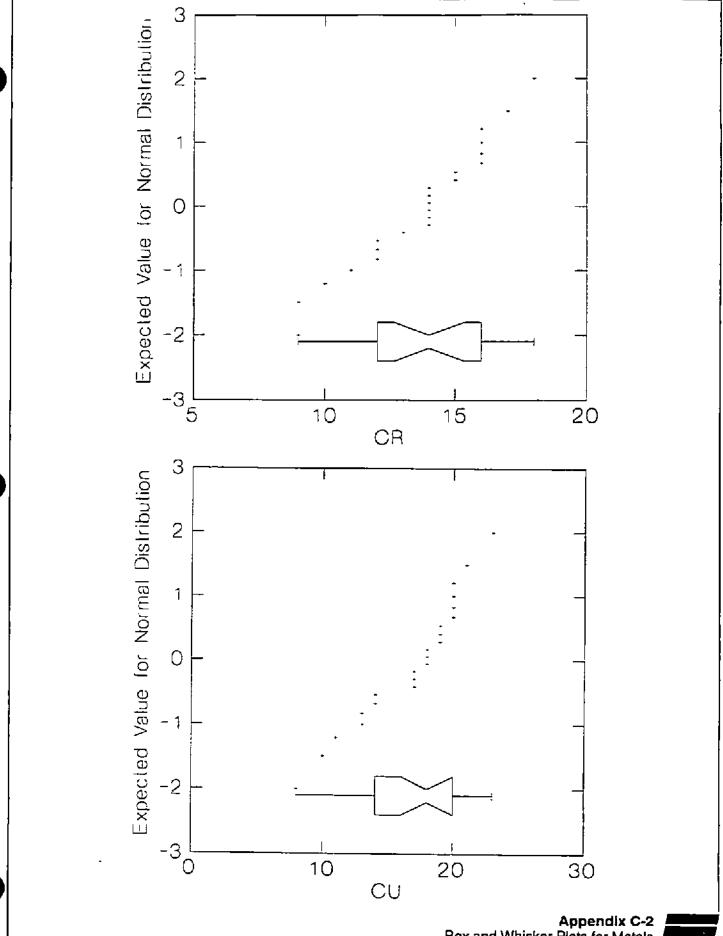




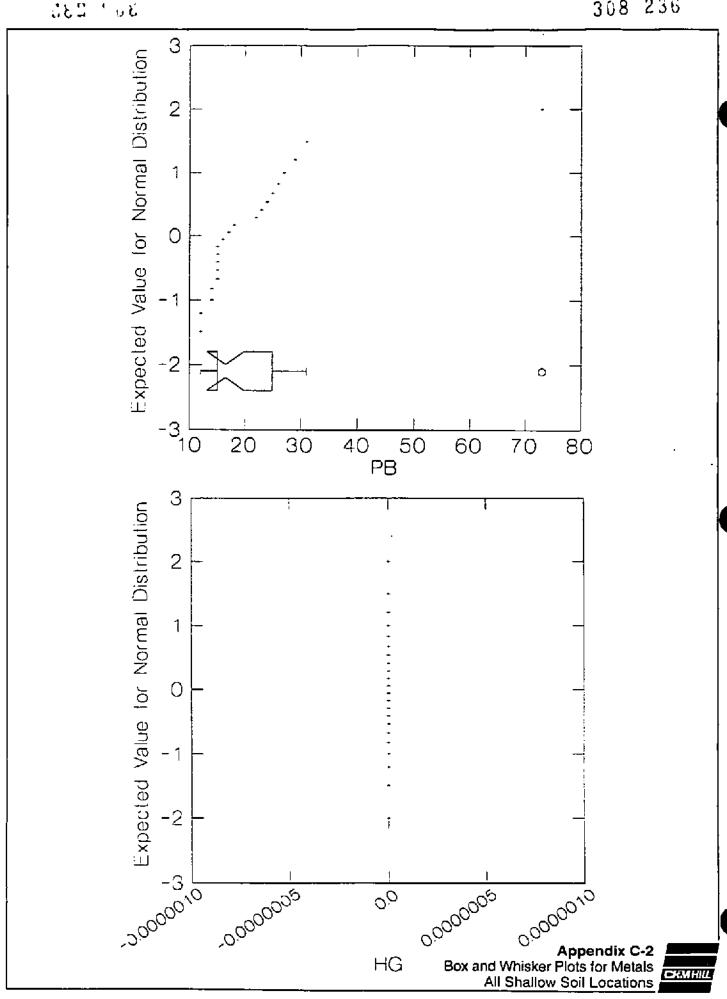
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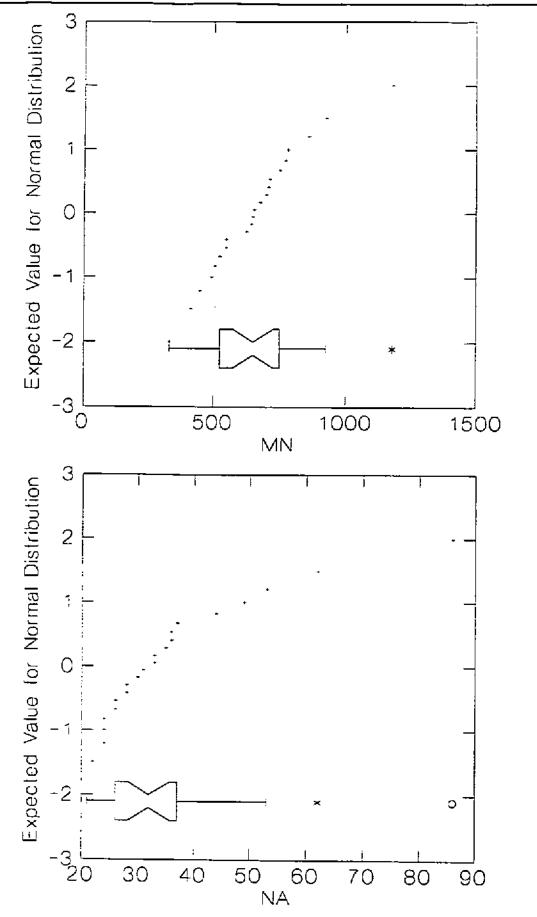




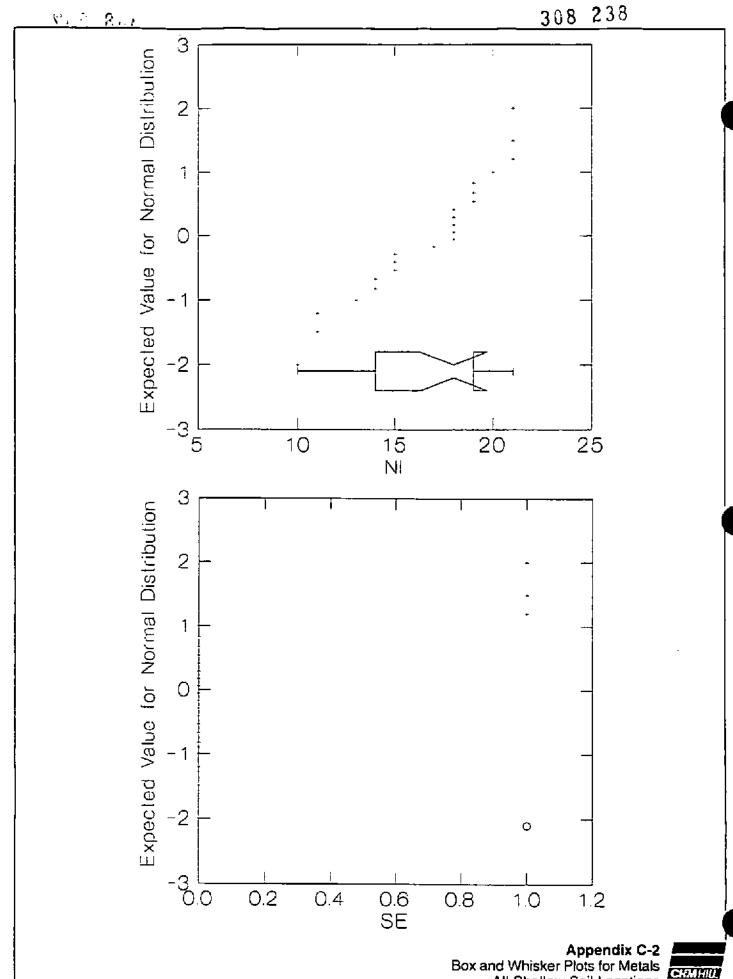




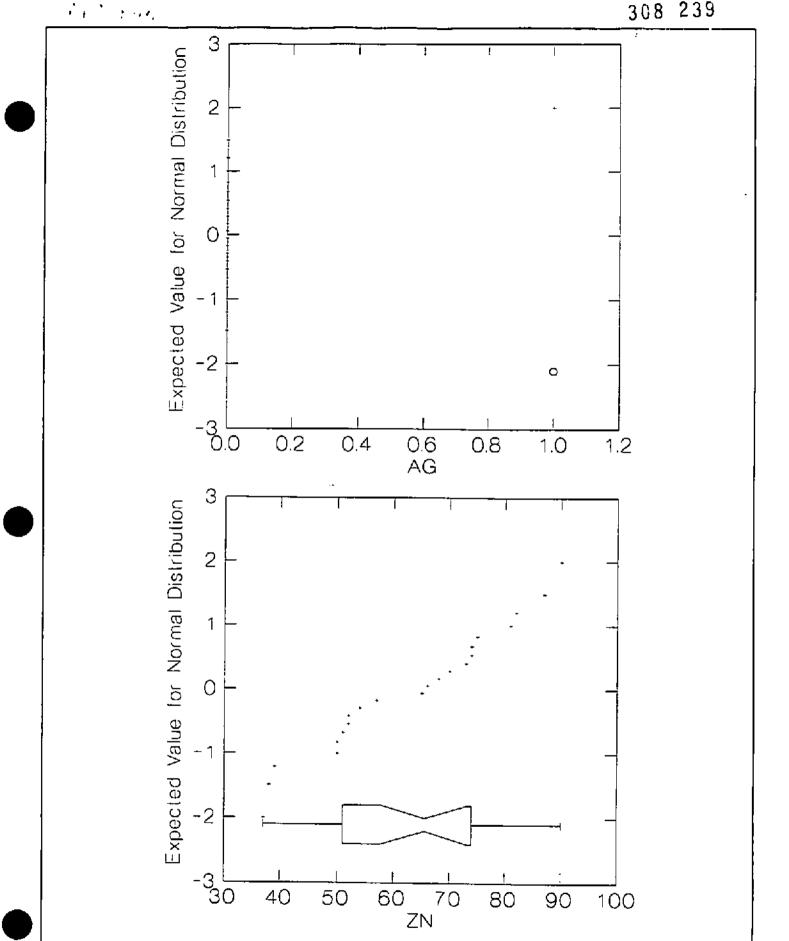




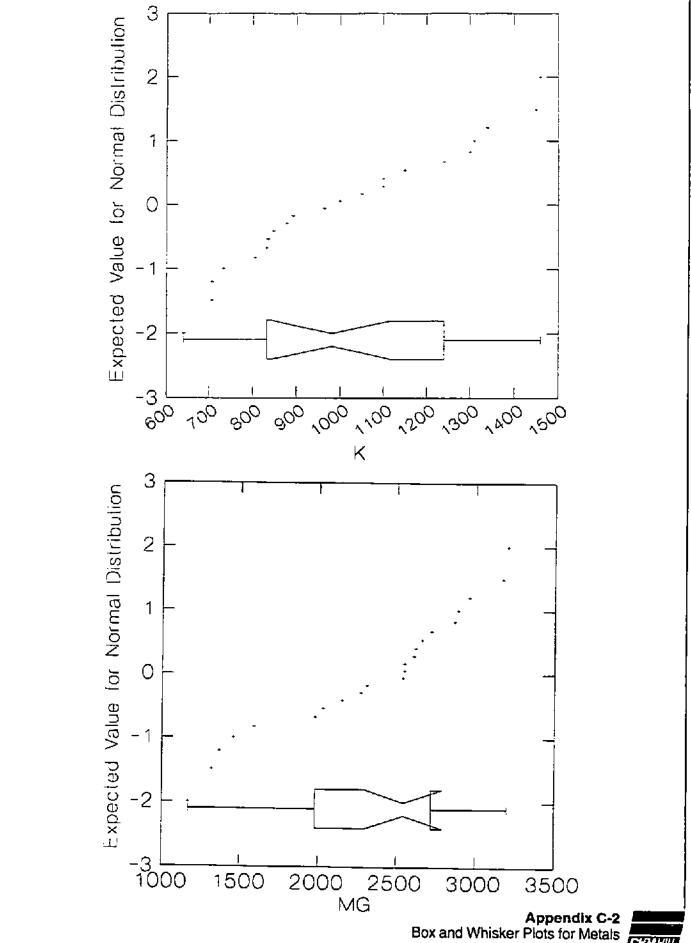






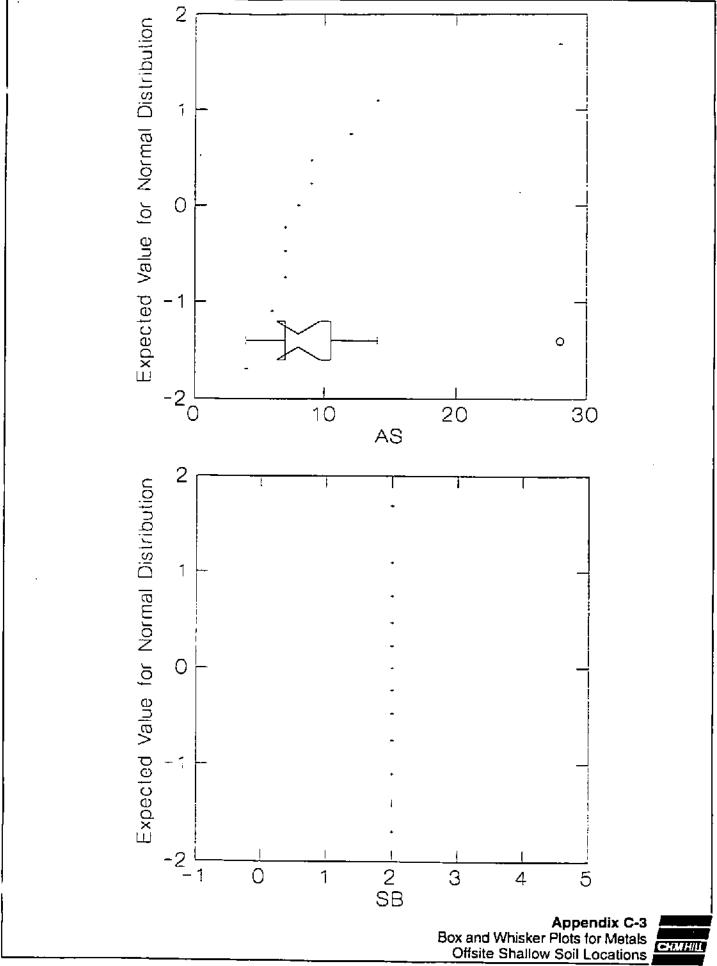


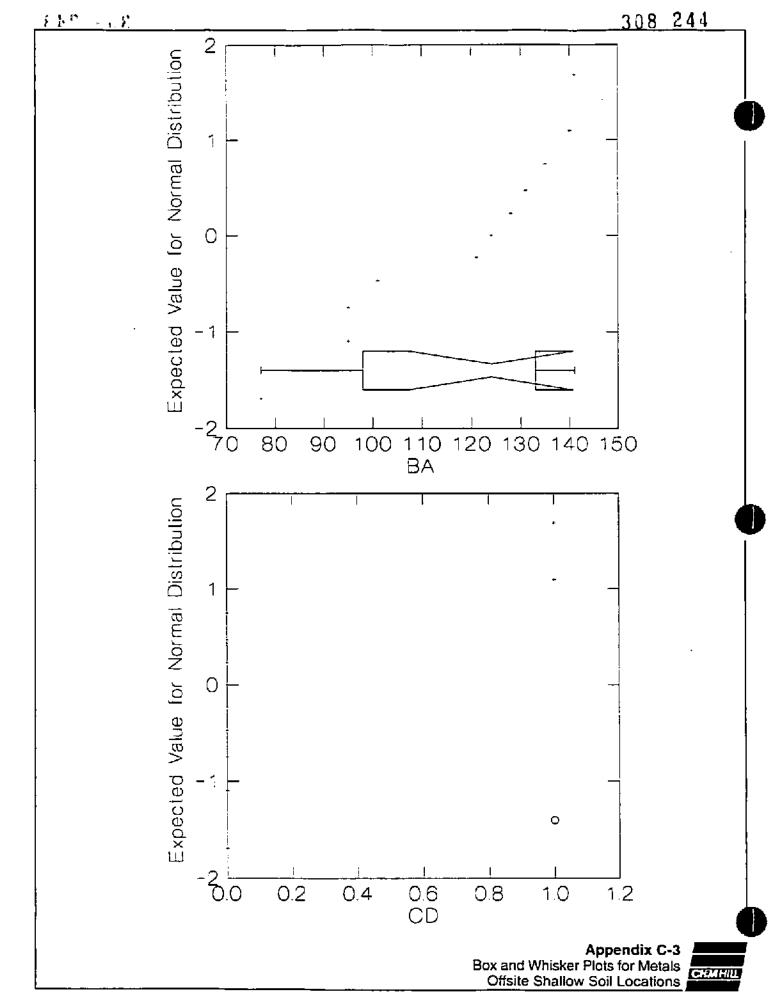




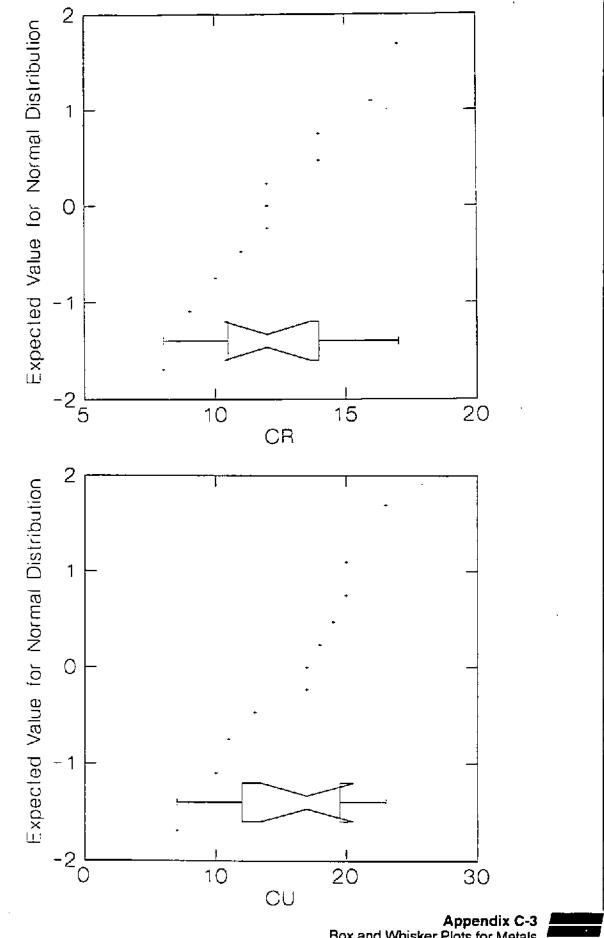


Appendix C-3
Offsite Shallow Soil Locations

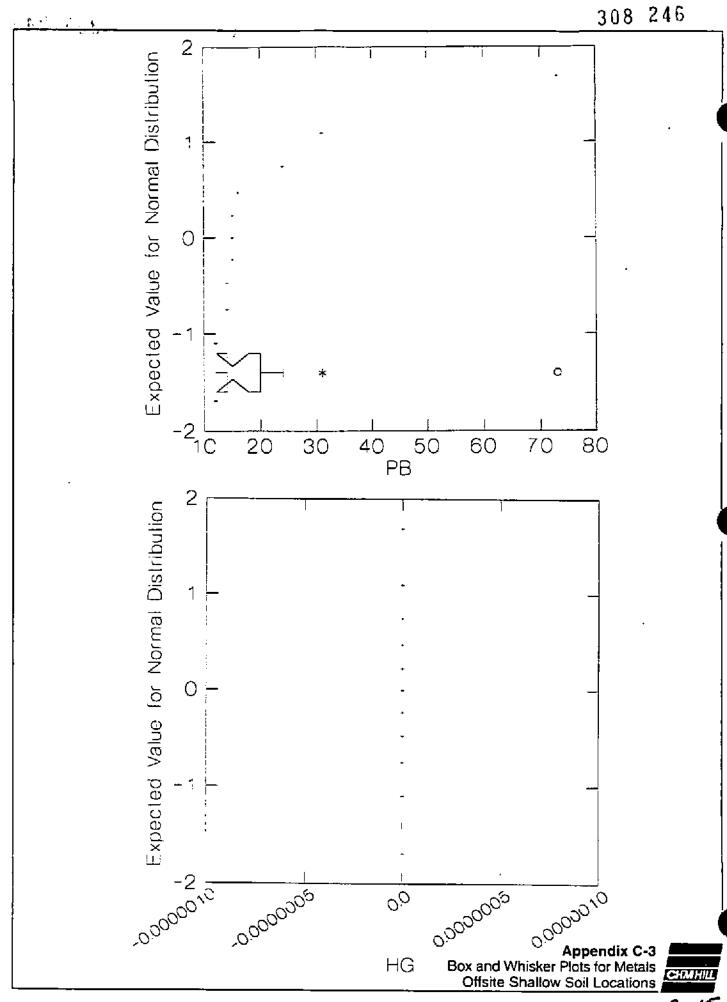


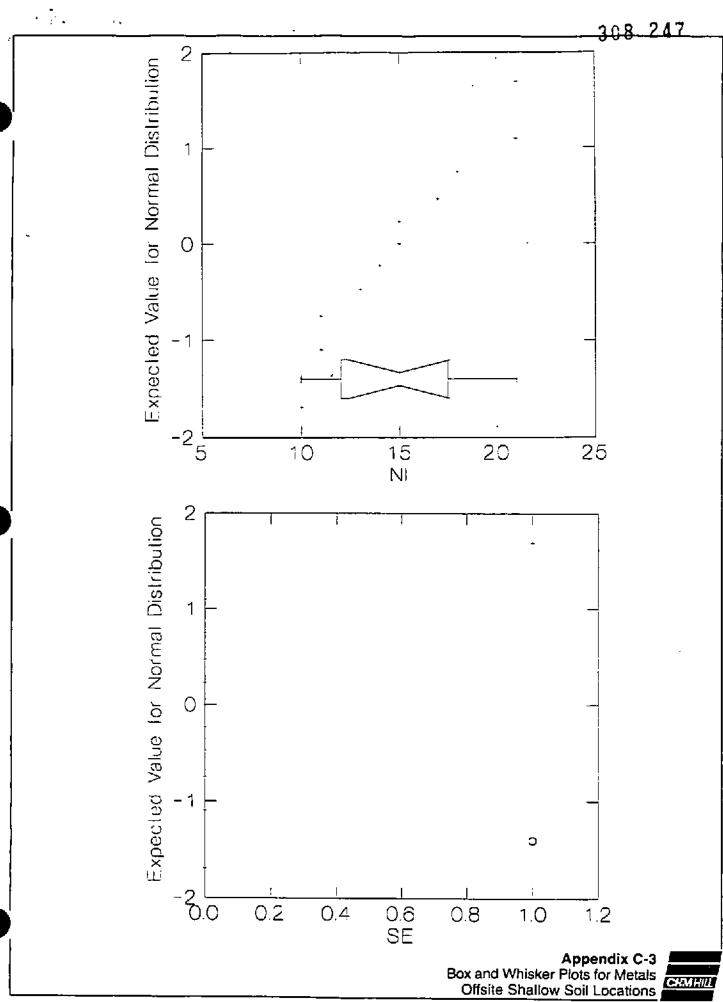




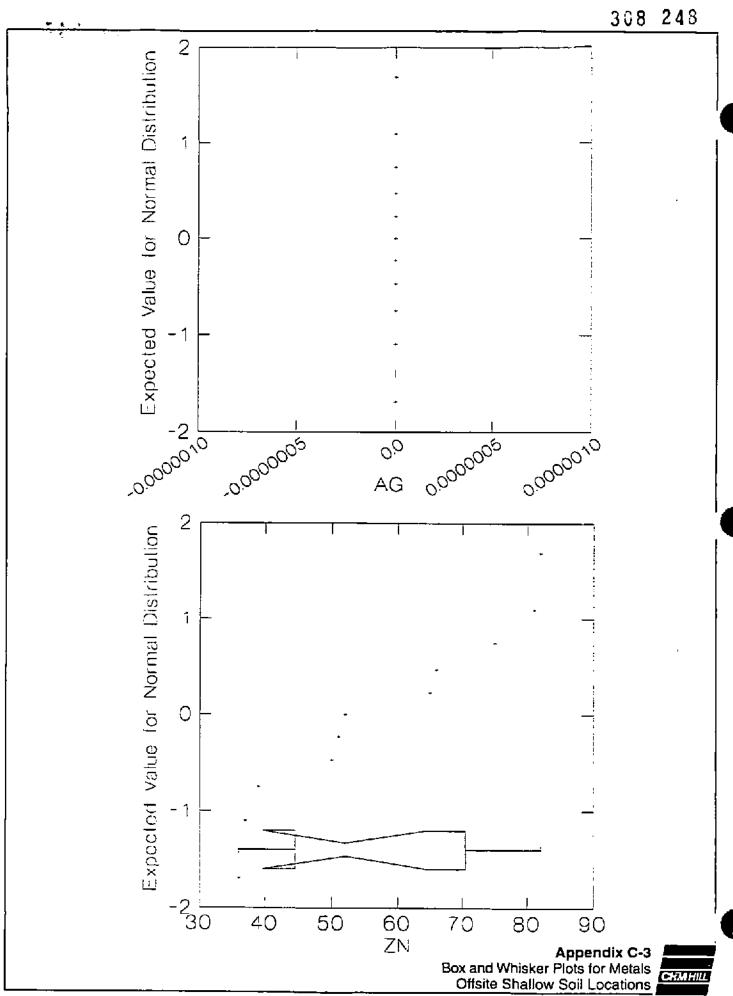


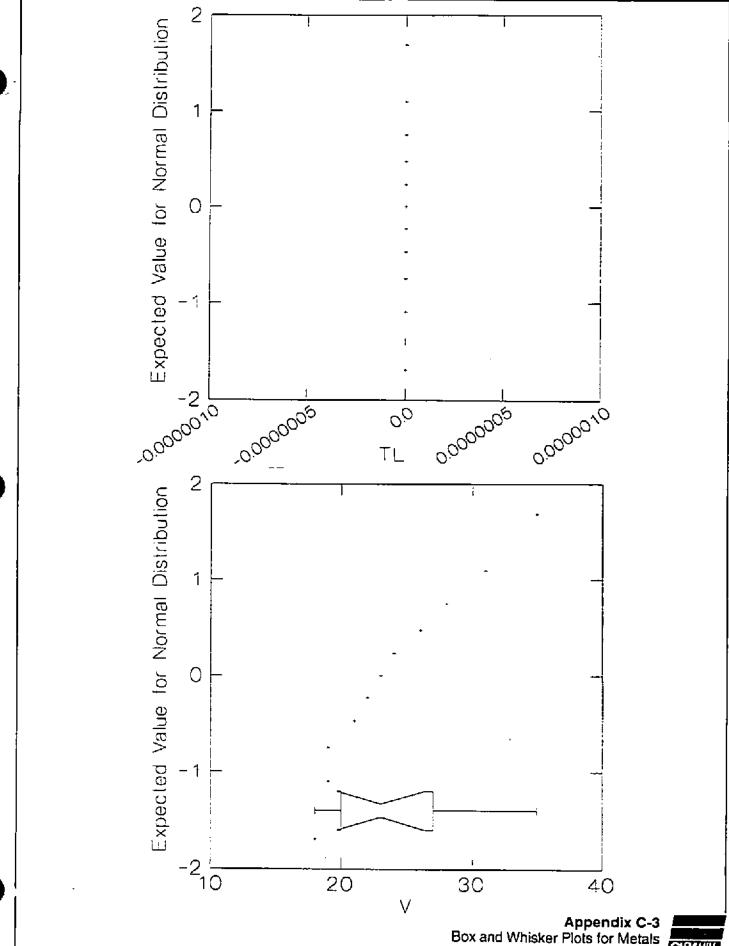




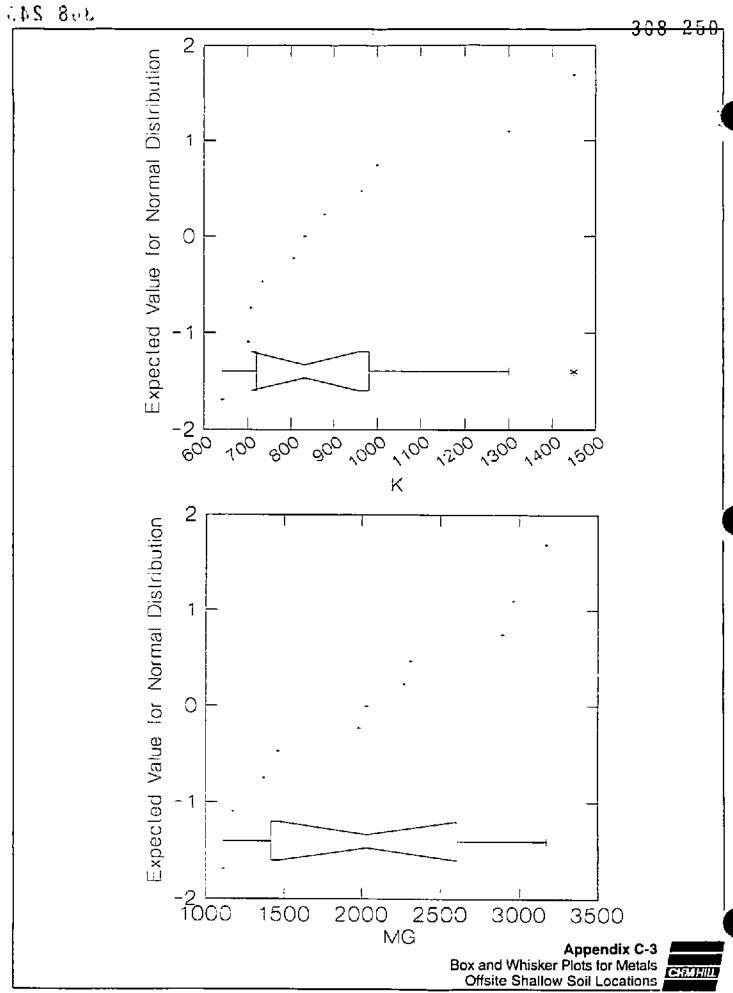


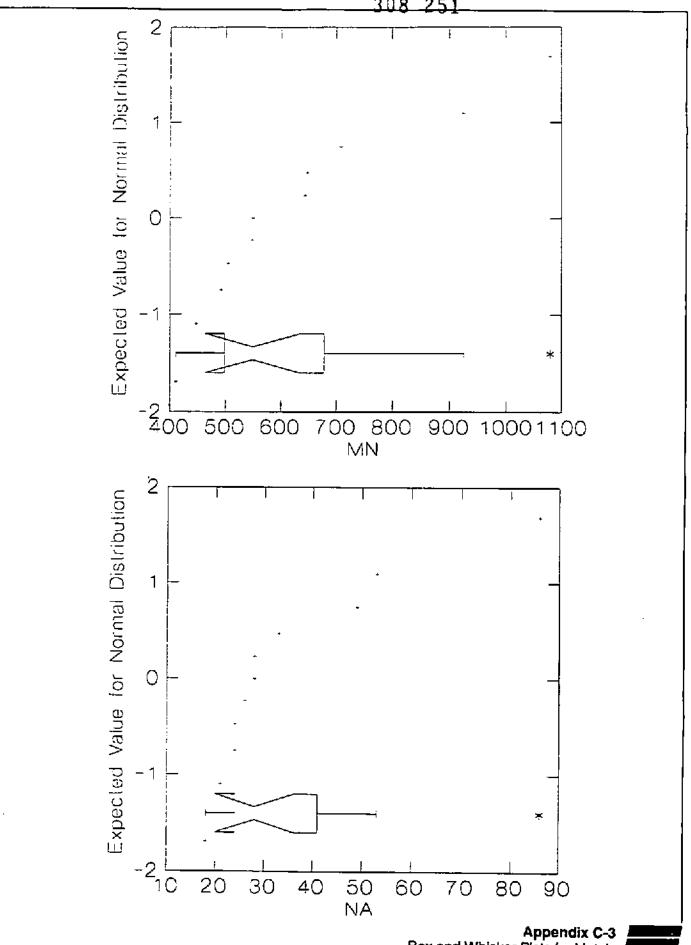






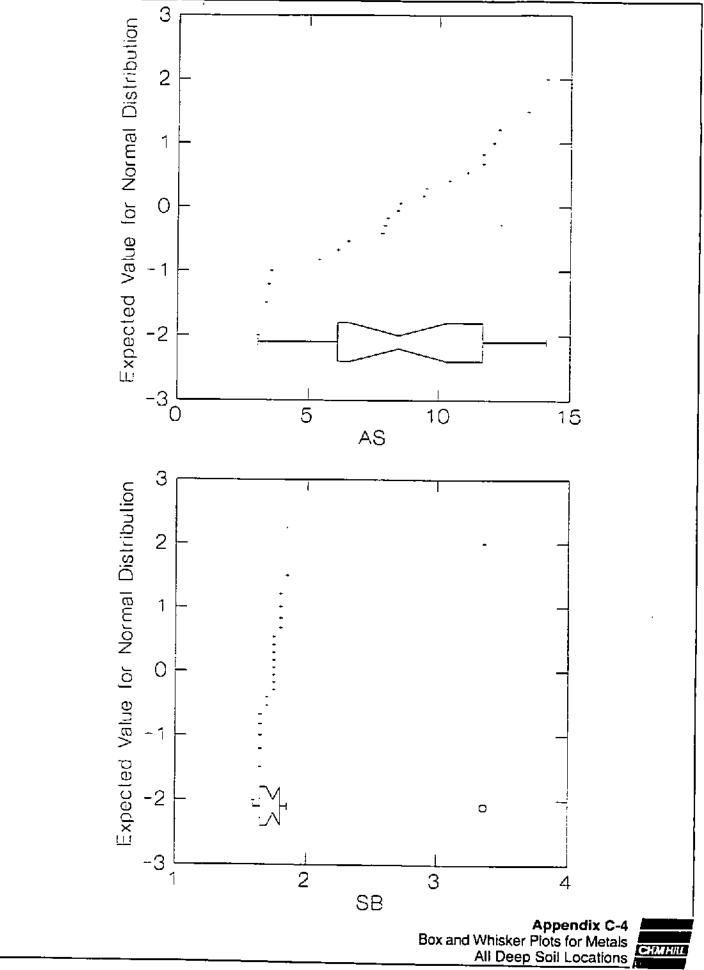




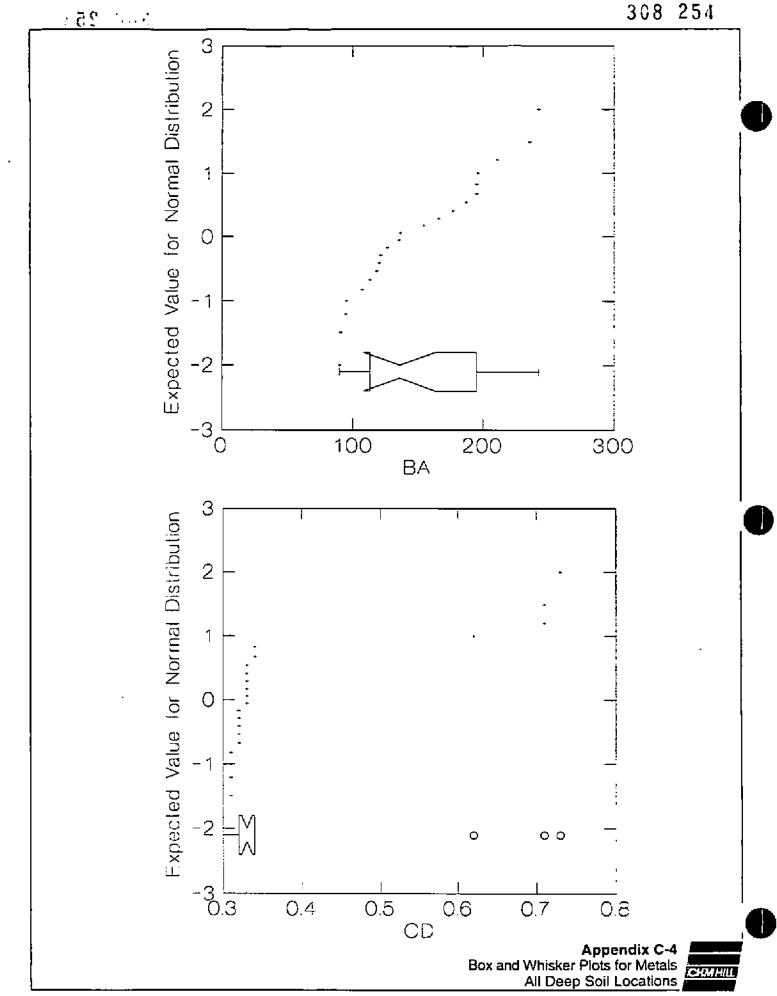


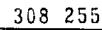


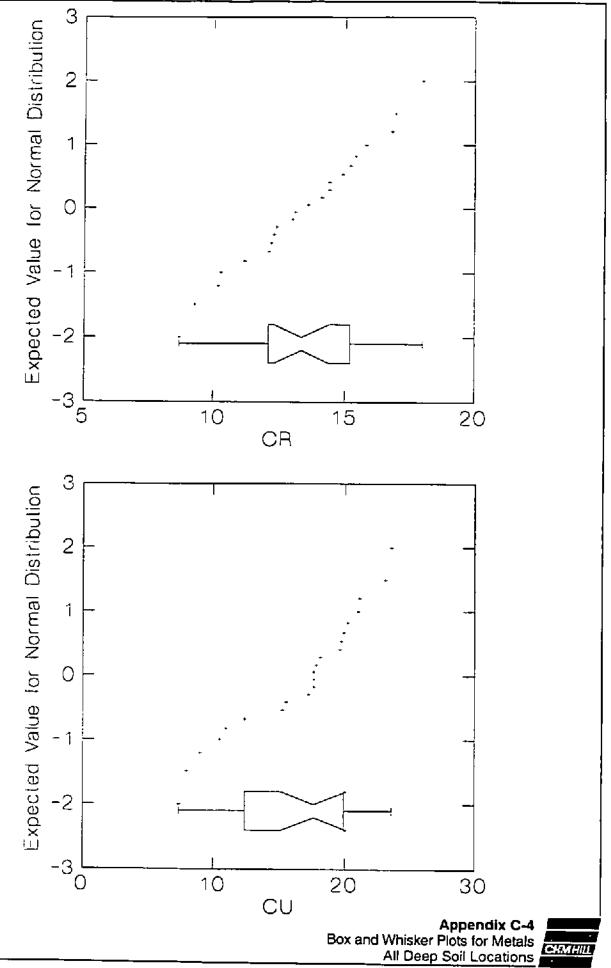
Appendix C-4
All Deep Soil Locations



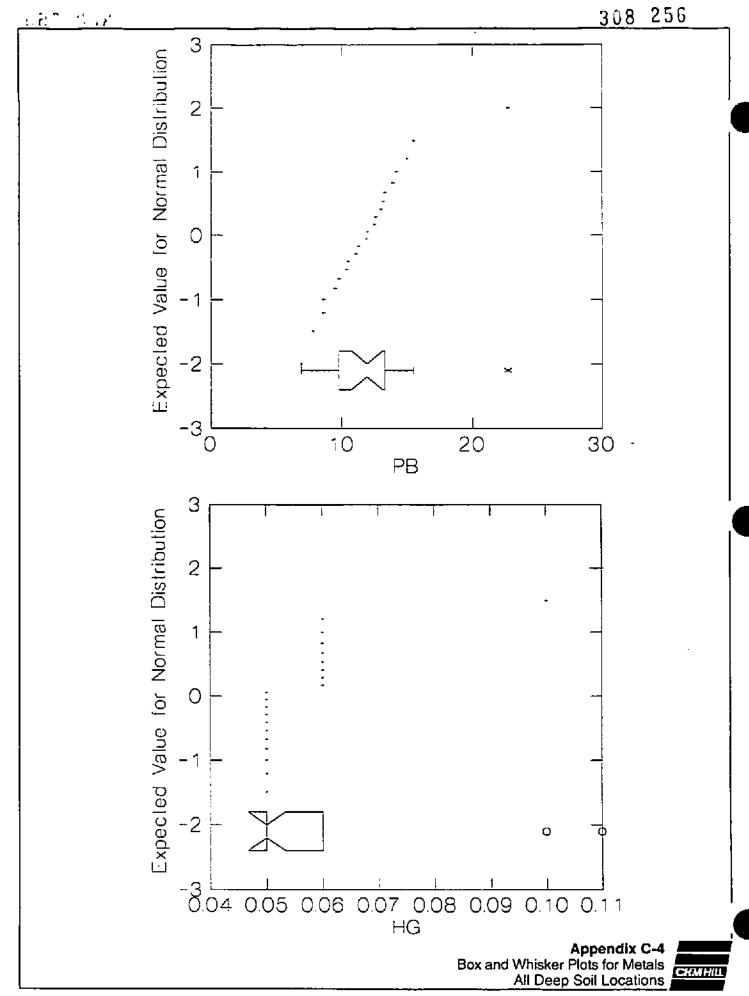
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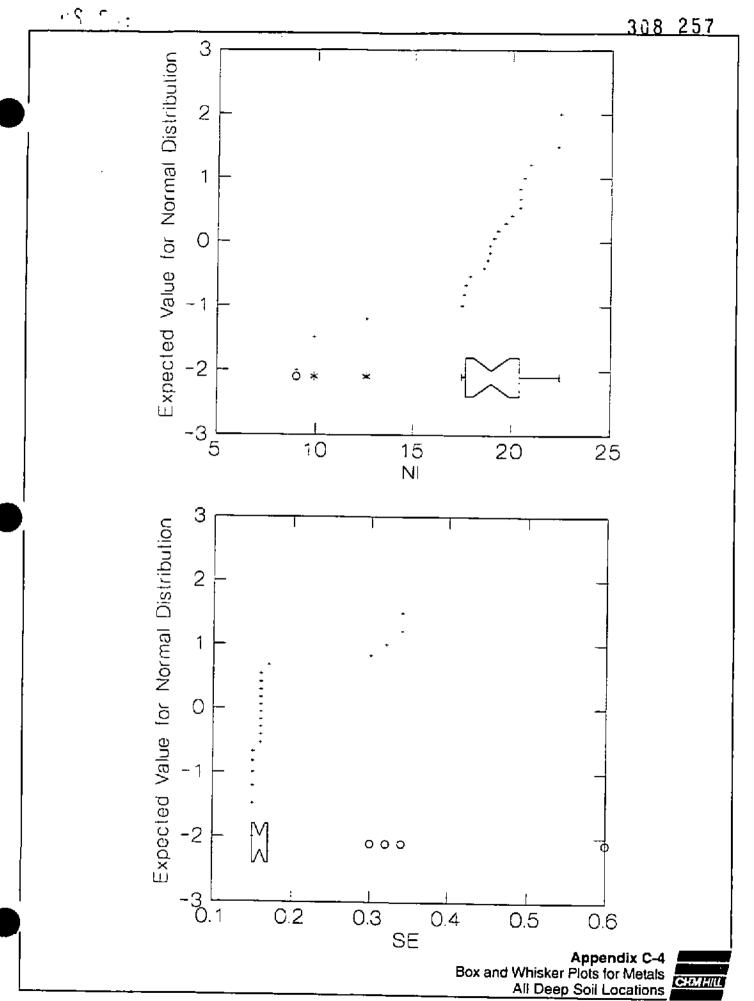




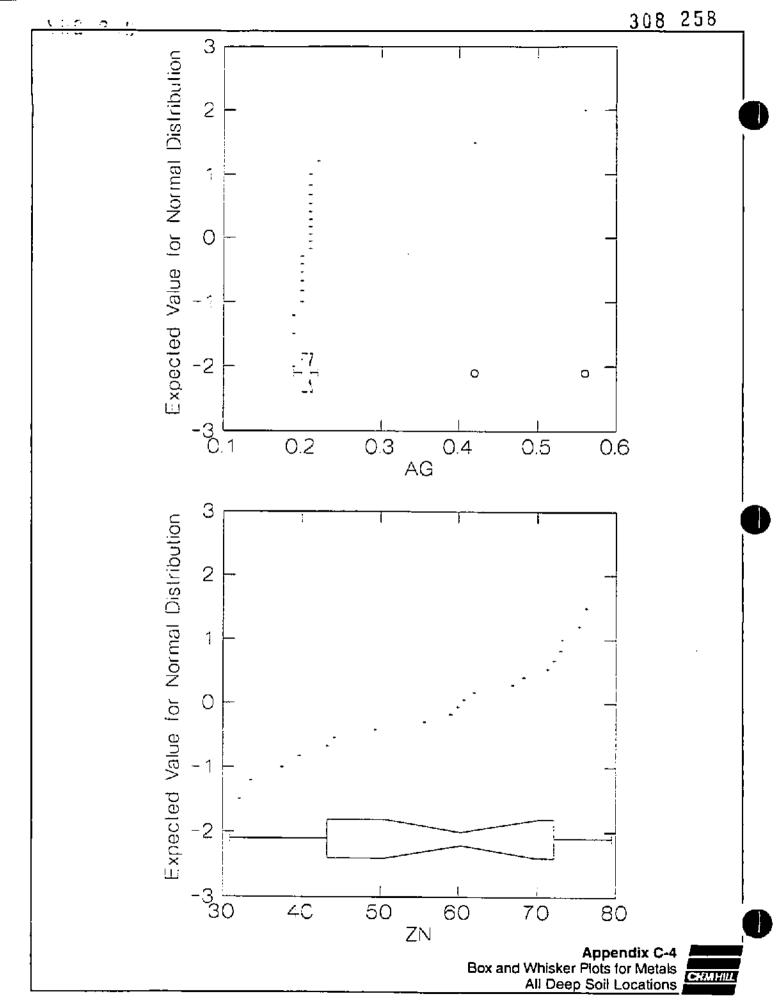


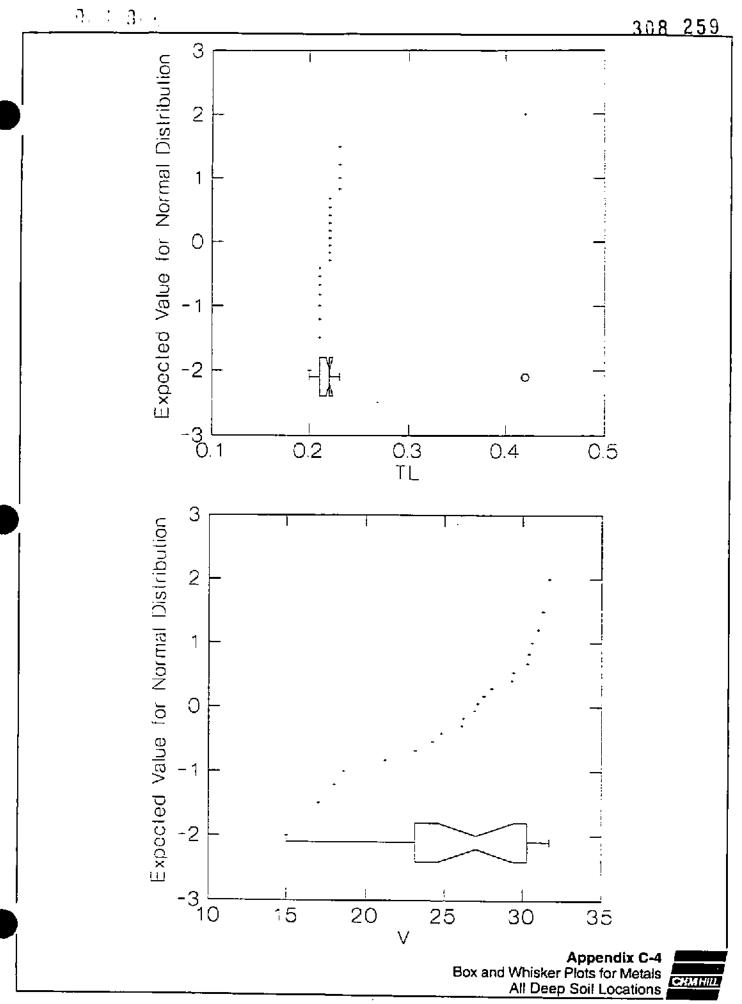
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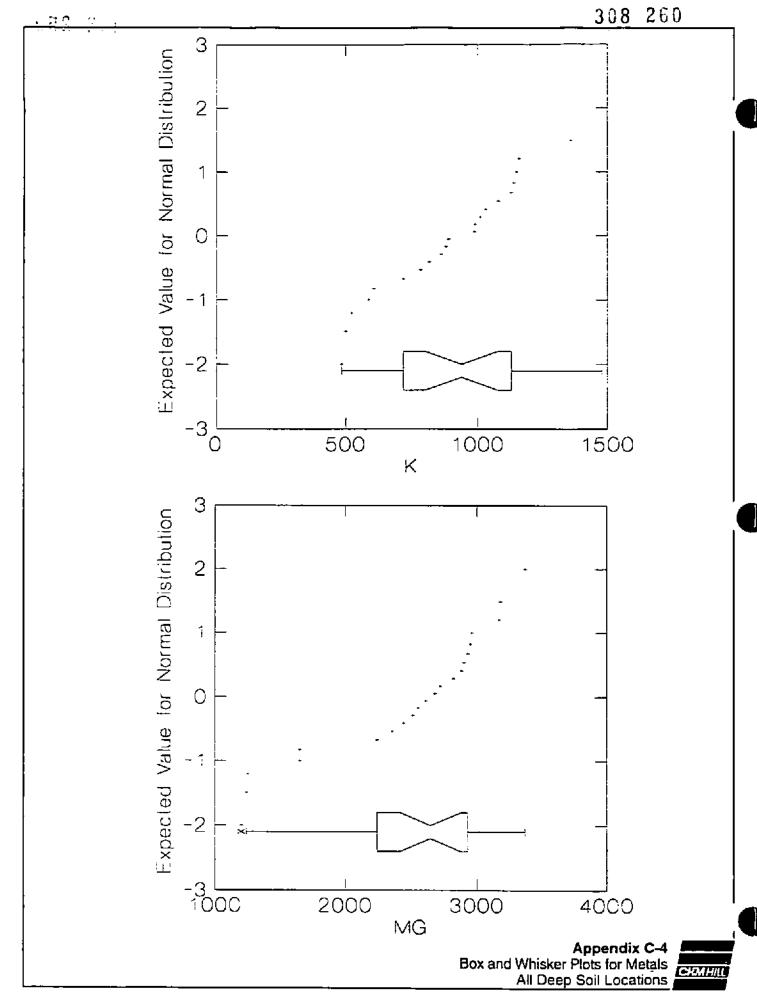


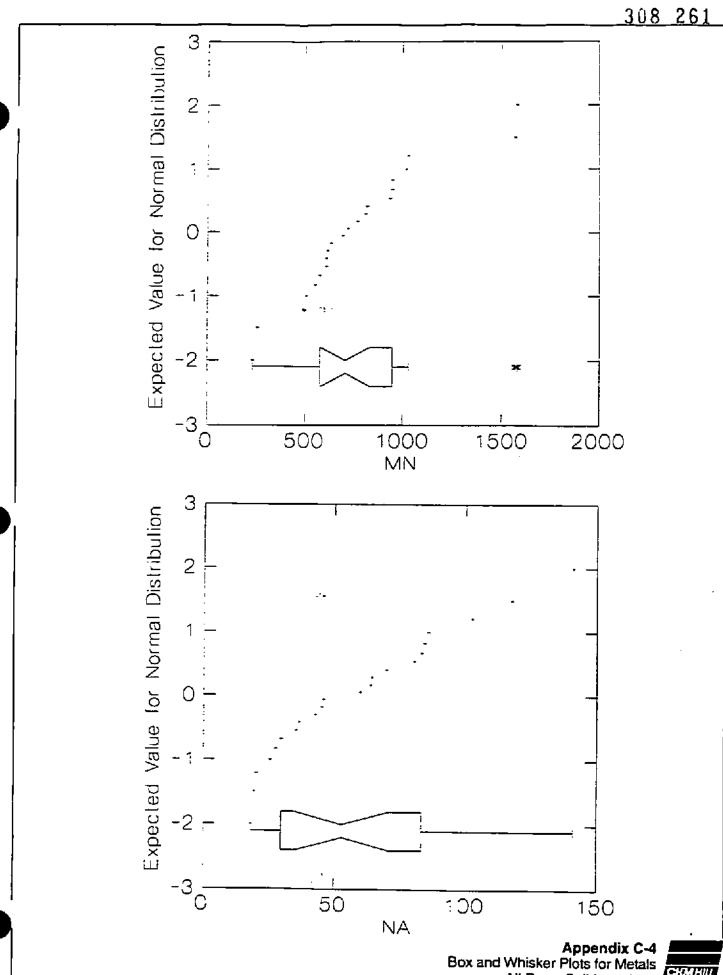


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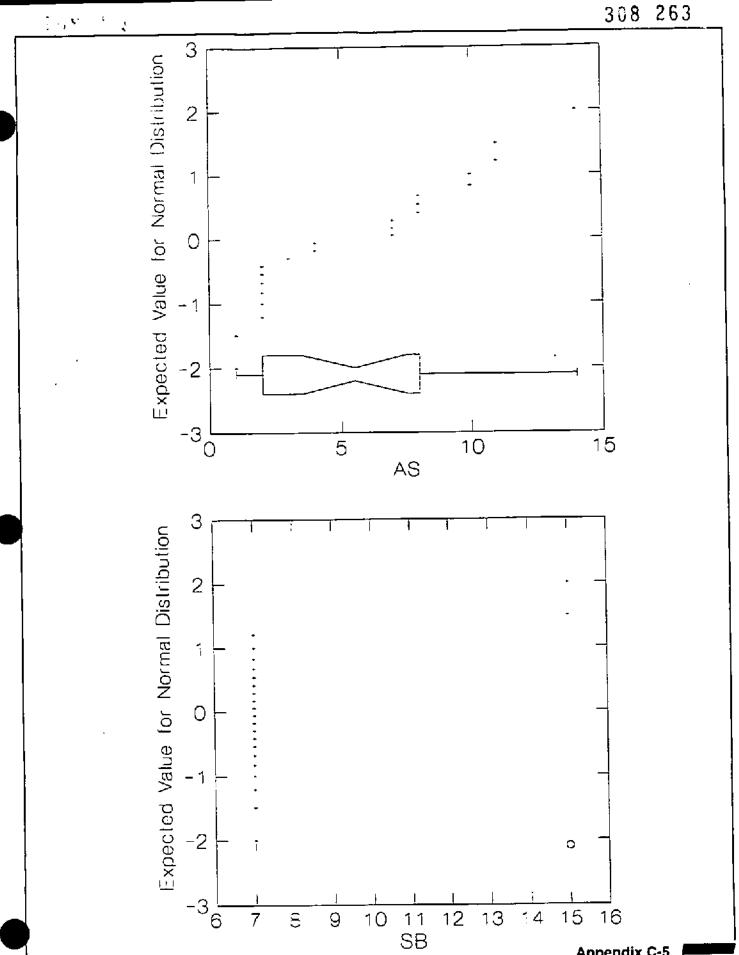




Appendix C-4
Box and Whisker Plots for Metals
All Deep Soil Locations

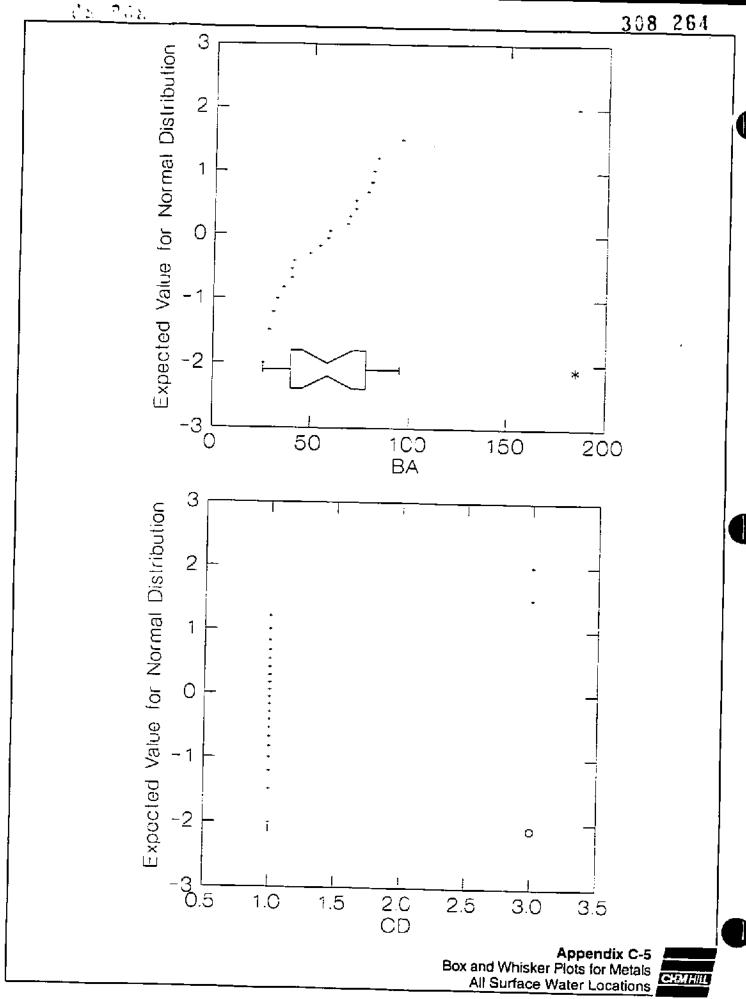


Appendix C-5
All Surface Water Locations



Appendix C-5
Box and Whisker Plots for Metals
All Surface Water Locations

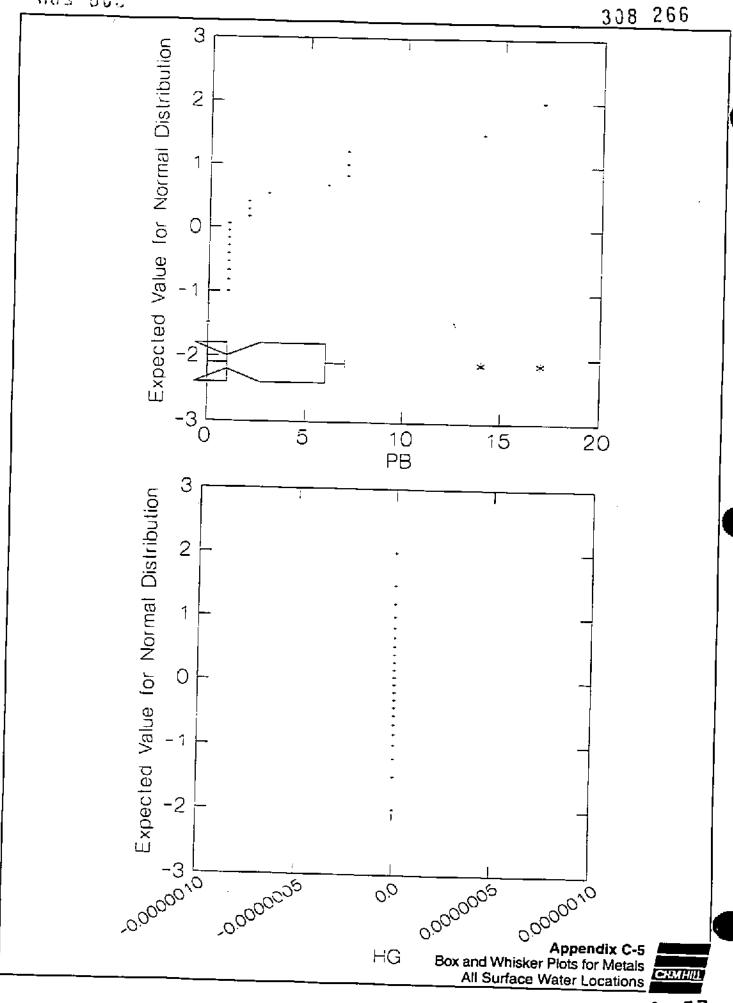




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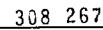
Appendix C-5
Box and Whisker Plots for Metals
All Surface Water Locations

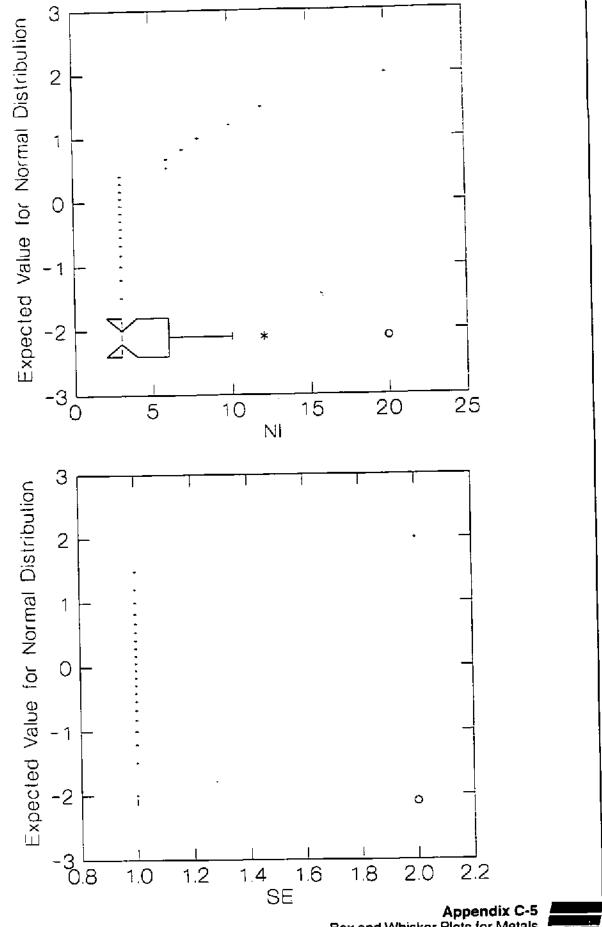




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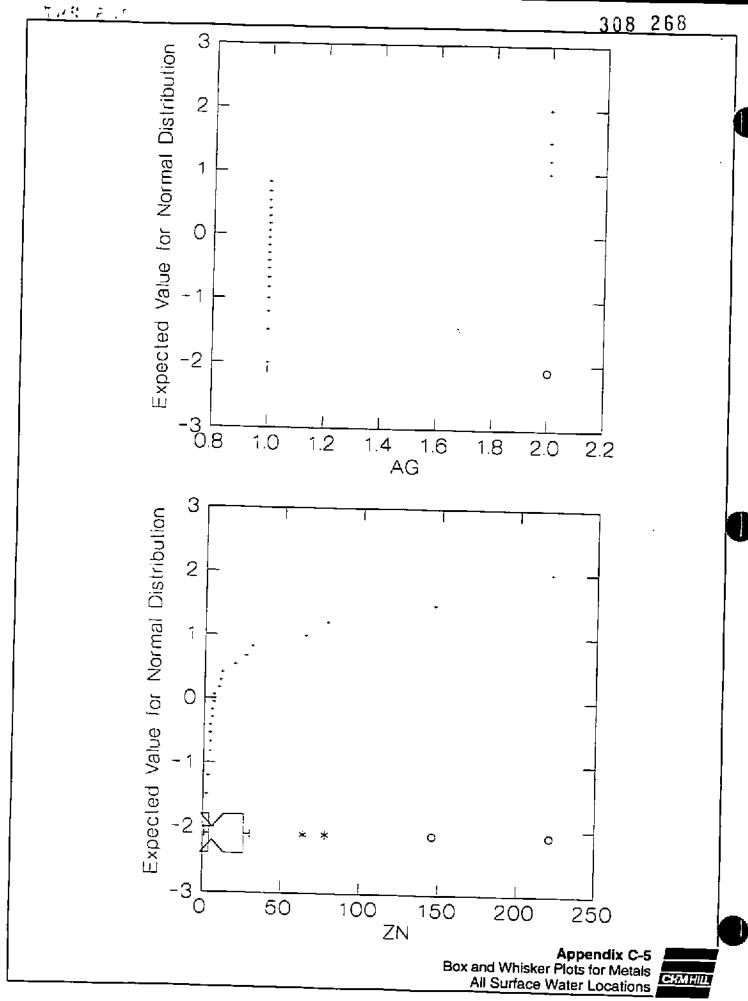
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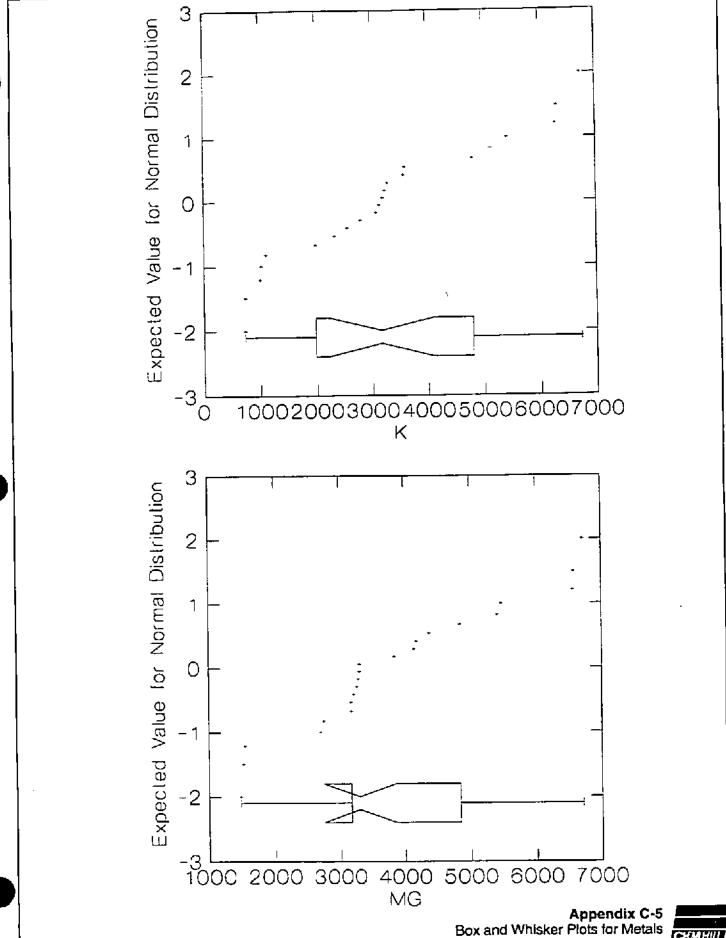




Appendix C-5
Box and Whisker Plots for Metals
All Surface Water Locations

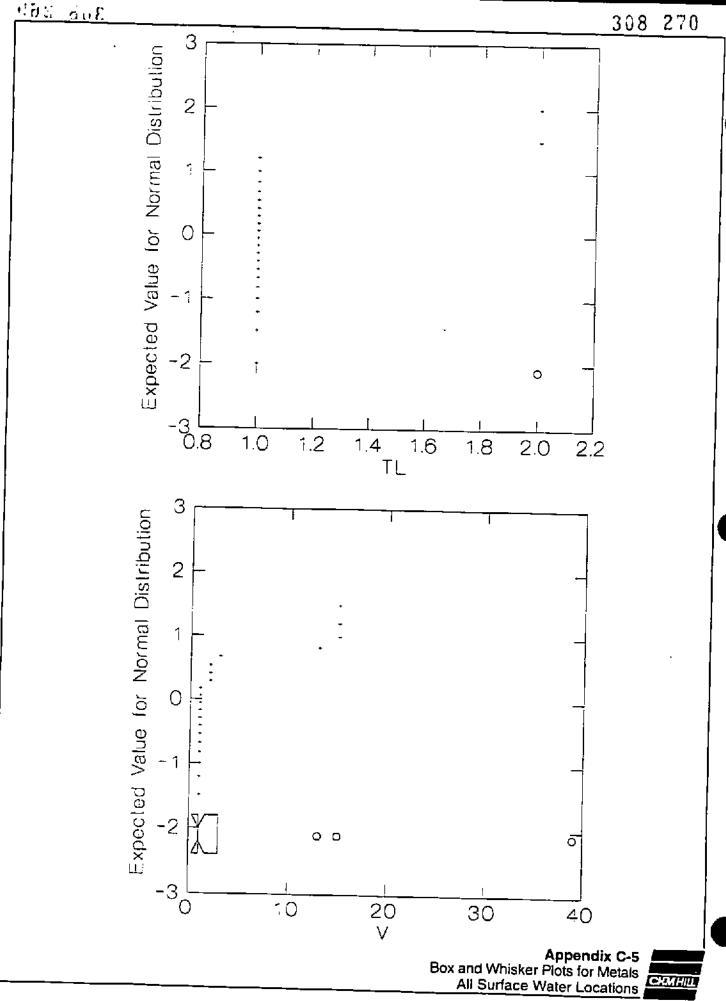


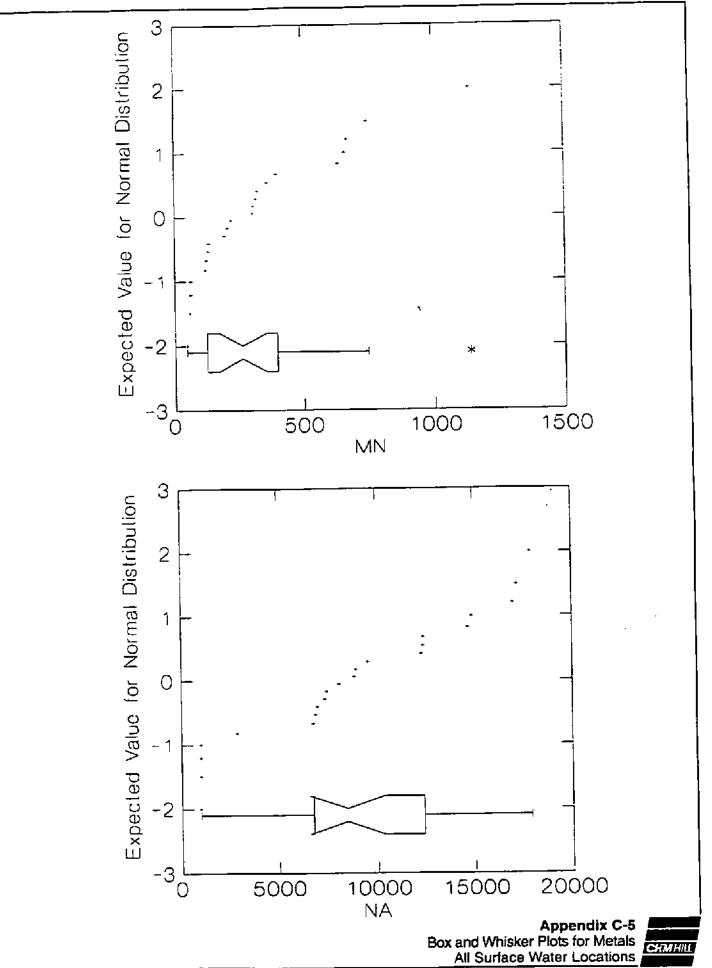




Appendix C-5
Box and Whisker Plots for Metals
All Surface Water Locations

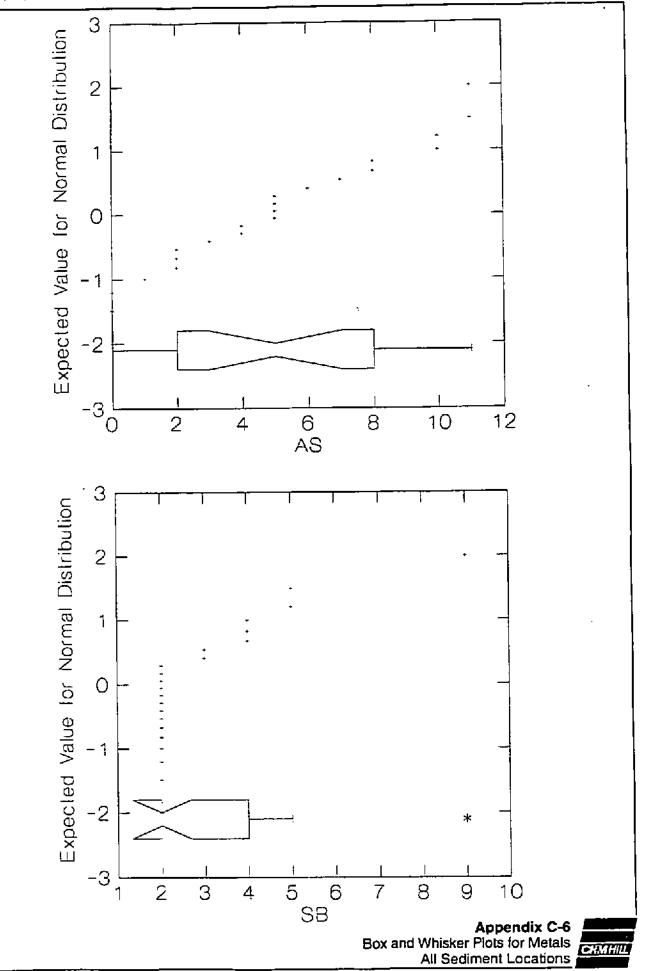


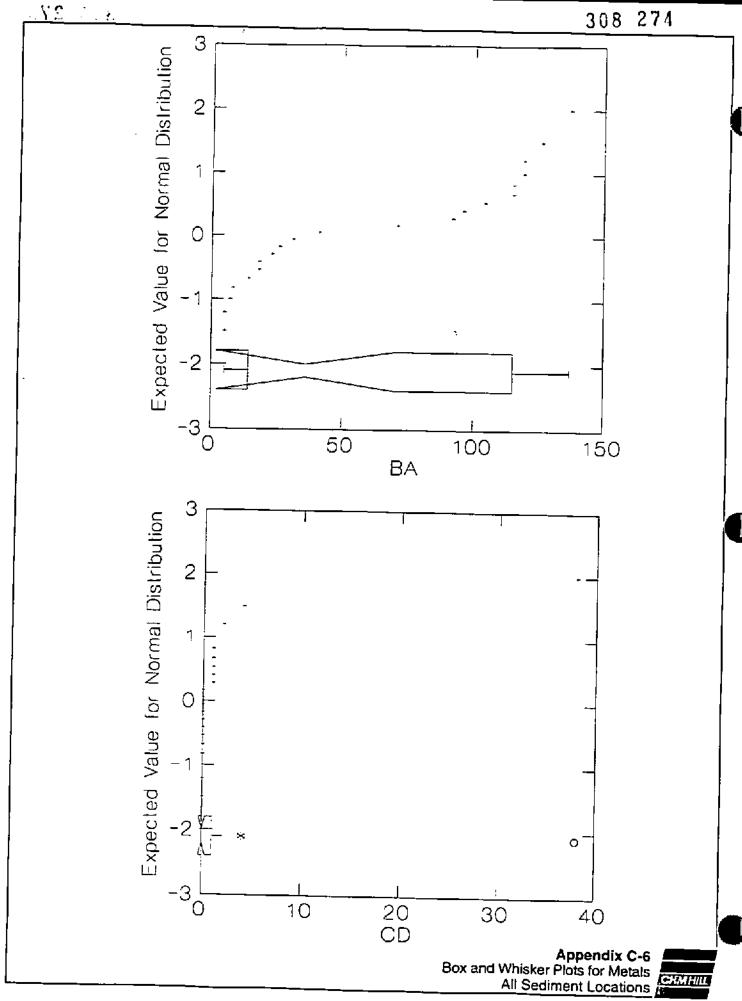


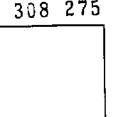


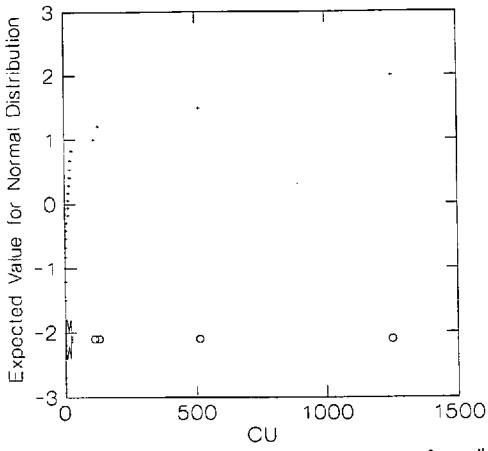
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Appendix C-6
All Sediment Locations









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-3°

0

50

Expected Value for Normal Distribution

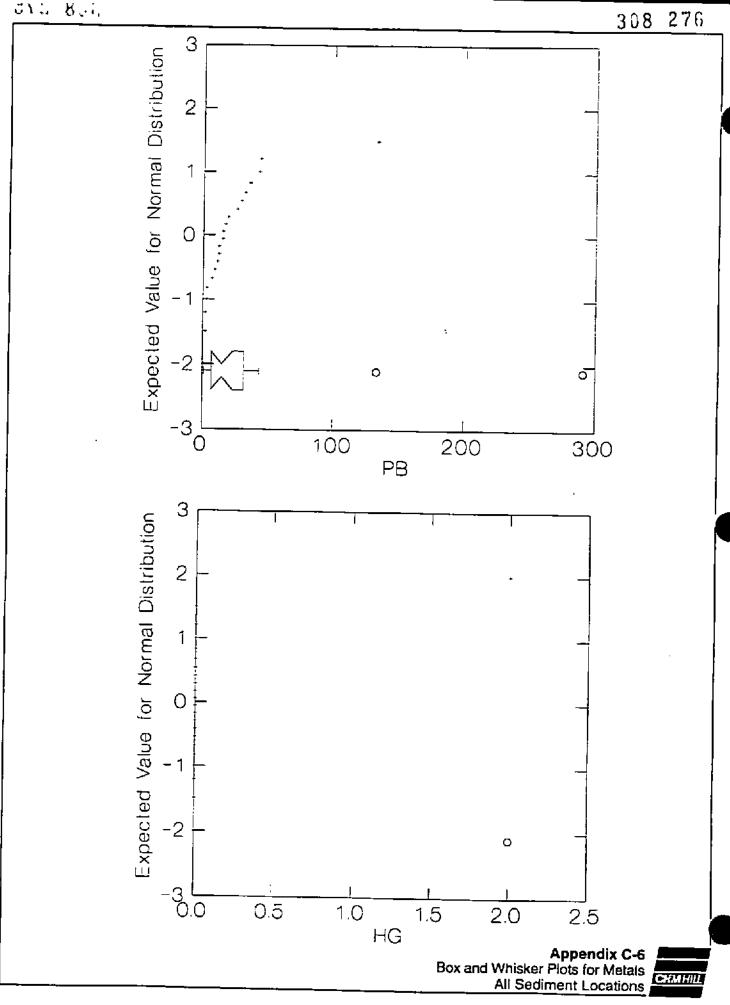
Appendix C-6
Box and Whisker Plots for Metals
All Sediment Locations

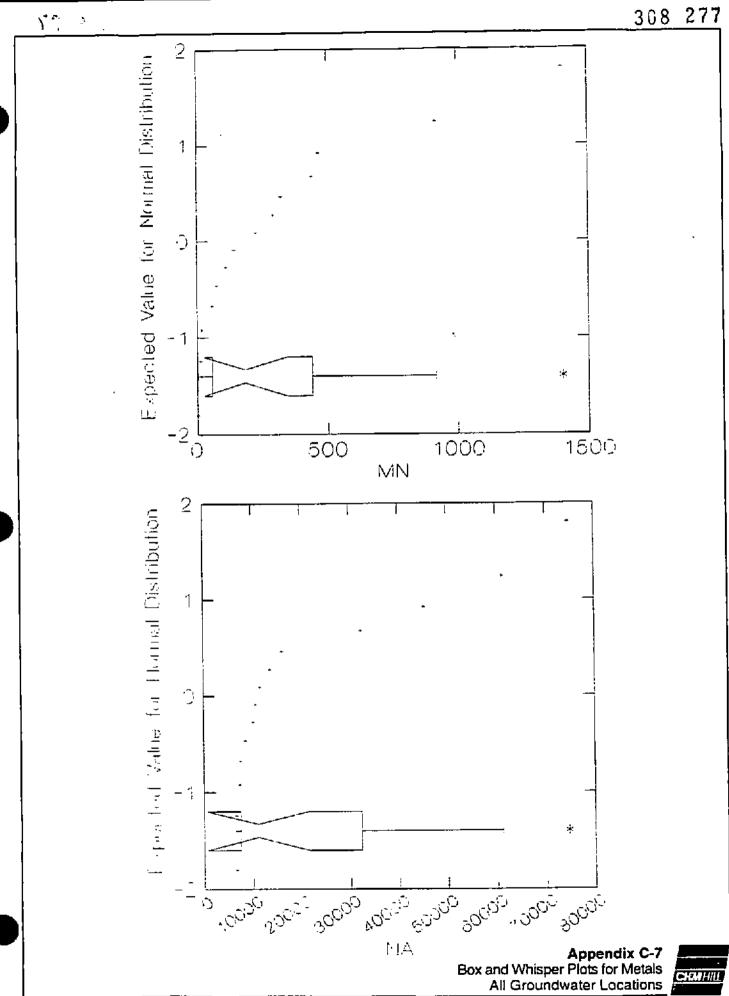
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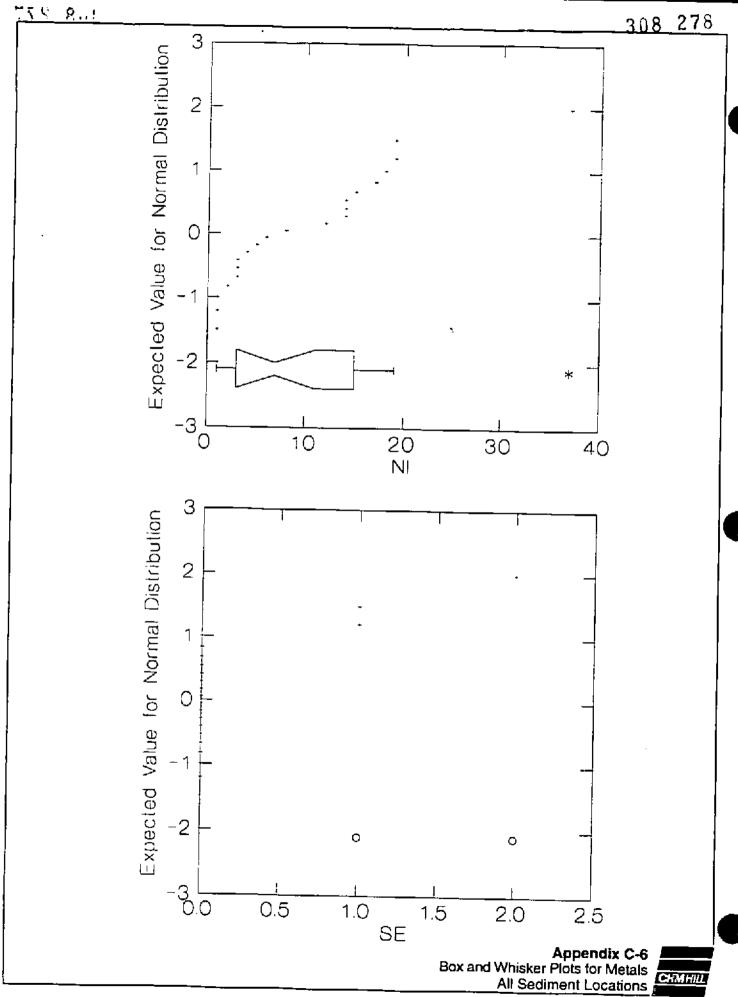
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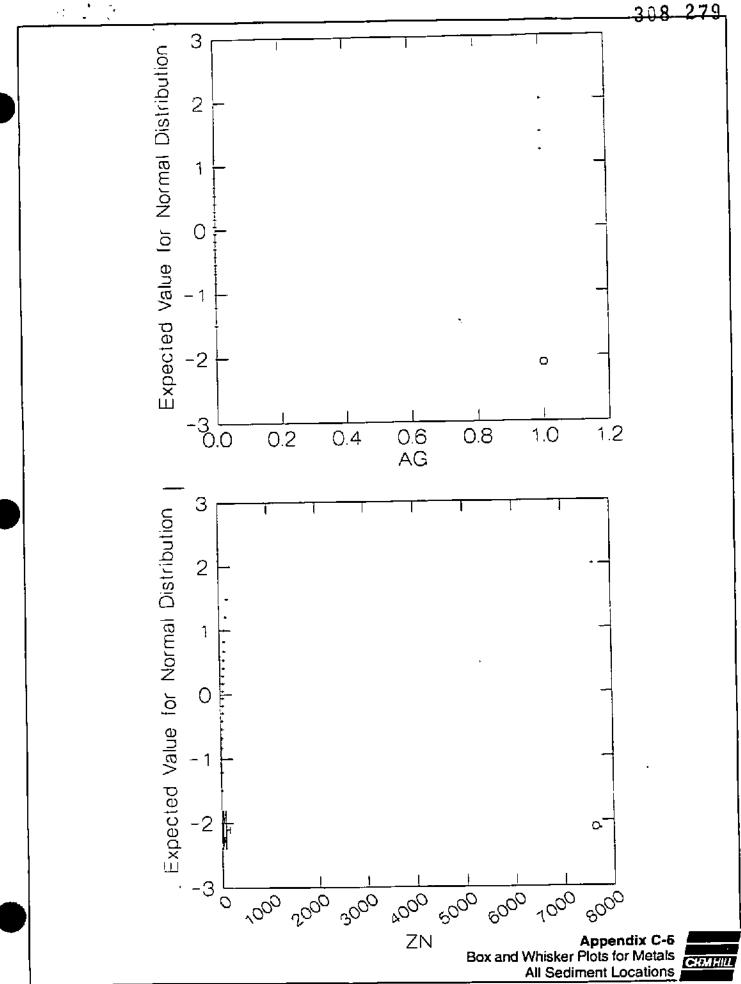
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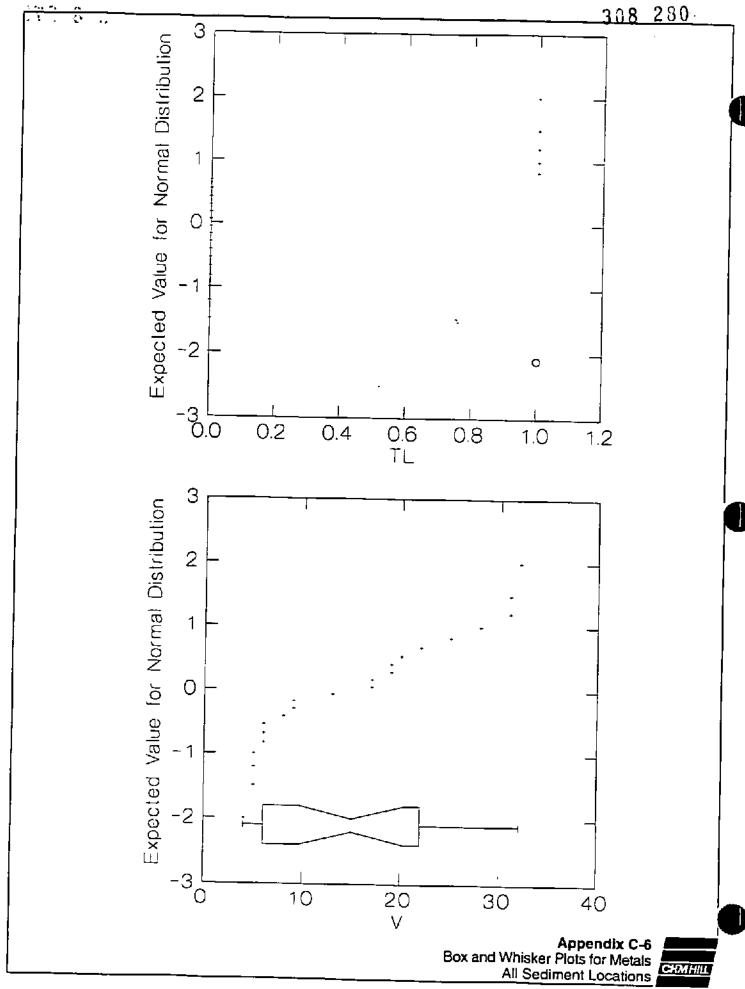


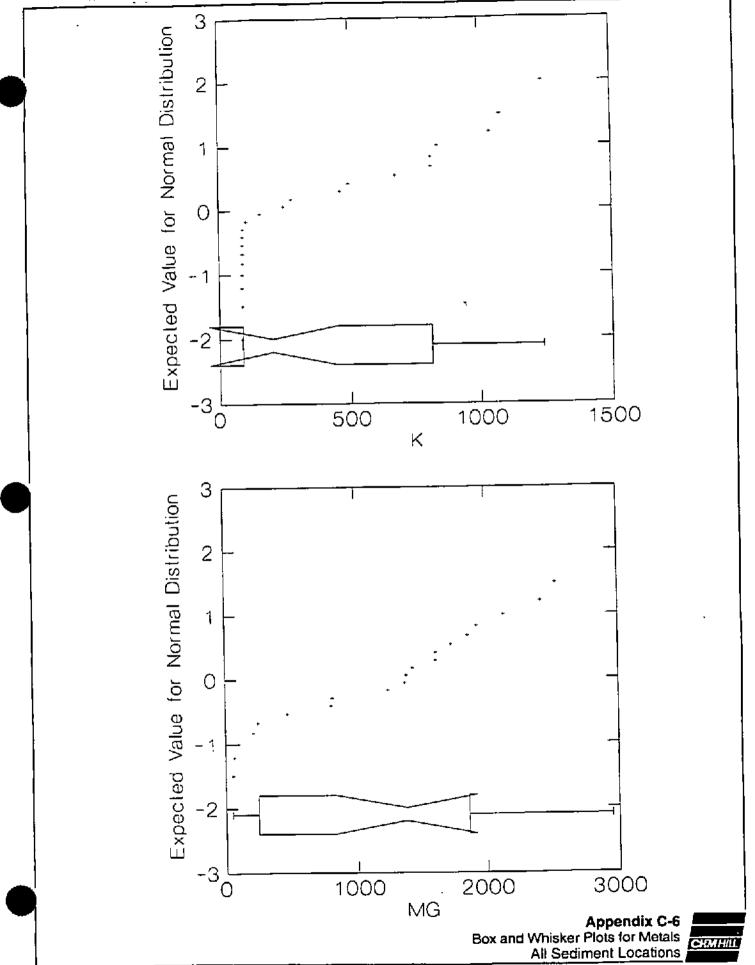


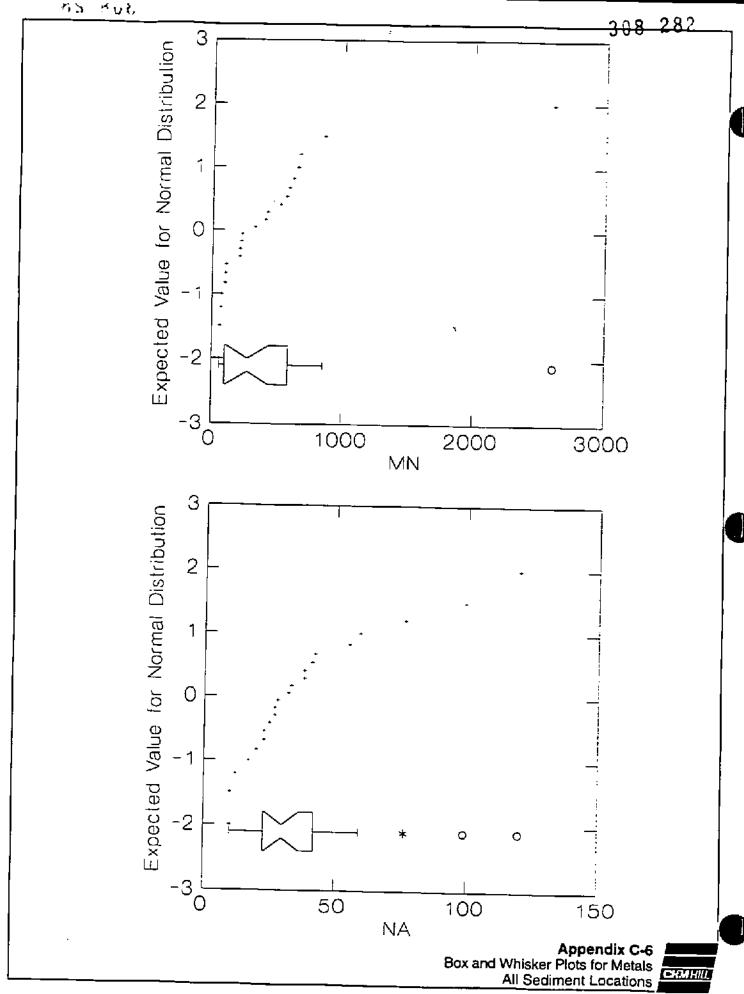




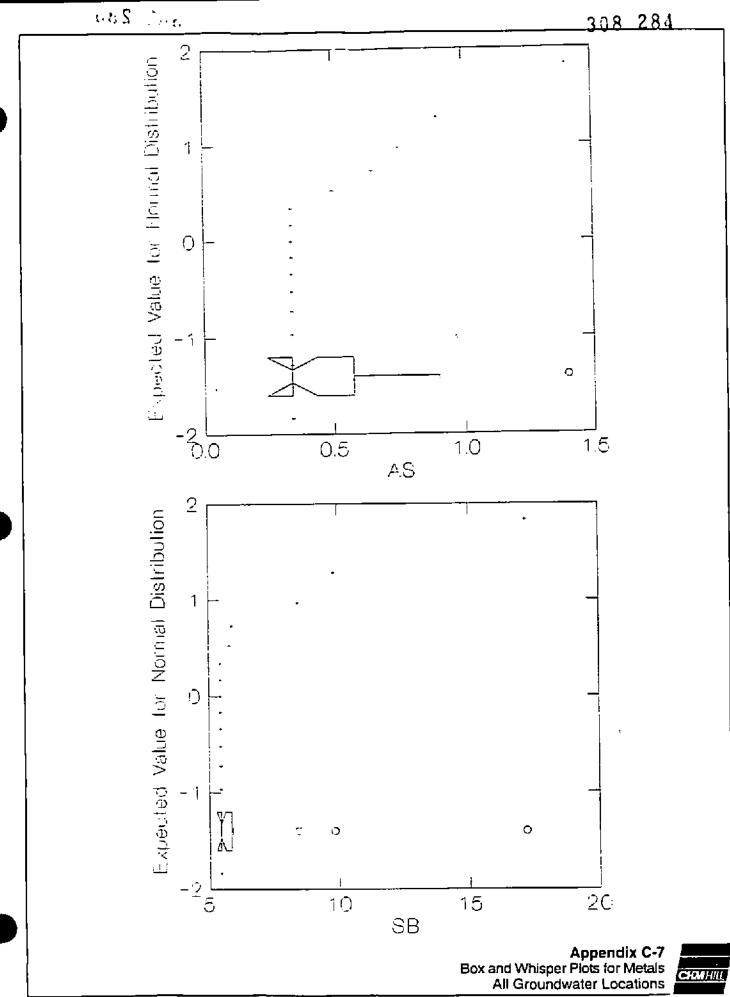


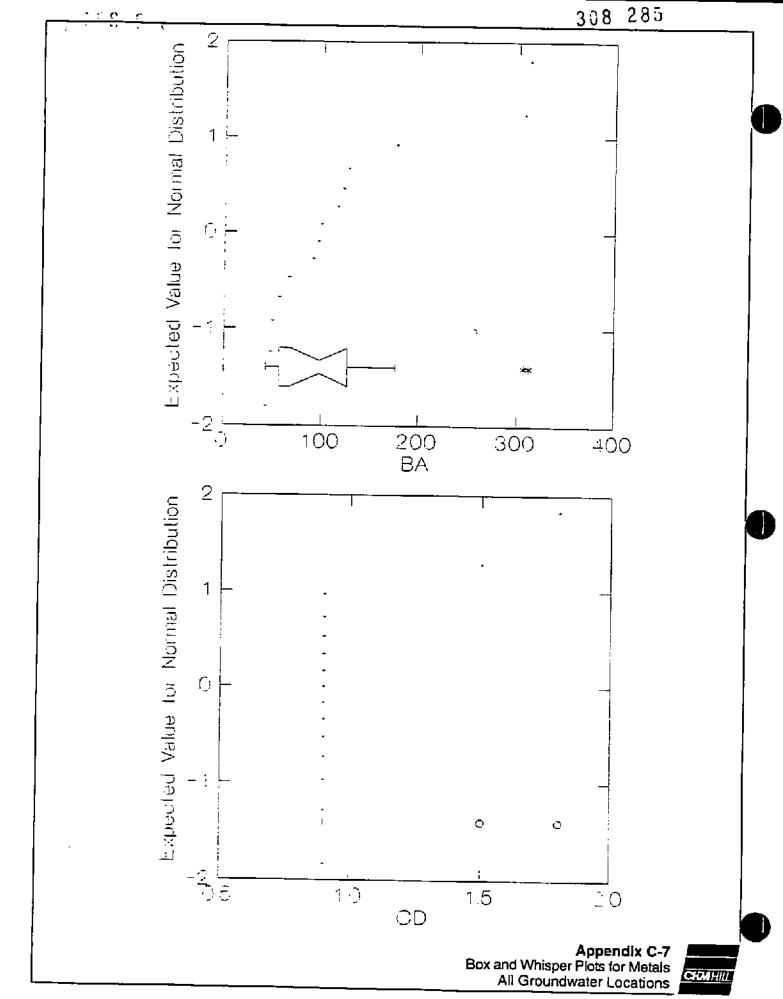




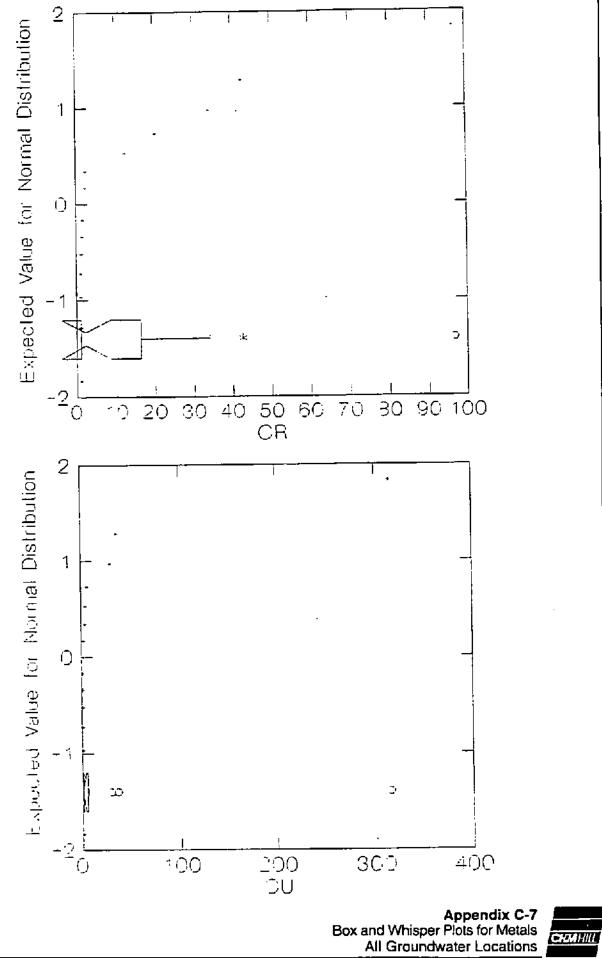


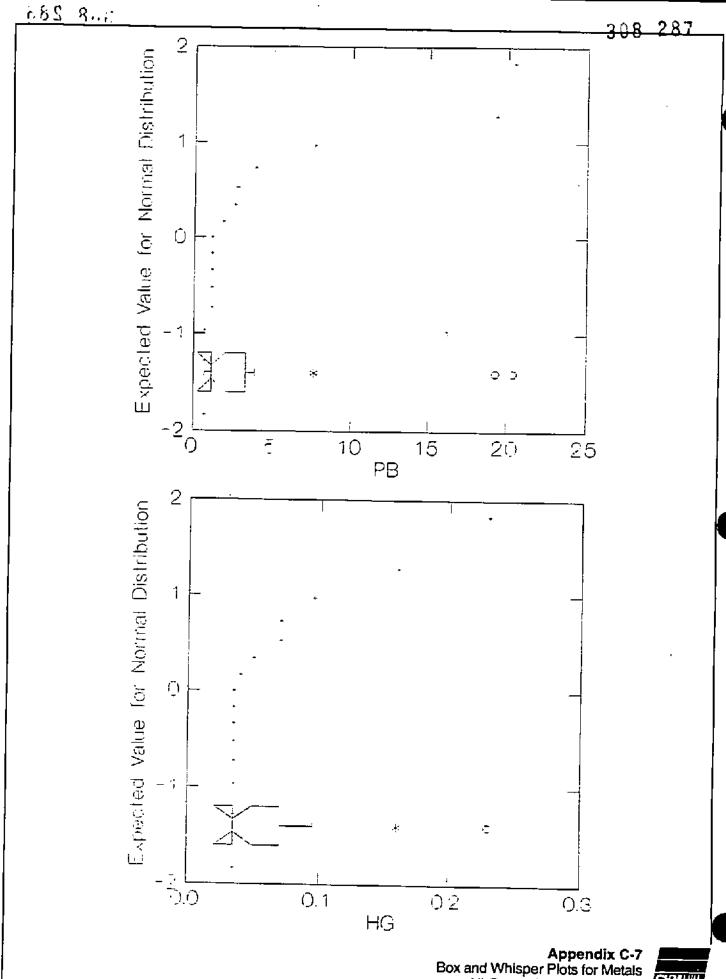
Appendix C-7
All Groundwater Locations









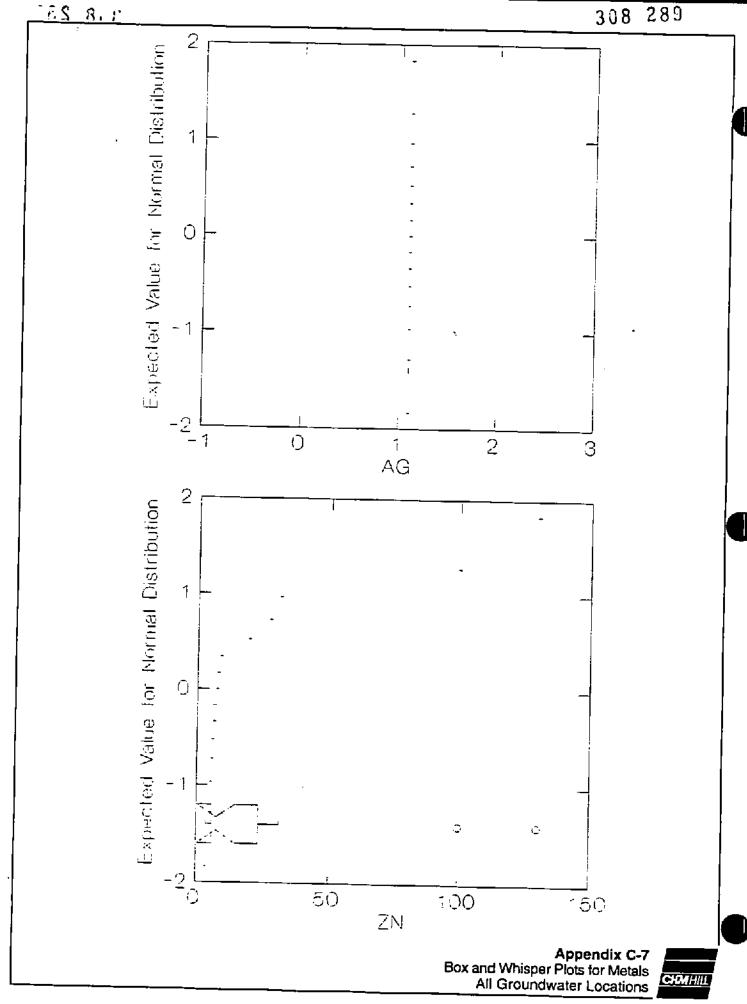


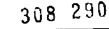
Appendix C-7
Box and Whisper Plots for Metals
All Groundwater Locations

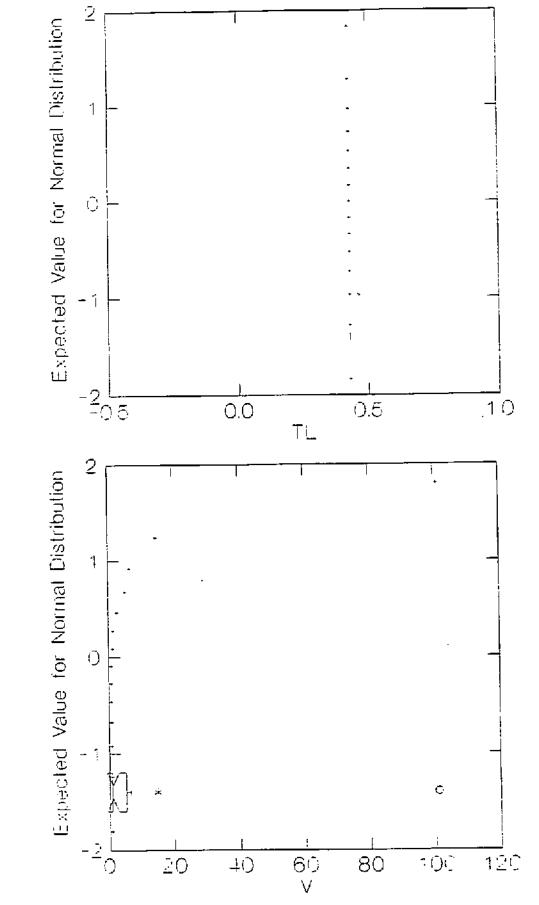


Appendix C-7
Box and Whisper Plots for Metals
All Groundwater Locations







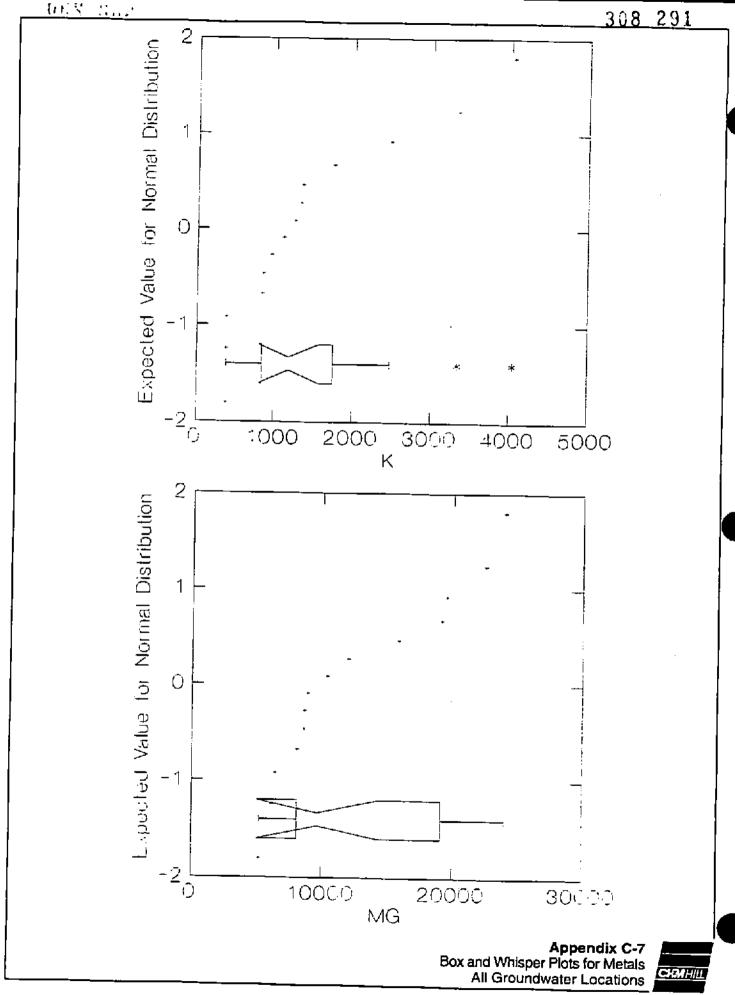


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Appendix C-7
Box and Whisper Plots for Metals
All Groundwater Locations





TAB

Appendix D

Appendix D

Background Analytical Data

APPENDIX D

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Analytical Data Summary: Surface Water	
-	
Analytical Data Summary: Surface Soil	D-31
Analytical Data Summary: Sediment	D-47
Analytical Data Summary: Deep Soil	
Analytical Data Summary: Groundwater	D-75

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		Starton D:	BWOI	BWOI	10,MG	BWDI	BWIG	DWO	6WILD EWILD	BWOS	DWO4	EWO CWXWS	
		Sample ID:	ZW IZ	V/IXS	WSSWIT	WESWITH A	1140				9 80	9	
		Sample Depth: Sample Date:	0 10 0	0 to 0	10/10/69	10/10/93	0 din	Ē	10/10/93	I	10,1095	10/10/95	
Group	Parameter	Unic											
		E.O.A.	5	=			200		100		10 0	<u>=</u>	
DIOXIN	13,72-TETRACHLOROUBENZD-P-MONIN	573	2 9	9			n e i		0.024		n 81	2	
DIOXIN	13,74-TETRACHLURODIBENZOFURAN	NGV	ກ				25 U		0.057		23 U	2	
NIXDIO	1247 PENTACHILDRODIBENZOPURAN	Z	, X	35 C			25 U		23 U		23 C	72	
DIOXIN	1217 PENTACHLORODIBENZO PUIONIN	2	2 2	122			2		70		25 0	23	
DIOXIN	2,24,7 J. PENTACHILIBERIZIO EN ZUPINAN	5	2 2	0 22			22 52		0.001		23 U	=	
DIOXIN	1214.12.HEXACILLOROBIBENZOPURAN	NO.	1 11	2			25 U		0.076 U		= 2:	2	
DIOXIN	1216/14 HERACHLORODISEACH ORAN	XCA	1 11	33 C			0 82		D 066 U		73 U	2	
DIOXIN	1,23,4,7,4 HELACHIONROPIBENZO-PONTAIN	532	2	33.0			13 U		0.0		0	ĸ	
DIOXIN	1.2.14.15.HEXACTILOROBISENZO-P.DICALN	202	2 2	2			25 U		0.0		n 1100	2	
NOXIN	121/16-HERACHLORUDIBEACAPTORAM	NEA	13.0	7 22			13 U		0.00		2	*	
LACKIN	27.46.14 HERACHLOHOMBALOROMAN 	Z Z	2 5	⊐ \$2			33 U		0 6(7)		2 2 2	A 1	
DIOXIN	1 1 2 4 2 LINESTACHLOROGUES/AND	NCAL	70	23 (1			5 : F :		0 171 0		2000	3 2	
Machin	XIX(IIII-0-CENSELIIIIAC EFYTESSEE CONT.	HCAL) S U	22 C			25		1 160		2 :	3 7	
N TOTAL	**************************************	NGI	U 55	32 C			## T		n 6/00		7 7	3 5	
MYCHI		MG/L	00	9			9.		0.314.)		4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	9 4	
Nicord		NGA	30 tu	⊃ 9			9		3 3		2 2:	2 2	
DICKIN	OK I AKIII, UKO MENUNGANON PROPERTINA PENUNGAN PROPERTINA PENUNGAN PROPERTINA PENUNGAN PROPERTINA PENUNGAN PROPERTINA PENUNGAN PROPERTINA PENUNGAN	NGL	\$	\$			2		£.		3 1	٤:	
NIXOID	A CAR TENDE CHILD CONTRACTOR CONTRACTOR	NGA	4	Ŧ			3		Q :		•	= 5	
NIXOLD	CLAND BY CONTROL OF COMPANY CONTROL OF CONTR	258	7	2			8		.		2 :	7 5	
NECES	ACTACH DECREEK TO BE DIOXIN-CID	NGL	3	3			*	;	3		•	2	
DESMETAL	Aberdam Obsolrd	5			9 9	39.3 U				1 441			
DESMETAL	A actionory, Oksoked	50			2 9 7	14.6 U		100					
DISSNETAL	A record. Disported	TOT			43.0	0.00		077		7117			
DISSHETAL	Berium, Dissolred	UGA			14.5					0 11 0			
DISSMETAL	Gery Bann, Dissolved	보 기 기			100			27.0		7.7			
DISSMETAL	Cardminm, Disnohed	מנות :			- 00004.0	23100 -		23800		* 00f0£			
DISSMETAL	Calcium, Dissolved				- F	11.11		11.5 01		4.9 U			
DISSMETAL	Chromiam, Dissofred				14.0	13.0		1.7 U		U.7.L			
DISSMETAL	Cobatt, Disarind				, A	17.10		2.5 U		2.5 U			
DISSMETAL	Copper, Dissolved	L'Sh			£33 =	432		67,2 U		Z :			
DISSMETAL		53			13.0	0.86 U) 44 C					
DESMETAL	Meserdon Disabilit				1830 J	7910		- 06.75					
DISSMETAL	Stanzage, Dieselved	15 0			9	326		2 :					
DISSALETAL	Merrary, Disact ed	3			D 110			3 = • -		29.0			,
DISSMETAL	Nickel, Dissolved	הפער הפער			7 6 6 7	1997		1 0237		4600 1			3
DESSMETAL	Potessiem, Dissolved	אלים ה			1066			0.00		חרים בי			0
DESMETAL	Schedom, Dissolved	. OC.			3 :	3 2		1.7 U		1.7 U			8
DISSMETAL	Silver, Ukstobed				976	0.00		14300)) ()			
DISSMETAL	Socijum, Dkmolved					211		2 17		=			2
DISSMETAL	Thatlium, Disselved				1 51	2		U 1,1		1.6.1			9
DISSMETAL	Yapadiam, Diryalved				36 U	3.3 U		10		43.0			5
DISSMETAL	Zirc, Dissilted	5	2.0	2) î		٠ :		2		
IERB	DALAPON		2	0.5 U			0.5 U		0.5 U		70		
188	DICAMBA	VCP.	35	150 U			150 U		D 55		2 :		
11598	NICPA	NO.	150 U	250 E			150 U		5 ; Si ;		2 ;		
HEER	MUTT NO SOPROP	UGA	1.5 U	2.5 U			1.5 U		7.3 C		7		
			•										

19/1064 19/1065 19/1065 19/1064 19/1064 19/1065 19/1			Sample ID: Sample Depth:	W55W20	COZMSSM	12 W2	WSSW21	5W22	WSSW22	CANS	WSSW	5471
1.3.24 Fortication to the control of the control	Group	Parmoneter	Sample Date: Units	15/10/93	10/10/95	(MIN)	(Bridge)	F6/01/0F	(0/1093	10/10/95	10/10/95	
1.3.7.9.FERTATION CONTINUES AND CONTINUES	Distr	13.7.6. DETRATTIL ORDNINGSWED-GOODS	3			;						
13.72-pack/trottonomescorpusary	DIOXIN	13.7.8.1 CTRACHLORUDIBENZUFIRAN	5			2 5		= : = :		=		2
March Marc	DIOXIN	1,1,1,1,8-PENTACHLONODIBENZOFURAN	NGC.			2 X		2 ;		⊃ : 2 :		2
March Marc	DIOXIN	1,3,7,8-PENTACILLOBODIBENZO-p-DIOXIN	NGT			= = 2		7 :		2 2 0		*
1,1,1,2,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1	DIOXIN	1.1,4,7,8-PENTACHLORODIDENZOFURAN	ZŠ.			2 52		2 x		0 2 2		∷
A CATACATACATACATACATACATACATACATACATAC	DICTION	111,4,7,4 HEXACILORODIDENZOFURAN	NGT.			2 2		2 = 2 X		9 7		A :
A. A. A. A. A. A. A. A. A. A. A. A. A.	DIDXIN	1,1,14,7,2-HEXACIII.ORODISENZOFURAN	NGA			1 22		2 %				2
1.3.5.5.5.18.2.4 1.3.5.5.5.5.5.5 1.3.5.5.5.5.5 1.3.5.5.5.5.5 1.3.5.5.5.5.5.5 1.3.5.5.5.5.5.5 1.3.5.5.5.5.5.5 1.3.5.5.5.5.5.5 1.3.5.5.5.5.5.5 1.3.5.5.5.5.5.5 1.3.5.5.5.5.5.5 1.3.5.5.5.5.5.5 1.3.5.5.5.5.5.5 1.3.5.5.5.5.5.5 1.3.5.5.5.5.5 1.3.5.5.5.5.5.5 1.3.5.5.5.5.5.5 1.3.5.5.5.5.5.5 1.3.5.5.5.5.5.5 1.3.5.5.5.5.5.5 1.3.5.5.5.5.5.5 1.3.5.5.5.5.5.5 1.3.5.5.5.5.5.5 1.3.5.5.5.5.5 1.3.5.5.5.5.5 1.3.5.5.5.5.5 1.3.5.5.5.5.5 1.3.5.5.5.5.5 1.3.5.5.5.5.5 1.3.5.5.5.5.5 1.3.5.5.5.5.5 1.3.5.5.5.5.5 1.3.5.5.5.5.5 1.3.5.5.5.5.5 1.3.5.5.5.5.5 1.3.5.5.5.5.5 1.3.5.5.5.5.5 1.3.5.5.5.5 1.3.5.5.5.5 1.3.5.5.5.5 1.3.5.5.5.5 1.3.5.5.5.5 1.3.5.5.5.5 1.3.5.5.5.5 1.3.5.5.5.5 1.3.5.5.5.5 1.3.5.5.5.5 1.3.5.5.5.5 1.3.5.5.5.5 1.3.5.5.5.5 1.3.5.5.5.5 1.3.5.5.5 1.3.5.5.5 1.3.5.5.5 1.3.5.5.5 1.3.5.5.5 1.3.5.5.5 1.3.5.5.5 1.3.5.5.5 1.3.5.5.5 1.3.5.5.5 1.3.5.5.5 1.3.5.5.5 1.3.5.5.5 1.3.5.5.5 1.3.5.5.5 1.3.5.5.5 1.3.5.5.5 1.3.5.5 1.3.5.5.5 1.3.5.5.5 1.3.5.5.5 1.3.5.5.5 1.3.5.5.5	DICKIN	1,1,1,1,1,1.HEXACIII.DRODIBENZO-potoxin	NGA.			2		2 %		2 2		Q I
1.2.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.	DYOXEN	I.A.A.A.F.F.KACHI.OROPIBENZO-P.DIOXIN	NG/L			? 5		2 ;		o :		23
1.3.44.54.1817.01.00019872.0418.04 No.2.	MOXIN	1,1,1,7,8,9-HEXACHLORINDIBENZO-P-OIDXIN	MCA.					5 5		⊋ ; A :		2
1.3.4.5.4.5.1.5.1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0	DIOKIN	22,44,74-HEXACIII.OROXIDENZDFIIDAN	NCA.					3 3		n ::		22
1.2.A.A.D.	PICKIN	1,2,3,7,4,9-HERASCHLOROPIDENZOFURAN	STR.			; ;		9 ;		⊃ : \$;		~
1.1.5.7.5.4.HEFTOR CORDENS CORP. 1.1.5.7.5.4.HEFTOR CORDENS CORP. 1.1.5.7.5.4.HEFTOR CORDENS CORP. 1.1.5.7.5.4.HEFTOR CORDENS CORP. 1.1.5.7.5.4.HEFTOR CORDENS CORP. 1.1.5.4.7.5.4.HEFTOR CORP. 1.1.5.4.7.5.4.HEFTOR CORP. 1.1.5.4.5.4.HEFTOR CORP. 1.1.5.4.5.4.HEFTOR CORP. 1.1.5.4.5.4.HEFTOR CORP. 1.1.5.4.HEFTOR CORP. 1.1.5	DIOXIN	1,1,3,4,6,7,6-HEPTACHLORODHBENZUFURAN	NGS			3 =		9 ;		3 6		=
1,1,2,1,2,1,2,1,2,1,2,1,2,1,2,2,1,2	MIXORD	1,2,4,6,7,5-HEPTACHLOROOMENZO-p-DIOXIN	552					9 2		23.0		7
OCTACILLOROPORESZORIIA.NA NGZ 1.12-15-17-16-10-10-10-10-10-10-10-10-10-10-10-10-10-	NIXOIQ	1,1,1,7,1,1,11EPTACHLORODIBENZOFURAN	NGA			9 5		2 2		25.0		22
1.7.1-FTERACHIAGORIENSKAPERIAN No.21	NIXOIG	OCTACHLOBODIBENZO-p-DIOXIN	200			200		9 5		72 0		ä
1.7.4.7.PRACHIGNEDIBERIOR ACTION No. 27 1.2.4.7.PRACHIGNEDIBERIOR IKOIO	OCTACILLORODIBENZOFIRAN	28			9 5		7 5		□ :		Ā	
1.3.2.4.173.0.010.010.010.02.010.03.01.03.0 1.5.0.00.00.00.00.00.00.00.00.00.00.00.00	NIXOIO	1,1,1-TETRACIILORODIBENZOFIIBAN-CI3	NGA					= 7		9 9		3
Authorities Charles 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	MXOIG	117.1 TETRACIILORODISENZO-PDIOXIN.CI3	NGT			: \$		2 5		3 :		2
1	MIXON	1236.74-HEXACHLORODIBENZO-9-DIDXIN-C13	NG/L			:		\$ 5		2 :		2
Mainten, Description of the control of the contro	DOXIN	OCTA CHLORODIBENZO-P-DIDXIN-CH	NG9.			: =		8 2		3:		£ :
March Marc	DISSMETAL	Albert Joseph Control ved	UCA	1130	36 62	•	16.4.1	:	1 7 6	•	į	\$
Column Description Colum	DISSMETAL,	Andmony, Oktoolved	UCA.	1 141	97		146 U				= m/	
Containing Description Containing Descript	DISSNETAL	Amerik, Dissoland	UCA.	0.61	4		13 (2)					
	DISSMETAL	Barlum, Dissolved	UCA.	7861	8		53.3.7					
12 Cathonian District Contains 12 12 12 13 13 13 13 13	DESSIETAL	Bery Bun, Obsuhred	LICA.	0.18 U	0.11		0 10					
11	DISSNIETAL	Cachnium, (Nasalved	NEAL	2.7 U	2.7		2.7 10					
1972 1972	DISSMETAL	Calrium, Démoived	D.C.T.		1770 08		7,600		753111 -		0 /2	
17 Capital Desired Capital Capit	DISSNETAL	Chracilum, Dictolved	DGA.		=		=		11 7 5 1		- 1877	
13.0 14.0 15.0	DISSAIFTAL	Cobalt, Démoired	LCA.	1.7 U	2		2		2 6 6		1 in	
17.1 17.2	DISSMETAL	Capper, Dissolved	rsn regr	13 U	1.49		0.61		2 - 2			
17.1 Magness Disorted UGCL Cold Co	DISSNETAL	Iron, Désselved	וופער	D 12	11.92		501		9 1			
Marganesian Distance Marganesian Distance	DISSMETAL	Lead, Dissolved	TON	0.16 U	010		0.44.0		11 911 0			
Victor V	DISSMERAL	Negreciem, Disselved	רפת		6515.41		6270 =		- Q119		1 1 1 1	
March Marc	Olecuser A.	Principal Control (40)	750	- 9'T	46.73		- F'(#		11.9		11.	
TAL Paragian, Disposing UGAL Solid Sign	DISSMETAL	Allerany, Laboured	To Co.		.		O Bud		0 11 03		(A) (E) (B)	
TAL Section District 130 130 1310	DISSMETAL	Description District		3	53		S.9 U		3.9 U			
TAL Sedium, Disabted 1.3 U 1.5 U 1.7 U 1.8 U 1.7	DISSMETAL	Colonian (Nambout	7500	1 0090	3631.41		122		3330 5		e330 -	
TAL Sedium, Usardered Li U List Li	DESMETAL			a :	<u>.</u>		- C.		1.6 J		14.	
TAL Thailinn, Hondvoid TAL Thailinn, Hondvoid TAL Thailinn, Hondvoid TAL Thailinn, Hondvoid TAL Thailinn, Hondvoid TAL Thailinn, Hondvoid TAL Tall TALL	DISSNETAL	Sadum, Ulysof-rd			2 6		1.7 U		1.10		1.7 U	
TAL Vandum, Bistocked UGAL L. U L.	DISSNETAL	That im. Headyed			15,451		162XD		10119		T EKIŽŽ I	
TAL Zinc, Discalved Lil	DISSNETAL	Vapadium (Marahyed	100		<u>.</u>				T) •	
DALAPON	DISSNETAL	Zinc. Olssahred	200) : :	3 :		5 ·		2 7		2.1 U	
DICAMBA NCPA NCPA NCPA NCPA NCPA NCPA DICIILUROPROPROP DICIILUROPROPROP DICIILUROPROPROP DICIILUROPROPROP DICIILUROPROP DICIILUROPROPROP IILUROPROPROP IILUROPROPROP DICIILUROPROPROP DICIILUROPROPROP DICIILUROPROP DICIILUROPROPROP DICIILUROPROPROP DICIILUROPROPROP DICIILUROPROP DICIILUROPROPROP DICIILUROPROP DICIILUROPROPROP DICIILUROPROP DICIILUROPROP DICIILUROPROP DICIILUROPROP DICIILUROPROP DICIILUROPROP DICIILUROPROP DICIILUROPROP DICIILURO	HERB	DALAPON	100	3	•	:	<u> </u>		3 12		305	
MCPA MCPA 45.0 05.0 MCPP 230 U 230 U 230 U DICHIL DROPROP 150 U 230 U 230 U DICHIL DROPROP 1.5 U 230 U 230 U RR 7Z/M24 XI.S PCQC 1 30 2.5 U 2.5 U	HERB	DICAMBA	101			- :		3 D		3 C		9
MCPP DICHLUROPROP BICHLUROPROP BICHLUROPROP BICHLUROPROP A 250 U 250	ILERB	NCPA				1 50		0.5 0		0 \$ 0		0 6 0
BICIIL DROPROP 250 U 250 U 250 U 250 U 250 U 250 U 250 U 250 U 250 U 250 U 250 U 250 U 250 U 250 U 250 U 250 U	ITERO	NCPP	300			D 007		720 C		250 U		= 95 55 7
RR.727/024.XLS	ILERB	DICIILUROPROP				007		1 052 1 052		250 U		D (K)
RR.727/024 XL.5								U. C. Z		2.5 U		2 2
		48 72/024 XLS		Desc.	2							1
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				CORE	SW/00	9.38	BWIO	II.M9	BWII	BW12	BW12
			4CWS42	SW2	WSSW2S	\$W26	WSSW26	SW23	WSSW11	82.MS	WSSW28
		Sernole Depth:	0100	20	0 210	3	2	Điể	010	0.31	011111
		Sample Date:	10/10/95	10/10/95	IO/IIIP)			KVI I AS	10/11/95	EV 179	10/11/95
	Parameter							İ			
				=		110		20		0 01	
DIOXIN	2,1,1,FTETRACHLORUMBENZO-PDIOXIM	אני היינו		• <u>•</u>				f IIno		<u> </u>	
MXQIQ	1,1,1,1-tetrachlorobidenzofuran	100		25.5		13.0		12 U		25 U	
NIKOIO	LLS.1.2.PENTACHLORODIBENZOFUZAN	Z D		2		25 U		25 U		n n	
DICAIN	1,1,1,1,4.PENTACIILOROOIBENZO-P-DIORIM	202		2		25 U		23 U		23 U	
NIXOID	11.4.7.8.PENTACIII.OROOIBENZOFURAN	2		0 52		Ħ		25 U		13	
DIOXIN	1,1,3,4,7,0-HEXACHI.OROMINENZOPURAN	552		2 2		23 0		U 25		n 62	
DIOXIN	1,1,14,7,E-11EXACH,ORODHENZOFURAN	3 5 2		2 2		2 22		23 U		23 11	
DKIXIN	(,,,,d,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1		1 1		= 5		33.0		13 (1	
NIXIN	1,2,3,6,7,5-II EXACHIAN BENZO-P-DRIXIN	7.7				2 22		73 U		3\$ C	
DICKÍN	122729-HEXACIILORODIBENZO-P.DIUXIN	3 5		2 %		1 22		25 C		15 10	
DICKIN	2.1.4.6.7.E siexaciilorodibenzofuran			; ;		2		32 C		22 C	
DICKIN	I,Z,Z,Z,B,HEKACHLORODIBENZOFURAN			2 2000		0.010.0		0.02 U		U.021 U	
DICKIN	LALAGA BREPTACHLOROPIBENZOPURAM			1 1000		13.0		□ \$ 2		72 U	
DIOXIN	LALAA, JAHEPTACHLUROODBENZO-P-DIOXIN			2 2		J \$2		25 U		75 U	
PIOXIN	12.14.18.4-HEPTACHLURODGBENZOPUBAN			047.0		D EMS I		0 635 J		0.597 J	
NIXON	OCTACHI. DRODI BENZO-PIDATA	NGA		3		28		¬		⊋	
DECKEN	OCTACHLURINGBENZOFURAN	NCA.		3		ř		7		33	
MXOIG	11.7.3.TETRACIII, D.ZOPABENZOFUKAN-CI 3	557		=		*		\$		7	
NIXCIO	13,12 TETRACIII.0RODIBENZO-PUDAIN-CI3	200		7		\$		69		22	
NIXOIG	113,6,7,8.1EXACHLORUOIBENZO-POIOXIN-C13	100		1 =		7		5		Ç	
NIKOIO	OCTACHLORODIBENZO-PDIOXIN-C13		11.00	:	43.5 U		O £.30		D 081		- 161
DISSAETAL	Attendese, Dissolved	100	1460		14.6 U		14.6 U		14.6 U		7 2 2
DISSASETAL	Antimour, Distrated				1,2.1		171 61		L9 (J		3
DISSMETAL	A restrict, Dissolved	5	410		1 678		1		1		- : - :
DISSMETAL	Berinna, Dienotved	NG.	0.110		D.10		0.11		a :		n : 1
DESMETAL	Berythesta Dissolved	1550	2.3 U		2.7 U		2.7 U		2.7 U		7.7
DISSMETAL	Cadenjour, Distorred	NGA	30800		33400 =		- 0527		- D91L		
DISSNIETAL		HCA.	U 7.71		(D 6:91		D 8:		= :		= :
DISSMETAL		750	11 T		I.3 U		., U		0 (1		
DISSMETAL		S	2.5 U		2.5 U		J 1.7		7		0 0
DESMETAL	Copper, Daniel red	UGAL	774		2 X		46.5 U		172 =		107
DISSMETAL	Free, Disserved	2	0.86 U		0 65 0		3 91 0		D 98 0		9 4
DISSMETAL	Lend, Ukspired	1521	1910 J				1440		1470		1 (1/4)
OTSSMETA 1.		155	- 161		Ä.		1 00		351 =		77
DISSMETAL	Nishgapene, Unison to	UCA	0 E		5 8.0		0.1				= =
DISSMETAL	Appropriate Notes and Appropriate Appropri	UCS.	3		0 4.01		5.9 U		29.0		767
DISSATETAL		UGAL	5710 -		- 953 - 20		22,570		700		
DISSMETAL		DGA.	13 01		ID 61				= : 2 :		
DISSMETAL		UCA	2 61		1.7 U		-2				
DESMETAL		UCA	1 1600 1		138		1250 U				
DESMETAL	Society, Course of	UCA	3 1 1		n = 1) []		• : • :		=======================================
DISSMETAL		LGT.	1,1 U		1 €1		ə :) 		
DISSNETAL	Valuations, conserved	UCA.	0 6.7		1.5 U	,	3.1 C	•	2 2 2	Ţ	
DESMILIAL	THE THEORY	150		3.0		7		0.5			
9311	DALATON	UCA	_	0.5 U		0.5 C		3 6 6		5 5	
	UICARA	3 3		O 027		⊋ : 9:		250		200	
150		UCL		D 052		O 052) 		2 2 2	
i i i		KZ	_	2.5 U		2.5 U		0.07		;	
4544			•								

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		Station (1):	EWI1	BW13	BWI4	BWI	BW15	BW(5	BWIS	BWI6	CIMB
		Sample Death:	0000	WSSW79	54.70	W.25.W.10	SW31	WSSWII	5 M 53	WSSW12	SWIJ
Group	Panakkr	Sample Date:	tori 1/95	IQ11A3	10/11/95	1011793	TOTAL PS	040 d 4011/04	0 to 6 10/11/25	0 to 0	000
											} !
DIOKIN	2,3,2,5-TETRACIILORODIBENZO-p-DIOXIN	NCA.	0 6250		=						
NOXIN	13,7,8-TETBACHLORODIBENZOFUBAN	NGA	٦ 0		2				0 0		110
NIXING	LAST PENTACHICIE DIBENZOFILLAN	ZG.	13 U		13 u		2 5		1 (100		
DIOXIN	114.3.PENTACH DOORRENZHINEN	NGJ.	23 C		n 12		73.0		1 0		I dfall
DIOXIN	113474-HEXACH ORODISENZOFIDAN	j s	⊃ ;		⊃ £		72 C		0.014		
NIXOIO	LAJA, J. SIEXACHI, ORGINEENZOFURAN	ACA.	2 2 3		⊃ X :		0 0		0 000		1 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
DIOXIN	1.2.1.4.7.3.HEXACHLORONBENZO. DIOXIN		2 7) 13.		33 U		0 9 la B		
CNOXIN	1234, 14 HEXACHLORODIBENZO, P. DIOXIN	J S	2 2		2 2		_ 52		O 613 C		
DIOXIN	123749-RERACIILORDDIBENZO-P-DIOXIN	S	0 X		: c		0 1100		0.9		0 123 U
DICKEN	23,46.74-HEXACIILORDBIBENZOFIIRAN	N.	2 2 2		- F		00110		0		0134 U
DIOXIN	12,3,7,8,9-(1EKACIILORODIBENZOFURAN	25%	2				7 F		0.014 12		D 5210
DACKIN	1,2,3,4,5,7,4-HEPTACHLORODIBENZOFURAN	52	0.150		2 2				0 02 0		0.119 U
NIXIN	LLA, A.A., T. H. F. P. T. A. C. H. ORCH MENZO-p. DIOX IN	NCJ.	T [NO) n		1 11		7 . 2 .		0 EE 0
MIXIN	LJ.J.4.7.8.9-HEPTACHLONOPIBERZOFURAN	NGA	23 C		2		=======================================		3 : C :		- - -
NIKOIO	OCTACHIO ROPIBENZO-P-GIOXIN	MGAL	1,225,1		1 (141)				70		÷ 17:0
Nove	(R.TACITLORODIBENZOFURAN	NG.	8		3		5		1 7770		1.135
NIA DIG	44/4-12 RACIBLORUUMENZOFURAN-CI)	NCA.	£		Ç				2		o ;
DICKEN	AND CHEMINATED SERVICES AND CONTRACTOR OF THE CO	NG	\$		\$		*		. 3		នះ
PIOKIN	PARAMETER AND AND AND AND AND AND AND AND AND AND	NGA	s,		3		3		ę g		2 :
DISSMETAL	Abraham Deckard	20 1	\$		Ç		63		: #		9 5
DISSAILTAL	Androom, Obsolved	735		63.8 U		61.6 (3		13.1 U	!	163 U	:
DISSMETAL	Arresis, Disselved					14.6 U		14.6 ()		14 & U	
DISSACETAL.	Barium, Dizzdved	3 55		- F		0 61		0 1.1		9 1	
DESSMETAL.	Derytlism, Dissulved	IG.				7.6		121		16 3 1	
DESMETAL	Cadmium, Dissolved	CC.		1.7 U				1170) !	
DISSMETAL	Calcham, Dissolved	UCAL.		7110 =		7360		0.70		1,10	
DISSMETAL	Chromaten Dissolved	LCA.) 		5 8 7		- 0750		- 6279	
DESMETAL	County Mandred	<u>5</u>) (i		2.2		2 2			
DESMETAL.	Los. (March of	3 5		יז כ		1.2 U		13.0			
DESMETAL	Land, I Washing	5 5		D 7 66		11.3 U		41,3 U		14.4	
DESTABLICAT.	Magnesdam, Dissalt ed	5				5 yra		1 48 0		OW to	_
DISSMETAL	Mange serve, Disnotred	UCA				2,310 J		26.70		2540.5	U
DESSMETAL	Niercary, Depoyed	TICAL.		D 11.0				9 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6		33.4	•
DISSMETAL	Nickel, District ed	UCA.		1.9.10		3.9 (2		100		3 5	
DISSMETAL		<u>z</u>		1 0116		2450 U		1 0501		177	۷
DISSMETAL	Silver, Disabled	3		n []		1.3 U		13 EL			J
DESNIETAL.	Sodium, Digashred	3		.,		I.7 U		1,3 U		i =	•
DISSARETAL	Thatium, Disched	5 5		2110 CJ		LU OWN		7 0616		1 000%	
DISSMETAL	Vanadlam, Dismired	3 5				D :		0.87		- III	
DESSMETAL	Zher, Olssoi ed	25				n ;		0 1.1		2	
HERB	DALAPON	DCA.	3.0		:	0 1.6	;	5		3.7 U	
ERD:	DICANIBA	NGA.	0.50						ח ר		3.0
	NICHA	COCK	730 U		2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		2 5 5		n 50		010
	AICPP	rion Oct	250 U		230 U		2 5		000) (KI
I DE KB	UCITOROPROP	rig NGF	2.5 U		25 U		23.5		2		D 351
					1		2		0.57		73.0





		!		į	,	6) Divis		2000	90/19	21 24 25	61A/B	
			1108	Weewin	WSSWITA	3	*C#55#	SW35	SWISA	SW35D	W55W35	
	t		66.6	000	9	990	O IN C	000	990	3	0 10 0	,
	4	Sample Dak:	56/11/01	10/11/01	I	10/11/05	10/11/95	10/11/95	10/11/95	10/11/95	1(V11,F15	
Group	Paracter	다 다						ŀ				
		200	1 (5)			9		0 025	0 600	11 RZU 0		
DIOXIN	23.7.B.TETRACIII.ORODIBENZO-P-DIOXIN	NCS.				7 100		0 000	0.016	9		٢
MOXIN	23,7,8-TETRACIII.ORODIBENZOFURAN	TON.	11 14			33.0		1 52 1	0000	2		
DIOXIN	1,3,3,5,FMTACHILDXOURPERCUPURAN	Ş	2			23 U		25 U	1 Ma	2		
DICKIN	I ANA PENTACHLUKUBBENKU-PERTAKA Talah merapa dan dadam menadah ban	Ş	2 2			23 U		23 17	0044)	23		
NOXII.	A A A A CONTRACTOR OF THE CONT	25	0.009 U			ПО		D 2002 U	0 040 D	00 m		
NIXON.	A A A SHEW CHILD OF THE SHEW CONTRACTOR OF TH	NCA	0.006			D 000		# C	D #00	:		
	12.14. FEEACHTOROUGHENZO-POIOXIN	NGA	25 U			0 6000		х Э :	D 1500	# :		
NINDRI	1 1 2 4 E HEXACTI DECIDENZO PODIN	NGL	0 014 U			0.015.1)		00	Onst U	:		
	LATE A MEXACULT OR DIRECTOR PRODUCTION OF THE PRODUCT OF THE PRODU	NG.	0.0			0.016.0		D 6000	D 000	я;		
DIGITION	NATITION OF THE MANAGEMENT OF THE PARTY OF T	Ę	70			0.000		= : ::	n 250 ci	Ω;		
	- 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2	NLM.	n mano			23 62		2 :	A SHOOL	5		
Proper	1.2.14.6.1.4.HEPTACHLORODIBENZOFURAN	NGA	0.024 U			0 1600 0		o croo	0.000			
NO TO THE	1 2 14 6 1 E HEPTACHLOROMBENZO-DIOXIN	NCA.	25 U			• : •) 	0000	2 4		
Niger	1.2.14.1EFTACIII.DRODIBENZOFURAN	NG.	2 5 U			2 .		□ ::	0.000	9		
NI OIL	CHITACHLOROUNENZO-POIUXIN	NCA.	20			0 669		0.192. J	1 43	5		
NO NO NO NO NO NO NO NO NO NO NO NO NO N	OCT A CHILDROM SENZOFUZAR	502	⊐ 91			9 9		3 :	= 9	2 4		
NI ASSE	2 1 1 & TETRA CHI ORODIBENZOFURANCIS	HC/L	31			5		2 :	я :	; ;		
NI TOTAL	2 1 1 TTTRACILLORUCKBENZO-DIOXIN-CI3	NCAL.	¥			5		х;	; ;	5 5		
NI CIG	13.6.7.2-HEXACIILURODIDENZO-P-MOXIN-CI3	YCX.	Ę			2		۱ ۲	6 7	7 7		
M KOJO	OCTACHIORODIBENZO-POIOXIN-CI3	Se	F	;	:	2		2	:	•	0.1.1	
DESMETAL	Ahundenn, Dizada ed	NCA.		72.6 U	0 171						791	
DISSMETAL	Anthony, Dissulved	5		1991	5 .		200				200	
DISSAGETAL	Armenic, Dissolved	3	_		3 2		13.6.1				12 17	
DESSMETAL	Bartam Dissolved	3		75.0	7, 6		3 10				0.11.0	
DISSMETAL	Dery Mum, Disadved			210	14 0		2,7 U				1.7 U	
DISSAIE TAL	Cadadum, Disoland	THE STATE OF		1 0027	1930		3710 1				1930	
DESMETAL	Calcium, Disposed			21.1	2		0.11				O E 'I	
DISSNETAL	Chroniton, Distorted	UCAL		1.7 U	U 5.1		U 7.1				5 t'1	
DISSAIETAL	Coppet, Lationwell	UGA.		1.2 U	0.71), I				0.27	
DESMETAL	Logical Decision	HCM.		33.9 U	0 1' 1) [0 6,74	
MCCMETAL	Cond. Disabled	LKZI.		0 88 0	0 65 0		O 46 U					
DISSMETAL.	Nterenciam, Dissohred	UCAL		- 005	1360		1220				. 9%	
DISSMETAL	Nanganese, District	ncv		0 2 0							0.16	
DISSMETAL	Mercury, Dissofted	הלק הלק									0 6 S	
DISSMETAL	Na.Ld. Dissohred				- 900		1 1941				1600	
DISSMIETAL	Potassium, Displayed	10 A			11.00		3				1.3 D	
DISSMETAL	Sekspiush, Disastrad			2 :	: :		0 61				U (,)	
DISSMETAL	Silver, D'andred			1091	1220		1 0Z/4				6730 J	
DISSAILTAL	Sodium, Diamined			7	7 17		1.8 U				5 F.	
DESTAL	The stillers, Dissurved	5		n -	0.11		D 1:1				7	
DISSMETAL	Venudlem, Disselved	100		O •~	n 11		24.0				13 [
DISSMETAL	Zioc, Distributed	E.C.	- -	•		2		2 €	3.0			
HERB	DALAME	NGA.	0.50			0 0 0		0.5 U	010			
IERB	DICAMBA	UCA	S			3 OC		250 U	250 C			
112.00	DALTA	UCA.	130 U			3 to C		29II U	= 0 X 1			
O MAIN	DICHLORUPROP	UCA.	1.5 U			2.5 U		1.5 U	⊐ . ~			

		Stational D.	BW19	8W8	BWZ	0000	12.00	1		ļ
		Sample 1D;	WSSW3SA	WSSW35D	SW36	WSSW36	SW3)	WESWID	17 MG	PT MS
		Santyde Depth:	2	9	0 10 0	0 in 8	0 00 0	C to C	0000	10 M (1)
Graup	Parameter	Semple Dete: Units		10/11/95	10/12/95	(6/17/8)	10/12/95	56/21/01	11/12/95	10/12/95
N										
NI TOTAL		5			= 9		4 (89		= =	
CIOXID	12.1.2.PENTA CILI ORDINIENZOFIBAN	200			⊋ : 9 :		n 0		□ 0	
DIGKIN	12.1.1.4. FENTACILLORODIBENZO. P. DICKIN				52 :		2 2 U		∩ s t	
DICKIN	23,4,7,8-PENTACIILORODIDENZOFURAN	512			= = : :		72 C		15 U	
DIOXIN	1,1,14,1,4-HEXACHLOROPIBENZOFURAN	NGN			3 F		2 3		13 U	
NIXOID	1,2,34,14-HEXACIILOBODIBENZOFURAN	NGN			7 7		n :		0.0	
DIOXIN	1,2,3,4,7,HEXACIILORODIBENZO-p-DIOXIN	NO.) ; ;		o ;		30	
DIOXIN	1,2,3,4,7,8-IIEXACIILORODIBENZO-P-DIGXIN	KG.			9 3		0 57		73 N	
DIDXIN	123,749-HEXACHLORODIBENZO-P-DIOXIN	200			2 2		2 :		9	
CITUALIN	1.3.4.8.7.8-HEXACHLURGIDIENZOFIRAN	N.			2 2) 			
NIKON	1,1,1,1,1,1,0,0,1,0,000 (BENZOFURAN	NGA			2 2		1 1		25 -	
DICKIN	I,J,J,4,4,7,JHIEPTACIILORODIBENZUFURAN	NGA			2 k		0 0 0		22	
MXON	1,1,1,4,6,7,1-HEPTACHLORODIDENZO-p-DIUXIN	NG.			2 %		0 174 0		0 6200	
DIOXIN	1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,	NGL			25.0		, ,		5 : 2 :	
DIGKIN	OCTACILLORODIBEXTO-P-DIOXIN	NG4			0.88		200		0 - 550	
DIOXIN	OCTACIILDRODIBENZOFURAN	NG.			. D.		- 5		1 1917	
DIOXIN	23,7.4 TETRACIII.ORODIBENZOFURAN.C11	NCA.					2 5		⊃ 8	
DIOXIN	23,7,8-TETRACIILORODIDENZO-p-DIGXIN-CI J	3			7		: 4			
DIOXIN	1,2,3,6,1,8-HEXACITLORODIDENZO-p-DIOXIN-CI3	NGA			2		. 2		^	
NIXCIG	OCTACHLORODIBENZO-p-DIOXIN-CIJ	NGL			2		. #		2 3	
DISSMETAL	Abusticum, Chaolved	ž	35.7 U	70 11		23.6 U	•	15.2 U	₹	33.1.11
DESMETAL	Antimosp, Nisotred	5	14.6 U	9.51		146.0		146.0		2 4 4 4
DESSMIETAL	Arsende, District		5	4 .		1 1 %		7.7		
DISSMETAL	Derlant, Disselved	Z Z	O 801	9 :		33,2 1		7.87		
DESMETAL	Bery Danz, Dennived	5	0.1 9 U	0.t		0.18 [J		0 10		110
DESMETAL	Codmium, Disselved	מכע	2.7 U	7.7		U 7.5		2.7 U		7.7
Dissmiriat		750	- 05 20 20 20 20 20 20 20 20 20 20 20 20 20	1977.79		£720 =		= D\$68		* 0.00
DISSMETAL.	Chromitan, Utacoved	Ş	3	=		5		0 11		3
DISSMETAL	Commercy Dissertion	5 5	7	2		D #:		2.5 U		0 81
DISSNIETAL	fran, Dissabred	3 5		[]		1.1 L		5.3 ()		33.0
DISSMETAL	Lead, Disselved	NCA.	1 910	979		37.7 U		35.2 U		=
DISSMETAL	Magnetium, Dissolved	NGY.	7 005	1324.19		0 0 0 m		0 10 0		- 41 - 1
DISSMETAL	Manganese, Dissolved	UCAL	1.10	36 28				111		
DISSMETAL	Mertury, Dissolved	ron Ton	0 H O	=======================================		1 10				41.2
DISSATETAL.	Netel, Disselved	T _C T	3.9 U	5.9		5.9 U		1161		
DISSMETAL	Pulestium, Disselved	UCA.	7 089	7115.7		U 0022		2 2 2		11 122
DISSMETAL		<u>5</u>	200	2		2		3		
DISSMERAL	Surer, Chalored	ECJ.		.,		U 7.1		17.0		= = =
DISSMETAL	Sodium, Dignarical	rcy.		6757 62		7210 1		1 48.27		1 07.22
DISMIETAL		r S	1.8 10	5		(1 1 1		=======================================		3
DISSMETAL.	Vanadeum, Introduct	5	0 TT	=		25.0		241)		: =
DISSMETAL	Ame, Distanced	75	D 1.2	212		3.0		43.0		: -
	BALATUN	5			2.0		2 0		2 0	: :
	DICANBA	<u>5</u>			0.5 U		0.5 U		n 5 0	
		5			280 0		33 GC2		230 U	
		1			130 C		350 U		350 U	
1		3			73 U		1.5 U		1.5 U	





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		Station10:	DAG.	0.00	BWO	BWDI	EWG.	BWUZ	BW63	BWill	BWDA	BWIM
		Sample ID:	5W17		_	WSSWITA	liw2	BLASSM		61.M.SS.M	27.55	CHEAS
		Sample Depth:	0 010	0010	980	000	O to D	2	9 110	3	0 11 2	5 E
,		Sample Deter	10/10/23	KYID95	10/10/95	10/10/05	254143				Complete	Cartin
d comp	Paraster	130	2.5 U	2.5 U			2.5 U		25.0		2311	
9831	CHACK IN A TITLE	5	0.5 []	010			0.50		0.3.0		0.50	
	24.5 TITRICILIOR DIPLIENDA Y ACETIC ACID)	UCM.	0.5 U	0.5 U			0.5 E		= : :)	
	2,408	COC	2.5 U	23 U			25.0		25.0			
LEND	DINOSEB	DCA.	0 \$ C	n :			2		<u> </u>		3 =	
EFERD	14-DICHLDRUPHENYLACETIC ACID	5	2 1	:			; ;		=		73.0	
LLSVOA	2-NITROANELINE			2 5			2 2		0		20 01	
1.1.5VOA	DANIETHYL, PHYLATE		2 2	2 %			2 22		13 U		25 U	
1.1.5VOA	D.NITROANILINE		50	2 9			9		9 01		0.01	
LLSVOA	LE DINITRO I GLACINE	50	2 0	20			70		10 01		<u> </u>	
LLSVOA	ACEMANITIES AS ACCORDING TO THE PROPERTY OF TH	CREA	2	9 01			n oı		11 02		2	
LISVOA	2.4.DINTROPUEMOL	CGA	n 52	34 D			n ≎		⊃ :		2 2	
LISVOA	+NITROPHENOL	DCA.	25 U	12 U			n :		3 S		Q 5	
LLSVOA	DIBENZOFURAN	UC/I	2 9	<u> </u>			3 : 0 :		29		2 5	
LLSVOA	1,4 DINITROTOLUENE	ncv	9 :	9 :			2 9		2 9		2 9	
LLSVOA	DIETHYL PHTHALATE	T NOT	9 9	2 9			2 2		2 0			
LLSVOA		555	2 5	2 2			2 2		<u> </u>		2	
LI SVOA	ACTILOROPIEM TO THE MILE BATHER	5	23.0	73 C			13 C		12 C		13 U	
TSAOA 	AKITI KOANTUANE AA DINITBO-T-AISTI-YI PII ENDI.	EG.	23 83	33.0			73 U		25 U)	
1000	NINTERSOCIALISM	DCA	1 0	200			2		2 : 2 :		9 9	
LEVOA	4 BROWDMIENYL, PRENYL, ETHER	UCL	-	D 01			2 : 2 :		2 : 2 :		2 2	
14.5VDA	HEXACIILOROBENZENE	191 191	<u> </u>	D 01) 		= =		2 -	
LLSYDA	PENTACILLOROMIENOL	וכע	? ∩))) ;				7 9	
LLSYOA	PIENANTHEENE	מכיל	2 9	= :			2 2		2 =		2 2	
CLSVOA	AMTHRACENE	15.7	2 5	2 9			9 9		n ou		50	
LLSVOA	CARDAZOI.E		2 2	2 2			2		20		20 03	
LISYOA	Displity Millary It	701	חמ	2 9			n oi		n al			
LISYGA	FUURAMINEAE	CICA.	DOL	200			7 2		3		<u>=</u>	
1187014	RENEWS BITTY, MITHALATE	HGP.	n oi	2			10 C		20		□ :	
LISVOA	BENZOALMATIBATENE	DG7	0 01	9			0 i		2 :		2 5	
VOAST1	13. DICHTOROBENZIDINE	UGA) 10 10	⊃ : 2 :			2 9		2 2		2 2	
LISVOA	CURYSENE	. OCA.	2 5	2 2					9 9		2	
LLSVOA	MATHEMATICAL PRINTERS OF THE PROPERTY OF THE P			2 2			9		□ 81		0 0	
LISVOA	DISPLACEMENT INDANTHER	Ton	2	101			5 5		O 91		2	
LISVOA	BENZOCHILLURANTHENE	LCA.	9	10 N			⊃ : =		2 :		2 9	
LISVOA	DENZO(m)PYRENE	UGA		9 : 2 :) = 1		2 2		2 2	
LISVOA	INDENOLLLA-LAPYRENE	<u> </u>	2 5	2 5			2 5		2 2		9	
LLSVOA	DIBENZALIANTIIRACENE	Test	2 5	2 5			9		0		9	
LLSVOA	BENZÜGAJPERYLENE		2 F	2 %			3		. 2		ŗ	
TEVDA	1-FLIXIROM ENOU.		= #	2 #			3		11		R	
LISVOA	PIECOL-ES	nick.	: =	! #			3		33		2	
LLSVOA		500	: =	; ;			\$		33		\$	
1,5704	11-DICHLOROBERALINE-DA	500	: 2	: =			5		=		ê	
Trever		ron nor	3	2			\$		3		\$	
104911	2.4. Turphonionical	CCA	2	<u>\$</u>			2		а		E	

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		Station D:	BWD4	BWD	BWCIS	BWils	BWIX	NA.	T WALL	5	!!
		Semple 10:	~	WSSW/Zup	SW21	WSSW21	SWZ	W55W22	SW23	WSSW7	SW24
		Sample Depth:	9 9	2	010	9110	0 == 0	0 010	0110	9190	÷
Grade	Patrimeter	tlaits	10/10/95	S S S S S S S S S S S S S S S S S S S	11611803	SAHA!	KPIGPS	Steat (A)	IOY (UMS	ICP CIPPS	SEATION
HERB	2,4.0 (DICITLOROPHENOXYACETICACID)	UCA.					;				
HERB	SILVEX (2,4,5-TP)	55					9 5		7.5 U		1.5 U
HERD	14.5-T (TRICH), OROPHENOXYACETIC ACID)	EG.					2 2		0 5 0		010
HERB	2,4 DB	UGA			2		00		0 2 0		11 5 0
ItERB	DINOSEB	ונע.			2 2 6				2 2 2		2.5 ()
HEND	2,4-DICHLOROPHENYLACETIC ACID	UCA.			=		5		- - -		0.5 (
LLSYOA	2-NITROAND.INE	CCL			= 2				S: 2		S .
YDASTI	DIMETHYL PHTHALATE	LCJ.			2 5		2 5		2 :		25 U
LLSVOA	JAHTROAMLINE	DCA,			2 2		2 2		o :		⊃ 9 ;
LLSVOA	14-DINITHOTOLUENE	L'OO			2 5		9 5) (1)		2
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LLSVOA	ACTENA PRITITIONE.	TO()			2 2		2 9		⇒ ; Q !		7 0
LLSVOA	2.4 DINTROPHENDL	75H			2 2		2 %				7 02
LLSVOA	4-MITROFILEMU.	1531			25.0		2 X) : () :		⊃ :
1.15804	DIBENZORIKAN	. SEE			=		2 5		3 5		= : E2 :
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LEVOA	DIETHYL PITHIALATE	.CG.			9		2 9		2 :		
LLSVOA	P.CORENE	מכער			9		2 2		2 5		0 :
LLSVOA	4-Chlorophenyl Phenyl Ether	UCA					2 5		2 9		a :
LLSVDA	4-NITROANILINE	UGA.			: ::		2 2		2 :		2 : 6 :
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LISVOA	4-BROMOMIENYL PHENYL ETHER	725			0 01		2 9				2 5
LESVOA	HEXALISTORDEENZENE	חכטר			D 01		- -		9		2 9
LLSVOA	PENTACHLOROPHENGL	NCW.			2.0		2		; s		2 -
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11 570A	CABBLYDEE	DG4.			⊃		7 OF		(1 01		2
VOASTI	DI-BITTYL PHTHALATE	100			⊃ : 9:		<u> </u>		10 0) <u> </u>
USVOA	G.CORANTIENE	1000			= : = :		⊃ <u>0</u>				10 C
LASVOA	PYRENE	501			- : - :		0 0		2		0 01
YOASTI	BENZYI, BUTVI, MITHALATE	200			2 :		D :		0.01		0 0
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2 4.D (DICHLOROPHENOXYACETIC ACID)											
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zabini popilibne.	CEN.	22		25.0		n≎		75.10		: X	
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		Station ID:	BWI7	BW17	£1.WB	E1 24 E	8140	61/8/0	9W 19	BW19	BW 19
		Sample ID:	SW33A	ILMSSW.	WSSWIJA	KAS 8	NEW28W	54/35	VILAS On a	SW350	WSSW35
		Sample Depth:	0000	0 40 B	<u>a</u>	1041A3	MIN	(AllA)	56/1/J	EVIT-PS	10/11/29
9	Percept	Units									;
ILERD	24-D (DICHLOROPHENOXYACETIC ACID)	T/D/N	0 5.5			7.5 U		2.5 U	2.5 U		
IERB	SILVEX (1,4.5-TP)	UG/J	0.3 U) i		0.50	050		
HERB	245-T (TRICHILORDPHENOXYACETIC ACID)	is i	0 \$ 0			5 5					
HERB	1,4 00	To To	130			7.70		0.50			,
IEBB	DINOSEB		7 E			<u> </u>		<u> </u>	; =		ر ۱
	14 DICHLOROMIENYSALETII. ALIB	55	- n sz) ? (23 13	73 C		٠.,
LESVOA		1/C/L	10 01			n 01		a <u>n</u>	10 ft		
115704		52.	25.0			25.0		32.0	⊐ £		
CLSVOA	24-1003-2010), (JENE)	EST.	0.01			O 01		=	n :		
LISVOA	ACENAMITIVE ENE	TEN.	0 01			<u> </u>) 2	n :		
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MAN		750	0			9 0		2	2 11		
LESTOA	A-DMINOIOLAEME	TO:	=			0 01		0.01	10 C		
LISVOA	HUDGRENE	חפע	9			<u> </u>		o :	<u>.</u>		
LLSVOA	4-CITLOROPHENYL PHENYL ETHER	CCC	2			2;		2 ;	2 F		
LLSVOA	4-NITRUANILINE	CCC	23.0			⊃ : # ;		7	3 7		
LLSVÖA	4.6-DINITRO-2-NETHYLPHENOL	NG4	1 1 1			2 5			2 2		
HSVOA	N-MITROSOBIPH ENYLAMINE	IKA.	2 9			9		2	2		
YOAST	+BEOMUTICATU FILENIE EMIEN	מפעי	9			D 01		1 0 1	D 01		
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CLSVOA	PIENANTHERE	T/On	D 01			70		2 : 2 :)		
LLSVDA	ANTHRACENE	NCA.	7 2			2 :		9 9	2 :		
LISVDA	CARBAZOLE	50	2 9			9 5		2 2	2 9		
11.5VDA	D1.B-BITYL PITHALATE		2 5			2		2	. 9		
FISAUY	FLUDRANTHENE		2 5			=		2	2		
IJ-SVOA	PYRENE		2			0		2	= 0		
LISYUA	BEACH DOING TO THE STATE OF THE SECOND OF TH	UCA	0			2		10 01	0 01		
VDAST1	3.7.DICH.DROBENZIDINE	UGA.	0 DI			9		101) 		
LLSVOA	CHRYSENE	100) 13			⊃ : £ :		2 9	=======================================		
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YOAST!		UGA	noi			7 CE		2 0	n 9		8
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LLSVOA	1-CHLOROPHENOL-D4		3 :			3 ;		2	: 5		
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LSYDA	NITHORENZENE-DS		* *			; 5 3		\$	•		
T.SVIDA	A	5	. 4			3		7	3		
LESVOA	A.A.D-TRIBKUNIOTIENNA.	i									

			B/W 19	BWI9	(R.M.B)	BW20	BW11	BW2I	BW22	BW11	
		Sample Deuth:	W35W33A	WSSW3SD	47.05 0.110	W35W36	SW17	WSSW37	ELMS.	WSSWIR	
į		Sample Date:		111/11/93	10/12/95	10,1269	10/12/93	INIZAS	0 to 0	0400	
diges.	Parameter	Units							!		
	S. E. DINGHEDRUPBENDAYACETIC ACID)	L'On			1.5 U		25.0		25 U		•
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LISUA					<u> </u>		O 03		D 01		
LISVOA		781			.) s		
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LISVOA	OI-0-BUTYL PIITIJALATE	201			- ; - ;		= : • :		n		
LLSYOA	FI.LIORANTHENE	55			2 9		7 : 0 :		>		
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T PAOY	BENZYL BUTYL MITHALATE	533			2 2		2 2) 2 9		
H-SVUA	BENZO(a)ANTHRACENE	75n			2 0		2 9		2 9		
LISYOA	13-DICHLOROBENZIBINE	1750			<u>ا</u>		2) = 2		
LISYON	CHRYSENE	UGJ,			2		0		=		
LLSVOA	BELLETH PLINEXYL, PUTHALATE	TON			n n		D 88		0		
AUXIO	DOMESTICATION OF THE PROPERTY	750 F			D 03		0 01				
LEVOA		5 :) 2) BI		2 27	3	
715704		100 m					2 0		O 01	Ü	_
LISVOA		75			⊃ : • !		<u> </u>		10 13	i 8	_
VOASTT	DIBENZALENATIBACENE				= : = !		3 3		2 5	3	
LISVOA	BENZUMALIZERYLENE				o :		= e		_ =	•	
LLSVOA	2-FLUOROPHENOL.	3 5					⊃ ≘ :		<u> </u>	3 !	٠,
LLSVOA	PHENOL-DS	3 5			2 8		# :		E:	GI	<u> </u>
LLSYGA	1-CHLOROPHENOL-UM	5 5			2 2		\$:		=	5	_
LLSYOA	IJ-DICITLOROBENZENE-IM	tiga.			2 7		s :		= 1		
LLSYOA	NITH OBENZENE-DS	25			- -		÷		24 1		
LISVOA	L'ELLOROBIPHIENY.L.	5			: 3		; ;		2 :		
YDASTI	1,4,4-TRIBROMOPHENOL	ncy.			\$ \$		2 2		3 7		
					;		2		3		





		L.Clariford	1000	i (A)	ju/nuj	BWG	BW02	BWIG	Ewo)	DWD1	BWIN	ВЖи	
		Semple ID:	SW17	VIIMS	WSSWIT	WSSWITA		WSSWIE	61AKS	MSSMIR	SW20	OUZAS	
		Sumply Depth:	0 to 0	0100	0110	0010	080	â	000	2	020	9	
		Sample Date:	18/10/63	10v10M3	10/10/93	10/10/95	10/10/95		(Alibas		6	Central	
Group	Parameter	115.0	F	=			æ		6		2	}	
TTSNOV		155	_ _	2			10 E		O 01		=		
10x011	MALCH ORDETHYLLETHER (PCHLOROETHYLETHER)	DCA.	9	n 0			<u> </u>) 		⊃ :		
TO VOTE	1-CILOROFIENOL	DCA.	18 U	D 01			2 : 9 :				9 5		
LSVOA	I-METHYLPHENOL (»-CRESOL)		2	9			:		2 = 2 9		2 2		
VOASTI	22-0XYBISH-CHURBOPROPANE	אסת	2	⊋ : 2 :			2 9		2 2		2 2		
MOVELL	4-NETHYLPHENDL (P-CRESOL)	ri i	2 : 2 :	9 9			2 2		2 2		2 2		`
LLSYOA	N.N.TROSOBLE-PROPYLAMINE	מביי	s : e :	a :			2 9		2 2		2 2		
LLSVOA	HEXACHLOROETHANE	5 5	2 5	2 :			2 9		2		2		٠,
LLSVOA	NITROBENZENE		2 5	2 5			2 2		2		0 01		
LISVOA	ISOPIIORGNE	1 5.71	2 9	2 5			2 2		3 2		9 81		
LISVOA	1.VITROPERNOI.		2 2	2 2					200		3 82		
LI-SVDA	14-DIMETRIMINATIONS	55	200	9			20		0.01		=		
CLSVDA		KG.	0 01	9			0 01		O 01		9		
TONOT		CCA	10 17	2			0.0		O 61		2		
LISYDA		CCA	(0 0)	9					20 01		<u> </u>		
LLSYDA		รีก	10 C	9			<u> </u>		ם מ		9		=
LEYUA		151	000	9			9		□		2		
40.517 10.52	A CHI DOG A MOTHYL PHEND!	155	0	n ol			<u> </u>	٠	⊃ 9 1		: !		
VOX.	A APPROXIMATION OF THE PARTY OF	LCJ.	9	2			⊅		2		2		
Liston	NEW COLL DROCKEL OPENTABLE NEW	151	0 00	201			0.0		2		⊐ : 2 :		
V0.217	* A L. TRICKI OR DPIENOL	DCA	D 01	10 0			D 01		20		0 :		
LISTON	2.4.STRICHLOROPIENOL	750	23 ()	32			33 Cl		13 U		2 5		
VOAST1	2.CHI.OBONAMITHIALENE	UCA	2	9			2		0 ::		2 :		
TEAGY	CHLOROMETHANE	T/UC/T	2	2			n :		2 9		2 5		
TIVOA	METHYL ETHYL KETONE (PBITTANONE)	NG4.	~	- ;			2 9		2 5		9 5		
TEVOA	TOTAL LADICILLOROFFIENE	75 E	2 9	2 9			2 5		2 2		9 9		
ELVOA	CILOROFORM	100		2 5			2		2		7 01		
TTAGY	1,1,1-TBICH,ORDETHANE	7 50	2 5	2 5			2 9		0 01		0 01		
LYOA	CARBON TETRACIILORIDE	150	2 2	2 2			: <u>-</u>		9		2 01		
LL.VOA	BENZENE	15	9 9	2 0			9		0 01		n ol		
TCVOA.	13-DICHEOMOETHANG	ron Ton	9	n 01) P		2		n ol		
LI.VOA		UGA	O 01	D 01			0.01		5 E		10		
11,404	BRONIODICHLORONIETHANE	161	9	O 0			9 :		200		2 5	,	
TADA	VINYL CHI.DRIDE	DCAL	10 T	100			= : = :		9 9		2 5	3 :	_
LLYDA	METRIYL ISOBUTYL KETONE (4-METRIYL-2-PENTANONE)	. n ce	= : e :	9 !			2 2		2 9			0 8	
LLVUA	CHI J-DICILLOROPROPENE	UEAL	2 5	2 9			2 9		2 9		: D	8	_
I,LVDA	TOLUENE	חייים	2 9	2 5			2 5		101		9		
LLYDA	CHEST J-DICH LOROPENE	350	2 9	2 9			2 2		9		9	3	_
LLYOA	1,1,2-TRICIII.OROETHANR	155		2 5					0 81		2	C	_
LLYOA	ZHEKANONE		2 5	2 2			2		==		=	7	_
LLYOA	TETRACHLOROETH VILENCE (P. E.)		2 5	2 9			200		1 10 10 10 10 10 10 10 10 10 10 10 10 10) (I		
LLYGA	DIBROMOCITOROBIETHAME		2 5	2 9			J 01		0 91		n oi		
LLVOA	CILLOROBENZENE	5	2 9	2 9			0		5		D 01		
Tryoy	ETHYLDEAZEACE	150	9	20			Q 01		O 02		10		
VOATI	BROMONIETIANS	POG.	9	0 0			10 OI		3				
LLVOA		8	9	2			D 02		n oi		9		
LLVOA	STARTE												

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		StationID	BWON	BWM	8 WO	X	X	NAME OF THE PERSON	5		1
		Sample ID;	WSSWZO	WSSWZID	SWZI	WSSW21	SW22	WSSW7	245	WSSW21	SW2
		Sample Depth:	3010	2	0 10 0	0 10 0	0 00	U to O	0010	6110	0 00 0
Gircuit	Prometer	Sample Date:	6400A2	11/11/95	10/10/95	18/10/95	Sériol Asi	10/10/95	10/11/93	10/10/95	10VIIV95
LISYOA	TER PITENYL-DIA	LECT.					ě				
LLSVOA	PHE-MAIL.	5			: =		2 5		: :		= =
LISVOA	MARCHAOROETHYLLETHER (ACHAOROETHYL ETTER)	TEN			2				: :		= =
TO SYDA	I-CH LOROPHENDI.	ion					2		=======================================		2 5
MASTI	1-SIETHYLPHENGL (+ CRESOL)	UGA			0 01		9		9 9		2 2
MSYDA	1. OXYBIŞI -CIILORG) FROPANE	ngv.			<u>.</u>		200		10 01		2
TO YOU	+AIETHYLPHENOL (p-CRESOL)	טפער			10		2 9 1		10 01		2
TT-SVOA	N-NITROSODI-a-FROPYLAMINE	DG4			10 D		O 01		10 O		Đ
LISVOA	HEXACHLORUETHARE	הכא			7 07) el		0.01		D 02
LLSVOA	NITRUBENZENE	ונטו			9		10 0		∩ 2 2		JO 01
LISVOA	GOFIIORONE	DCA.			0 61		10 f		0 0		10 (11
LLSVOA	MITTO FILENDI.	5] [5		9		9
VOACT	Aprillate fill (Filteration)	100			2 9		3 :		3 97		0 93
LESTON	TADICIS OBORRENO				9 9		2		<u>.</u>		2
LEVILA					= : • :		⊃ : 2:		7 0 I		20
11 67016	TATELONG CONTRACTOR OF THE CON	100] : 2 :		9 :		0 0		2 6
TI SVOY	ACIT OBOLNI NE				2 9		o :		70 (7		20
15004	HEXACILOROSITADIENE	159			2 9		D :) 		10 n
LLSVOA	4-CHI. ODO. SMETRIY CPHENOL	100			2 9		2 5		a :		⊃ : ≘ :
L SYOA	3-NETHYLMAMITHALENE	150			: :		9 9		2 2		o :
LLSVUA	HEXACIILOROCYCLUPINTADIONE	E			2 5		2 9		2 9		2 9
HSVOA	14.6-THICHLORUPHENOL	EG							2 2		2 5
HSVOA	14.5-TRICILOROPHENOL	CCC			: n		; z		2 2		
LLSVOA	J-CHLORONA MITHALENE	UGN			9 2		; = } \$		2 2		
LLVOA	CITLOROMETHANE	55			9				2 9		2 2
I.I.VOA	METHYL ETHYL KETONÉ (2-BLITANONE)	UCA.			O 01		0		-		2 ~
LLYGA	TOTAL LADICITADE OF THENE	UCA.			n 91		2		9		
LLVGA	CHLOROFORM	164.			□		===		=		n ol
LLVGA	I,I,I-TRICILORDETIIANE	UCAT.			2		0 0		2		: D
LLVOA	CARBON TETRACISLURIDE	ECA.) [10 U		2		10.01
LLVOA	DENZENE) 01		0 01		0 01		0 01
LLVOA	LADICII, DROETIIANE	rea.			0 0		2 23		0 #		D E
1. VO.	IMACHANIMAC HELLANG HATA	10.0			⊃ : • :		2		=		D (ii
CLYCA					= =		n :		⊒ : ≒ :		2
TTAOY	VINYLCHUKIDE	5			2 5		2 5) 		⊃ : ≘ :
LLYOA	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	UCAL			9 9		. 9		2 9		2 9
LLVOA	del Jorchi Oropropene	1500			70		0 01		2 2		
LLVOA	TOLLIENE.	LGA.			2 62		2 2		= =		
LLYDA	Preside DOCTILOROPHOPENE	LCA.			O 61		3 2		2 9		
TUNDA	I.I.P.TRICHLOROETHANE	EG.			O 01		0.01		71 OZ		
LLVOA	HEXANONE	5			O 01		0 01		11 85		51 OF
LLVOA	TET RACHLOROETHI LENE (PCE)	ECA.			7 OT		N 61		1		9
LLVOA	DIRROMOCILOROMETIANE	מכעד			10 D		D 01		0		= =
LLVOA	CIILOMOPENE	UCA			7 O		2		J 01		10 01
Trov	ETIVLERAZENS	CCL			D 01		10 (1		0 0		200
LI.VDA	BROMONIETIANE	מכל			고 일		9 0		I) ()		6 01
CLVOA.		אַלאַ			7 01		9				2 8
LLVOA	STREME	- FE			<u> </u>		= 9		0 01		n 0



OR01 KR.ZZ/024.XI.S

		Station(I):	B 9/10	B WO	COMB	3%10	8%10	EWI.		BW12	ElwB mcsw2e
		Sample 10:	WESW24	SW25	WSSW75	SW 26	97.855.8	7 A C	State of	001	
		Semple Depth:	0 to 0	0000	080	2	2	CALLYS	EALIN)	KFITFOS	k0/11/95
1		cha()									
Chorp		מפו		~		15		69		3 ;	
V 0.5		UCAL		0 01		D 02		11 01		2	
	FREEZICE LASTER LETTER LECHLOROETHYL ETHER)	DCA		(O U		D 01		7 9		2	
500	2.CH GROWIEROL	UEAL	_			7 2		2		2 :	
1000	SAISTING HEROLI O-CRESOL)	מכע		1 Q		n 01		o :		9 9	
500	2 T. J.Y. VELSCH. CHI. OR OF ROPANE	500		0		7 OE		2 :		9 9	
1000	ANETHY PHENOL (P-CRESOL)	UCA		9		0		2 :		2 :	
TOAS II	N.NITRIXODI-9-PROPYLAMINE	CCA		⊃ 2		o :		o :		2 9	
1 6404	HEXACILIDADETHANE	NCA.		2		<u>a</u>				9 ;	
M.1.5.11	THE STATE OF THE S	CCA.		2		=		2		= : E :	
LISVERA		UGA		9		1 01		2 2		9 :	
1000	1.NITOOPHEKOL	UCA.		D P		= 9		2 :		2 :	
W 1000	* * Charles III VI PHENGIL	#C7.		D 01		9		2 :)	
10.00	Neg-CHI ORDETTALK METHANE	LC.		D 01		2		9 :		2 9	
1000	A CONTINUE OF THE PAGE.	UCA		20		2		0 !		2 :	
1000	1) A-TOICHLOROBENZENE	TON.		0		2		9 9		2 9	
70/21	NA MCTIALENE	TOT.		2 Q:		o :		2 :			
1 CVO.	SULLANDED	150a		100		⊃ : \$		2 :		2 5	
10,0	HETACISLOBOBITADIENE	1)C4.		9		2		2 :		2 5	
VUX	4-CHLORO-SAIRTHYLPHENOL	2		3		o :				: = : =	
TT-CAST	2-METHYLNAPHTHALENE	UEM.				o :		2 5		1 5	
T.CVOA	HEXACULOROCYCLOPENTADIENE	NG.		9 !		2 5		2 9		2 9	
LLSVOA	1,44 TRICILLOROPHENGL	70 m		2 2		2 %		3 2		25.0	
LISVOA	2,4,5-TRICILORDPITENOL	50.0		9 9		3 5		9		0.0	
LISVOA	2-CHLORONA PITTIALENE			2 9		2 9		9 9		10 0	
LLYUA	CHLOROMETIANE	100	,	2 -		2 5		2		n 01	
TLYOA	METHYL ETHYL KETONE (*-BLITANONE)			. 2		9		n ol		O 01	
YOA71	TOTAL LEDICILIONOETHENE			9 9		0 01		2		10.0	
LI,VOA	CHLOROFORM			100		01		10 61		n ei	
TAOV	1.1.1.TRICILIARETIKNE	5		2		70		<u>s</u>		=	
YOA.T	CARBON TETRACHICARDE	5		2 01		D 01		3		2	
VO.71		UCAL		10 U		D 01		2		9 9	
T	TOICH ASOCIALISE (TCE)	DC.		10 U		9		⊃ : • :			
	1.2.DICHILOROPROTANE	הפת		<u>.</u>		∩ : •		2 5		2 2	
Y0.77	BRONODICHLOROMETHANE	3		9 9		2 5		2 5		2	
17.704	VINYL CALLORIDE	ਸ਼ੂ ਤ		2 9				2 3		2	
LLVOA	METHYL ISOBUTYL KETONE (4-METHYL-1-FENTANONE)	195		2 2		9		2		0 2	
TY.OY	ch-1,3-01CHLOROPROPENE			2 9		0 91		11 OI		7	
LLVOA	TOLUENE	T-Sn		2		0 91		חמו		71 01	
LLYOA		NO.		미양		9		D 01		2	
T.V0.), LT BICKLUROE HARB	UCAL		10 0		D 01		20		3 9 9 9 9	
۲ <u>۱</u>	ACTUAL OPPORTUNITY ENGINEE	CL		10 1		2 01		<u> </u>		5 : 2 !	
YDA T	DEBONIOCHI OBUNETIANE	150 150		O 01		D 01		2 :		2 :	
	TANK TO BOOK TO THE TANK TO BE TO THE TANK TO BE TO THE TANK TO TH	P.C.		20		⊃ <u>o</u>		ב ב ב		o ;	
5 6		הפער		J 6		D 21		O :		9 9	
	BEONIONETTIANE	UCA.		0		200		⊃ ; 9 !		2 -	
	Total Melmer	UCA,		=							
	3730715	75	_	9		=		2		2	
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		Statles (D:	BW13	BW13	BWIA	8W14	8₩15	BW15	BWIB	98	BW17	
		Sample 10	5W29	6Z/M55/M	OEMS	0£.M.55.M	5w3	WSSW31	EEMS	CLASS M	SWII	
		Semple Depth:	000	9	O to O	0 10 0	0 99 0	Q to D	0110	000	0 40 0	
Group	Percenter	Sertiple Pele:	66/11/03	SWITWS	154 154 154	HVII/NS	INTENS	10/11/03	(W) [W)	14711/45	164 1743	
LISVOA	TERPHENYL, DI4	IICa	Ş				į					ì,
LISVOA	PITENOL		3 5		3 9		2 :		E.		3	•
LLSVDA	MAT-CHLORDETHYL) ETHER (T-CHLORDETHYL ETHER)	E S	2 9		2 5		2 9		0 :		9 :	
LLSVOA	I-CHLOROPIENOL	1621	0.07		2 2		2 5		2 9) : 9 :	,
LLSVOA	2-METHYLMICNOL IN CRESOLI	DCA.	20		0.01		2 2		2 2			
LLSVOA	23-0XYBISH-CHLOROIPROPANE	DCA.	10 0		2		2				2 2	→
LLSVOA	4-METHYLPHENOL (p-CRESOL)	LICH.	5 6		D QI		n n		2		9 9	
POASTI	N-NITROSODI-a-PROPYLANINE	TOO.	î O		D 01		10 O		2 0		9 5	ζ,
LISVOA	BEXACHLOBOFTHANS	ncy.	11 01		∩ 01		0.0		2		9 5	
11.5VOA	NITRIBENZENE	LCA.	D 01		0 00		0 0		1 0		9 5	
11.5 VOA	SOPIORONE	LCA.	0 01		D 01		9		2 2		2 =	
LLSYAA	1-NITEOPHENDL	2	2		=		2		2		2	
LLSYOA	LA-DIMETHYLPHENOL	nev	D or		<u> </u>		O DI		II 0I		9 0	
LLSYOA	64/2-CIII.OR()ETIIOXY) AIETIIANE	5	9		O 01		Ü		10		9	
LISYOA	14-DCHIARCTIENCI.	EX.	2		<u> </u>		=		=		2	
LISVOA	LJ,4 THICHILDROBENZENE	IKN.	0		11 E1		3 8		=		11 61	
LISVOA	KAPIITIALEME	55	9		2 0		101		9		10 01	
TO STOR	+CIILOROAMILINE	<u> </u>			7 01		5 0 0		10 01		19 0	
TI SVOA	HEXACIILOROBUTADIENE	UCA	10 C		10 U		10 C		10 U		10 0	
CLSVOA	4CHLORO-METHYLFIENOL	ממר	5 2		70		10 E		O 91		10 0	
LISVOA	2-METHYLMAPHINALENE	ינטר	19 11		20		n e		0 00		n or	
LISVOA	HEAL, REDECT TO THE LANGER	1 10 1	o :		9		2		O 01		0 01	
1000	AAPT KILILOROFIENGE		2 2		n :		10 0		9		미 0I	
50491		1,521	0 5 5		2 :		33 C		23 U		13.0	
500		30	0 9		0 :		D 01		<u> </u>		D 01	
TVOY	METATYL PTICYL KETONE (LBITTANONE)	167/) 2		D :		2		2 2	
11,404	TOTAL 12014 NOTICENERS		2 9		2 5		⊃ :		2		2	
LLVOA			2 9		2 9		0 9		n .		2	
LLVOA	LLITRICITOROETHANE	5	2 9				2 9) 2		5 : 9 :	
LJ.YOA	CARBON TETRACILLOPIDE	3	? <u>o</u>		2 9		2 9		- : - :		= :	
LLYOA	BENZENE	rSn	2		0		2 2		2 5		2 9	
LLVDA	I, DICHLOBOETHANE	UGL	100		10.0) 9		2 9		2 5	
LIVOA	TRICHLOROETH YLENE (TUE)	5	9		10.0		: D		2 2		2 2	
LI,VIA	LJ-DICHLOKOPROPANE	16.7	n (1		= = =) E		2		2	
רראמא	BRONKOICHLURCNIETHANE	CCV.			0 01		0 01		D 91		2	
T ADA	VANT, CHLORIDE	(1C7).	2) 		→		D 02		<u> </u>	
H.VOA	ALCHAY, EQUATT, RETUNE (4-RETHAY). FENTANONE)	To a	₽ :		⊃ : <u>=</u>		() ()		7 OI		9	
		700	2 :		0:		20		⊃ <u>9</u>		0 0	
5 5	THE LANGE OF SPECIAL PROPERTY		2 9) 		2 : E :		⊃ ©		<u> </u>	
		35	2 :		2 :		9		D 2		0 O	
LIVOA	SHEWANDLE STORY	3 5	9 5		2 :		o :		D :		<u>=</u>	
LLVOA	TETRACTIONOETHYLENEOPEN		2 5		2 5		2 ;		D :		2	
LLVOA	DIBROMOCILLORDMETHANE	300	9 2		2 5		2 5		2 9		0 :	3 (
LLVOA	CIII.OROBENZENE	DO:	2		2 2		2 5		2 9		0 0) (
LLVUA	ETHYLGENZENE	Ę	2		9 9		2 2		: = : 9		2 2	8
LLVOA	BRONDMETHANE	UCA	A 01		2		9 0		9 =		2 5	
LLVOA	Total Xylenes	500	10 01		0		9 2		2 5		2 9	3
I.I.VOA	STYREME	nca.			D 01		9		2 2		2 2	1
									!		2	0





		Charles	66.70	PW17	EW17	EW 18	BWIE	BWIS	BWIS	BWIS	61.818
		Sample 10:	SW33A	WESWID	WSSWJJA	K MS	MASSA	SW3S	AKCWZ	SW3SD	WSSW35
		Sample Pepts:	000	0 m q	2	0 00 0	0100	0 100	9	9	Uch
		Sample Date:	S6/11/01	10/11/93		10/11/95	1011/03	66/11/01	G-11-20	(A) I (A)	College
Group	Parameter	201	5			2		45	£		
LISVOA	TERMIENAL DIA	400	3 5			= =		3	•		
1.1.5VOA	PIIFNOI		2 5					2	2		
LISVOA	NATIONAL TINES (1-CH.DROETIVE ETITER)	ing.	2 5			9		2	10 0		
LISVOA	J.C.H.LOROPUENOL.		2 5					חפ	=======================================		
POASTI	J.AIETTIYLPIENOI. (CCRESOL)		2 5			9		0) <u>P</u>		
LLSVOA	1J. OXYBIS(I. CHLOROWROPANE	150	9 5					10 0	0.01		
LLSV0A	+Afficial PLATEROL (p-CRESOL)	IICA	2 2			2		0	50		
LLSVDA	N.NITEOSODI-S-PROPYLABINE	TOTAL STATE	2 2			9		O 01	0 01		•
H-SVOA	HEXACIILURUE IIIANE	DCA	2 2			0		200	9		
LLSVOA	NITROPENZENE	150	2 5			0		10 U	10 01		
LISVDA	EOMIORONE.	500	2 5			2		0 11	20		
LLSVOA	1.NITEOPIE.NOI.	167	2			101) B1	n al		
M.SVUA	A CHAIRTINI FILENCE.	153	0 0			10 C) 1	0 0		
LLSVOA	NET COLLOND FILLOND ME HISAME	NGA.	0.0			7 01		0 01	# O#		
1.1.5704	14-DICHLOROFHENGL		2			7 OJ		10 Q	J 01		
LLSVOA	LA-TRICILIONOBEACEAE	100				10.0		10 D	() ()		
LLSVOA	NA FILLIAL LATE	DCA.	0.00			10 0		0 01	: :		
Trans.	CALLUXUANILLINE	1000	10 0			20		10 (1	9 0		
LISYOA	HEXACILORUBOI ADRANG		100			10 U		П QI	0		
LSVQA		50	20			0 0		20	2		
LSVOA	J-NIE III TAAPII IIALEAE	5	200			0 01		10 0	0 82		
LEVOA		net	00			9		20	⊃		
restor.	Age Biotich of Street Control	UCA.	U \$2			13 U		22 C	22		
10.07		GG.	O 81			5 9		2	D 01		
V 7.5	Chichelland	TICAL				5 9		10 U	D 01		
,	METHYL CTHYL RETONE (2.RUTANONE)	NCA.	2			2		<u>-</u>	20		
Y0411	TOTAL 12.000 (10.000 CM)	rign Nev	9			□ <u>0</u>		<u> </u>	- -		
1 704		NG/J	9			n 01		⊃ : ≅	2 :		
VOA II	1.1.TERCHLOROETHANE	LGP.	9			9		2 :	9.3 0.3		
LLVOA	CARBON TETRACILORIDE	167	5			0 :		2 9	2 5		
T'AOV	BENZENE	ign ign	101			0 :		2 3	2 5		
LVOA	13-DICHTOROETHANE	<u>න</u> ්	<u>.</u>			2 9		2 9			
POATI	TRICHLORDETHYLENE (TCE)	169				2 5		2 2	9		
LVOA	12-MCIII.OBOPROPANE		2 9			2 =		1 2	9		
LLVOA	BROMODICHLOROMETHANE		2 5			2 0		9	10 U		
LLVDA	VINYL CICLORIDE	5	2 2			2		10 1	51 01		
LLVDA	ALTINI SIBILITE RELONE (+ALEIN LAFTER DANNE)	150	2			5		<u> </u>	n m		
rr.ov	to under	NS)	9			D 01		n 01	2		3
LLVOA	TOTAL TAICH OROPROPENE	וכא	7 93			D 92		00	Pol		U
Y 00 1	1 1 1 TELLIL CROETIANE	HCAL	9			D 01		O BI	n u		8
1000	THE KANDAR	IKA	5			2		=	= :		\$
11.511	PPRACTICION (FINALEMENT)	CHO.	9			2		2	3 ·		•
	DIRECTOR CONTENTIANE	550	9			=		2	2		3.
\$ 0 A	CHIOROBENZENE	5	D 01			2		2	2		L
1 404	CHAYLBENZENE	ng.	20			10 0		o :	= : = :		1
504	BROMINETIANE	מפור	20			n e		9 : 2 :	5 :		
Troy	Notal M. Perses	DCL	200			<u>.</u>		⊃ : 2 :			
VO.TI	STVESKE	USA.	<u> </u>			9		0	9		
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				A	BW 20	2	- A	7 84 7	7749	77 20
		Sample Denth:	VXF#SS#	OSEWSEW.	54.76 6.40	WSSW36	5.437	EMSSM.	PI AS	BCW22W
		Sample Date:	ı	10/11/95	10/12/95	10/12/95	10/12/95	10/12/25	100.00	10012793
Group	Pinameter	Unib					•			
LI-SVOA	TERFILENTLAN	1/2/0			(9		22	:	3	
LLSYON	· FINCHIA	(14.2).			==		10		= 9	
LLSVOA	MASCHIAROETHY, ETHER (ACHLOROETHYL ETHER)	OCT.			0 01		O 01		3 87	
LI-SVOA	1-CIILOROPHENOI,	UCA			0 0		□		0	
LSVOA	I.N.FTIPLMIENOL (#CRESOL)	70 1			î Q		n pı		0 0	
YOASTI	11 OXYBES(1-CHLORO) PROFANE	. C			2		O 01		<u>.</u>	
TO ACT	+NIFTHYLPHENOL (P-CRESOL)	IKZI) e1		<u> </u>		O 01	
LLSVDA	N-NITRUSCOP- PROPELAMINE	מכער			↑ 61		<u> </u>		2 0	
LI-SVDA	DEXACIILOROETHANE	מפע			0.0		<u>.</u>		19 E	
roasit	NITROBENZENE	131			10 01		20		0 61	
LISVOA	SOMIORONE	500			0 0		חפו		3 0	
LSVOA	PAITEOFIE TO THE TOTAL T	- First			10.0		= =		101	
LISTOA	A-CINIE III TUTIENOI.	5 5			2 : 2 :		2 : <u>2</u> :		4	
50,00	THAT BEVELOR BOAT AND HARA) (1)		o :		٦ 2	
10,00	A-DICHELINGTON TO THE TOTAL TOT				o :		9) [
1000		1000) (1)		⊒ : • !		n :	
VOA51	ACTH OSOANI INF	3 5			2 2		o :		⊒ : <u>0</u> :	
11.5YGA	HEXACIALOROBITADIENE				2 2		2 5		2 5	
TESVOA	+CHORG-PARTHYLPHENOL	55			2 2		2 9		2 5	
TISYOA	3-METHYLNAPHTHALENE	TON			2 0		2 9		2 2	
LLSYOA	HEXACHLOROCYCLOPENTADIENE	UCL			00		0.01		2	
LLSYUA	14.6-TRICHLOROPHENOL	5			D 01		00		D 01	
LL-SYOA	14,5-TRICHLOROPHENOL	5			13 U		13 U		23 U	
H-SVOA	J-CHI.ORONAPHTHALENE	LC-I			0 01		0 22		E 02	
LLVOA	CIILOROMETTIANE	חפע			9		2		2	
LLVDA	AKETHYL ETHYL KETINE (1. BUTANONE)	5) 9		Ξ		2	
YOA'TI	TOTAL LEGICILOROETHENE	. ne.			2		n 91		D 02	
Trop.					2 :		3		2	
FLVOA	I, i.i HELLEGEGE LANGE CLORON TETOLOGIE	75) E		<u>-</u> :		⊃ : ≘ :	
100	DENZENE	TOO TO			2 9		2 9		2 : 2 :	
LVOA	I, DDICILLOROFTIANE	i don			2 9		2 2		2 2	
LI.VOA	TRICHLOROETHYLENE (TCE)	NC/I			100		1 2		2	
LLYOA	1.2 DICHLOROPROPANE	151			0 O		10 01		D 91	
YOAT	GEONIODICHLOROMETHANE	1500) (1)		O 02		O 01	
LLYUA	VINYL CITORIDE	155			<u>.</u>		2		=	
LEVOA	MECHTE BUSCHTE RETURE (************************************	1 5			o :		2		<u> </u>	
r vor					a :		<u> </u>		0	
TAOY	PERSONAL ADMINISTRATION OF STREET	1 2			2 5) : E :		2 : 2 :	
TVOY	1.1.TRITILIZEDETHANE	1531			2 5		2 5		2 :	
TLYOA	FIEXANDNE	1124			2 0		: ::		2 5	
TLYOA	TETRACTILOXOSTILYLENE(PCE)	LICAL			0.01		9		9 9	
LLYOA	DIBROMOCHLOROMETHANE	FIG.			10 0		2		9 2	
TVOY	CHLOROBENZENE	LICA.			10 01		7 01		101	
LLYOA	ETHYLBENZENE	UEM.			D 01		D 01		10 U	
LLYOA	BRONIDNIETIIANE	UEA.			n 01		5 6		10 0	
LLYOA	Total Xylenes	151			70		0.01		0 01	





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		SurdentDo	10/4/0	10 M C	10,400	DWO!	71176	BW02		STATE OF THE PERSON NAMED IN	S.A.S	CW2/W2	
		Sample II);	2#I	Y21.MS	O o o	ASSW12A	040	4354	<u> </u>		S P P	- S	
		Semple (Mater	SKIII WI	10/10/93	10710793	ICA II ASS	SANIAN	i	See 11411		HU HIEVS	III CAN	
Group Prometer	-										ļ		
ا	FDRM	חכער	10 N	10 0			⊒ : 9 :		⊃ : 2 :		고 : 요 !		
LLVOA II.23-TI	I,I, 23. TETRACHLOROETHANE	S.S.	⊃ 2	∩ 01			2		9		2		
LLVOA 12-DICH	LA-DICHLOROETHANE-DM	TOD.	8	g			5		5)		5		i
LLVOA TOLIENE/PS	. 52	CG.	70	ē			<u> </u>		2 3		€ 3		}•
	I-Brond-fluorobenzene (* Bronkopluorobenzene)	1500	1 03	ā			8		<u> </u>		<u>₹</u>		ŧ
	CIILOROETIIANE	ig D	⊋	<u> </u>			9 9		2 9		2 9		
LL.VOA ACETONE	믲	50	9	9			0 0		= : = :		a :		
	H-DICHTONOFTHENE	CG.	3 9	고 및			O :		D :		a :		
-	CARBUN OISILL FIDE	(C)(2)	9				0 01		9		≘		
	1.3 DICHIOROBENZENE	CCA.	2 9	0			n ol		70		20		
	LA-DICHIOROBENZENE	£	10 01	2			1 0 1		9		2		
11.404 12-DICI	1.2-DICHOROBENENE	NCA.	1 0	9			D 01		∩ •		O 83		
	METHYCENE CHORIDE	T/On	9	9			10 C		9		2		
	1. DICHLOROETHANE	HCA.	0	D 01			10 0		2		⊃ : 9		
	ALPHA BRICKALPHA BEKACIILOROCYCLOBEXANE)	ZJ.	0.05 U	0.00			000		200		009 (1		
BETA B	BETA BIIC (BETA ILEXACILOROCYCLOHEXANE)	nc4	0.05 U	0 600			0.05 U		0 500		0 500		
DELTA	DELTA BRE (DELTA HEXACITLOROCYCE.DIEXANE)	รั	D.03 U	0 60 C			400		0 50 0		500		
CANINA	GANIMA BITC (LINDANE)	nca.	003 0	0.03 U			0.65		i San				
HEFTACHLOR	HLOR	202	D 600	963 C			990						
ALDRIN		נישו.	0.05 U	2 0 0			2 20 0						
HEPTAL	HEFTACHLOR EPOXIDE	5	0.00	D :					666				
ALMIA.	ALMIA ENDOSULFAN	5	0.00	500			8 2						
DIELDRIN	Z	101		3 5			2 2						
300-,414				3 2					0 0		n 10		
ENDRIN			3 -	0 0			0.10		0.10		# 10		
BELAEN	BELA ENMANUETAN	50	0.10	0.00			D 1:3		0 0		010		
BOUNS	FINDOSII. FAN SIILFATE	S n	10	U 1.0			U 1.0		0 1 0		n †:0		
TIM.		CICA	0.1.0	9			חוט		D 1.0		210		
METHO	ANTICAL CHI OR	IKA	0.5 U	030			D \$ 0		0.5 U		0.50		
FNORIN	ENDRIN RETONE	UKW.	0.1.0	0.10			II 10		=		= ; = ;		
ENURIN	ENDRIN ALDEITYDE	DCT	9	0			D :		3 ! 3 !		0 : 0		
ALPHA.	ALPHA-CIII.DRIDANE	ない	200	500			900		9 1				
CAMINI	CANIMA-CHLORDANE	155	9 ;	D :			9		9 7				,
TOXAPHENE	HENE) : -						=		-		3 (
PCE-10	PCB-1816 (A ROCTIL OR 1816)	3 1		3 :					= :		7		3 :
PCB-1Z	PCB-1221 (A FOCITION 1221)		7 -	? =			-		-		-		8
FCB-17	PCB-1212 (A DOCILLOR 1222)			? =			· =		-		0		
7.6.7.	PCD-1241 (A ROCHEDR 1242)		2 =				2		2 -		1		3
7.67	PCB-11-42 (ARIANTILON 1748)	100	=				Ξ		-		=		1
#18-11.	F.B-124 (AKIA: 111.0K 124)	164	2 =	2			2		7		-		3
E CE-IT	PCB-120 (ARCALL) OR 120)		-	2			2		3		22		<u> </u>
		DCA.	=	2			9		=		8		
PEST PECACILLY		LES C	375	0 6.59			909		- 111		<u> </u>	137.91	
	ANO	UCA	⊃ + +	14.6 U			14.6 U		701		1461	4.6	
		rgn OGr	3.2 U	3.6 U			3 ¢ U		33 G		3 6 U	Ξ	
_	! ==	UCJ	164	\$			11.9.5		67.5 J		294	2	
		ECL	0.18 U	D.13 U			⊃ ? 0		0 10		0	=	

		Station(D:	BWO	ВУТО	BWWS	840	BWDb	BWD	(Dwg	BWW	BW(#
		Sample ID:	WSSW20	WSSW200	IZAK\$	Ilms5M	SW22	WSSW22	SW23	WSSWZJ	* ? MS
		Sample Depth:	090	9	0 ol 0	D of O	0 10 0	÷ 010	000	000	0 10 10
<u> </u>	Parameter	Sample Date:	SAULE			6641431	5641143	CAN IN	KV (CP95	CV (CV)	56411401
100	RECALCISORAL	nea			1 9		5		= 9		11 10
LLVOA	1.3.3. TETRACHLOROETHANE	DCA.			2 2		9		9 9		2 9
LLVOA	12-DICHLOROETHANE-IM	UGAL			2		221				5
LLVOA	TOLUENE 08	יישוו					<u> </u>		5		6
LI.VOA	1.880NIO-4-FLUOROBENZENE (4.880MOFLUOROBENZENE)	LEN.			711		5		9		70
LLVOA	CHLAROETHANE	חלווט			10 O		9		0 01		n oı
LLVOA	ACETONE	15 0			0 0		O 81		==		n 21
LLVOA	1,1-DICTILORGETHENE	UCA.			o •) P		10 01		n ol
LLVOA	CARBON DISULITUE	ויטו) 0		10 D		9		II OI
LI,YOA	13-DICHLOROBENZENE	r <u>i</u>			2		⊃ <u>B</u>		0 0		II 92
LL.VOA	I, + DKTILOZOBENZENE	UG/L			0		⊃ ₽		0		I 01
LLVGA	12-UKCHLOROBENZENE	ווה.			n e		⊃ B3		0		0 01
LLVOA	METHYLENE CHLORIDE	ng.			-		9		0		D 01
l,L,vaA	I, I-DICHT, ORGETIIANE	5			9		<u>-</u>		0		OI
FENT	ALTHA BIC (ALMIA HEXACIDI DRIKOT) OREXANE)	25			600		101		112		2 22
PEST.	BETA BITC (BETA HEXACULOROCYCLOHEXANE)	5					202		0.65		2 21 3
rest	DELTA BISC(DELTA SEXACSILOROCYCLOSEXANE)	3					12 G		0 60		U.05 U
rest	GABIMA BIIC (LINDANE)	157			0.05		903				0.03
PEST	HEMACHLOR	3 :			0.03		0 60 C		2 63		U 50.0
FEST	ALDHIN	191			0.03 U		200		000		D 50:0
FS.	HEFTACHLUR EFOAME						2 2				0 603
151	ALMIA ENDOSULFAM	100					1 600		200		0.00
2 t		191					3 5		3 5		2 -
		100					3 3		2		
	BETA ENLOSIU FAN	מכער) <u> </u>				: =		3 3
į <u>5</u>	did:,e,a	UGJ.			D. I.B		0.10		- - =) -
152	ENDOSILLEAN SULFATE	UGL			0 178		0.1.0		0.1 U		11 10
PEST	TOG: #rd	UGAL.			O 1.0		0.1 U		0.10 0.10		0 0
FEST	METRIOAYCELOR	<u>5</u>			0.5 U		D 5 U		0.5 U		0.5.0
FEST	ENDRIN KETONE	ភ្ន			0 I O		<u>n</u> 10		0 0) -
rest	ENDRIN ALDEITYDE	בי מכל			<u>ء</u>		0 0		٠ -		0.1.0
LEST.	ALPITA-CITLOBDAME	1 5					0.03 0		200		D 60
HEST.	CAMMATHIDEDAME) (i		0 600		6 5		E \$100
±Si	TORAMINE.	1001					<u> </u>		= =		= ;
2 1							- r				2;
	MIGHTH (ARCCHAIN 121)	100) = 7 -		2 -		= = 7 -		= =
		100) = 		2 =		= =		= =
- E	PUBLISH (AROUND 194)	5			? =		2 =		=		= =
LEZ L	PCD-1134 (AROCHLOR 1154)	מכור			2		-) <u>-</u>		2 2
15	PCB-1160 (AROCH) LOR 1160)	UGAL			=) <u>-</u>		2 3
EST	1,4,5,6 TETRACHLORO-NETA-XYLENE	UGAL			3		F		æ		, =
PEST	DECACHLOROBIPHENYL	LOT.			Ħ		*		2		\$
TOTALETAL	ALUMINUM	rich.			35.2 U		. 992 - 992		53.2 D		148 0
TOTALETAL	ANTIMONY	UCAL			19 €		146.0		1460		11 9 81
TOTALETAL	ARSENIC	מכער			4.1 U		3 C		1 1 9		3
TOTALETAL	BARIUM	UCA.			- X		64.7.1		Z 7		1 2 1
TOTMETAL	DERYLLIUM	50			D #1.0		0.24 U		0.2 U		O E1:0
TOTMETAL	CADMIUM	Ton			2.7 U		2,1 U		7.7 N		0 t/2





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		Charles 10.	e Linna		0.00/16	110	96.0	11/58	1180	BW12	8413
		Seconds 1D:	WSSW24	SW25	WSSW25	24.7e	WSSW26	5W27	MESME	12.MS	WSSW2
		Sample Depth:	0 to 0	0 00 0	0 010	3	2	0 00 0	gmo	0 00 0	Biot
		Sample Date:	10/10/95	10/10/95	10/13/95			10/11/95	\$641700	10/11/95	10/11/95
Gracia	Paratreter			11 (2)		1		100		100	
LLVOA	DROMOFORM			2 5		2 2		2 2		: 3	
YDAT	LITTELEMENT OF THE PARTY OF THE	100		2 8		. 2		<u> </u>		35	
vo.	TAPACHICANA MANAGAM	NGV.		<u> </u>		201		<u> </u>		001	
¥0,413	LABORIO 4.FLUOROBENZENE (4.6ROMOFLI)OROBĚNZENE)	ş		8		20		101		3	
11.00	CILOROETIANE	UGA.		10 0		n		10 Ot		n 01	
ro,Ti	ACETONE	UGA		10 D		o 0		<u> </u>) 	
LLVOA	1,1-DICHLOROETHENE	5		0 0		2		= : e :		n :	
LLYOA	CARBON DISULFIDE	HGA.		0 : 0 :		⊃ ; 2 ;		2 : 2 :		2 5	
LLVOA	1. DICHLARABENZENE	ZZ		2		n oi		a :		2 5	
LLVOA	J.A.DICHLOROBENZINE	i ci		5 : 9 :		- - -) 		2 5	
LLVOA	LJ.DICHLORUBENZENE			: : :		2 9					
LLVOA	ARTHYLERE THEORIGE	1820				2 2				2	
LLVOA	LIPERING MORE THANKS TO A STRUCTURE AND THE TAKEN TO THE TAKEN TO THE TAKEN	ic.		980		0 60 C		0 50 to		0.00	
3 {	ALTER BRICARTA HEAVELL ODOUGE ORBITAND	DCS/		980		n sau		909 U		0 9 00	
2 2	DELTA BUIL (BELLA BEXACHLOSOCYCLOBEXANE)	i5		0 60 0		0.05 E		D 608		0.03.0	
	CANIMA DISCULINDANE	UCA		0 80 U		0 05 U		0 600		0 500	
153	HEPTACHLUR	UGA.		0 65 U		0 005 U		0.05 U		0 500	
152	ALDRIN	UGAL		0.03 U		÷ 63		0 68 U		0 600	
FEST	HEPTACHLON EPOXINE	7 75		D 62 C		2 : 2 :		1 600			
PEST	ALPHA ENDOSULFAN	יים ו		0.03 U		9:					
FEST	DIELUKIN	LGT.) 							
FEST	p.v.00€	750									
FEST	ENDRIN	5		5 6				2 =		2 2	
TEST.	BETA ENDOSILIFAN	35		5 6) 		; ; ;	
PEST	000,44	100		5 5				7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		n 10	
FEST	ENDOSITION STITES IN	5				9.10		010		n i o	
		2		0 5 0		0.50		0.5 tt		0.5 U	
154	ENDRINKETONE	DEM		9 I.O		n :0		0.10		ŋ. 1'n	
5	ENDRIN ALDEITYDE	חללוט		0.1.0		= :		- - -) 	
FEST	ALPHA-CHIORDANE			0.00				2 2 2 2 2		1 110	
HST	CARAMACHLORIVANE	15.2								= = =	
is i	JUNANTEUR.	7.5	_			2		2		0.1	3
I Kan	PCB-1111 (ABOCHLOR 1711)	UCA.		3.0		10		2.1)		3 C	C
12	PCB-1133 (AROCIILOR 1133)	ron nor		<u>a</u> -		_		<u>-</u>)	8
1231	PCB-1141 (AROCIII.OR 1141)	rg.		-		= -		>		2 :	
FEST	PCB-1148 (ARGC)(LOR 1148)	UGA		<u>-</u> :		<u>-</u> :		= :			3
FEST	PC5-1254 (AROCHLOR 1154)	CCA		= :		3 3		= :		= =	}]
PEST	PC0-12601AROCHLOB 1260)	116.7		- ;		a - ;		- -		- g	1
PEST	245,6-TETRACHLORO-META-XVI.ENE	מניי		2 1		₹ 1		: 3		; ;	;
PEST	tate and oktobrollengt	THE STATE OF THE S						£130)		7 (210)	
TOTNETAL	ALUMINUM	150		* * * * * * * * * * * * * * * * * * *						1917	
TOTMETAL	ANTIMONY	יפו) . •				2 -		2 4	
TOTNIETAL	ARSENIC			5 8		9		1.611		11.5	
TOTALETAL	BARIUM	150		0.18 U		= = =		U 150		0.41.0	
TOTALETAL		150		1.7 U		U (.		0.1.1		1.7 U	
		•	•								

		Station D.	RWIT	11718	77.00	77.77	1	977018	71 200	717110	5
		Sample ID.	SWR	WESWZ	DCAS	(KASSA	5W1)	ICMSSM	5W3	WSSW32	17.AS
		Sample Orpith:	0 10 0	020	3 E	940	₽ m Q	Broc	0 40 ()	940	n to the
(Sample Deser-	10/11/25	10/11/05	56/1 LA)?	E 179	10/11/45	10/11/95	16/11/93	1111795	10/11/03
CHORAS .					:		:				
100			2 :		2 2		= : 2 :		= .		2
V 704			3 5		= 3		=		= 3 !		= = :
VDA.1.1			3 5		\$ 3		2 5		5 6		Ξ, Ξ
TLYUA	1-BRUNIO-4-FLUOPOBENZENE (+BRONIOFLUOROBENZENE)	DOM:	<u> </u>		i <u>s</u>		8		. 5		i,s C
LLYGA	CIILOROETHANE	r _S	20		0 01		9		2 63		D 01
LLYOA	ACETONE	UCA.	n ol		D 62		n 01		1 9 f		19 10 10 10 10 10 10 10 10 10 10 10 10 10
LLYOA	(J.DICHLOROETHENE	ron nce	10 N		D 01		⊃ <u>e</u>		10 0		n or
LLYOA	CARBON DISULTIDE	DC4.	□ 0		n 01		2		20 01		m d
LLVOA	L. DICHLOROBENZENE	DCA.	00		n 01		0 01		20 62		= a
LLVUA	I.A.DICIIL.OROBENZENE	150.	D 01		O 01		9		20 61		=======================================
LL-VOA	(AVERTAGORACIO)	55.	D CI		=		=		3 61		=======================================
M.Y.DA	RIETTITYLENE CITCONIDE	EC.	2		2		=] =		ě
H.VDA	I,I.DICHLOROETHANE	rion	20 02) 22		0		n el) Pr
PEST	ALPHA BIIC (ALPHA HEXACHLOROCYCLOHEXANE)	5	0.03		0.000		0.03 U		0 5 0 0		0 60 U
PEST	BETA BIJC (BETA HEXACILLOROCYCLOHEXANE)	2	0.00 U		0.03 U		0.03 U		0.05 11		0 SO 0
rest	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	מל	0.05 U		0.03 U		0.03 U		0.03 11		0.05 11
PEST	GARINIA BIIC (LINDANE)	5	0.00		0 50 0		0.03 U		0.05 U		0 500
PEST	SI EPTA CHILOR	15)	U 20.0		0 000		0 000		0 00 n		0 G) C
PEST	ALDRIN	5	0.03		Ð.65 U		9 DS 17		0 00 U		0 ES C
FEST	HEPTACHLOR EPUXIDE	55	0.05 U		0.03 U		0 ES U		n sou		0.05 ()
PEST	ALPHA ENDOSULFAN	UCA.	0 50 0		2		0.03 U		0 OS 11		0 50 0
PEST	DIELOHIN	100	0 :		ے ا		3		0.1.0		0
IS.	p.p.DDE	50.5	0 : 0		D : :				2 : 5 :		
FEST			2 3) 		0 : 0		O 1:0		2
											5 6
<u> </u>		3 5	3 2						= = = = = = = = = = = = = = = = = = =)
100	PASSAGE AND SOLICE AND	555	5 6		2		3 5		3 3		
1334		55) ;		3 5		3 5		
		150	2 -						9 5		
FEST	ENDRIN ALDESTYDE	L'On) <u> </u>) i i		0 1 0		3 5		? :
EST	ALPHA CILORDANE	UCA.	D 500		0.05 U		404		U 800		0 600
FEST	CANINA-CHLORDANE	UCA.	003 C		0.03		0 60 0		U \$0.0		0 600
ršī	TOXAPIIENE	UCA) C		9.0		? ?		n s		? =
PEST	PCD-1016 (AROCIII.OR ID16)	IICA.	o -		<u>-</u>		-		<u>-</u>		-
PEST	PCB-(22) (ABDCIILOB 122))	UCA	7		3 C		3 n		n ~		7.0
FEST	PCR-(233 (ABOCHLOR (232)	ייין פער	- :		2 :		<u> </u>		<u>-</u>		<u>-</u>
PEST	PCB.1241 (A ROCHLOR 1242)	7 1	> :		2		= :		<u>-</u>		5
123	PCB-12/8 (ARDC)11.0R 12/8)	NGA.	- :		> :		<u>-</u>		= :		n 1
5	PUB-1254 (A ROCTILLON 1254)	1,40,4	<u>-</u> :		- :		<u> </u>		<u>-</u>		=
ISI.	PCB-1266 (A ROCHLOW 1269)	LK-A.	⊃ ;		n :		-		<u>-</u>		n .
PEST	24.54 TETRACHIORO-META-KYLENE	DC7	? :		P ;		9		63		3
PEST	DECACHLOROBIMIENTL	150	3		9		*		Ξ		2
TOTAL	ALUMINUM	IKW	1 00691		5790		527 1		609		1 561
TOTALETAL	ANTIMONY	IKW	14.6 U		14.6 U		14.6 U		H.6 U		14.6 U
TOTMETAL	ARSENIC	HC/L	13.6		• • • • • • • • • • • • • • • • • • •				3		3 (1)
TOTALETAL	BARIUM	TK.A.			12.6		33.4		35.9		1 5.72
TOTMETAL	BERVLLIN				1		0.15				D 25 II
TOTMETAL	CARBIEUM	195	7.7 0		2,7 U		2.7 🗓		1.7 U		2.7 U





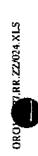
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35.03 34.0 2,7.0 2
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D-23

: Water
Surface
Summary:
Analytical Data

		Station D:	51848	<u> </u>	EW.	8W20	12,771	BW21	8477	2003	
		Sample ID:	*	WSSW3SD	5W.36	WSSW36	1CW2	WSSW37	Swin	WSSWJ	
		Sample Depth:	9	Ė	Confi	0.00	000	0 11 0	0 to 0	110111	
		Sample Date:		10/11/93	10/12/95	10/12/95	10/12/45	10/12/95	10/12/95	10/12/45	
VOA II	RECHORDS	DEA.			11 01		5		5		7
Traov	11.1.1.TETRACILLORDETHANE	UCAL			2 3		2 2		2 9		Î
FFAOY	12-DICHLOROETHANE-DA	DOL			8		10.2		2 3		ŀ
LLVOA	TOLINENEAU	TICAL.			101		9		2		·
LLYCA	LIDROKOLAFILURGODENZENE (4-BBONIOFILHOROBENZENE)	tica.			101		₫		<u> </u>		;
L1.YAA	CILLDROSTHANE	UGAL			O 01		D 93		9		2,
LLYOA	ACETONE	ney.			11 QI) 10 10		a 0		٠,
TLYOA	I,I-DICHLOROETHENE	Z Z					9		9		S
LLYUA	CARBON DISULFIDE	EG.			2 02		A 91		0 01		
LLYUA	I, Priciii. Orobenzene	UC)			2) 				
LLVUA	I,4-DICHI.OROBENZENE	DCJ.			2		20		2		
LL.VUA	LICHLOROBENZENE	155 1			9		2 07		2		
TLVDA	NETITYLENECHLORIDE	מכת			3 N		a -		n -		
t.L.voa	I,I-DICIILOBOETIIANE	TOO!					2		0.0		
PEST	ALPHA BUT (ALPHA BEXACHLOROX PCLOHEXANE)	ii ii			2 SQ 0		200		0.115 13		
ısı.	OFTA BRECHETA DEXACIBIDADENCYCLOREXANE)	X.			± 69 ±		1 9 10		0415-0		
FST	DELTA BUC (DELTA HEXACHLORDCYCLOHEXANE)	IKCA			200		0.03 0.03		0.03.0		
PEST	GAMMA BIIC (LINDANE)	HGT.			3 500		ı € 00		n \$00		
151	HEPTACHLOS	CKST.			500		0 500		045 0		
PEST	ALDRIN	55			0.05 U		000		0 00 13		
FEST	HEPTACHLOB EPOXIDE	מפע			0 000		0 03 0		0 500		
TST.	ALPHA ENDOSULAN	NG/L			90		1 SDQ		0 50 0		
	DIELDRIN	7			<u> </u>		n :		0.10		
ā ‡					5 6		 		3 : 5 :		
	BETA ENIOCHERA	100			9 =				5 6		
	**: #: # : # : # : # : # : # : # : # : #	CH.ST.					=		2 2		
15	ENDOSULFAN SULFATE	tiCi.			0.10		3		2 2		
PEST	p.p.: DDT	UCA			010		D 10		0 10		
FEST	METHOXYCHLOR	UGH.			0.5 I.)		0.50		0.5 U		
P237	ENDRIN KETONE	CCI.			<u> </u>		200		2 10		
FSI	ENDRIN ALDERYDE	USA			0.1 U		210		N 10		
FET	ALPIIA-CIILORDANE	150 1			0.03 U		0 00 E		O 68 U		
FEST	CAMMIA-CIII.OBDANE	מנים ו			0 90 C		0 CO 0		0 005 E		
FIST	TOXAMIENE				÷ :		<u> </u>		= :		
					- ·		a :		- 1		
ē \$	PCB-1224 (ARCCIII.OR 122) PCB-1323 (ABOCIII.OR 123)	CICA.			3 -		7 -) : -		
3 2) : 		.		3
	PCB. 32414 DOCTION 1242				2 =		3 =		<u> </u>		Û
1534	PCB-124 (AROCULOR 124)	r5n			. ~				3 =		8
191	PCB-12601AROCH1.09 12603	UCA			2		-		: <u>-</u>		3
FEST	2,45,6-TETRACIILORO-META-XYLENE	UCA			3		8		2		3
FEST	DECACHLOROBIPHENYL	nca			•		3		22		3]
TOTALETAL	ALUMINUM	HCA.			1 172		<u>-</u>		389.1		L 8
TOTALETAL	ANTINIONS	HC2L			14.6 U		791		146 U		3
TOTALETAL	ARSENIC	UGA.			199		689		1.7.1		
TOTNIETAL	BARILIN	אנה ה ה			- 1		103		6'07		
TOTALETAL		USA:			0 1 0		D \$1 0		0.11		
TOTNIETAL	CADMIUM	180	_		27 0		= :		2.7 12		





Water	
Surface	
Summary:	
Data	
Analytical	

820 m

		Station1D:	BW:01	BWOI	1046	BWCI	BWIIZ	BW02	(n.k.g	694(0)	BWCH	13.A.B
		Sample ID:	CIAS	Y/I A/S	LIMSSA	YL1MS5M	SWIE	WSSWI	61MS	WSSWIP	SW20	SWZNE
		Sample Depth:	940	0 19 0	0000	O to D	0 M 0	9	0.10	2	9 10 0	9
		Sample Date:	10/10/95	10/10/95	t0/10/95	10/10/93	10/10/95		SEGRO		10/10/95	10/10/95
Group	Punter	Undta										
TOTALETAL	CALCHINI	UCA.	11100 -	22100 -			2490) =		23410 -		77XII *	277KH B
TUTMETAL	CHROMIUM, TOTAL	UCA.	D #1	1.8.1			1.4 U		2 =:		7 *:	=
TOTMETAL	COBALT	UCA.	D 1.1	0.71			I.3 U		7.0		1.7	~
TOTALETAL.	COPPER	5	n 71	3.4 U) []		יים מיי		D 61	1.2
TOTALETAL	RON	UGU	130	2130 -			1070		;		# 979	614 07
TOTALETAL	TEXT)	ಕ್ಷ	D 9\$0	086			D 5'1		2.1.0		0 16 (1	0 66
TOTALETAL	MAGNESTUR	CCA	3840 J	3640			5410 •		#10 •		6710 =	6714.16
TOTALETAL	MANGANESE	UCA	- 66	M7 =			110 =		326 •		62 4 =	5.14
TOTMETAL	NERCURY	UCL	0.11 U	2 1 0			0.11.0		0.15 U		0 11 0	=======================================
TOTALETAL	NICKEL.	NG4.	D 6'5	3.9 U			39 U		3.9 U		29.0	5,9
TOTACETAL	POTASSUM	IKU	7,000	3000			f CYMP		1 30 •		I OHK	2Em 21
TOTAGETAL.	SELENIUM	ואנש.	1.3 U	E (1			1.3.1		13.0		H CT	5
TOTALETAL	SILYER	IKT.	1,7 G	0.61			11.0		0.01		1.7 1.	<u>.,</u>
TOTALETAL.	NO CONTRACTOR OF THE PROPERTY	CGA.	9530 =	- 0181			I ONLIN		- 0357		17900 =	(7.0#R/)
TOTALETAL	THALLIUM	UCA	0.11	2 6 .1			3 1 1		11		a ::	=
THITMETAL.	VANAININI	UGA	9	A FI			7 ~		16 U		2	₹
TOTALETAL	ZINC	UGA	A 179	62 U			1.9 U		13 b U		3.0	£.

D-25

			CA100	3 .	5340						DWD CM
	Sample Depth:	0000	WSSW AUD	0 to 0	Omo	0 en 0	0 m 0	0.00	0100	0 M O	Biod Otoo
	Saruple Dete:		KANDIA)	10/10/93	10/10/93	10/10/93	10/10/93	26/01/01	(PID49	10/10/95	10/19/06 10/19/04
hymeter	Undle										
CALCIUM	TYDN			16600 -		- 00042		3340x) =		33600 =	
HIROMIUM, TOTAL). 6 U		0		2 11		3 X I	3360 = 3360 =
COBALT	חפע			ויז ה		 D		n (*)		n (:1	33403 - 3360 v 1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (
5	. מכעי			1.2 U		0 77		1.2 U		D ~1	33403 (1912) (1912) (1912) (1913) (19
IRON	חפע			= 097		- 100		H6 =		1420 1	33403 - 3360 - 3360 - 18 ti 13
EAD	חפע			D 6.1		O 86 C		0.00		3.2 (1)	33400 = 33600 = 114 to 112 to
IAGNESIUM	ממע			6570 •		6360		1 (1)		f 0117	33403 = 3360 = 11 tt tt tt tt tt tt tt tt tt tt tt tt
IANGANESE	TYDO			46.5 =		30¢ •		134.		308	33403 - 33602 - 18 0 13 0 13 0 13 0 13 0 13 0 140 1 140 1 140 1 140 1 140 1 140 1 140 1 140 1 140 1 140 1 140 1
IERCURY	Typo			D \$1.0		0.11.0		0 11 U		A Tro	33405 - 154 10 11 12 10 13 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15
HCKET	מכע			240		5.9 U		7 O O		3.9 U	33403 - 33600 v 15 to 15
SHIM	מפע			130		2750 J		= 0119		6310 =	33403 - 33604 v 13 U 13 U 13 U 13 U 13 U 13 U 13 U 13
SELENTIN	מפעי			13.0		13 63		3 5 1		10.61	33403 - 33600 v 14 tu 1.3
II,YEK	TVDIN			1.1 (1		0.0		1,7 U		0.7.1	33405 = 33600 = 11 to 11
SODIUM	מע			- 00271		1700.00		13400 J		12300 1	33403 - 33600 - 13 10 11 12 10
HALLIUM	חפער	_) 11) •:) =		3 1 :	33403 - 33600 v 15 10 15 1
ANADIUM	T/DO			יו ני		⊃ <u>₹</u>		., U		1	33400 = 33600 v 15 to 15 t
	חכע			13 U		□ 7 6		0 11		11.5 U	33400 = 33600 pr 15 10 12 0 15 0 13 0 346 = 1420 * 046 03 33 03 4460 J 4460 J 15 0 13 0 59 0 6310 = 6310 pr 15 0 13 01 15
E SE	TON	_		13.0		7.6			3 1	077	

		T. Carrier Co.	ŧ	94,40	out to	9	u wa	1770	138	EW!	E WA	
		710000		5	9*0	2	1			1	1	
		Semple 10:	WSSWZ4	SW15	WSSW25	SW76	WSSW26	SW27	WSSWII	24.5	WSSWZB	
		Semple Depth:	0 00 0	0 10 0	090	9	3	Dist	g et o	0 00	0.00	
		Sample Dude:	10/10/95	10/10/93	10/11/93			10/11/95	10/11/93	101103	JOY 1 795	
Group	Parameter	Unib										
TOTAGETAL	CALCIUM	CCA.	i	34800 =	:	- 0030		1630 =		* Of CE		
TOTALETAL	CHEOMINIAL TOTAL	150		3.7 U		* 1.81		0 9		6.7 U		,
TOTALETAL		LCL.		7.6 U		1.5 U		33.0		1.3 U		
TOTALETA	. 039401	J.C.		16.9 [0.6 U		12.6 U		156.		£
TOTAL CALL	1 NO	252		- 066		- 0567		= 0219		1330		,
Total Car		ממר		13.7 -		- 19		33.		63.		;
TOTALETAL	MACHEN	UCAL		4360 1		3300 3		1 0718		1300		:
TOTAL	ALAKTANESE	rgn Cer		360		14.		635 .		- 699		,
TOTALITAL	* CO. C. C. C. C. C. C. C. C. C. C. C. C. C.	UCA		0,18 U		3 1 4		0 #I #		0 1 TO		
TOTALETAL		UCAL		0 63		11.9.1		1931		FÀ I		
TOTALETAL	POTASSUM	אמות		- DC29		35.		3230		3570 (
TOTALETAL	SELECTION OF SELEC	<u>ත්</u>		<u> </u>		13.03		5		I.6 II		
TOTALFTAL		UGA		U ('I		1.7 U		 U		חני		
TOTALETAL		UGA		12400 =		7 0%61		066		. O.V.		
TOTALETAL		UCA		0 61). U) 17		T#1		
TOTALETAL	VANACHEM	UGU		4.1 U		- 2		13.2 1		14.8.)		
TOTALETAL	ZINC	CC4.		2		12.2 UI		\$18 CI		39.1 17.0 17.0 17.0 17.0 17.0 17.0 17.0 17		

		Station (D:	39713	BW13	BWI	BWIA	84/15	BWtS	91 A.B	BW 16	BW17
		Semple ID;		WSSWID	SW.NS	WSSW30	SW31	WSSW31	SW32	WSSW32	5W11
		Sample Depth:		0 00 0	000	0 10 0	Outo	000	000	9100	0 to 0
		Sample Date:		10/11/93	10/11/03	10/11/95	10/11/05	10/11/95	10/11/95	10/11/95	10/11/93
Group	Parameter	Unite		:	•	,					
TOTMETAL	САГСТИМ	חכע	9330		= 0111		- 0009		# 0X9		4107
TOTMETAL	CHROMIUM, TOTAL	5	=		3.7 U		0 53		7		' = 1 E1
TOTMETAL	COBALT	5	1.3 U		1.3 (1		F.3 O		7 1		0.1
TOTMETAL	COPPER	LCA.	76.4 =		H.S U		1.10		2.5 U		חות
TOTMETAL	NORI	UCA	200E00		1470 -		. M.		30 -		# (29)1
TOTMETAL	LEAD	PCF	16.7 •		6.5 =		1.2 U		3.4 U) I Z
TOTMETAL	MACNESIUM	UCA	1970		1260 J		1690		1740 J		1 008
TOTHETAL	MANGANESE	5	- 071		669		58.2 =		61.6 =		192 -
TOTMETAL	MERCURY	UCA.	0 11 O		o II o		0.14 U		0.11.0		D.13 U
TOTALETAL	NICKEL	UGAL	16.61				53.0		39 U		5.9 U
TOTATETAL	POTASSIUM	ron Non	5130 -		1 9451		1.001		f (XIO)		2550
TOTMETAL	SELENIUM	UGA	J.9 U) ((N 971		1.1 U		U (.)
TOTALETAL	SILVER	15. 15.	U (,		C RT		1.7 U		- -		U L'1
TOTMETAL	SODILIM	rg Cr	2890 J		O OHOR		92.50		1 070		- 0\$/40
TOTALTAL		UCA.	0 87		-		⊃ ₹ 1		1.8 U		7.8.0
TOTAIETAL.	DATES.	5	39.4.1		15.2.3		= :		24.0		36.11
TOTMETAL	ZINC	חכת	<u>\$</u>		S9.5 U		17.7 (1)		13.4 (3)		38 6 UI

	Station(D):	BW17	LIME	BWIT	BWIL	BWIR	BW 19	61 ALB	BW 19	BW19
	Sample 10:	SW33A	WSSWJ	WSSW33A	SWI	WESWA	SWII	SW33A	SWIID	WSSW35
	Semple Depth:	0 100 0	0 20	ð	990	000	0 43 0	0000	2	999
	Sample Deter	10/11/95	\$6/11/01		10/11/95	10/11/95	10/11/95	10/11/95	10/11/95	10/11/95
Parameter	Uais									
CALCTUM	UCA.	4380 J			f 0444		1007	£110 J	4502.41	
HKOMIUM, TOTAL	nca.	D #1			0 17		0 #1	1 8.1	=	
UDBALT	#GT.	1.7 U			1.7 U		U (1	1.7 U	2	
. 22	nen	630			340		12.3 U	0 9 7	133	
RON	UGU	1300			* 85		1510	1250	1497,44	
•	UGU	3.2 U			1.2 U		2.0	7.E C	2.19	
NESIUM	nev.	1910 J			1470 J		1530	f gas 1	132467	
GANESE	UCJ.	100			193 =		223	205 =	224 09	
CURY	מכת	0.16 (1			D 11 a		0 3 10	0.14.0	110	
	מפע	1.9 U			2.9 U		S.9 U	19 U	ŝ	
POTASSRIM	ניטח	I OTH			1910		1320 1	1350	11.91.11	
SKIUKI	UCA). J. U			 		1.5 17	5	2	
ILYER	מכע	1.7 U			1.1 U		0.63	1.7 (1	Ξ	
SOCIUM	חפת	• 0909			# OFC#		e (XXX)	6720 =	62,6324	
HALLIUM	מפע	1.1 U			0 61		0.8.1	0 87	=	
ANADIUM	750	3.9 C			3.t O		3.2 U	2.6 U	90;	
ZINC	r5n	U) 9''LE			121		25,3 UJ	3	77.84	

Page 29 of 30

		Sladon D.	BW19	BW19	BW20	BW20	0.8721	BW2I	BW22	DW22	
		Sumple 10:	WSSWJJA	WSSWISD	SW36	WSSW36	5W37	WSSW31	BCMS	WSSW38	
		Semple Depth:	2	9	0 80 0	0100	0 oi g	0 m 0	g m g	0 00 0	
		Sample Date:		10/11/95	10/12/95	10/12/95	10/12/95	567 LAH	10/12/93	IIV 2795	
Group	Personier	Colts									
TOTALETAL	CALCIUM	UCA.			- OL16		9230 =		- (186.6		
TOTAL	CIERIMHIM, TOTAL	<u>.</u>			3.10		3 E		11 17		٠.
TOTALETAL	-	5			2.8 U		ם בי		n (:		2
TOTALETAL		rion Non			=		10.4 J		1 671		3
TOTALETAL		200			# 60 0		797 a		1		
TOTALETAL		NG.			2.1 U		n r 7		0 97		5 -
TOTALETAL		P.C.			1001		f gktf		3216.3		ς,
TOTALETAL		3			123 .		- 61		- 151		, ;
TOTALETAL		UCA.			0 11 0		0.11.0		0		
TOTMETAL		2			1.9 U		5.9 U		5.9 U		
TOTALETAL		5			2210 U		7430 C		O OHOR		
TOTALETAL.		5			5		5 1.		3 7		
TOTALETAL		DCP.			<u>.</u>		1.1 M		1.10		
TOTALETAL		DG4.			# 060 8		350		7460		
TOTALETAL		DCA.			O 8.1		=======================================		= =		
TOTALETAL	VANADIUM	PG.			3.1 U		n []		1.5 U		
TUTALETAL	ZINC	EG.			3		S.1 U.		77 E		





		Station(D)	100	ire Virg	ESSTATE	8503 5553	15972 559201.	8503 5553	H30N	BS05	8505 \$555DL	
		Sample Depth: Sample Date:	0 to 1	0 to 1	a (NP 0)	Dis 1 KPM/5	(PAYY)	0 to 1	l us o	Cortino	10,103	· 3. '
Group	Paracto	Lists										:
A	NIXOLA DE DOBOLO DE DE LA LA LA LA LA LA LA LA LA LA LA LA LA	UCKG	-	2		2		2	7	<u>n</u> -		()
DIOXIN	LATA-TETRACIILORODIBENZOFURAN	ucyko	-	?		0.1		=	-	<u>-</u>		
MXOIG	1,23,2,8-PENTACHLORODIBENZOFURAN	DO/ICC	2.5 []	2.5 U		13 U		2.5 U	2.5 U	250		
DIOXIN	1,1,7,5.PENTACHLORODIBENZO.p.DROXIN	CCACC	7.5 U	3.5 U		1.3 U		2.5 U	2.5 U	2		
DIOXIN	1,3,4,7,8-PENTACIII, OBODIBENZ DFURAN	DC/KG	25.0	13 C		7.5 U		25.0	2.5	2.5 U		
DICKEN	I,3,3,4,7,£Ifexaciil.orodibenzofuran		2.5 U	13.0		2 :		2 ;	0 7	- C7		
DICKIN	I,2,2,4,1EXACIILORODIBENZOFURAN	DCAKC	77 C			D 5.5		2.50	23.0	9;		
CICKIN	I,2,4,7,FIIEXACHLORODIBENZU-p-DIOXIN	ickc	13 D	2.5 0		ָ בְּיִי		25.0	n ::) 		
NIXOIG	LAJA, JEHEKACHLORODIBENZU-PODOXIN	DCAKG	n ::	7.5		⊃ : :::		0 5 5	0 52	2		
DICKIN	LALA A SERACH CORODINENCO PODOXIN	DCJKC	0 6 2	7.2		2 2		0.62	3 6 6			
NIXOIO	23,447, HEXACILORODIBENZOFURAN	DONG	3;	2 :		7		2 .				
NXO	LINING BERACHTOROUPENCOUNTY.	מכאנפ	2 5	3 5		0.600		0.52	2 2	2 2		
MIXOR	LANGE AND THE TACHTON OF THE CONTRACT OF THE C	DOWG	2 2 2	1100		0.122 J		9	2.5 U	2		
M X CIG	LANA, FREE FREE CHORODISCA STRUCKS	newe	25.0	3 5 4		2.5 U		2.5 U	2,5 ∪	1.5 C		
MANG	OCTACIO DE DESCRICA DE DOMINA	UGVKG	5 632 =	5 4E9 =		4.108.3		L 190.1	10.614 =	3 122 3		
Signatura	OCTACILORODIBERZOFURAN	HOKC	3.0	3 0		1 90 n		3 U	S U	'ns		,
DIOXIN	13.7 L TETRACHLORODIBENZOFIIRAN-CI3	DC/KG	5	7		4		11	s	×		
MXDIG	13,73-TETRACIILORODISENZO-POIOXIN-CI3	DC/KG	Ŧ	S		z		9	z	3		
DIGKEN	123674 HEXACHLOROBIBENZO P DIOXIN CID	DC/KG	8	=		=		2	R	<u>a</u>		
DICKIN	OCTACHLORODIBENZO-P-DIOXIN-C13	DCAKC	#	2		3		\$	ដ	- ;		
IERD	DALAPON	DEVKG	2 OE	270 C) (1)		9 : 9 :	_ : ••••	207		
ILERB	DICANIBA	DEAKG	□	22 U		3		7	Q :	3		
ITERA	MCPA	UCIKG	0001	00011		2220		0 0001	2,000			
	MCPP	ONE							0 00077	222		
	DICHLOROPEOP 14 P. MICHI OBSERVANSVANSTIN ACID)	UCKC			-	28		9	120 tl	1 m22		
		UCKC	22	22		3		2	27	4 5		
	2.4.5.T (TRICILL DROP(LENGKYACETIC ACID)	DCKC	22 C	□		7		□	7 3	→		
	1,4 170	CONTR	1 0 I) E		1 9£		110 11	1 0X E	230 (
(ERB	DINOSEB	DCXC	72 U	22		∓		⊋ 1	⊒ ∓	∓ ;		
(IERB	ZADICHLOROPHENYLACETICACID	DACKG.	2	3 }		<u> </u>		9 6	2 2	1000		
VOASTI	ANITROANILNE	DE/KG						2 3	2 2	2 205		
YOAST!		UC/KG	4800 1	1 009	920U R	O ROS		0 006	U 000	13 006		
LISVOA	2.6-DINITROTOLUENE	UC/KG	0 0031	0001	3700 R	0 00E) (P) (1	369 U	360 U		
LISVOA	ACENAMINITENE	UG/KG	1 000 1	0 00	37to R	n 0%		360 U	- - - - -	790 E	3	_
LLSVOA	ACENAMITHENE	UC/ICC	0 0011	30	3700 R	360 C		= 0 9 ((S	360 0	0	_
LLSVOA	1,4 DINITROPHENOL	UCAKG	7009	7600	9200 R	o co				D 008	8	_
CLSVOA	4-NITROPHENOL	DOMON		9 9	9280	- C		D G A) }	•	
LLSVOA	Nativitation	UCMG			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 2			3 5	3 5	٢	_
VOAST1	2,4 DINITROTOLUENE	DAKO.			¥ 600	2 2		2 3	3	3 5 5 5	5 4	
LLSVOA	DIETLIYL PHTMALATE	2000			1 0 C	9 9			3	7 (9)	2 5	٠.
VOASTT	FLUORENE	2000			1700 R	200		9) DSK	300 C)	•
LLSVDA	ANTEDAMENTES CONTRACTOR CONTRACTO	CORC	4600 U	1009¥	4200 R	7 Q06		30.00	U OK	O 006		
YOACH!	4. DINITRO LIGHTINI PILENOL	UCXC	n gusp	1,600 U	92XD R	U 000		J 0.8		7 (15K		
YOASTI	N-NITROSODIPHENYLAMINE	UCAKG	D 0081	0001	JTCO R	11 OP		n 0 9 (D 09€	360 U		
TOAST	4-Byomophenyl Phenyl Ether	UCKG	1\$00 C		3700 R	<u> </u>		⊐ 7\$4)) (1	D 090		

Analytical Data Summary: Surface Soil

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Analylical Data Summary: Surface Soil

		Station III:	3058	B506	BS:07	BSof	80% 0	8505	e Sup	9210	HS11	
		Sample 10:	5556	\$\$\$60d.	5557	1525	SSSEDE	\$559	\$559DL	2560	1955	
		Sample Dule:	10/10/93	IOTONS	10/10/95	10/10/95	10/10/95	10/10/95	10410493	10/11/95	1001103	
Group	Princier	Ualta										-
Mixel	13.7.8-TETRACIII.OBODIBENZODIOXIN	DGDC	=		=	Ξ		=		=	=	•
DIOXIN	13.3 TETRACIII. CIRCIDIBENZOI URAN	UGJKG	_			=		-			2 =	
DICKIN	11.3.7.4.PENTACHLORODIBENZOFURAN	TIGAGG	1.5 U		2.5 U	1.5 U		1.5 U		13.0	2.5 U	
DIOXIN	LJ.J.J.J.P.PENTACHLORONIBENZO-PDIOXIN	UC/KG	1.1 U		73 U	3.3 C		2.5 U		130		,
DIOXIN	1,3,4,7,4-PENTACISI.ORODIBENZOPI:BAN	UCMG	1.5 U		2.5 U	1.5 U		2.5 U		1.5 U		,
NIXCIG	1,1,1,1,1,1 HEXACTILORODIBENZOFURAN	UC/KG	2.5 []		73 U	2.5 U		2.5 U		1.5 U	2.5 U	- {
DICKIN	I,J,A,J,EIIEXACIILURODIBENZOFURAN	UG/KG	2.5 U		2.5 U	23.0		2.5 to		1.5 U		Ŀ
DICKIN	LLLA.T.B. HEXACHLORODIBENZO-P-DIOXIN	UC/KG	J. 1.5		1.5 U	1.5 U		2.5 U		1.5 U	2.5 U	
DKIXIN	ILLALE HEXACIII.OROPIDENZO-P.DIOXIN	UG/KG	2.5 U		7.5 U	2.5 U		25.0		1.5 U	2.5 U	
DIOXIN	JJJJJJJJJJJKXACIILORODIBENZO-PDIBXIN	UGVKG	730		73.0	13 U		2.5 U		13 U	2.5 U	
DICKIN	22,4,4,7,4-IFEXACIILORODIBENZOFURAN	tiG/KG	2.5 U		2.5 U	7.5 U		3 S U		1.5 II	2.5 17	
DIOXIN	1,2,1,1,8,9,11EXACIII,ORODIBENZOFURAN	CC/KG	23 U		7.5 U	73 U		3.5 U		77 O	2.5 U	
DIOXIN	1,2,1,4,6,7,4-15,PTACIII.ORODIBENZOFURAN	UC/KC	72 O		2 C	2.5 U		7.5 U		1.3 U	2.5 U	
NIXOGE	1,2,1,4,6,7,8-11EPTACHLAIRODIDENZO-p-DIDXIN	OCYKG	= 52		7.5 U	73 U		1.5 U		2.5 ()	Z.5 U	
DIOXIN	1,2,3,4,7,8,9-HEPTACHLARODIBENZOFHRAN	UKYKG	2.5 U		33 E	2.5 U		1.5 U		2.5 U	2.5 U	
DIOXIN	OCTACHI.ORODIBENZO-p-DIDXIN	OC/KG	4,576.)		# 1# E	1.257.1		1.942		1 6850	1.274 1	
DIOXIN	OCTACIO, DRODIJENZOFUZAN	CC/KG	7 €		2 2	7		2.0		2	2.0	
MOXIN	2,1,2 TETRACIIL DRUDI BENZOFURAN-CI 3	UC/KG	Z		7	4		#		7	ŧ	
DIDXIN	AA, J. TETRAUIR, ORODOBENZO-POIOXIN-CIS	DC/KC	8		2	=		ş		Ŧ	₹	
DIOXIN	1,2,1,4,7,5-IIEXACIILORODIBENZO-P-DIOXIN-C13	DC/EC	2		E	5		ę		9	•	
DICKIN	OCTACILLORODIBENZO-P-OIOXIN-C13	1KZ/KG	\$		z	11		5		٦,	3	
HEKB	DALAPON	HERC	3 :		130 C	2 :		⊃ 		∩ 062	120 U	
IERB	DICANIBA	OCAC	3 ! 3 !) 	a :		∓ ;		2	73 U	
EB9	MCFA	OCACO	22000 U					U DOUGE		0 1211	7 000 E	
6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	NCPP STATES OF THE STATES OF T	2400	O 0022		000	5 to 1		O GENERAL		A 40011	0001	
8 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	PICHLUROPROP 14-0 (BICH OBOMIENOXY1/ETICACID)				2 9	5 5		3 :		= :) 	
11500		TILINE C	1		2 2	2 :		2			2 :	
E CALL	14 4 T CPSCH DROPHENDIVACETIC ACID)	CICKG	3		; ;] = =		7		2 5	=======================================	
15.28	14 DB	UCKO	200		9 91	: 5		3 92.		217	=======================================	
JIE SAB	DINOSEB	OCKC	1		2	=		=		2 22	· ~	
HERB	2.4-DICHLOROMIENYLACETICACID	UCARG	121		=	æ		Ξ		졅	Ş	
1.LSVDA	3-NITBOANILINE	UCAKG	∩ 006		D 006	9500 10	SOLLO R	4600 U	9200 R		D 006	
CLSVDA	DINETHYL PHINALATE	UC/KG	9		5 ;)KO (1600 R) (Ka)	370 8	⊃ <u>≆</u>	D (194	
rossin	PART ROADLINE					0.000	19000 R	0.00	8 2 KG		D :	
115404			9 5				160 E		X 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	
LASVOA	ACENAPITHENE	UCAK	2000		96	NEO C	1605		1700	180	3 5	
LESVOA	*+DINITRUPILENOL	UC/KG	200		006	0.0056	19000 R	1 (X 5)	9 mg		7 0%	
LLSVOA	4-NITROPHENOL.	UC/KC	∏ 006) (186	0.000	ISHED R	46KU U	9200 R		D COS	
LLSVOA	DIBEKZOFURAN	UCKG	360 U		360 U	300 0	HOUD R		37cc) R	350 U	360 U	
LLSVOA	1,4-DINITROTOLUENE	UGVKG	360 []		360 ∪	3100 U	763) K		3300 R	350 U	360 U	
LLSVOA	DIETHYL PIMIALATE	UCAKG	360 U		D 09€	JKIO U	7600 R	1 m	3700 R) 180 U	350 U	
LLSVOA	FLUORENE	UCAKG	∩ 0%		D 090	3500	76HD R		3700 R	350 U	360 U	
LLSVOA	4-chloropienyi. Mienyl ether	DEVICE	360 C		⊃ 91	380 6	7600 R	O (200)	3705 R) DXI	36) U	
11.5404	4-NITROANILINE	DOWE	7 00K			940 U	19mm R	esta U	9203 R		O POR	
1.1.5VOA	4.4-DINITRO-LAIET IIV LPIENDL	UCKC	O 006			2 (7%)	i de constante	009 1	9300 R	O 031	200%	
LSVOA	N-NITROSODIM (ENYLAMINE	OCAC	300		⊋	3500 U	7600 R	000	3700 R	350 U	160 U	
LLSVOA	4-BRUALOP(IENYL PIIENYL ETIIER	UGAKG	360 17) (S) (3100 U	7600 R	() (m)	1310 R	320 0	J&) U	





		Stanfool D.	10211 \$56108	BS12 5562	8517 55678E	CISM	1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	5514	9515	BS16 55%	BS16
		Sample Depth:	s	- B	묘	0 10 1	000	9	1 010	9 9	9
į		Sample Date:	1011/93	10/11/95	10/11/95	10/11/95	10/11/03	10/11/95	10/11/93	10/11/93	10/11/95
Cherch	remaker							:			
MOXIN	13,12-TETSACIII.ORDDIBENZO-PDIGKIN	UCZKC		0		0.0	2		0 -	-	
MOXIN	1,1,1, TETRACIIL ORODIBENZOFURAN	UCARG		0.000		1	-		<u>n</u> -	7	
DIOXIN	1,11,1,4. PENTACIILORODIBENZOFURAN	UCVKG		23 U		1.10	2.5 U		2.5 U	150	
DIDXIN	1,1,1,2 PENTACIII. ORODISENZO-POIOXIN	UG/KG		2		2.5) LI		2.5 U	2.5 U	
DIDXIN	114,18-PENTACHLORODIDENZOFURAN	CCKG		73 U		7.3 U	7.3 U		7.5 U	2.5 0	
DIUXEN	1,1,1,1,1,EHEKACHI.ORODIBENZOFURAN	UCAKG		2.5 U		73 U	1.3 U		2.5 U	2.5 U	
DIOXEN	121414HEXACHLORODIBENZOFURAN	LICYKG		2.5 U		23.0	1.5 U		2.5 U	2.5 U	
DIOXIN	LLLA, I, F. HEKA CHLORODISENZO, F. DIOXIN	UC/KG		73 U		1.3 U	1.3 U		2.5 U	2.5 U	
DIOXIN	1,214,7,4 HEXACHLORODIBENZO-P-DIOXIN	UC/KG		7 : C		n :	13.0		n :	2.5 U	
NIXOR	121/14. HEXACHLOBODIBENZO: P. DIDAIN	UCAKG				0 : 1	0 5 5		25.0) ; ;	
N KOR	13447 HEXACHLOROBENZOVIKAN	200		3 ;) 	2 :		2.5	2 : :	
	LALAND-HEAACHLOMOURINACHOMAN			2 5		2 5	2 =		9 6		
	C 3 A & 3 E HE PT A CHILODONISTING CONTRACTOR	DE/KC		0.00		22.5	-		1 61.0	2 2	
NIXOU	12147ESTACHLORODIBENZOFURAM	DUNC!		25.0		23.0	3.50		25.0	25.0	
DICKIN	OCTACILLORODIBENZO-P DIOXIN	UCAKG		4.411		6 7117 -	0 747 J		5.597	0 991	
DIOXIN	OCTACILLORONISENZOFURAN	UCAKG		D DMS I		20	10		0.393 1	2.0	
DIOXIN	23,7,4 TETRACHI, OPODIBENZOFURAN-C13	UE/KG		3		\$	7		s	\$	
NIXON	23.7. TETEACHLORODIBENZO-P-DIOXIN-C13	UCAKG		3		\$	\$		S	23	
MOXIN	I 23,47,EHEXACIILGRODIBENZO-PDIOXIN-CI3	UC/KG		3		\$	61		Ę	2	
MOXIN	OCTACILLORODISENZO-P-DIOXIN-C13	UC/KG		\$		z	19		2	*	
HER	DALLAPON	COKC		3	9	⊃ : 9**	4		1 074	9	
LIERD	DICAMBA	LICYKC		1	3	4	7		1	1	
HERD	MCPA	DEAKC				2,000 0	3000		21000 U	7 00 F	
E 10	MCPP AND COORDS	2450		TION I	7000		0 0007				
	DROUGHT DECENERATION AND COLDS			1 0 1 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							
	51.VEX 114.5.TE	UCAKC		1	3	3	7		1	3	
IEAO	24.5-T (TRICILLOROPHIENOXYACETICACID)	UCIKC		1 =	4	7	7		2 ==	1	
HERB	2,4 DB	UGAKG		210 R	210 UJ	10 U	O 021		210 U	210 U	
8830	DINOSEB	UGAKG		1	3 ;	⊃ ‡ ;	Ţ .		4	= ¥	
8 3	ZADICIII, OROPII ENYLACETICACIO	2800		- 1	S.	= 1	R		# §	3	1
VOAST!	J-NI KO-NILINE	DIENC .				2 5	7		2 2	2 5	
LISVOA	PULLEDANILLE	UCAKG				2 06	2006		1 061	200	
LLSVOA	2,4.DINITIRD TOLUENE	UGAKG		⊃ 950 70		330 U	360 C		350 U	U DK	H DOM I
LLSVOA	ACENAPITHYLENE	UGAKG) 9SC		330 U	360 U		350 U	380	((KX) (k
LISYGA	ACENAPATTIENE	UGAKG		356 U		350 C	360 U		330 0	쭚	2 00 0 1
LISYGA	ZA-DINITROPHENOL	0000		⊃ : 82 {		2 : 8 :	ə :		D :	2 : 2 :	4400 R
LLSVUA.	+NITROPIENOL.	3970				0.00	9				X (1)
YOAST	DIBENZOPURAN	DIAME.				2 2	3 S				X 6
VOACT!				1 5		3 3	36				
1157GA	DE INTERNATE DE LE CONTRACTOR DE L'OSENE	2470		2 5		2 2	2 2		0 000		
500	PLOCKETS A CHI ODOBGONY BURNY FINES			2 5		2 2	3		2 5	2 5	
LESTON		HEAKG					2 2				440.0
LISVOA	4. CONTIROL: METHYLPHENOL	UG/KG		200		200	006) OK	1 063	4-6120 %
LISVOA	R-NITROSODIMIENYLANINE	UCAKG		7 080		350 (1	D 98		330 0	380	100 R
LISVOA	4-bromophenyl Pitenyl Ettier	UCVEG		O 05€		330.0	360 U		350 U	350 U	NO R
		•									

Analytical Data Summary: Surface Soil

		Station III:	8517	1217	DSII	6158	6230	8521	2258
		Sample ID:	2367	SSATO	2363	5569	5570	1255	\$212
		Sample Depth: Sample Date:	0 in 1	10/12/95	0 to 1 0/12/93	0 to 1 10/13/95	0 to 1	1042495 1042495	0 to 1 10/12/95
Group	Farefel	1							
NIXCIO	2.1.3.4.TETBACHLORODIBENZO-PIOXIN	UEVKG	7	-	-	0.1	=	n -	n -
DIOXIN	23.7.ETETRACIILOROMBENZOFURAN	UE/KG	-	-	<u>-</u>	0.7	0 -	-	1 0
DICKIN	1,3,7,8-PENTACHLORODIBENZOFURAN	UCAKG	1.5 U	2.2	1.5 U	2.5 U	2.5 U	1.5 U	250
NIXGIO	1237# PENTACHLORODIBENZO-# DIOXIN	DC/KG	3.5 U	22	1.5 U	2.5 U	2.5 U	3.5 U	350
PIOXIN	11,4,7,8 PENTACHLOROPIBENZOFURAN	UG/KG	1.5 U	22	1.5 U	2.5 U	3.5 U	2.5 U	1 5 U
CIDX IN	1.23,4.7.HEXACILLORODIDENZOFURAN	DEWG	1.5 U	2.5	1.5 U	1.5 U	2.5 U	2.5 U	2.5 U
NIXOIO	1,1,16,7,1-HEXACHLORODIBENZOFURAN	UC/KG	1.5 U	2.5	150	2.5 U	1.5 0	1.5 U	25 C
MXCIO	123,4,2,HEXACIILOBODIBENZO-PDIOXIN	UGVKG	1.5 U	2.5	1.5 U	2.5 U	110	1.5 U	15 U
NIXOIO	1235,74-UEXACITLORODIBENZO-P.DIOXIN	UWKG	1.5 U	2.5	1.5 U	2.5 U	1.3 U	2.5 U	250
DIOXIN	123.7.p.9.(IEXACHLOBODIBENZG-P.DIGXIN	DCXC	0 S.E	27	7.5 U	1.5 U	J.5 U	2.5 U	250
NIXOID	2,3,4,6,7,4.IEXACII.LORODIBENZOFURAN	UC/KG	1.5 L	2	7 ? C	7.5 U	150	7.5 U	2 · ·
MXOIG	1,2,3,7,8,9.HEXACHLORODISENZOFURAN	IIC/KG	D 57	2	1 to 1	25.0	250	25 U	150
Nixor	123,44,74-HEPTACHLOROCOBENZOFURAN	UENC	13.0	5,0	1.5	0 62		25.0	0.00
MXCX	LLSAATEHEPTACH ORONGBENZUADIGKIN	TINK!	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9 ,				7 100	1 1701
DIOXIN	LLLA, 4.7 L.Y. (IEFTA FILLO X OD BENZOFURAN	ULWAG	7.7	C !	1.5	25.0	0 5 7	7 S.	25.0
NIXOIO	WCTACHLORODIBENZO-prioxin	CONC	1 1 2 2	7.41.7	• :	# CZF CF		8 : 6 :	# 970 F
DIOXON	OCTACILLOBODIBENZOFURAN	0000	- -	^	-	, ,	? ;	o ^ ;	<u> </u>
DICKIN	23.7. LTETAACHIORODISENZOFURAN-CIJ	OCARC	;	a :	₹ !	ឧ	2 :	; ;	ę ș
DIOXEN	2,2,7,FTET#ACIII.ORODISENZO-p-DKUKIN-CIJ	nexe	3 ;	;	7	P. 1	3 :	~ :	<u>.</u>
DIOXIN	1,23,6,7,8-HEXACHLORODISENZO-P-DIOXIN-CLJ	UG/KG	2	3 :	2	29 :	\$;	! ۵	5
NIXOIG	OCTACILLO DO DIBENZO - PIOXIN-CII	94/40	<u> </u>	35	2	66	9	2	~
IERG	DALAPON	DAKE.) i		= = = =	⊃ :	O = =	= = = =) : 9 ;
HERB	DICAMBA		3		= ;	1 1 1		•	* !
HERE	NCFA	CONC	1000		1 005 E	23(20 0	0 0000	Canal	1100 E
ICEN	NCPP	D CAR	ם ממוד		3 X	D (III)	O WORZ	1 1111	1440
115,88	DICHLOROPROP	Diske] OF) S :	200	300		102
159	14-D (DICHLOROPHENOXYACETIC ACID)	DENKE TENKE	0 017) : :	0.00	1 GR 7	1027	0 62
1608		D CONTRACT	= = = =		: :	2:	; :	: : :	;
	ZAS-T (TRICILLOROPHENOXYACETIC ACID)	333	= = = = =		= = = =	2 2 2	7 5	3 <u>5</u>	= = \$ \$
	87 F7	IIGAKG	7		? =	3 2	7	7	2 1
		HCMC	. =		. 5	: E	: <u>:</u>	: : <u>:</u>	· -
LISUDA	S.NITROANGINE	HOVE	n 06#		n 026	98	D 006	0 01106	í1 026
LISVOA	DIMETRIC PITTIALATE	HEVICG	130 U		11 OCE	350 U	J76 U	360 U	J 07.E
LLSVOA	PHITROANILINE	UCVKG	D 068		0 0Z6	0.00	0 08-6	O 60%	920 U
LLSVOA	14-UNITROTOL UENE	UCAKG	330 U		J 01.	350 U	J & C	360 U	370 U
LISVOA	ACENAMITIVLENE	DCAKG	330 🗆		2£) 12 1	330 C	360 0	320 U
LLSVDA	ACENAMITHENE	UGKG	330 0		٦ و د		1K) C	⊃ 98 29	33.0
LLSVOA	14-DANTENPHENOL	UG/KG	50 63		D 02,6	2000	<u> </u>		13 RZ6
LISVOA	4-NITROPHENOL	UGWG	5 : 8 :		026	25 25 25	0 1 0		17 626 ·
1.LSVOA	DIBENZOFURAN	HEARC	380		200		9 OF (55 ;	370 1
LISVOA	2,+DINITRUTOLITENE	UCAG	320 C		370 C	350	330 0	399	378 12
LISVOA	DIETHYL MITHALATE	HOKE	⊋		170 t	- 12	30.0	360 ti	11 11/2
LLSVOA	PLUDKENE	UCARG	380 0		320 0	348	170 U	360 U	370 15
LLSVDA	+CHLUROMIENYL PHENYL ETHER	UGAKG	330 to		1000	38	U OFE	360 U	370 12
POASTI	+NITROANILINE	UCVKG	⊐ 983		A20 U	- DS-6	740 U	300	3 0Z6
MAN	4,5-dinitro-laiethylphienol	CRUKG	130 CE		O 026	0 DS	3	17 00 K	920 DI
LLSYOA	NNITROSODIFILENYLAMINE	OKK	130		370 U	□	2 :	200	e i
HSVOA	4.6ROMOPHENYL PHENYL ETHER	Make	320		0 62.5			2	370 0



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	Station D.	īgs B	155	<u> </u>	255	775	8203	9204	5750
	Sample (D:	1525	A1622	SSSIADIL	5533	SSSZDL	\$533	KSS	\$553
	Semple Pepith:	- o o	O to 1	2	d es b	ŝ	1010	- O10	- m
Promotion	Sample Date:	\$6 4 501	2000	109693	10444	104493	104961	10/10/95	10/10/95
HETATH OROGENZENE	HENKO	13 00016	1 003 1	NO E	13 09%		11 091	1 090	2
PENTACHI ORINITENOS.	UCKG	11 066	11 03.6	H CXXI	3		3	= ==	3
PITENANTINENE	UCKG	O COMI		37CO R	360 U		190 C	- 014	4
ANTHRACENE	UC/KG	O 0011	0 0017	3700 R	300 E		NO 0X	38	
CARBAZOLE	UCAKG	n 00#1	1 (20)	3700 R	л 0%) 00K	67 1	□ 0%
DS-BUTYL FIITHALATE	UCAKG	0081	1 OCH	\$100 R	360 U		1 60 U	360 U	360 U
FLIURANTHENE	UCAKG	D 0001	1600 U	3700 B	- 4		360 U	# D091	- GE
PYRENE	DC/RC			STOD R	9		3 9 8	1300	2
BENZYL BUTYL MITHIALATE	UC/KG		1 630 U	3700 R	790 m		360 U	360 U	n oy
BENZOI+MATIIRACENE	UCKG		1600 U	3700 R	340 E		190 C	716 a	<u>.</u>
3,3. DICHLOROBENZIDINE	UCKG) (()		3700 R	D 000		100 C) 197	7
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	DENE			1100	2 09		2 5		5 5
	DEVIC	0 000	001	1300 R	n 09K		0.091	12	1 090
DISENZALIMATERACENE	UCAKG	0 90\$1	0001	3700 R	340 U		360 U	760 J	3,60
	UCIKC	0 00#1	000	37KD P	360 U		360	- 029	=
2-FLUOROPHIENOL	UCKG	5	2	£	2		3	3	=
TIENOL BS	DCAKG	9	2	5	\$		2	Ľ	3
2-CHLOROPHENOL-DA	DC/KG	9	\$	3	15		\$	\$	8
1.2-DICHLOROBENZENE/M	UG/KG	Ş	2	3	3		9	ž.	8
NITROBENZENEJOS	UCKC	6	ŭ	ş	3		Ę	Z	•
Z-FLUOROBIPITÉNYI.	OUVIC	3	ţ	2	7		23	2	ā
2,4,6-TRIBROMOMIENOL	DCKC	S	3	C	3 1		<u>د</u> د	-	3 :
Terphenyl.Di4	DCKG	F	2	2	9.		2	÷ ;	3
FIENOL				2000 P			22.		- : 9 :
MAZ-CITLOROETHYL) ETHER (Z-CIILOROETHYL ETHER)				3700			2000		
ACHLOROM ENDL				3760			0 00 00	0 00 00	9 5
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N.NITRUSCOL-PROPY.ANINE	UCIKC	D cost		370	X60 U		740 0	360 []	300 0
HEXACILLOROETHANE	UCARC	n oosi		3700 R	360 U		O 09K	340 U) }
NITROBENZENE	COKC	D 00#1	000	3700 H	⊃ 0 40		366 U	360 UJ	366
ISOFIIOBONE	CCARC	D 0021		37K) R) (0) (1)		780 U	Jose U	
2-NITROPHENDL	CCKC	1 toot 1		3700 R	⊒ 9		360 U	D 09€	⊒ : 980 6
1,4-DIMETHYLPHENOL				3700	D :		0 ; 9 ;	O :	= : 9 ;
MAZ-CIFLOROETHOXY METHANE		1 000		1 m			700	100	200
2,4DICIII.OROPHENOL	2 200	8		3700			000		
I JATRICIILOROBEAZENE	2450							7 : 6 :	
NAPITIALENE	O SOLAT			3/10/16				5 5	
#CILCURDANTING		3 6			8 5		2000	9 5	
HENACHLOROSOTAURENE	2430				2 5		2 2	7 2 2	
4CILCHO-FAILTH'SLITTENCY					3		2 2	3 5 5 5	
ZATE I BITLANTI IIIALENE HEKACIII ODOGACI OBOITABIENE					3 3		3 5	3 92	
HEALILUKKA TUUTA TAUKAE 114 TOICHI ABAMBAAT				2 WELL	3		2 2	3 5	
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		StadonID:	Š	BSD#	BSOT	B SCO	BSUF	R\$U9	B\$19	BSIO	BSII
		Semple III.	2556	SSAGDI	523)	2231	SSSIDL	52.55	SSPOR	0988	1955
		Sample Depth:	90	2	010	- 80	ē	P co d	2	0 10 1	- e
	Parameter	Sample Date:	10/10/95	IONINAS	(Min9)	5254	ICHIANS		ILV III PAS	10/11/03	10/11/95
YUNSTI	HEXACIILOBOBENZENE	UC/KG	E IM		11 1700	11 (101)	2600 0	11/4/11	1700 0	100	1000
11.5VDA	PENTACILLOROPIIENOL	UCAKG	3 081		2 2		2001				
YUNSTI	PHENANTHREVE	UC/KG	1 091		380 0	1800 C	7,000	0027	3700	3 3	1 091
LLSVOA	ANTII ILA CENE	UG/KG	360 U		380 U	00 00	345	1800	1700 B	130 11	209
LISVDA	CARBAZOLE	UCIKG	D 990		360 U	D QUAK	7500 R	D 0081	J JUT	D OST	360 1
PLISYDA	DI-P-BUTYL MITHALATE	UCAKG	n 091		⊋ Ø		7600 B	O 0/87	37KU R	130 U	II 09K
LLSVUA	PLUDRANTHENE	UC/KG	7 061) W	(14	2600 R	O OUBI	37W R	f 8 3 1	340 U
LLSVDA	PYRENE	DC/KG	1 0/1		380	C (tight	7600 R	1000	37tb R	1 044	Jeo u
LISVOA	BENZYL BITTYL MITHALATE	DACH	O 090		260	O CERT	7600 B		JAN) MC	1 OH
TTSAOA	BENZDAMMTHRACENE	UCAKG	(() ()		7 OF	3400	1600 R	THE PROPERTY.	STUD R	7.0	360 U
LLSVOA	J.Pichlorobenzidine	DC/KG	∩ 0% (340	Mark (7600 R	O OOL	1710 R	350 U	190 N
LLSVOA	CHRYSENE	#G/KG	Ē		360 U	3000	16KD R	n cogn	17cd R	8	Jed U
LLSVOA	NG(ZETRIYLHEXYL) MITHALATÉ	UGAKG	O D9K		700 C		7600 R		17co R	350 U	360 U
TUSYDA	DI-a-OCTYI.M1TIIAtATE	UC/KG	360 U		380 C		767U R	70 DOS 1	A OUT	350 0	760 U
LLSVOA	DENZO(D)FILLIDRANTHENE	UC/KG			3 60 U	3100 01	JOHN R		R (UL	9	∩ 0 9 K
LISVOA	BENZOALITLUBRANTHENE	UG/KG	2		J60 U	SECO UI	7600 R		S OFFIC	130.1	340 ()
LISVOA	BENZONNYRENE	UG/KG	-		360 0	MOO OIL	7600 R	1000 FT	JAKU R	1 1	109K
LLSVOA	INDENCALLLEAPPRENE	CCKG	1001		∩ 090	3KO 53	7600 R	IEN CI	O'NOU R	2	360 C
LLSVOA	DIBENZADIANTHRACENE	CCAKG	20 C		766 U	3KG 61	Teuc R		S (M)C	36) (ş) (
LLSVOA	BENZOKLAJIERVLENE	CICARC	<u>s</u> :				TOUR R		3700 R	<u>-</u>	D 6940
LISVOA	2 FLUOROPHENOL	OCKC	S		3 :	:	0	\$	\$	Ľ	59
LLSVOA	PRENCIPOS	3450	\$:		5	9 :	o 1	Ž :	5,	2	5
LLSYOA		3470	3 ;		8 :	₹ :	.	;	S :	₽;	3 :
Y COLOR			2 ;		2 ;	7 :	,	•	;	≓ i	3 :
LSYOA		34711	c t		= 7	2 :		e :	G :	⊼ i	5 :
AUX-11			2 2			3 3	•	8 :	. 1	₽ ;	3 :
115704	TERRITANE IN				= =	X S		2 2	;	≓ F	;
H SYOA	FIEDOL	OCARC	0.000		= 2 §	2 6	9 (44.7)	2 6		2 5	- 6 3
11.5Y0A	MATACHI OROETHYL) ETHER (T.CHLOROETHYL ETHER)	UCAKG	3		9		2411			180	
H-SVOA	2-CIII.GROFIENOL	UCYKG) 0%		760	JENO U	1610 10	9	JAM B	3800	200
TSY0A	2-METHYLPHENOL (- CRESOL)	UCAKG	360 U		360 U	3400 U	7600 R		JYND R	350 U	D 090
H_SVOA	22"-OXYBISH-CHLOBOJPROPANE	UCARG	360 UI		200 C	State US	7600 R	100 031	JY00 R	350 [1	J60 U
L.SVOA	4-METHYLMIENOL (p.CRESOL)	UCVKG	⊃ : 93) 980 0	3100 0	7600 8	0031	JYOU R	350 U	3 60
LISYNA	NAITEOSODI-S-FROPTLAMINE	UUKC	50 08		5 : 90 :	TO OHE	76.XJ		JAN.	380	388
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TO SAID		DESC	9			1000	7 000 K) (B) (C)	2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	
CLSVDA	2.NITBOPHEROL.	UCKE	2 98				1,000		מ משננ	1000	3 3
LLSVOA	24-DIMETHYLPHENDI.	UGAKG	360		2 3		1 0 0 0 0		1000	2 5	0 00
LISVOA	MACHILOROFTHOMY) AIGTHANE	DCVKG	360 U) 98.	340 6	TOTAL R	7 1121	DAM R	350 U	
LISVOA	14-DICHTOROPHENOL	UUNG	360 U) 98	38.0 U	7600 R	2 631	JAN R	350 U	O 1990
LISVOA	I J.+TXICIILOROBENZENE	UCAKG	7 C9K		∩ D9 K	SECO U	7600 R	n ooti	JYNN R	350 U) B9C
LLSVOA	NAMITHALENE	UGAKG	360 C		∩ D9X	3200 U	7600 R	D 9011	3700 R	350 U	∩ 0% (
CLSVOA	4-CHLORDANILINE	UGIKG	360			13 000 [1	A 0047	D CONT	370th R	350 €	J 090
CLSVOA	HEKACIILOROBUTADIENE	CCKC	360 U) 98	3100	7600 R	n oxy	37KD R	350 C	360 U
LLSVOA	+CHLORO-3-METHYLPHENDL	nc/kc	360) 180 €	JECO U	7600 R	7 CO S	3700 R	350 C	360 U
115vDA	2-A(ETI(YLAAMITIIALENE	UC/XC	9		⊃ D9C	7 CO T	7500	n coal	37KK R	38.0	360 U
LLSVOA	HEXACIILOROCYCI.OPENTADIENE	הבעכ	> 0 %		360 C	34ro U	7600 8	n com	S SEL	350 t	D 090
rrsvoa	1,4.6-TRICHLORDPHENOL	nevke	- OF		28 28	n contr	7600 A	n coll	JANK R	380 0	A 090





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Analytical Data Summary: Surface Soi		_
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			Station(D)	158	BSI2	6512	BSIJ	DS14	BS14	6813	BSIG	BS16
Particul Continue C			Countle Denth	1000	1000	3202KE	686 6	1 5	330404	1 o 0	0000	SSOUL
			Sample Dete:	10411.63	10/11/95	10/11/95	SATIAN	ID/11/03	INTINS	24 IA	10/11/95	HYIIM
Particological Continuent Particological Continuent	Group	Parameter	Units									
Particulation Particulatio	LISYOA	HEXXCHI.ORUBENZENE	UGNKG		350 U) (K	360 U		_ 0 %	⊃ 3K	HOU R
	LLSYOA	PENTACHLORUPHENGL	UUNKC) 181	<u>∓</u>		⊃ 8	2	2
	rrzyoa	PIENANTHRENE	UCIKG		콗		3. 3.	2		<u>.</u>	- : - :	2 . 2 .
Colorations Coloration Co	11.5VUA	ANTHRACENE .	UG/KG		35 55 1		3 : 3 :	5 ;] S) S	
	TI-SYOA	CARBAZOLE	ncyke.		⊃ : 50 !		9 :	D :		3 ;) (K)	
	LLSVAA	DI-B-BUTTL PIITIALATE	USAKG				9 8) (2)		2.5	3 - 2 :	
Pack Pack	1.1.5VOA	FLUORANTIENE	UCKE		2		R:			1 077	e s	8
Description of the color 1910 1	1.5704	PYRENE	CORC		R :		2	2 :		9.5	2 :	
Discriptive Engineering	LLSVOA	BENZYL BUTYL PHTUALATE	OCARC				0.5	- COX		2 . 2 .	J :	
DESCRIPTION DESCRIPTION CORP. CO	LLSYOA	BENZOGAMITIRACENE	CENT		9		G ;	9		166) : 	
CONTROL CONT	TI-SYOA	3. DICHLOROBENZIRNE	CCKC		280		2 CSC	360 1		5 . 5 .	9.	
DESCRIPTION TRANSMENTER COREC 380 100	LLSVOA	CHRYSENE	CCKC		210)		8	2		20	3	4 00
DESCRIPTION CORRECT TOTAL TOTA	H-SVOA	Neg 2: ETHIY LIJEXYL) PHTHALATE	CORC		98		300	300		3 : 3 :	⊃ :	× ×
DESCRIPTIONE CHARGE 200 191 90 91 91 91 91 91 91 91 91 91 91 91 91 91 91 91 90 91 91 91 91 91 91 91 91 91 91 91 91 91 91 91 92 91 91 92 92 92 92 92 92 93	TOAST1	DI-9-OCTYLMITRALATE	CHCARC		200		300	n on		=	2	
Decirio Control Cont	TISYON	BENZO(6)\$1.110RANT21ENE	CHCARC		710 J		25	<u>.</u>		=	<u>\$</u>	
DESCRIPTION CONTINUE CUCKE 28.1 29.0	LLSVOA	BENZUAL) FLUORANTIIENE	CHCARC		700		32 J	6		=	78 28	HERT A
Designation Designation	LLSVOA	BENZONIPYBENE	CICARE		700		7	7		<u>.</u>	350 U	1 (1) (1) (1) (1)
DECENTIONALIPE CERES USANG SS SS SS SS SS SS SS	LLSVOA	INDENOLIZACAPTRENE	UCIKE		7 001		š 2	3		3	3.	2
DESCRIPTIONED 1991 231 321 321 321 321 321 322	LISYOA	DIBENZUMMTHRACENE	OCARG		*		350 U	3 3		3 20 U	38	E (1)
THE TOTAL CONTINUE OF THE TOTAL CONTINUE O	LLSYOA	BENZONFFINERYLENE	DC/KG		1961		37 1	2		3	350	2 2 2
	LLSVUA	J.F.LUOROPHENOL.	DC/KC		F		5	Z		3	X :	2 :
1,000000000000000000000000000000000000	TT2A0Y	PIENOL-D\$	IKAKE		Ţ		\$	2		3	2	7
ILLIDICIDICIDICIDICIDICIDICIDICIDICIDICI	LL-SVOA	1-CHLORDFIIEWOLD	OCKE		£ :		*	2 (2 9	3 ;	÷:
THINDDENEMENDAL UCKIC 130 15	LLSVOA	I.J.DICIILOROBENZENE-D4	UGKG		:		2 :	2 !		\$:	ā :	: :
TERRITENT-DIAGODINICIONI-DIAGONI-LICONICIDIALICONICID	LLSVOA	NITROBENZENE.DS			; ;		2 :	? ;		6 ;	2 F	3 3
Value Valu	LL SVUA	1.FI,UOROBIFIENTI.			: :		: :	E 5		2 \$; =
PARTICULOROPHICAL 190 19	LLSVOA	1,4,4-TEIBKOMOPHENOL	UASA L		3 \$: :	2 8		3 8	= =	
PARTICIAL OR OFFITIAL PARTICIAL OR OFFITIAL PARTICIAL OR OFFITIAL PARTICIAL OR OFFITIAL PARTICIAL OR OFFITIAL PARTICIAL OR OFFITIAL PARTICIAL OR OFFITIAL PARTICIAL OR OFFITIAL OR OFFITIAL PARTICIAL OR OFFITIAL OR OFF	LISVOA	TEKFILENYL-DJ4	24/241		₹ Ş		: 5	2 55		38.	: S	2 CE
14 15 15 15 15 15 15 15	YOAT	PIEROL.	10/00		2 9		2 5	9		138.0	351	H CHI
13.0 10.0 13.0 13.0	VI SVD1		OGYKG		350 C		380	9		150 U	330 C	HE CHE
15-0XYBIGH_CROPROPROPER UCJKG 150 U 15	11,5704	146THYLPHENOL (+CRESOL)	UG/KC		330 U		350 U	0.090		350 U) (Itus R
4.METITILIDAGE DESCOL; UGKG 150 U 350 U 360 U 350 U<	LL5VOA	11-OXYBISH-CHLOROPROPANE	UC/KG		130 U) DSE	O 090		⊃ 9X	350 C	1 00 R
NATIONAL PROPERTY AND PARTITION AND PARTIT	1.1.5570.4	LMETHYLMIENOL (P-CRESOL)	UC/KG		130 C		250 C	0 090		130 U	350 C	1 FC B
NITROBENZENE UG/NG	LISYON	N-NITH KOIN-B-PROPYLAMINE	116/16		330 0		338.0	⊃ 907		= 0K	3 3 3 3	a .
NITRODENZENE 1900 1500	TESYUA	HEXACILLORUETHANE	nc/kg		330 0		28.) 200) (SE) : S	
SOM LORGINE SOUTH CONTINUE SOUTH C	tl.5voa	NITROBENZENE	CONC		9 3		985	9 3			9 5	
14-DIMICROPHIENOL	LLSVOA	SOMIORONE			2000			96		2 5		
14-DIN E H 17-D	YOAS 17		2000		2 5			- -		200		
4.4-FILLOROPIEZADI. 1.5-FILLOROPIEZADI. 1.50 U 350 U	LISVOA	LALIME HAUFERMUL	0000		2 5		380	9,09,		38.0	38.0	200
124-TRICHILOROPINZENE 1904 150 U	יייייי	MARA CHILINAL HIGH I MICHIANE	DE NO		2 52			341.0		2 80	350.0	H 0071
ACTION CONTINUED 150 U 1	LLSYOA		OCHEC		200		130 0	200		: 0 x €	386	EKKI R
4-CILLURGOANILINE 350 U	115111		DCMG		350 U		330 C	360 U		350 0	350	IXXI R
REXACTIC CORPORATE DIENE LG/KG 350 U 350	LEVOL	ACTION AND INF	UC/KG		2000		350 U	D ON		350 U	350 U	INT. R
4-CHARGE ANETHINE ANETHINE ANETHINE ANETHINE ANETHINE ANETHINE ANETHINE ANETHINE ANETHINE ANETHINE ANETHINE ANETHINE ANETHINE ANETHINE ANETHINE AND ANOTHER AND AND ANOTHER AND	702		DOKO		350 U		130 U	360.0		380 0	350 U	INTXI R
TAMETHYMAPHTHALENE UC/RG 350 U 350 U <td>E EVOLV</td> <td>ACTIL ORD SAMETHYLMIENOL.</td> <td>UC/KG</td> <td></td> <td>350 U</td> <td></td> <td>330 C</td> <td>360 U</td> <td></td> <td>350 U</td> <td>350</td> <td>1 TOTAL 18</td>	E EVOLV	ACTIL ORD SAMETHYLMIENOL.	UC/KG		350 U		330 C	360 U		350 U	350	1 TOTAL 18
HEXACHICOROCYCLOPENTADIENE UG/NG 350 U 350 U 350 U 350 U 350 U 350 U 1800 350 U 1800 350 U 350 U 1800 350 U 350 U 1800 350 U 350 U 1800 350 U 350 U 350 U 350 U 1800 350 U 350 U 350 U 350 U 350 U 1800 350 U 35	LISVOA	2-METHYLMAPHTHA LENE	DC/KG		350 U		130 1	D 09K		350 U	> 0X	ISTAG R
24,6 TRICHLOROPHENOL. 350 U 350 U 350 U 350 U 350 U 1800	TEVOV	HEXACIILOBOCYCLOPENTADIÊNE	UCAKE		350 U		n oxí	760 L		350 0	350 E	1400 R
	MOVELL	24.6 TRICRIDATION ENGINEEROL	DICHE		350 U		350 U	360 U		350 U	350 U	1600 R

Analytical Data Summary: Surface Soil

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			5567	02985	256	. See	5570	\$571	2235
		Supply County	9 5 6	9 2		900	1919	010	
Group	Paraseter	Jefts	(410)	667100	C6/7 [5]	(8/7 JB)	SKII N	(671A)	647143
LLSVOA	HEXACILLOBOBENZENE	DC/KG) 50 U		370 U	o etc	370 U	J60 U	13 O. U
LISVOA	PENTACILLOROPHENOL	DMCDID	O 081		0.026) (§)	281	O CRI	2
LLSVOA	MIENANTURENE	DOWC	330 C		U 078	380 U	110 J	Jes (1	370 U
LISVOA	ANTHRACENE	DCXC	J 50 U		ti off) ost	370 U	J60 U	330 U
LLSVOA	CARBAZOLE	CCAKG	⊃ 9KC		370 []) (ME	370 U) 60 U	330 0
LLSVOA	DE-DUTYL PITTIALATE	CICARG	D 05€		370 U) (1)	D OTE	100 U	170 U
LLSVOA	FLUORANTHENE	CCKC	O 05C		320 U	380 U	1000 1000	J&! C	370 U
LISVOA	FVRENE	DCMC	330 0		J 07.	0000	<u>@</u>	360 C	10 C
LISVOA	BENZYL BITTYI, MITHALATE	UC/KG	0 05 0		370 U) (4)	370 U	360 U	300
LSVOA	BENZO(a)ANTIIRACENE	DC/KG	350 U		370 U		- Si	36) U	330 U
LISVOA	37.DICHTORORENZIBINE	UC/KC	330 0		370 U		11 0.0) (M)	330 U
LISVOA	CHANENE	DZ/KG	320 0		370 U		- 2	Jeo ti	= ==
LISVOA	basethylhextl. Mithalate	CIG/KG	350 12		370 U) 12 13 13 13 13 13 13 13 13 13 13 13 13 13	ח חנו	D CHAIL	
LLSVOA	DI-0-DCTYLMITHALATE	UC/KG	3 SC		1 OC S	요 요 .	330 0) (8)	2
115YOA	DENZONJELIORANTIENE	DC/KC	25 25 25 26		310 U	300	3) 196	25.
LLSVOA	DENZOXEJELIORANTIIENE	IKZ/KC	٦ 5		J 01	360	- (OS)	346.0	1100
LLSYOA	DENZOALPYRENE	INC/KG	350 U		J10 U) (S)	‡ -) (9)	J 01.
YOASTT	INDENO(1,11-c,d)PYRENE	DZ/KC	350 ∪		370 U	360 0	2	O 090	D 00.0
LLSYOA	DIBEKZĮ _G AMTIIRA CENE	UCAKE	350 U		10 C	35 25 27	13 O.C.	O 090) (C
LLSVOA	8EYZQ _E LJPERYLENE	UCARC	350 0		7 Q.E	350 U	198	O 090	330 C
ELSVOA.	1.FLUOROPHENOL	UCIKE	25		#	¥	F	22	~
11.5704	PRENOL.DS	DIAME:	3		Z	Z	7	뎔	\$
LLSYOA	1CILLORDFHENOLDS	OCARG	a		\$ 1	%	7	5	\$
TESYUA	12 DICHTOROBENZENE DA	DC/RC	3 1		3 :	3	=	77	3
TI-SYOA	NITROBENZEME.DS	THEFT	z (3:	R (F :	? :	ス :
11 5004	144 TOIRDOMORIEMOS	HCMC	3 \$		8 5		: ;		3 5
LISVOA		1KVKG	: G		₹ ₹	. 3	s =		
H-SVOA	PHENOT.	DC/KG	350 0		130 U	380 U	330 U	98	
LLSVOA	MAJ-CIILOROFTHYL) ETHER (2-CHLOROETHYL ETHER)	DC/KG	150 U		370 U	200	130 C) D9C	200
LSVOA	1-CHI.OBOPHENOL	UCARC	350 U		II QLE	360 0	U OFF	360 U	200
LLSVOA	PARETHYLPHENOL (o-CRESOL)	OC/KG	350 U		370 U	350 U	U OFE	360 🖰	J 0/C
LLSVOA	LT-OXYBISH-CHLOROJPROPANE	DICTIC	380 0		J 02 C	380 U	U OYE	J60 U	376.0
LLSVOA	4ATETHYLPHENOL (P-CRESOL)	DUNC	350.0		J 0 C	380 U	370 U) (4)	D \$KC
FL5V0A	N.NITHOSODI-B-PROPYLAMINE	OCARC	3 <u>5</u> 0 C		J 07.E	340 E) (M	D 090) (C
LLSVOA	HEXACIILOROETHANE	NCAG	38 C		170 U	350 (330 U	360 U	50
LLSVOA	NTROBENZENE	DCARC	180		370 (300	ם סינו	360 C	36
LLSVOA	ISOPHORONE	OC.LC	320 0		310 17	= SE	J. O.C.	_ 98	36
LL-SYOA	PAITEOFHENOL	OCKC	98		D OK	=======================================) <u>1</u>	D90	
CL5V0A	24 DIMETHYLMIENCH	3850	380 0		2		0.0	⊒ : 98 :	= E.
LLSVOA	MATCH CROCHIOAT) METHANE	USEC	320 C		310 0) O(I	= 9	376
175VOA	14 DICHLORUMIENOL	OCAG	285		J OLE	350 [) O(350 U	36
LLSVOA	L24TXICILOROBENZENE	OCIEC	380		37 C	350 5) (MI) 160	320
11.5704	NAPILLIALENE	UGIKG	2 2 2 3 3 4		370 U	360 U	U OYL	O 090	370 [
Y0.571	+CIIILU NOANILINE	UCIKG	380		J 01	350 0	n OLE	99	370
LLSVOA	HEXACIII.ORODUTA DIENE	OC/KG	350 C		330 U	350 U	J70 U	7 O9K	() DYE
H.SVOA	+CHLORO-DAIETHYLPHENOL	UCAKG	350 U		J 0/L	3100) (K)	360 U	370 L
LLSVOA	3-METHYLNAPHTHALENE	UCARG	350 C		370 U		3% C	360 U	J 0/E
LLSYOA	HEXACITLOROCYCL, OPENTA DIENE	11C/KG	350 C		J 01	350 U	O ()()	360 U	C) D/C



ORO113627.RR,ZZ/024.XLS

	Sample Depth: Sample Deter	0 to 1	1 010	10,0491	1 ar 0 1 ar 0	10,5493	0 to 1	0 to 1	0 10 1	to IAIIAN
Parameter		11 0097	11 0097	9 (UKO	n oue		D 006	11 UOS	1 05	
AGN TRICILIZATION OF THE STATE	HAKC			SEC R	NO C		2	3	Meth	
CHLOROMETHARE	UWKG	0 5	n 11		<u>-</u>) =	0 11	5	
METHYL ETHYL KETONE (1.BUTANONE)	UCZKG	011	<u>-</u>		n 1		n =	0 =	=	
TOTAL 12-DICHLOROETHENE	UCAKG	2	<u> </u>		<u> </u>		- -	=	0 =	
CHLOROFORM	UGNKG	D	<u>ء</u>		- -		- -	=	a :	
I,I.I-TRICHLOROETHANE	OCKE	o =	<u>.</u>		=		5 =	?	0 =	
CARBON TETRACIII. ORI DE	OCKC	D 11	<u>-</u>		<u> </u>		2	=	n =	
BENZENE	OCARG	9 =	<u>-</u>		<u> </u>		<u> </u>	0	- -	
13. DICHLOROETHANE	1KZ/KG	= =	n ::		<u>-</u>		1	<u>-</u>	=	
TRICHLOSOFTHYLENE (TCE)	UC/KC	0 11	0 ::		<u>-</u>		o :	= : =	=	
1,2.DICHLOROPROPANE	UCARG	9 =	5)		⊃ ÷	=	1	
BROMODICHLOROMETHANE	UCAKG	9 =	n ::		<u>=</u> =		n =	o :	a =	
YNYL CIILORIDE	UCAKC	2) -		<u> </u>		-	9 =	<u> </u>	
METHY), ISOBUTYI, KETONE (+METHYL-I-PENTANONE)	UCAKE	9 =	==		<u> </u>		∩ =	=	-	
CA-L DOICH LOROPROPENE	DC/RC	D II	2 ::		<u>n</u> ::		n ::	9 =	ב מ	
TOLUENE	DC/KG	n 11	-		7.		o =	<u> </u>	<u> </u>	
CHEST LADICILLOROPROPENE	UCAG	<u> </u>	2) 1		⊃ Ξ	5 1) 1	
LI J.TRICILLUROETIBANE	UC/KG	7 =	5) H		=======================================	=	n ::	
2-HEBANONE	UG/KG	-	n -		5		<u> </u>	- -	ם די	
TETRACIILOROETHYI.ENE(PCE)	OC/KG	: :	D 1) -		a =	= =	= =	
DIBROMOCHLORDALETHANE	CIC/KG	=	0 11)		-) =	-	
CHLOROBENZENE	UC/KG	=	o =		.		=	=) = 1	
ETTIYI.BENZENE	UC/KG	<u> </u>) =		o :) = :	3 ;) 	
BROMONETHANE	OS/SC C	> ·	- -				<u>.</u>	> ·	: ·	
Total Aylerna	DACK C	- :	- =		· =			=======================================	•	
	DC/KG	=======================================	: :) = =) =	=	=	
BECOMING ORDER TO A DESCRIPTION OF THE STATE	DC/KG	: =	=) =		0 =	1 =	5	
	OCAG	5	501		ž		Š	\$	ŞO	
	UCYKG	ΙΞ	: ≘		Ξ		₹	<u>=</u>	3	
LEBOLNO-LELIODOBENZENE (4.820MOFILUOROBENZENE)	11C/KG	8	8		8		43	<u>ē</u>	001	
CHORDETIANE	HCMC	<u>۔</u>	1		7		o =	2	a =	
ACCTONE	DCVKG	13 E	5 =		3 =		ñ ≅	3	5 =	
I,1.DICHLOROETHENE	DC/KG	o 1	<u> </u>		<u> </u>		- -	=	1	
CARBON DISULFIDE	UCKG	> =	= ;		7		= :	- :	= ;	
1. DICH LOROBENZENE	DCAKC	0 000	001	3700 R	9		900	3 ;	3 :	•
1,4-DICHLOROBENZENE	UCAK			370 %	9 5		000	9 5	2 2	•
13-DICHLOROBENZENE	DICK!			2,00			3 =	3 =	=	_
METHYLEAE CHUURIDE		2 =	2 :) = : :		==	=======================================	=======================================	8
LITTER CONTROL HONE	IIORG	2	5 67		: = :	=	0 17	2	1,7 U	=
ALTER BILL (ALTER REACHED BOCKET DIRECTOR	HCKG	0 61	0.61		0 1	=	7	7	1.7 U	=
BELLA BILL (BELLA HEARTH BOOK OF TEXTURE)	UCK	9 6	0.61		0 97	=	7	11 11	0.00	=
CARIMA BIC CLINDAND	OC/KG	O 6'1	0.61		O 8.1	=	20 11	3 =	3.7 U	<u>=</u>
HETTACHLOR	UCAKE	O 6'I	0.6.1		U #:T	=	======================================	7 2	3.7 U	<u>=</u>
	UG/KG	D 6:1	1.9 U) (i	=	n •1	= =	3.7 U	=
HEPTACHLOR EPOXIDE	UG/KG	D 6:1	0 61		0 87	<u>.</u>	G 5 3	2 2	3.0	=
ALMIA ENDOSULFAN	UG/KG		D 61		0 11	4	1.8 U	3 ==	110	=
	CACCE		-		2	3	77	28	-01	

3	0	8	3	3	Ź

		StationalD:	80S	9008	850	RSCH	BSM	8509	B500	6510	1150	
		Sample Depth:	3 a	100	- A	0.0		1 m	3377J.	2300 E In I	1 m 2	
9	Permeter	Sample Date:	10/10/93	10/10/95	ID/10/95	10/11/95	lottors	10/10/93	KVID93	10/11/95	1011.05	
TOASTI	245-TRICILI DROPHENOL	UCARG	006		71 006	11 105-6	19000 R	() (X)97F	9200	130 (1	1	,
LISYAL	2-CULORONA MITHALENE	THANK	9		340 U	JEET U	7613 8	i izzi	M (M/C)	2 2 2 2 2 2 2 2 2 2 2	Z Z	ţ,
LIVDA	CILOROMÉTIRA	CCVKG	<u> </u>		n	==		0 1		n 01	=	5,
LVOA	Metry L ethyt, ketone (Jbutanone)	COCC	2		5	=		<u> </u>		D 02	=	
LLYDA	TOTAL LADICILLOROETHENE	מכשנפ	2		-	5 =		5		20	3 E	
11.704	CHLOROFORM	COXC	2 :		⊃ : = :	5 :		=		D Q	<u> </u>	
14.04	J.I.I-TRICIIL-OROETIIANE		= : = :		= =	<u> </u>		=		2	<u> </u>	
FLVDA	CARBON TETRACIIL DRIDE		= : = :		= :	= :		- :		5	-	
LLVOA	BEALENE 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3460	2 :) :) : : :		- : - :		o : e :	> :	
LLVOA	TO DICITION OF THE PARTY OF THE	3 4 5 5 5	a :		= :	= : : :) :) 2	⊋ :	
1 404	TATUTURE TITLENE (T.E.)		= =		= =	= =		3 = 3 ±		2 9) 5 5	
TO YOU	BEONODICH CORONETTANE	UGAKG	: :) : =	: ::		= =		2 2	=======================================	
LLVOA	VINYLCFILORIDE	UCARG	=		=	: =		; =		2 2	? =	
rl.voa	METHYL ISOBUTYL KETONE (4-METHYL-1-PENTANONE)	UCAKG	0 II		0 11	9		<u>-</u>		01	=	
TLVOA	dallanchiorpropere	UUNKG	<u> </u>		<u> </u>	5		<u> </u>		n oi	o =	
TEVOA	TOLUENE	UGWG	=		n =	<u> </u>		=		0 01	= =	
LLVOA	CTREE-1,3-DICHLARAPRUPENE	DCKG	5 2) :	> =				9	= =	
LLVOA	I.I.2-TRICKLOROETHANG	COXC	= : = :)	- : - :		2 : 2 :		2	<u> </u>	
TT VOA	PLEXANDRE	DISKO	= :		> :	- -		<u>-</u> :		o : 9 :	= :	
, c.	TELEMACHUM DECENTER TERREPORTED TO THE BOARD THE DECENTED TO THE BOARD THE THE AREA TO THE BOARD THE THE AREA TO THE BOARD THE THE AREA TO THE BOARD THE THE AREA TO THE BOARD THE THE AREA TO THE BOARD THE THE AREA TO THE BOARD THE AREA TO THE BOARD THE AREA TO THE BOARD THE B	2000) : : :		= =	= =		> : : :		2 5	= : = :	
1004		DOKO	2 =		> =	2 =				2 5	= = = =	
TAOA		ncwe	:=			; =				2 2	: = : =	
LLYOA	BRONOMETHIANE	DOME	=) :=	=				2	; =	
LLVOA	Total Xytems	DOMO	=		7	2		<u></u>		D 01	=	
LLVOA	STYRENE	UC/KG	=		1 11	= =		<u> </u>		D 91) =	
LLYOA	BROMOFORM	nc/kg	= =		n =	=		=		0	- -	
LLVOA	I.I.2.2-TET BACKLOBOETHANE	DCVKG	= :		> = {	= =		=		⊃ <u>e</u>	= =	
17.704	L.DICHILORDETHAND-DA	DC/KG	≘ :		2 !	<u>₹</u>		≅ :		Ē	Œ	
LLVOA		5 CKG	Ξ !		5 !	≛ (<u>e</u> :		2	<u> </u>	
YOA	THE DESCRIPTION OF THE PROPERTY OF THE PROPERT	90000	3 =		3 =	=		£ :		202	\$:	
CLVOA.	ACETONE	1)C/KG	: =		3	· =		. 5 : :		9 9	2 2	
V0/11	I,I-DICIII,OROETHENE	DEMEG	5		D 11	=		; ;		9	; <u>;</u>	
LLVOA	CARBON DISTILLINE	DC/KC	=		D 11	<u>-</u>		2		3	3	
LLVOA	13-DICHLOROBENZENE	UC/KG	D :		□ 790	700 n	7620 R	(ECO 17	3710 R	350 U	360 []	
LLVOA	LADICALOROBENZENE	OCKC	3) 	200	7600 R			= 3.0 1.0	360 0	3
LEVOA	LEDICALOROBENZENE	CORC	3 : SX :		⊃ : S :	9:	25 25 26 26		37CO R	1 050	⊐ : Sg :	3 (
rr voy	METHITLENE CHILORIDE		===		= = = =	3 = 2 =		3 : 2 :		2 9	- :	3 (
בר בר בר	LITERATURE AND ALL BOTH HERE CHILDRED WAS CHESTERS	DENE		27.0	- 17	: :		= ;		2 7	= :	3
	ALTHA BILL (ALTHA HELLCH) OROCYCI CASTANEI	DOKO		: :								
1534	DELTA BIIC (DELTA HEXACILOROCYCLOHEXANE)	nc/kg	7.6		9	: <u>-</u>		2 5		2	: :	3
FEST	GANIMA BIC (LINDANE)	UCKG	0.59		7.0) A		4.7 13				3
PEST	HEPTACHLOR	UCIKC	9.2 U	37 B	4.6 U	0.		4.7 U		7	= =	4
PEST	ALDRIN	UC/KC	9.2 U		O 97	⊃ 6:I		4.7 U		0 11	n •:	
FEST	HEFTACHLOR EPOXIDE	DC/XC	9.2 U	37 B	1.6 ∪	D 6:1		1.7.1		O 8:1	D 11	
PEST	ALPIA ENDOSULFAN	UCAKC			4.6 U	∩ 6:I		43.0		D 8.1	0	
75.7	DIELDRIN	OGREG	85 85 85	98	-	3.6)		0 1.6		77	E	

Analytical Data Summary: Surface Soll





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THE PROPERTY METERS CURREN			10000				• = = =			=======================================	3 = 2 ±		
A STATE CONTINUES CONTIN	LLYDA		TO THE PARTY OF TH		=======================================		2 2			2 =) = 2 ±		
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Table Tabl	1 VO	4.1 CDICH OROPROPENE	UGNG				2	24		3	= ₹		
1.0 1.0	LIVOA	TOTAL STATE OF THE	UCMG		- -		11	J (2		9	N 92		
Intervention of the properties of the properti	TVOY	CARTIL DICHTOROPHOPENE	UCMG		11.0		<u>-</u>	13 C		? =	2		
Table Action doctring between the control of the	LLYOA	I, L-TRICIILOROETIANE	DCMCG		<u>-</u>		<u>-</u>	33 0		-	79 C		
The proposed control of the	LLYOA	1-LIEXANDNE	UCAKG		1)	2) (Z		n =	76 E		
CILLOYORENZENEE UCKKG	LLVOA	TETTACKLOBOETHYLENS/PCEN	ncwc		<u> </u>		1	71 C		= =	39 C		
CHIOMOMETRANE CUCKG	LLYOA	DIBROMOCHLURUMETHANE	DWDI		==		1 11	71 C		- -	29 U		
STATEMENT STAT	LLYOA	CHTOROBENZENE	UCMG		<u> </u>		2	0 tz) =	A 65		
DETAINS DETA	LLYDA	ETHYCHENZENE	UGAKG		a =		<u> </u>) (3 =	2		
TOLALENIARE LUCKG 11 U 71 U	LLYUA	BRONIGNIETIIANE	LCKG		2 : I :)	ה ה		3 ·	⊋ : % :		
11.2.TETRACUILOROETIANE UGING 11.0 11.0 11.0 12.0 1	LYOA	Total X plant	DC/KG		5 : : :)	o :		~ :) : (;		
1.2.PTETACHILOROPETIANE UUNC UU	TTAOY	STYBENE	DCARC		2 :		= =	2 ;		= =	2 2		
12-DICTIORDEFINANCE (LARONDELVIZENE) 100KG 110	YOAT				2 :		= =	9 5		3 S	2 %		
14 10 10 10 10 10 10 10	rany.	IJJZJ-IETWALGLUKOZ HANG	2000		: E		: ;	9		, = <u>=</u>	•		
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11 11 11 11 11 11 11 1	LLYOA	CHLOROETHANE	UG/KG		0 =		? =	n 22		011	∩ 9 2		
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1-DICHLOROBENZENE	LLYUA	CARBON DISULATOR	OCKC.		0 :		= ;	2 5		ī ;	⊃ ;	1	
ADDICATION 1400 1500 1	LLYOA	LyDICHICOROBENZENE	2820				D 05	9			2 2	¥ 4	
THE PRODUCTION OF COLUMN THE PRODUCT T	T'NOY	ADICALOROBENZENE			2 5		25	9 5		2 30	3 5		
I	T.YOA		Dicke .		2		? :	= = 2		2 =	2 42		
ALPIA BIIC (ALPIA IEXACILOROCYCLOIEXANE) BETA BIIC (BETA IEXACILOROCYCLOIEXANE) UGYKG BETA BIIC (BETA IEXACILOROCYCLOIEXANE) UGYKG	¥0.41	I CALCALL ORDETIANS	CHOKE		? =		• = =	0 62 0 62) = ! =	2 %		
NETA BILC (BETA HEXACHLOROCYCLOHEXANE) UGXG	PEST	ALMIA BIIC (ALMIA HEXACIILOROCYCLOHEXANE)	UCKC	=	2		011	7	=	₽ 6) 	ъ ж	
DELTA DICIDELTA HEXACHLOROCYCLOHEXANE) UGZKG LIR 9 U LIR U 4.6 U LIR R 9 U LIR U 9 U LIR U 4.6 U LIR R 9 U LIR U 9 U LIR U 9 U LIR U 4.6 U LIR R 9 U LIR U 4.6 U LIR U 9 U LIR U 4.6 U LIR U 9 U LIR U 9 U LIR U 4.6 U LIR U 9 U LIR U 4.6 U LIR U 9 U LIR U 4.6 U LIR U 9 U LIR U 4.6 U LIR U 9 U LIR U 4.6 U LIR U 9 U LIR U 4.6 U LIR U 9 U LIR U 4.6 U LIR U 9 U LIR U 4.6 U LIR U 4.6 U LIR U 9 U LIR U 4.6 U LIR U 9 U LIR U 9 U LIR U	1	BETA BIIC (BETA HEXACHLOROCYCLOHEXANE)	UC/KG	2	n 6		0.4.1	4.6 U		9 0	1.1 0	84 64	
CANISTA BIC (LINDANE) UCXG IIR 9 U IEU 46 U IR 9 U III U 46 U IR 9 U III U 9 U III U 46 U IR 9 U III U 9 U III U 46 U IR 9 U III U 9 U	PEST	DELTA BRC (DELTA HEXACHLOROCYCLOREXANE)	UCAKG		∩ 6		0 17	4.6 U		0 ¢	0 17	э ж	
	FEST	CANISTA BIIC (LINDANE)	UCARG) 6		0.81	4.6 U) ř	3	≃	
ALDAIN HEPTACILLOR EPUXIDE UCXIC II R 9 U I.I U 46 U IBR 9 U I.I U 9 ALPHA ENDOSULFAN UCXIC II R 9 U I.I U 9 DIELDRIN LICYIC IA 8 SS SS SS SS SS SS SS SS SS SS SS SS S	PEST	HEPTACHLOR	UCIKC		7		0 1	7.6 U		n f	 		
	PEST	ALDRIN	21/20		J :		⊃ : ■ :	24.) 	3 : 2 :	œ .	
- ALMAR ENDOSULFAN 18 9 1 18 0 18 18 9 1 18 0 9 1 18 0 9 1 18 0 9 9 1 18 0 9 9 1 18 0 9 9 1 18 0 9 9 1 18 0 9 9 1 18 0 9 1 18 0 9 9 1 18 0 9 9 1 18 0 9 9 1 18 0 9 9 1 18 0 9 9 1 18 0 9 1 18 0 9 9 1 18 0 9 9 1 18 0 9 9 1 18 0 9 9 1 18 0 9 9 1 18 0 9 1 18 0 9 1 18 0 9	PEST	HEPTACILOR EPUXIDE	CCKG	æ :	5 :		→ :	n 9 ;) F	-		
DIELDRIN 190 - 06 - 71 EN	īā.	ALIMIA ENDOSILIFAN	UC/KG	æ :	⊃ •		a ;	4 :	= ;	=	⊃ ¦		
	PEST	DIELDKIN	I SYKE	2	S		35 13	3	• 8 61	8	-		

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		Station Co.	F150	6517	BSIE	6219	BSB	18.521	5223
		Samue Denth:	90	9	010	- ot 0	1 20	- - 90	- a0
į		Sample Base:	10/13/93	10/12/95	10/12/95	10/12/95	10/17/95	10/17/95	10/15/91
droug	Parameter - Franchis Charles - F	UEBB	11 000		100	11 050	L Cod	11 00.00	ofter al
115404	JAN KICHLOKOMIKANIL	DESC	3.0		1301	2 9	1 021	109	201
LLYOA	CHLOROMETHANE	UCACG	=		=	=	=	=	=
LLYOA	METHYL ETHYL KETONE (3-BUTANONE)	UGWG	2		2	<u> </u>	n =1	=	> =
LLYOA	TOTAL LADICAL DRUKTHENE	DX/S/A	ב		2	- -	1 = 1	- -	5
LLYGA	CHLOROFORM	HCMG	5 2		2	n =	: :	: :	0 =
LLYGA	I.I.I-TRICIII.0ROETIIANE	UGAKG	1		=	=	- -	=	D =
LLYOA	CARBON TETRACHLORIDE	DCMG	10		<u> </u>	= =	<u> </u>	10	3
LLYGA	BENZENE	DCACC	> =		=	= :	=	2	7
YDAT1	13-DICHLOROETHANE	DC/KG) =		5	-	<u>-</u>	<u>=</u>	⊋ =
LLYOA	TRICH(ORDETH YLENE (TEE)	UC/KG) =		> : =	= =	_ : =	3 =	=
LLVOA	LI-MCIII.OHOPROPANE	DE NO) = :		• :) = :	= : = :	= : = :)
1,1,70,4	BROMUDICLURURETIFANE	HCMC	= : = :		= :	3 : 2 :	- : - :	3 : 3 :	3 : 2 :
LLYOA	VINYL CHIORIDE	DIANG.) : : :		• : • :	: : : :	- : - :	= :	= :
LLYQA	NETHYL ISOBITIT, RETONE (FRICTHYL-FENTANIME)	מביאני:	- : - :) : :	= : = :	- : - :	= :	= :
LLYOA	GF. J-DICHLOHOFROPENE	DNON) ::) : : :	= :	- : - :	; ::	9 : = :
LLYUA	TOLUENE	ממשט	o :) :) : = :	= : = :	3 : : :	- : - :
LLYOA	bass-1,5-Dictil, DROPEOPENE	2000) :) : = :) = :	a :) : : :) : = :
17,704	I.I.A.TRICII.CIROETHANE	DANG	2 :) = :) : = :) :) = :
LLYOA	LIEXANDNE	5000) :			- : - :) : ::) : = :) : = :
LLVOA	TET LACH LONDET II Y LENE (FCE)	DE/AG) :	3 : = :)) : = :
LLVOA	DIBRUMINCHLURORIE HISAME	ביניאט) : : :		2 :	: : : :	a :) : : :) : = :
LLVOA	CHICHORDENE	TICHE	: : : :		= :) : : :) : = :	3 : = :	3 3
YDATI	FILLTERACENE					= =	= =	3 =	= =
LEYON		00000	2 2			- -	==	2 =	: -
VO. 1		DECKE	: =		2 =	. =	=======================================) : :	: =
TT-NOV	BRONOTURN	CCACC	2		=	5	=	2	=
TTXUY	1.1.2.TETRACIILOROETIIANE	UGNG	>		ם	9 =	<u> </u>	0 11	=
LLYOA	1-DCIILOROETIIANE.DH	UCACG	Ξ		6	<u>20</u>	5	701	<u>[0</u>
LLVOA	TOLUENEDA	UC/KG	Ξ		917	<u>e</u>	‡	<u>\$</u>	ĩ
LLVOA	I.BROMO-4-FLUUROBENZENE (+ DROMOFILUOROS ENZENE)	UCAKG	8		<u>6</u>	ō	ŝ	8	9
LLYOA	CHLOROETHANE	נוכאנט) = :		- :	= : = :	: :	- - :	3 : 3 :
LLYOA	ACETONE	DE/NO) : : :) :	= : = :	a :	a :	9 : = :
LI.YUA		מפעכם			= =	9 S	> :	= =) : : :
Trans		LIGAG	2 51		2 2	- 5	2 5	1 000	1 5
10,71	A.M.C.II.OBOURNENE	UCAKG	350 U		0.0CC	340 t	U DUC	360 U	370 U
LEVOA	LIDICITORORENZENE	DOMO) 98 0		U OCC	350 U	U DEC	360 13	370 U
LLVOA	NETHYLENECHLORIDE	TIC/KG	13 (1		11 0	<u> </u>	0.11	11 11	0 =
POATI	LINCREADBOETHANE	1)C/KG	0 -		1 n	⊋	1	9 ==	<u> </u>
FEST	ALPHA BIIC (ALPHA HEXACHLOROCYCLOHEXANE)	UCAKG	0 61		1.9 U	0.61	U 61	Q #1	0.67
15.1	BETA BUID (BETA HEXACHI, DROCYCLOHEXANE)	HOYKG	0 81		13 0	0.61	(1-61)	0 17	(1.67)
PEST	DELTA BUC (DELTA HEXACHLOROCYCLOHEXANE)	IKYKG	3 F.		= 6:I	0.61	1161	=	0.67
FEST	CANTHA BEIC (LINDANE)	DCAKG	D 87		10.1	0 6:1	0.64	=======================================	0 6.1
FEST	HEPTACHLOR	DC/KG	3 71		0.61	0.61	(1 6°)	O #1	U 6.1
FEST	ALDRIN	DENC) 		U 6:1	0.67	U 61	n #:	U 6'I
PEST	HEPTACHLOR EPOXIDE	DCKG	7 T		O 6:1	U 6.1	F.9 U	1.8 U	U 6.1
TEST	ALMIA ENDOSULFAN	LICKG	D 11		1.9 C	0.61	1.9 U	3 8 1	0.61
15	DIELDRIN	UC/KG	33 U		3.6 U	3.7 U	U CE	3.6 U	3.6 U

 $(t+F) \otimes_{t+1}^{t} e$





		Slationi D:	ESOI	1201	1028	1050	252	6203	NS:	8503	8503
		Sample 1D:	1525	SSSIA	SSIALA	5552	SSSZDA	(525)	252	5555	SSSSOL
		Sample Depth:	0 to 1	O to I	2	l en o	8	0 to 1	# FE	1 210	9
1		Sample Date:	104993	10/9/25	(chart)	i Dravy S	HAMAS	15MAy 5	IOVIDA!\$	IO/1043	ice inevi
PEST TEST	p.p.:00E	UCAKG	U CE	U 7.E		3.5 U	35 R	35.0	35 U	13 (S.	<u>.</u>
TS.	FAIRIN	1047/613	33.0	3.7.11		33.0	33 K	33.0	11.11	7.2 ti	¥ 14.
PEST	BETA ENDOSTILFAN	UC/KG	3.3 (1	3.7 U		3.5 U	35 R	3.5 U	ח גר	7.2 (0	* 45
PEST	\$\$.000	UC/KG	J.7 U	3.7 U		3.5 U	35 R	3.5 U) ((7.2 U	×
ž	ENDOSULFAN SULFATE	UCYKG	3.7 U	0.00		3.5 U	12 22 24	3.5 U) S U	7,2 U	36 R
727	p.p.:hnt	UG/KG	3.3 U	J.7 U		3.5 U	# £	3.5 U	33 U	47 =	46 R
FEST	METHOXYCHLOR	UC/KG	⊃ <u>61</u>	O 61		2	<u>.</u>	A 81		37 U	180 g
TEST	EXDRIN KETONE	UCAKG	33 U	3.7 U		3.5 17	35 E	3.5 U	33.11	7.2 U	36 R
P.CST	ENDRIN ALDELIYDE	UC/KG	37 U	3.7 U		1.5 D	35 8	3.5 U	33 C	7.2 U	36 R
PEST	ALPRA-CILORDANE	UCMC	I.9 U	0 61		U 11	=======================================	n = :	<u> </u>		2.6 R
PEST	CANIMA-CHLORDANE	UCMG	D 67	0.61		7 % :	≝	a = :) =	29.1	3 6 R
PEST	TUXAPITENE	DO/IC	5 0 <u>X</u>) (4)				- 191	: (1)	11 11/1	N COM
ISI	P.W.1006 (A ROCCILLO B TOTAL	CKVKG	33 C	2		38.0	350 B	1 50	330 (1	12.1	yo k
PEST	PCB-1221 (AROCHLOR 1231)	UC/KG) 1	7		มถ	E 62.	72	120 ±	<u>9</u>	130 R
PEST	PCB-1223 (AROCILLOR 123)	CORC	37 U	3, 0		35 L	350 B	13 U	150 U	ח בנ	. N 09E
PEST	PCE-1241(AROCHLOR 1243)	CCKG	33 U	31 C		35 U	N INC	35.0	350 U	12 17	360 R
FEST	PCB-1248 (A ROCHLOR 1248)	UCAKG	33.0	11 (35 C	350 m	35 0	38.0	U 27	360 R
131	PURITIFICATION (194)	UCAKG	D 44	310		2	330 8	2	D 081	72 U	360 R
rest	PCB-1250 (AROCH), OB 1260)	CC/KG	33 C	33.0		2	350 M	35 C	130 C	1 00 1	X60 B
rest	14,56-TETBACHLORO-META-XYLEVE	nexico	Z	Z		7	7	£	5	=	8
PEST	DECACHLORDBIFILENYL	CONC	¥	~		3	\$	=	149	13	=
TOTAL	ALUMINUM	NGWG	too:	1720		2900 =		13300	HX0 =	1 1600 =	
TOTMETAL	ANTIMONY	SIG/KG	3.3 U	7		3.9 U		-	35.1) I.C	
TOTALETAL	ARSENIC	NC/KG	6	-		- [0]		9	- 7	- F	
TOTALETAL	BARIUM	NC/IC	- 2	= :		<u>.</u>		2	= 1	- C	
TUTNIETAL	DERYLLIUM	NCKG	110	1 10		1630				0.00	
TOTALETAL	CADMIEM	0000	- C97			- 41		916	18%	192	
TOTAINTAN	CALLINE CHROMINA TOTAL	MCAKG	17.7	12		9T		-	12.7.1	K.	
TOTALETAL	COBALT	MCAKG	9,1 1	î		10.1 J		1.1.6	9.4 1	166	
TOTALETAL	COPPER	MCACC	19.7	<u>•</u>		13.6 =		. P.C.	18.6.1	<u> </u>	
TOTALETAL	IRON	MCAKG	26100 =	13000		- 0.05(- QF981	215/13	1120 -	•
TOTALETAL	LEAD	MCAKG	- 2'21	163		11.7		- 1	- X	792	•
TOTALETAL	MACMESIUM	MGAG	3200 -	3130 =		- 0%I		- FE	# DZ.CZ	1620 =	
TOTAIETAL.	MANGANESE	MCAKG	524	ğ		20		249	113.	- 25	
TOTALETAL	NERCURY	MC/KG) - -	0 I 0		D 600		0 0	D 10	0.600	
TDTMETAL	NICKEL	MCACC	-	. .		• *		151	17.9 =	600	
TUTMETAL.	POTASSIUM	MUKC	- B	- C+2		- X		- OC21	. 25	94.	
TOTALETAL	SELENIUM	MCAKG	13 C	0.55		0 22 U		3	O 45	0.15	
TOTALETAL	SILVER	MCKG	0 31 C	0.36 13		0.36 U		n 1 6 o	13.1	0 37 U	
TOTALETAL	SODIUM	MCAC	71.9 U	61.3 U		436 U		32.4 to	5 5 8	4	
TOTALETAL	MITIALIUM	MUNC	0410	010		0 20		0416	13 60 0	0 66 9	
TOTALETAL	VANADIUM	MCJKC	¥.7	77		76.1 +		2	n -	2 6 B =	
TOTAL	ZINC	MISKE	£.	£7.8 =		<u>.</u>		- 6.12 - 6.12	13.	116	

Surface Soil	
Analytical Data Summary:	
ical Data	
Analyt	

	5,	Starton! D:	8508	8506	9207	880	B.504	9209	0200	0158	BSII
	u di	Sample ID:	55.56	334DL	5557	5550	SSMP.	6555	55 MDL,	326	5261
	tues .	Sample Depth:	3	2	- H	_ - -	2	- 010	5	1 610	0 111
! ;		Sample Date:	10/10/93	EWI (1975)	IOVRIVS	(Antha)	tixtows	10/11/95	IIVI(P)S	ION 1895	10/11/95
T.S. de	THE ORY, OUR.	TICAKE	9	9	100	13.0		=		1411	131
151		TICKE	n ==	~	2	3.7 U		1		25.5	15 C
PEST	ADDSULFAN	UCIKO	n ■	72 R	n 6:0	3.7 U		0 1.6		350	350
PEST		CCKG	<u>-</u>	72 B	f L9	3.7 U		9.1.10		3.5 U	35 U
FEST	LEAN SULFATE	UG/KG	n = 1	% ≈	0 61	3.7 U		9.1 1		3.5 U	330
PEST		UG/KG	- *.	77 R	0.61	3.7 U		9. U		33.0	1.5 (1
FEST	TYCHLOH	DECKE	92 U	370 B	₽	19.0		47.0		1 2 1	7 11
PEST		UCKG	Q =1	77 B	0 6'8	3.7 U		9.1 1.9		3.5 1)	13 U
7237	ENDRIN ALDEMYDE (14	COXC	11.0	72 R	D 6:	3.7 U		9.1 U		3.5 U	13 U
757		DECKE	3.5.1	37 B	7	9 6.1		767		U #.1	7 7 1
PEST	143	IICAKG	23.1	37 R	9	N 61		7e =		A 27	7
PEST		UC/KG	070 U	3700 R	0.09	<u>8</u>		470 U		2000	D 011
PEST	PCB-1614 (AROCHLOR 1814)	DUNKG	⊃ Ω	25 25	⊃ 64	37 U		71 16		35 U	35 (1
rest		UGVKG	360 C	2 ES	<u>=</u>	7 92		O 031		2 2	31 0
PEST	PCB-1331 (ARIXCIII.UR 1332)	DOWE	□ 02 1	13 24) 23	33 U		0 16		35 U	33.11
PEST		UGVKG	∩ Ω	7 O.T	□ 6#	33 U		<u>۱</u>		35 U	33.01
FEST		UCAKG	л 9	0₹.	O 63	37 U		91.0		35 U	15 U
rest		IICAKG	n 9	4 O.T.	n 63	33 (A 16		35 U	2 6
FEST		DEVKG	101	120 R	=	33 U		a 16		35 U) SC
PEST	TA-XYLENE	DC/KG	2	2	3	2		\$		2	2
rest	DECACHLOROBINIENYI. DIC	UGVKG	8	≅	=	2		2		z	2
TOTACETAL	ALUMINIM	MCAKG	12400 -		<u>1</u>	4,000		10300 =		- 0111	135000 =
TOTAGETAL	ANTIMONY	NGAKG	33.0); (33.0		3.1 U		31.63	32 UJ
TOTATETAL		MCMG	• 		9.6	12,3 =		11.7 -		- 99	-
TOTALETAL		MC/KG	=		<u> </u>	9		=		£.	- 50
TOTALETAL	2	MC/KG	0.79		75	790		0 52 1		0 43 1	f 9 D
TOTMETAL		MCAKG	O & O		٠ :	n •		011		0.57 U) Ka
TOTALETAL		NGMG	9 9			2		616		- XIX	- 260
TOTACETAL	UA1, TUTAL	MCANG	7 6 7		-	133		-		12.2	* 1
TOTALETAL		NGAG	6.6		2 ;			= :		- - - - (]
TOIMEIAL	*		7 7 7			107		1		# 67.4 W	• [77
TOTALETAL	NOX.	MCAKG	110 F		- pares	13.4.1		- 0187			2330
TOTAGETAL	Reliiki	MCAKE	2610 =		97,7	- CE		170		- 02/12	1 0 7 1
TOTACETAL		MG/KG	E		. LL 9	130		928 .		- 645	
TOTAKETAL		MG/KG	0.13 =		0 601	0 I O		0.11		0.000	D 600
TOTALETAL	NICKEL. M	MG/KG	19.5 =		II.7	11.6 •		12.9 =		16.7	21.3 -
TOTAL	NOTA SSIUM M	NCAKG	1450 *		1 501	1310 -		- 0001		1.1	3
TOTALETAL	SELENIUM	MG/KG	0.11 U		0.12	í) & 0		0.32 U		0.27 UI	(C) (E)
TOTAIETAL.		MCAKG	=		0.36 U	0.31 U		032.0		0 36 U	0.11
TOTALETAL		NGAKG	J. I. C		134 U	70.5 U		7 CS		68.4 U	13 64
TOINTETAL		ALCAKG	0 39 C) ()	0 1 0		D 95 U		0.38.1) AC 13
TUTNIETAL	DIUM	MC/KG	=		243	- 105		1.4		*	- 177
TOTATETAL	ZINC	NG/KG	2.2		- 6.9 - C.	7		13.2.9		49.8	[P]





		Statles ID:	8511	8517	BS12	8513	1158	BS14	2120	8S16	BSté
		Sample D.	326IDL	2367	SSEZRE	556.3	2564	SSAUL	5565	5566	S566DL
	35	Sample Depth:	٥	C 10 1	2	l ot O	0 to 1	3	0 to 1	() to	=
		Sample Pate:	10/11/95	10/11/95	1411795	(IFT1743	101103	IIVIIAS	161163	(VIIV)	SECTION
Grado	Parimeter	l/mirs									
FEST	300-,44	UC/KG	35 8	O =1		3.5 U	0 é	¥ 95	n ti	1.5 U	<u>=</u>
FEST	ENDBIN	UC/KG	# SE	⊃ =		3,5 U	9 0	7 9K	î 61	130	# #
T.S.	BETA ENDOSULFAN	UCAKG	X 55	a =		3.5 U	D F	2	⊃ =	13.0	<u>.</u>
121	OOQ-, 64	UGVKG	35 1	2		3.5 U	3 F	×	= =	330	a 2
FEST	ENDOSULFAN SULFATE	DOVICE	33.8	1 t		1.5 U	0.6	76 78	n =	33.11	=======================================
H:ST	Idd. a.m	DEVKG	33.8	9.4		3.5 U	0 6	36 R	=	3.5 U	<u>.</u>
PEST	METHOXYCILOR	DEVKG	ã) (K		> =	n 9‡	180 R	8	=	S.
PEST	ENDBINKETONE	DEVKG	35 R) 8		3.5 U) 6	36 R) -	3.5 U	# #
PEST	ENDETH ALDEITYDE	UGAKG	15 R			0 5'C	٥ ٦	36 R	2 1	3.5 U	<u>=</u>
152	ALMIA-CIILORDANE	UCAKG	=	17.5), 8 U	∏ 9 ∓	۵ =	Π 6	1.10	≃
FEST	GANIMA CILORDANE	UC/KG	¤ =	1.9.1		D #:	∏ 9 †	a =	n 6	Π (1)	⊕
FEST	TOXAFIIENE	UGVKG	1900 R	0.000		1 O#	11 U97	HICD R	II UX	2 2 3	94.D R
151	PCB-1016 (AROCH1/DB 1016)	UGAKG	350 R	001		35 U	n 08	360 R	33 GB 1	35 U	
1534	PCB-1211 (ARC)F(HLOB 1211)	UGAKG	730 R	340 0		=======================================	2) OT	350 R	360 U	2 10	360 R
TS.	PCD-1332 (ARCHCHISTIN)	DIVING	3 050	<u>₩</u>		13 (1	II 0\$	340 R	0 63	33 =	160 R
TEST	PCB-1242 LAROCHIAN 1343)	UCAKG	350 R	∩ 28 1		33 E	73 OS	360 R	101	35 [24 2011
FEST	PCB.1243.4 ROCHLOB 1343)	DOKC	350 P	= =		33 U	J 06	360 8	n 92 1	35 €	180 R
153	PCB-125 (AROCHLUM 124)	UCZKG	350 R			35 U	n 08	340 R) EU V	25	14 OF
15.	PCB-1146 (ARCICILCIS 1140)	UCAKG	150 R	⊃ (81		7 ? (i Š	360 R		35 U	<u> </u>
1834	2454 TETRACHLOROMETA-XYLENE	UUVKG	=	-		3	8	92	2	Ľ	נג
131	DECACHLOROBIPHENYL	UCAKG	901	8		92	4	<u>a</u>	#	76	101
TOTALETAL	ALEMINUM	MC/KC		• GU611		1 160	12500		¥10 *	- 0566	
TOTALETAL	ANTIMONY	MPAKG		3,1 CJ		3.1 U/	3.2 UJ		3.1 (5)	3.0	
TOTALETAL	ARSENIC	NG/KG		- 5.7		1.4 =	1.3		-1.7	-	
TOTAIETAL	EA FLUM	NUNC		101		13.4	133 =		4 911	:1	
TUTMETAL	DERYLLIUM	MG/KG		0.54		0 39 U	0.53		0 43 J	- S-	
TOTAIETAL.	CADMILIM	MCJKG		0.53 U		0.57.0	0.59 U		0.86.0	190	
TOTALETAL	CALCIUM	NUVKG		7490 =		18	- 0(7)		Julian)	1969	
TOTALETAL	CHROMBIM, TOTAL	MCVKG		1		9.4	■		• • • • • • • • • • • • • • • • • • •	=	
TUTNETAL	COBALT	MGAKG		16		- 90	11.7		-	4.7	
TUTALETAL	COPPER	MG/KG		¥ 1.00		10 7 •	21.2 •		13.9 •	Ĭ	
TOTMETAL	IBON	MC/KG		- Q0161		12000	21400 =		· (KMC)	- 2XE-	
TOTALETAL	LEAD	MC/KC		30.5		14.1	- 27		11.5	=======================================	
TIVENETAL.	MACINESTUM	MCXC		2310 -		- 02	2640 •		1550 -	3540	
TOTAL TAL	MANITAMENE	MISSEL		1 505		- 20	Į.		625 J	3	
TOTALETAL	NEGCONY	NCAG		n 60:0		U.41 =	010		U 40.0	O (f) O	
TOTALETAL	NICKEL	MC/KG		15.3 -		10.6	17.6 =		17.5	# <u> </u>	
TOTALETAL	POTASSIUM	NG/KG		- *		707	901		[6]	, FF	
TOTALETAL	SELEVIUM	MG/KG		0.28 UJ		0.27 UJ	0.28 U3		0.3 J	11 61	
TUTRIETAL	SILVER	N4G/KG		0.36 1)		0.36.0	0.37 ()		0.36 ()	D 96 0	
TOTALETAL	Sopilia	MG/KG		91.2 U		42.5 U	U 1.74		N 6 59	62 6 U	
TOTALETAL.	THALLIUM	NIC/KG		0.39 U		0 HC 0	0.39 U		0.39.0	0.39 U	
TOTSIETAL	YAMADIUM	MG/KG		76.4 w		- 1.67	27.6 -		* 22	25.4	
TOTALETAL	ZINC	MG/KG		۳ -		37.4.1	19.3		304.)	<u> </u>	

		Station D.	BS17	8517	8318	6158	BSM	8521	8522
		Sample 1D:	2567	SSB7D	2568	\$264	523	125	2212
		Sumply Depth:	- Q	9	1 010	0.01	1 110	0	0 1 11 0
		Sample Date:	10/12/95	10/12/93	10/12/95	10/12/95	10/12/95	10/12/95	\$941401
Group	Ризокъг	Units							
FST	300°,44	UUNKC	33.0		3.6 U	3.7 U	3.7 U	19E	36 U
PEST	ENDRIN	UUKC	33.0		74 ()	3.7 U	3.7 U	360	36 U
PEST	BETA ENDOSULFAN	DC/KG	1.5 U		7.6 U	3.7 U	3.7 U	360	36 U
PEST	000-¢¢	UE/KG	330		0.6 U	3.7 U	3.7 U	3.6 (2	16 U
PEST	ENDOSULFAN SULFATE	UCAKG	3.5 U		3.6 U	1.1 U	3.7 U	360	7 ♦ €
PEST	TOT: eq	DC/KG	3.5 to		360	1.7 U	3.7.0	360	16 U
PEST	METHOXYCHLOR	UC/KG) =		19 0	= •	19 61	חוו	n 64
PEST	ENDRIN KETONE	DC/KG	33.0		3.6 U	J.7 U	3.7 U	14 (1	36 U
PEST	ENDRIN ALDERY DE	DOWED	33.0		36.0	3.7 U	3.7 U	16 U	14 (1
PEST	ALPITA-CIILORDANE	DC/KG	0 87		0.61	1.9 U	71 d'1	7	n 61
rest	CANSMA CILLORDANE	HC/KG	0 11		U 6'1	D 6:1	U 6.1	D = 1	1 6:1
PEST	TOXAPHENE	HC/KG	11 081		1901	2 65	11 061	13 (35)	5) (8)
PEST	PCB-101s (ARCHITITINE 1814)	DEST) ??		= 9 £	J) (1	37 U	11 es	<u> </u>
1534	FCB-1111 (ARUCILUR 1731)	DCXG) 1		2	76 ∪	75 U	73.0	14 13
PEST	PCB-1333 (AROCHEUR 1223)	UGVKG) \$C		36 U	חננ	37.0	36 (3	11 91
FEST	PCB-1343 (ARIXA10.UR 1343)	UC/KG	D\$ €		3¢ C) (32 U	N 9X	36 U
PEST	PCB-1244 (ARIOCHLUR 1248)	ncytic	35 C		⊃ %	J) (C	37.0	n 91	⊃ 9 €
PEST	PCB-11% (AROCHLOR 129)	UG/KG) SC		7 % 20	31 U	33 C	36 U	2 %
	PCB-1266 (AROCHLDR 1268)	UG/KG	38 U		⊃ 9K	ם נה	37 U	2 ec	28
rest	245.6-TETRACIILORO-META-XYLENE	UCMG	3		2	\$	æ	2	67
PEST	DECACHLOROBIPHENY).	UC/KG	#		£		2	2	žī.
TOTALETAL	ALUMINUM	NIG/KG	- 01.61	10:02	13500	1830X) =	LORGO .	- 0616	E360 =
TOTALETAL	ANTIMONY	MG/KG	3.2 UJ	3.1705	3.2 (3)	3.3 U)	1.3 411	11 01	13 (1)
TOTALETAL.	ARSENIC	MG/KG	+7-	3.611.3	13.9	# F.	•	6.5 =	62.
TOTALETAL	BARCUNI	NG/KG	124	113,9435	121	- 0+1	<u>-</u>	121 *	93.1 a
TOTALETAL	BERYLLIUM	NG/KG	0.47 U	0.4043	0.63 U	0 (90	0.SI U	0.49.0	O 42 O
TOTALITAL	CADISTUM	MC/KG	0.59 U	0.5463	0.6 10	O 19:0	0.61.0	8	11.6 U
TOTALETAL	CALCIUM	NG/KG	124 /	137.0791	-	(00.0)	1510 .	1360 •	1 [98
TOTARETAL	CHBOMIUM, TOTAL	MC/KG		1.9.1	- 2	16.3 .	12.4 •	-	101
TOTALETAL	COBALT	NG/KG	7.6)	12.61379	¥ ;	1 1 1	6.7.1	(I)	1.1.1
TOTALETAL	COPPER	MG/KG		8. 2519	8	-	- 2	- 2	* F6
TOTALETAL	KON	MG/KG	- DO\$0.1	12649.97	- 005×	22M0 =	- 0066	- 69	- OK21
TOTALETAL	LEAD	AIC/KC	171	17(0)7	-	5.9	~	13.5	- 6:02
TOTMETAL.	MACHESHIM	MG/KG	-	120.295	120	2820	1 030	* URAL	× 091
TOTNETAL.	ALANGAMESE	NC/KG	- B	1178.317	3	<u></u>	- 2	2	÷
TOTATETAL	MERCURY	MG/KG	- 13	0.0964	0.09 U	0.10	0 F0	n 10	5 To
TOTALETAL	NICKEL	»IC/KG	=======================================	10.7296	17.8	21.4	* 9 *1	Y	£ 4 2
TOTALETAL	POTASSIKIM	MG/KG	豆	706.6232	1251	- 28	1 902	134 J	<u>-</u>
TOTALETAL	SELENIUM	MG/KG	0.28 U	0.2823	5	0.0	0.79 UJ	0.23	<u>-</u>
TOTALETAL	SILVER	MG/KG	0.37 U	03692	U.38 U	0.39 C	0.34 U	0.33 U	0 11 0
TOTALETAL	SOPIUNI	MCAKE	36.6 U	37.1574	U 2/	48.3 U	45.3 U	35.1 U	26.4 U
TOTALETAL	THALLIUM	AIG/KG	0.39 L	0.3931	O • U	0.41	041 0	0 95 0	040
TOTMETAL	VANADILIM	NG/KG	17.7	20.1868	* 65	35.1	13.2 -	21.5 =	4 7.63
TOTALETAL	LINC	MG/KG	356.1	37.630\$	1 ('59	63.6 J	31.4.)	\$1.3.3	JA'I I





Sediment
Summary:
nalytical Data
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		StanfortD: Secope 10:	8W91 SD060	BW01 SDX6AD	SD/VOZ SD/OTO	OBWE)	BW04 SD050	BWDA	SDIGS	BW06 SD110	BW07 SD120	BWG SU130	
		Sample Depth: Sample Date:	0 to .5 R0Y095	6 to .5 10/10/95	0 to .5 10/10/95	0 to .5	0 to .5 10/10/93	0 to .5 (N1095	0 to .5 (0/16/93	8. ot 0 8. ot 0	0.to.5 IN10 95	O to .5 TIVITA95	
Group	Parameter	Units											
NEXTRA	STATE TRACTH ORCHIDENZA - PROKIN	ORAKG	=	=	=	=	Ē	-	=	=	=	=	į
DRIXIN	Z.T.H.TETRACHI.ORUDIOENZOPIRAN	UCHKG	2	<u> </u>	1.0	2	2	-	<u>-</u>	: -	n •	7	١,
DICKIN	121,14-PENTACIILORODIBENZOFURAN	UCVKG	2.5 U	2.5 U	230	2.5 U	2.5 U	2.2	2.5 U	25.0	13 U	2.5 U	•
DICKEN	I,J,J,PENTACHLORODIBENZO-P-DIGKIN		23.0	25 C	2.5 U	2.5 U	2.5 U	57	2.5 U	7.5 U	52	2 :	
DICKIN	2,3,4,1,4-PENTACHI.OBODIBENZOFURAN	O NCARC	0 : 1	25.0	9 ;	2 :	73.0		23.0	5.5	22.0	2 :	
DIOXIN	1,1,1,1,1,1. HEXACHLORODIBENZOFURAN			2 2 2	7 7	1 2 2		5.	2 2 2	25.0			
DIOXIN	1,1,4,1,4-HEXACHLORDSBENZOPUKAN		7 :			2 %			3 2 2		1 2 2	= =	٠,
NIXOID	(,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1	DOM:		2 2	7 2	22.0		3.2	2 2	3 2	2 7 7	2 2	
NIXOIG	LINETA-HERACHLORUGUERAU-F-COORIG	2000		2 5	2 2	25.5	1 2 2	2	2.5 U	7.5	2	2 7	
DECKER	JAKATATIERAKATII OBODIDENZOFIKAN	DICARC	no	25.0	2.5 0	25 U	2.3 U	\$2	2.5 U	13.0	23.0	110	
DUXIN	11114-HEXACILORIDIBENZOFURAN	DX/KG	2.5 U	2.5 U	2.5 U	23 U	2.1 U	52	2.5 U	250	2.5 U	110	
DIOXIN	1,2,4,4,1, HEFTACHLOSODIBENZOFURAN	DCVKG	1.5 U	2.5 U	2.5 U	250	1.3 U	2.5	250	2.5 B	25 0	2.5 U	
DIOXEN	1234474HEFTACHLOROBIRENZO-P-DIOXIN	DCKC	2.5 U	15 L	2.5 U	250	⊃ : 7	:	ລ :	25.0	n :	2 :	
DIOXIN	1,2,1,1,1,1,1,1 IEFTACHLORODIBENZOFIRAN	UCIKE	2.5 U	2.5 U	130	0 5 Z	13.0	2	0 57	2 .	2 :	0 .	
DIOXIN	OCTACILLUX DODIBENZO-P-DIOXIN	OGIKE	0.7	= ÷	9 =	= =		1	2 5	2 =			
DIOXIN	OCTACILL DECOMBENZOR DESIGNATION	DISKE	` *	, 5	, <u>-</u>	,	· P	. 1	, 2	3	, =	3	
DICKEN	2,17,5-1E KALIILI/RIKUBIRAZAFOMANTELO 1114.TETDACIH DRODIBIRAZA-DIOXIN-CIS	CICARC	: F	; 5 5	: \$	5	:	7	\$	2	. 7	9	
DILIKIN	1.1.1.4.1.4.1EXACIII.0RODIBENZO-DIOXIN-CI3	UC/KC	₹	=	4	8	2	116	<u>6</u>	5	3	5	
NIXOID	OCTACIII.DRODIBENZO-9-DIOXIN-CI3	UC/KG	z.	=	3	2	2	33	22	3	=	3	
HEAD	DALARON	UCYKG	360 C	746 C	2 2 7	2 :	D 01		= : Q: :	_ ; Q. :] : G	2 : 2 :	
HERB	DICAMBA	חכשכ	25		12.0	n 21	3 : : : : : : : : : : : : : : : : : : :		7 7 7	0.77			
HEAS	MCPA		0.000	0.000		9000 F			D CHE		240E) (1	24,68,0	
E 19		ופשפו	1000	(1) (R)	9	9	3		5 15	3 5	15 GP.	240 047	
	14 D (INC.) CONTROL OF THE ACT OF ACT	DXCDC	130 0	0.00	98	O 04	3		O 85	n ¥	13 6772	240 E)	
HE 20	SILVER (2.45TP)	DCCC	79 PZ	n *	O #	12 10	a 1		0 Z	D 2	⊒ ₹	=	
IE BO	1AST (TRICHLOROPHENUXYACETICACID)	UCTKG	26 U	3+ D	13 C	12 0	1		= 2	n ~	7	□	
ILERB	1,4 DB	DCJKC	0 001) 2	5 :	3 : 3 :	⊃ : \$4 :		= : # !) :	2 : 2 !		
HERB	DINISES	DWG!	⊃ * a	2 3	= = :	= C C	= F		2 1	2 2	7 8	7	
HERD	14-DICHLOROPHISYLACETIC ACID	DEVICE			200	2 2 3 3	- DE		1 DE	7 026) 100 1	Z900 U	
LLSVOA	JANIEMINA BUTTAL ATE	DC/KG	28.5	D 00#	#00 TI	00 C	370 U		D 066	390 13	9) (UK)	
LSVOA		DEVKG	1 000 i	000 n	0 000	(1 06A	∏ 0 7-6) 126	974 U	1650	D (MSZ	
LLSVOA	14-WINTROTOLUENE	UGIKG	N 927	7) QQ	HID O		370 U		D 966	330 U	0 00	D 0021	
FLLSVOA	ACENAMITHYLENE	UCAKC	○ 段	7007	0 00	B	2 i		O :	D 06.		925	
LLSVOA	ACENAPITIENE	UCYKG	⊃ : #	7 CO 1	200	9 ; \$	200		n ogg			9	3
LLSVOA	24-Dinitrophenol						7 7						3 (
LISVOA	+NITROPIENOL		1 90	5	107	200				3000	1 20	100) {
VOAST	DIBENCOPOLINA • ORIGINATION OF SERVE	DESC	0.007	9	n OX	∩ (K#)	ם פנו) OK) DEK) (C)	n ouz i	3
V 1870	ACTION PUTITIONS	UCKC	1 0Z)	400 U	D 4XX	1 (K#	3 S.L		190 G	380.0	1) (1.1)*	3 O.Z.	
TO YOUR	PLUCENE	UCAC	N 027	400 U	400	O 00#	ט פנו		u aki	385 C	U UJ	02.1	3 4
LISVOA	4-CILLOROPHENYL MIENYL ETHER	UCARC	n 027		C COOP	n 00#	J 01.		⊐ :X:	D 26	T (2)	000	1 1
LLSVDA	4-NITROANILINE	DC/KC	000 C	1000 C		7 064	D 076		D 026	0 226			
1.LSVDA	41-UNITRO-1-METUYI.MIENDI.	DC/KC	D 0001	n pout		D 0%] : 		0 0 E				
LLSVDA	n-nitrosom pienylanine	OC/KC	0 (0 :			0.00				3 5	2 627	
LLSVOA	←Bromophenyl Páenyl ether	SIGNE				189	e e		2	n okt			
_4													
			ı										
	ORD113627.RR.ZZ/024.XLS		ğ	Page 1 of 12									

		Statool D:	BW79	BW10	IIMI	BW12	DWI)	BWIA	EI M E	BW16	BWIT	0W17	
		Sample ID:	SD140	ŝ	SDIGO	SO! N	oji as	8	SDZGS	SD210	SD220	SDIZOA	
		Sample Detr:	0.000 10/10/95	9	C. 20 10/11/91	040.5 ID/11/95	0 to .5 KV1 L/95	0 to .5	2, MO 24, 193	0 to . 5	0 to .5	2: 010 V V	,
Group	Parameter	Ueta								.			•
RIOXEN	2.3.7.4.TETBACHLORODIBENZO-PDIOXIN	DCAKG	=	=	=	=	-	Ξ	=		17 10000	1 5 5 5 6	}
DIOXEN	2.3.7 LTETRACILLOBODIBENZOFURAN	UGNKG	-) -	: <u>-</u>	2 =		3 =		2 -			1
DIOXIN	1,2,1,7# PENTACHLORODIBENZOFURAN	DC/KG	1.5 U	2.5 U	1.5 (1	2.5 U	2.5 U	2.5.0	2.3 U	7.5			÷,
MXOIO	1,7,7,4.PENTACHI.ORODIBENZO-p DIOXIN	DCAKC	1.5 U	2.5 U	1.5 U	2.5 U	2.5 U	2.5 U	23.0	2.5 U	77 0	7 T T	
MXCR	ATALLE PENTACIILORODIBENZOJURAN	UCAKG	1.5 U	2.5 U	2.5 U	25.0	2.5 U	2.5 U	2.5 U	23.0	0.55		
NIXOIO	1,1,4,7, ITEXACIILORODIBENZOFURAN	UDVKG	13.0	2.5 U	1.5 U	2.5 U	2.5 U	2.5 (1	0 0	75 ∪	D (IE)O	n fash	
DIDXIN	1) JATE HEXACIILGRODBENZOFURAN	DENKG	2.5 U	73 U	1.5 U	2.5 U	7.5 U	2.5 U	A 600 0	2.5 U	0	. o c c	
NIXCIII	LALATEN EXACTILARODISENZO-4-DIOXIN	DENKC	1.5 U	2.5 U	2.5 U	23.0	2.5 U	2.5 U	2.5 U	2.5 U	1.5 U	7	
CIXUD	I, J, J, J, F. CEXACHLAIROPHBENZO-P-DIOXIN	DEVKG	1.5 U	2.5 U	2.5 U	23.0	2.5 U	2.5 U	=	O COOLO	0 (10)	11 (11)	
DEOXIN	I J.J. D. HEXACHLORODIBENZO-P-DIOXIN	UC/KG	1.5 U	2.5 13	1.3 U	2.5 U	2.5 U	2.5 U	20	0 (100)	0 000	0 000	
DECKIN	13,44,7.F.HEXACHLORODIBENZOSURAN	1)CJKG	0 f7	2.5 U	73 O	2.5 U	2.5 U	130	2.5 U	2.5 U	15 0	134	
MIXOK	123,235-HEXACHLOROOBENZOFURAN	DC/KG	7.3 U	2.5 U	23.0	2.5 U	2.5 U	1.5 U	2.5 U	2.5 U	1.5 11	130	
DIOXIN	1,3,3,4,5,2-HEPTACHLOBODIBENZOFURAN	DC/KG	25.0	7.5 ()	77 C	2.5 U	1.5 U	13.0	0 (475 U	O CLUD O	0 633 0	0.000	
MXOIQ	12,3,4,4,4,HIEPTACHLORODIBENZO-POINTIN	UGAKG	72 ∪	25 0	2.5 U	2.5 U	2.5 U	1.3 U	0.017 U	0.067.1	1 H90 D	0.064	
NIXOID NIX	1,1,4,1,4,9-HEPTACHLORODIBENZOFUDAM	UC/KG	75 0	7.5 U	7 C	7.5 U	1.5 U	1.1 U	1.5 U	2.5 U	77 N	2.5 U	
DIOXIN	OCTACHI, DRODIBENZO-p-DIDXIN	tic/KC	<u> </u>	U 191.0	- 77	2.0	0	=	- -	3 635 J	2.536.1	1,741.)	
NIX	OCTACHLORODI ENZOPUJAN	COKC	0 s	ה ר	2 €	2	2.0) 1	n 5	9.6	3.0	5	
NIXON	11,7 LTETRACIDEDENZOFURAN-CIS	UCARO	i	#	3	7	2	I	2	3	7	7	
DICKEN	11,7 FTETRACIII OXODIBENZO-POIDXIN-CIS	OCARG	2 !	Z į	Ē !	67	£ :	7	Ξ.	=	3	₽	
NIXOID	LASA AP-HEKA CHI MKIMBA BENZU-P-DIDAIN-CHA	OCARC	<u>8</u> :	<u>.</u>	<u>.</u>	=	2	£ :	~	6	2	<u>\$</u>	
DICKE	CALLACATION CONTRACTOR CONTRACTOR		2 6	= :	7	*	S (2	₹ ;	56	3	2	£	
	DICAMBA	OG NO	3 4			9		4 5	→ :	1017 1: 1:		⊃ : ¥ :	
		il Caro		2 20007		COLUMN 1) : :	7 17	9	3 ;	
	MCPF	nexe	20002		Tanna I	O GIRE	Men I	1 mm2	1000		X000 U		
HERB	DICHIOROPROP	UCARG	240 (1)	9	15 OK	Th Off	; ;	11 01%			And D	11 1011	
ERB	24-D (DICHLOROPHENDXYACETIC ACID)	UCAKG	240 U	⊃ G	390 ח	120 C	; ⊃ (30)	740 17	3 z	3 2			
HERB	SILVEX (1,4.5-TP)	UUNKG	410	O 98,1	<u> </u>	2	20.02	2	7.	2	9	3	
HERB	24.5-T (TRICHLORDPHENOXYACETIC ACID)	UUNKC	A 15	130	100	2 41	U 57	A U	340	1) FZ	2 8	- 3	
HERB	2,4 DB	UCAKG	740 II	0.084	390 U	530 U	360 C	240 1)	U 071	= 9+7	n ax	310 1)	
HERB	DINOSEB	UGAKG	⇒ ∓ ;	130 C	5 9 !	D 00:	U 22	‡ ``) X	71 C	⊋ 93	3	
	A CHILDROPH AND A CHILDROLL AND A CHILDROLL AND AND AND AND AND AND AND AND AND AND	9820	<u>8</u> 8	6	4	£	# :	22	=	2	\$	8	
LISYDA	DINSETTIVE PRINTIALATE	HCKC	2 6	2007	200	7.00				3	0.00	9 !	
TT-SVDA	S-KITROANILINE	UEVKG	n 0%	⊃ bo6	ikto t	D (KEK)	7400 U	ZIII					
LLSYOA	2.4 DINITROTOLUENE	UCAKG	D 007	4000 U	N 0059		NOOD U	2000 0	360 (1	D 09+	- (B)S		2
LLSVOA	ACENAPITITYLENE	UG/KG	n 00 7		D 0059	420) U	XXXI U	U COUR	O (198	O 094	000		û
rizvo.	ACENAMITHENE	DOXC	\$		0 UX9	43no (1	JONG IN	CONTRACT IN	D 095	460 (1	7 O.X		Я
LLSVOA 11820	ZA-DINTIKOPILENOK.	CORC			1 00.91		74(K) U		D (K)		1200 (1	J DOC 1	
LISVOA		Care	3 -		1600		2 2 2 2) () () () () () () () () () (0 0	1200		3
POAST	14-DINITEOTOLUENE	DGKC	, g	1 000	0.00	0.004	West I			0 0			4
VOASTI	DIETIKL PHTIALATE	DCKC	9		1 059		JUNE D	West 1					12
LISVOA	TLUDENE	UC/KG	7 051		0 000	1 1 1 1 1			3)
LISYOA	4CHLORUPHENYL PHENYL ETHER	UC/KG	9	0 000	0.003	7 7 7 7	Account to	2002	3	0 57		3 5	
LISVOA	+NITROAMLINE	UCJKG	n 066	O CUSS	D 00091	n onoai	2400 0	7 00%	142		3 2		
LLSVOA	4.Dinitro-J-Methylphenol	DC/KG	n 066	O 0066	D 00091	O DOORS	2400 D	A OID	9		1 021	2 2 2 2	
LLSVDA	n-nitrosodipiienylamine	DC/KG	T 00#	O COOP	6500 U	42KB U	JOHN C	70102	D 698	7 05	NO C	2 628	
A LLSVOA	←Bronopilenyl piienyl etiier	DCKC	400 U		0 0089	(1 DOC)	3000 U	7010)	1 09K	11 (197)	n ox	250 0	





Sediment
Summary:
Data
Analytical

		Sample ID:	50030	Spiloth	\$D240	SE134UA	SD14CO	\$0230	\$0360	50210
		Sample Depth:	5. 61 0	0 to .5	£. e) D	£. 140	010.5	€. cn 0	6. m0	0 tm 5
g G	Parameter	Sumple Date; Units	8611701	1871 LPS	1811/95	WIIWS	10711795	lor 1245	11/12/95	KY12/93
			:							
NIXOIO	11,7,8-TETRACIII.ORODISENZO-POIDXIN	UCARL			-		_	-	<u> </u>	- :
DIOXIN	2.7.2.TETRACIILOROBIBENZOFIIRAN	וכאני					- ;	- ;	- ;	- :
DICKIN	125,7 PPENTACHI, DROBBENZOFUBÁN	המאוני			0 67	1 7 1	2 :	D C7		7
DIOXIN	LAJ, J. P. PENTACY IL ORODIO ENZO-P DIOXIN				23.0	= :	2 ;) [7	7
NIXON	1,1,4,7,4-PENTACHLURODIBENZOFURAN	ממונפ			0 62	1	2 ;) (;	7	7
DIOXIN	LLJA,T.HEXACHI.ORODIBENZOFIJRAN	חמשמם	0.000				0	ה ה		73.0
DECKIN	I.J.A.7.J-II.EXACIII.ORODIBENZOFIIRAN	מכאנפ			7.5 U	0 100	22		2.5 U	150
DIOXIN	123,474-HEXACHLOROBBENZO-PROXIN	HEVKG	0.000		7.5 U	0 (100	5;2	1,3 U	2 5 U	3 C
DECKIN	LESE, TELLEXACTION OF BRIDGE NEW PRINCES	UG/KG	O'CT)		0 (00)	D EDUŞ (T	UIN	2.5 U	2.5 U	350
NIXOIO	123.24.P.HEXACHLOROPHBENZO.P.DIOXIN	UGAKG	O 100'0		0 001 U	D (sa) D	0000	2.5 (1	15 [2.5 U
NIXOR	13,44,74,1EXACHLORODIBENZOFURAN	UCVKG	D (00:0		0 1000	0 5000	57	13 11	1.5 U	2.5 U
NIXOR	NAME AND STATEMENT OF THE STATEMENT OF T	UC/KG	77 C		2.5 U		2	1.5 U	23 U	7.5 U
NOKIN	133467ENEPTACHLORODISENZOFURAN	DCCC	0 601		O EXIO	001	0	1.5 U	23 U	2.5 U
NIXOL	NY VYY YE GENTACTILO HODINEN CO-P-DIOXIN	DC/KG	0.583 J		O (M)	D CMIT	1H) 0	0.049.0	1.5 U	0
NIXURI	1 2 3 4 7 4 7 1 FPT ACHILOHODIBENZONIRAN	CHUKU	n (go g		2.3 U	O CALS	2.5	1.1 0	7 n c c	2.5 td
NIXOR	OFFICE CROBINES CONTRACTOR OF THE CONTRACTOR OF	DEME	7,107		E.556 -	E.837 -	K 3 ::	1.604	n o	0.498.3
NACE	CKTACHLORODIBENZOFIRAN	UC/KG	0.0		7.0	0.5	-	o •	3.0	3.0
	* * * * * * * * * * * * * * * * * * *	DCKG	2		2	5	~	23	×	2
		UCKE	: =		\$	2	8	=	ŝ	Ľ
		DOVEC	: 5:		2	\$	2	9	2	<u>=</u>
	COTACH COORDENSO. NIOKKEIS	03/00	2		8	9	=	35	55	3
		DCAKG	1 096		D 000	710 U		D OOK	4300 D	2008
144		1CAKG	. ⊅		20.00	7 1		AK U	1027	200
	NO.	DEVE	U COCURE		19x0 L	U 0004		Darro U	Months I	() (June 7)
100	MACIN	DC/XG	U (XXXX)		D CHÁI	D CKM1		O HISTORY	24(BEED 1)	2SMEET 1
	DACHLOROPROF	UG/KG	180 U)		(A) (S)	(A) (A)		(A (18)	15 GHZ	2500 UI
	LAD IDICIII.OROPHENOXYACETIC ACID)	INVEG	130 U		2000	n 0+1		1500.0	O CEIS	2300 U
1506	SILVEN CLASTE	DC/KG	⊃ %) ()) !!		300 U	420 10	
IEDR	14 CT CTRICIL OBOPHENOXYACETIC ACID)	LICARG	3		2 0 00	? €2		NO C	0 R.F	300
	1 A DR	UUKG	7 047		150 1	11 (34)		0 8051	2100 0	15to U
1007		UGVKG	2		□ 0 %	n #≈		300	430 (N OX
TEN DE	SECOND OBDERENY ACETICACIO	UCAKG	=		=	2		*	[]	2
27,121	SALINGTON INC.	CHORG	11 0021		1200 11	1300 17				U CAXIOL
2005	DIRECTIVE OFFICE ATE	CHUKC	29 0		1 064	1 22		76/III U		T (SEE
103511	LATERACANI IN	INCHE	1300 1		1200	ו ממנו		O 0349		U (IIXXI)
1000	A DINITION OF THE REAL PROPERTY.	UC/EC	Ş		490 U	470 U		2600 U	3880	1) (1) (1) (1) (1)
TO TO	ACEMANICAL ENE	UCARG	□ F		- PE	430 U		2600 U	350 0	H 0027
LISVOA	ACENAPITIENE	UC/KG	₽		190	J 074		D 0092	3900 U	47(8) (3
LISVDA	LADINITRUPIENOL	DC/KG	D 0021		1200 U	1200 0		O CENTO	1) (7. 11	O COLOR
70.5511	4-NITROPHENOL.	DC/KG	1200 U		1200 U	1200 ()		O CANA	O ONE	KKKU) U
2005	DIRENZOGUBAN	DC/KG	□ ₽		490 U	130 C		D OURSE	D CKE	1 11X P
115504	1.4. INITIALITE NE	UCZKE	□ P		⊃ R ¥	4 5 €		368) U	n ows	42x0 D
TOASTI	DISTRICT	UCYKU	2 E 4		- 2	→ 24		76X U	35'0 U	4200 U
118004	FLINGENE.	UC/KG	⊃ ₽ †		D 06+	470 U		2600 U	35m U	4200 U
LISVDA	4-CHICIROPIENYL PHENYL, FTHER	DC/KG	470 C		0 1%	47k U		26m U	15to U	(1 UX)
CLSVDA	4-NITBOANILINE	UG/KG	U 2021		1200	U (MOŽI		13 (E)49	TI CKI LI	MAKKO U
MOVELL	45-DINITRO-2-METHYLMIENOL	UG/KG	A 900.1		O DESC	U CERT		TI (17)49	II CONTR	10000
L SVOA	N.NITROSODÍMIENYLAMINE	UGAKG	D 047		∩ 96 +	470 U		D 0092	1X:0 U	7200
TYONS TH	LARONMHENYL PHENYL ETHER	DACAKG .	n 04		□ 06	130 C		D 0098	3500 U	1 TO
1			61.44.0	•						

		Stabout.	8.00	BWDI	EWU2	[FWI]	ВМС	HAM	BWU5	BW(6	BW(17)	BIANB
		Segrete Death:	0 6.5	0.00	50070 0 m .5	SD 5	50030 0 to 5	STOURIED O to 5	SD108	50 Kg	\$10\$ \$10\$	50136 5 4 6
		Sample Dute:	\$6401.01	10/10/95	10vine93	END NO	100 100 5	\$60101	10/10/5	10/10/93	10/10/95	10/10/95
Group	Personettr	Units					,					!
TOAS TI	HEXACHLOROBENZENE	DOWG	430 U	D 00)	U (30)	(100 F	11 07.0		380 U	D 064	71 (11)4	1300
LISVOL	PENTACHI, OROPHENOL	Davag	210 [7	n cox	D OUR	2101	2 8		D IXI	D 15.	310	1 2 3%
11.5704	PLENANTHENE	DOWE	420 U	400 C	7	400 U	370 U		320.0	390 U	1.1	OX69
TELOY	ANTIIRACENE	DCAKC	730 C	D 00 1	O COP	4 00 C	370 [190 1	390 U	(1 OD#	- 0091
LLSYOA	CARBAION.E	DYNC	2 7	T CC#		400 U	370 [360 0	1990	FI (17)#	5
CLSYOA	Discount of the Control of the Contr	DANCE	₽	7 CQ 1	900	5	370 []		3,40 C	22 C	77 (7)	- n 021
LLSVOA	FLANDAMENTE	DOKE.	□ :	7	1951	8	370 U		8	386 C	<u>0</u>	710017
YOASTI	PTRINE	DCMC.	0 2 2	7.5	3	20 10 10 10 10 10 10 10 10 10 10 10 10 10	370 [7	380 O	2	6KW
TRACE	BENZYL BUTYL MITHALATE	DONCO	200	9	20	#CD C	J 02.0		390 U	0.000	A 00#	U 0021
LISVDA	BENZUALANTIIKACENE	DMON	200		. 59		 20€		330 E	D 060	3	7910 =
TISVOA	JDICHLOROBENZBINE	DEVICE	2 :) (II)	⊃ . 7	7 93	330 C		360 0	⊃ 86 7	(I) (I)	() (IR)
LISVOA	CERVSENE	CONC	2 2	7	-		מ ענג		DAU U) 	12	3200 **
LESVOA	bb(2-ETHYLHEXTL) MITHALATE	DACME		200) 100 - 1	7	300		7. C	D80	D (1)	n inti
VONCYT		DANGE	2 5		6		200		136	⊃ : Ø: :	⊒	ח מצו
LI SVIIA		DISTRICT	2 :		.	7	370 U		180 0	= 05.	~	360 a
VUASTI	DENZON PLONGRAM HIENE	UCAL:	0 1		2		D ÈF		3) ()	;	3¥D 4
YOASTI	BENZONETHERE	DC/KC	0.00	# CO CO	3	3 (S)	3 to C		190 U	390 1)	F	250.
VOAST'	INDENO(1,1,1) c,d iP V REVE	CONTROL	9	- F	?	T (1)	7g.C		190 C	390 E	ž	1710 ×
LISVOA	DIBENZALDIANTIERACENE	OCINC	2		∩ 80 7	1 (1)	130 C		3%C	190 E	n gu r	700 J
TIBAGY	BENZOR DIPERY LENE		2 2 7	\$!	7	E O	370 U) (K	39 0 U	ŝ	* Cupi
LISVOA	1-FLOOROFILENOL	D CALCA	3 :	3	-	£ :	59		53	3	3	42
LLSVOA	PICENOLUS	ORAC DESCRIPTION OF THE PERSON	ਤ :	5 :	3	S	8		5	67	S,	63
VOASTI		2000	8 ;	3 :	2 :	3	5		\$	3	*	2
LLSYUA	LAPICITUM UBEN ZENE-IH	OMON!	z :	2 :	3 :	8	₽ :		z	2	X.	3
LLSVOA	NINGSENZENETS	3870	3 ;	7 ;	3	3	7		3	£	z	*
1157417	Z-FLIDKOBITIENTI.		5 .	Z 5	3 :	3 :	3 5 :		S . :	2	3	S.
ADTCL.	AAA-I KIDALATIOTIIEAGA TEORITANI DIA		2 ;	8 :	3 :	; ;	ŧ:		2 ;	3 :	3 ;	F 1
LEVOL		DANG	-	5 8		2 ;	¥		3 ;	= ;	Z :	7
LEVOA	HALLON GROETIVITETRE (ZÜM DROFTIVI, ETIKR)	DYNC		3 5		2 2			7	300.0		0 000
YOASTI	ZANIOROPHENOL.	UCAKC		2 0	2 6				2 2	2 6	3 5	0 000
LLSYOA	ZMETHYLPHENOL (+CRESOL)	UG/KG	7 2 2	0.00	9					Z S	3 5	
LLSVOA	1,7-0XYBIS(1-CHL.DRO)PROPANE	HOKC	420 U	U 00#	48.0	D ON	276.0		190 E	3 66	2 9	
YOASTI	4-METHY LPHENDL (P-URESOL)	DEME	430 U	0.00	0.03	O (K)	374 C		390 U	390 to	9	1 XxII U
LL-SYOA	N-NITHUSODI-E-PROPYLANINE	UC/KC		400 U	A D A	∩ (x.)	376 U		J90 U	330.0	- QQ	(1 01%)
YOASTT	HEXACIILORUETHANE	DOKO	↑ 02+	4:0 C	£00 U	O CR	330 C		390 C	350 C		U 0027
LLSVOA	NITROBENZENE	CAKG	430 C	200	(C)	4 00 U) 1 40		390 U	390-0	1	O DIX
L.L.SVOA	Springane	53651	479 U	Ş	7 O 7		2 2 2 2) (K	381 0	₹	
LLSVOA	2.NTROPHENDI.	23/22/	430 0	0.00	7 CO	⊃ (X.¥) <u>1</u> 20		39a U	3910	1	O IXXI
LISVOA	2.4.DIMETHYLMENOL	DCAKE		007	9	⊃ . X	370 C		330 13	390 0	400 C	O DOŽI
LISVOA	MET-CALCRODETTOAT) METTIANE	DCKG	1	0 00	100	- CC	D EC		390 [3	390 C		0 0021
TRADA	24 DICHLOROFIIENOL	DCMC	2	n ux	O 007	41) C) 및 C		390 17	350 13	∩ (X) 7	U IXXI
r LSVDA	LA-TRICIILGIROBENZENE	DCMG		40 U	007	→) □ P(390 [390 (1) (EE)
LISVDA	NAPITIALENE	UC/KG	- Q	40 U	1 0.07	₽) 日 日 日		393 11	13 CM		1 100
I.I.SVDA	4.CHLOROANILINE	DCMG	7.00	100	3 03	0 00) P.F		390 U	350 U	4K) 1)	(ZIII)
LISVDA	HEXACHLOROBUTAINENE	LCAKG		71.07	T 0.7) #	5 5 0		390 U	190 U	400 U	I ZIZI
LISVDA	4-CIILORO-MIETRI YLMIENDL	UCKC) ()	T 007	(T)	J 0./C		190 1	390 tl	1	n mei
LISVDA	LAIETH FLAAPIITIEA LENE	חכאכו	2	\$	∏ 00 7	6	J 07£		390 U	390-11	44 U	ו אות ח
TRADA	HEXACHLOROCYCLOPENTABIENE	הפאפם		ii 00#	- CQ	400	370 52		350 U	390 H	O CUS	1 200 1
VOASTI	2,4,5-TRICII LUROPII ENOL	newa	7.0 0	\$	∩ (\$	400 U	370 0		390 U	136 II	(I QU)	1200 []
7												



))	
	Analytk	Analytical Data Summary: Sediment	ımmary:	Sediment							
	Station(D:	BW09	6W10	11 84 8	BW12	BW13	BW14	BWIS	BW16	BW17	
	Sample ID:	50140	Spiso	Spics	OCTUS	919	961 CI	SD200		97.2CS	•
	Sample Depth:	0 to 5	9	0 to .5	0 to 5	T. H.O	6 0 0	? ?	₹:01	6 to .5	
	Sample Date:	10/10/95		5911701	10/11/95	551121	10.11.93	10711/95	10/11/95	10/11/95	_
HEXACHIOROBENZENE	HC/KG	O 629	t coor	U 0083	4300 10	DON G	Dong U	260 0	71 (93) ES	
FENTAL VII ON DEPTITATION	DICAKE	二金月	Ti creat	3 100 (11 GD 12	1500 (1	UR!	2KD ±	÷ ÷	230 (1	
PIIENAMTIKENE	DOWG	100	0.00*	O ITAN	4 XKI U	Jun C	D (KK)	200	0 004	348 0	
ANTHRACENE	DC/KG	310.1	A ODD	U 0084	4200 U	D COOK	XXII) []	O 698	450 U	000	
CARBAZOLE	LCMG		40t0 U	00059	4200 U	JOSO U	C) CHICK		(US)	D COS	
DI-BUTYI, PITTIALATE	DCAKG	() ()O F	7 000 7	0 0059	42KD U	Jazo (1	1000 n	 98	O (98)	II (33)	
FLJIORANTIENE	UCAKG	1300 -	U O'OA	0 0059	42KD 13	II OCON	7 022	3 95 8	- OS	O 005	
PYBENE	UCIKC	1400	0 aus	7 00 5		71 COOK	160 /	⊋ :	⊃ : 95	3630 C	
BENZYI, BILTYL RITTIKLATE	CONCO	O (1)	000	0.0059	4200 U	3000		O :	200		
BENZOWANTHIRACENE	TICAKG	2	7000	0 005				9 5		3	
S. DICHLOROBENZIDINE	DWON			0 6000	4700 0	A CANA		3	9 3) - 1	
	NAME:		2 - 2 - 3 - 4				1100	3	7	7 7	
bejae Hittiteans, filliada ie	2000	1	1000		1 1127		7000	3	2		
	DANS!	3 5	7 007		470	100	100	3	99	9	
	0000		7 017	0 959	4200 1	NO CO	D COUNTY	3	0 094	i enz	
	CICKG	85	0.00	0 0059	42KI U	SKIN D	Han II	O 095	1 D3\$	3	
	DCCKC	98	U OOM	O (1059	4200 (XXIO U	D COR	266	U D##	130 J	
DIBENZADAMITIBACENE	CONC	1 05.1	O ONDIF	U 0084	4200 U	3010	n axa	⊃ 199 5	460 U	2006	
BENZOGAJPERYLENE	DOCOL	g	71 CUTO	O OK9	4 IDD U	30KD U	U CLUE	0 998	() (PP	8	
1-FLUOROMIENUL	UCIKG	F	2	£	3	2	~	3	\$	£9 '	
PHENOC-05	LICKG	=	ñ	3	3	z !	€ :	3 :	1	5 :	
2-CHLOROPHENOL-D4	DC/KG	2 :	S	\$:	Ç :	Si i	≂ }	3 8 8	# :	9:	
1.1-DICILLOROBENZENE-TM	DCAKG	2 :	x :	ខុះ		≂ i	. :	2 ;	£ 7	à :	
NITROBENZENE-D5	DCAKG	2 :	ę ;	5 3	5 \$	≓ ₽	2 2	3	2 7	8 1	
2-FLUOROBIPHENYL.	3430	: :	2 2	8 5	E #	2 F	2 F	5 8	\$ 8	3 2	
1.4.5-TRIBROBIONIENOL	DON'S DON'S		; *	• 4 <u>1</u>	8 2	? R	2.2	3 =	3 ≉	2 %	
	HAKC		21 02097	0 089	7 A 20 U	n one	COOK	9	1 0 3	2 05	
NEWOL.	UENC	7 03	9	() () () () () () () () () () () () () (TO OZ	JO DOOR	CO COUX	94	D (5)	2005 	
1.CHI.OROPHENDL.	UCIKC	7 00	O axa	O OX9	7300 U	3000	CARD U	7) USX	0 (8)	34B U	
2-ATETITYLMIENOL (a-CRESOL.)	UGVKG	400 U	4000	0 0X9	42co U	O GOOK	ZIAND LI	0 095	1 09 1	D 908	
2,2:-OXVBISH-CHLDROPROPANE	UGAKG	0 007	4110 (1	0 0 Kg	1 0 X	XXX C	ZITE O	⊋ ;	- 1) (EX	
+METHYLMIEND: (P-LRESOL)			400	2 2 2 2				3 3	3 5		
N-NJTR(OSIDDI-#-PROPYLANDINE	UGKC			10 000	0 007			3	9	3	
MERACHIONOLITANE	UCKG	200	4000 U	5 0059	(I) OK*	JOHO OIL	ZODO (U)	9	3	7 005	
KOMIOBONE	UCIKG	000	n ow	0 0059	1 UZ7		U 0002	C) 095	(1 09)	n aas	
MITHOMIENOL	UCKG	U 003	O CUCP	U 0023	ORY	n goge	O 0002	200	O 094	D 0.88	
1,4.0IMETHYLPHENOL	UCAKE	400 th	40x) U	U OCSA	7 0124	DOM O	D OTEN	360 E	25	7 (1) 5	
BAT-CHLOROETHOXY) METHANE	UCARC	400 C	1000 P	0 00059	1 mx+	D CHE	D OHE	260 U	- ES	3 3	
1,4 DICHLOROPHENOL	UC/KC	8	T OXY	000	1 0 X	n oxor		⊃ : 53 :) 	XO C	
L.A-TRICHI.OROBENZENE	DEME	8	1 0 C	0 000	7200			e e			
NAMITIALENE	CACAL		3 600		1 2 2 2) 3	\$ 5 S		
4-CHIORDANILINE	9000	3 5		0000	1 000	000		- 1 3	9	2 2 3	
ILEACHLOXOGO AD GAG	DICKE DICKE	2 9	000	0.000	0 00ZF	n cook	ACC C	3	□ (34)	n ox	
2-NETHYLNA MITHALENE	UCAKG	0 00+	4000	D (059) DOC	axp U	n cust	11 095	O 094	O OX	
HEXACILOROCYCLOPENTA DIENE	DC/ICC	O 00+	4000 U	6500 U	4300 U	O OUDE	KED U	n 998	0 (9 1	N OX	
2.4.4-TRICIILOROMIENOL	. UGNKG	D 00#	- 000 7	000 n	7 OOC	XIO U	ZKIO U	⊃ 9¥	7 09	200	

| 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 11570A | 1

50220A 0 to 3 (011795)

Sediment
Summary:
natytical Data
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		StationID:	E A B	BWII	BIWIS	9W 19	BW19	BW20	BWZI	8471
		Sumple 1D:	SD230	SULMOL	SD240	SD240A	SD241D	SDSSQ	SD260	5D273
		Sample Depth:	0 to .5	\$: 01 B	0 to .5	0 to .5	0 to .5	fl.m.5	E vig	1,010
,		Susspik Date:	10/11/05	10/11/03	16/11/93	10/11/93	1011.63	14712/95	10/13/95	EWIZWS
g G	Patameter	Uelta								
YOAS T	HEXACTILOROBENZENE	UG/KG	⊃ Q;+		∩ Q; +	10 OL*		360 0	1300 U	1300 U
11.5404	PENTACIII, OROPIIEMOI.	UOKC	730 C		140 III	230 U		LXKI U	U fritti	2100 (1
17.3704	PIIENANTIBENE	UGVKG	<u>8</u>		7 26	410 CI		10091	15u) U	420 U
LLSVOA	ANTILLACENE	LIGKG	7.00		D 06+	410 U		1600 U	D OISE	O ORR
LISYOA	CARBAZOLE	UCVKG	D 04.7		O (%)			1600 U	000C	420 U
11.5YUA	DI-BBUTYL PHTHALATE	DCVKG	740 U		\$ \$	7 9 C		16to U	U 0086	4200 U
LSVOA	FLUORANTHENE	DCVKG	136		⊃ 0¥	130 C		7 000	((K#	L CHE
L.I.SVUA	PYRENE	HCMG			∩ 06 4	7 00		1900	(CERC)	L CHRT
LLSVUA	BENZYL PUTYL MITHALATE	DCXC) (4)		0.00	430 C		19 (X) (1	3500 0	43mi U
LISVOA	BENZOGANTHRACENE	DWOO	192		480 0	4 X C		T (8%	3500	1 MKP
LLSVOA	3.D.C.IILOROBENZIUINE	UC/KG	476 C		0.067	4 M C		D (09E	3500 U	43xii 11
rossi	CHRYSENE	UG/KG	3		7 04	1) 0/4		1331	3XK 0	1 PART
LLSVOA	beq2-ETHYLLEXYIJ MITHALATE	DC/KG	470 C		∩ 06 ‡	430 €		1610 U	3500 0) XXX
LISYDA	DI-B-DCTVL/HTHALATE	UC/KG	470 U		490 L)	□ P.		1) (H92	3500 U	4 XKI U
LLSVOA	BENZOKIJILUORANTIKENE	UG/KG	1021		00 P	3 P.F		940.1	35m U	4200
LLSVOA	BENZOKLITUORANTIENE	UC/KE	<u>\$</u>		7 OG	470 U		940 3	3500 1)	42m U
LLSYOA	BENZOKINYYRENE	DCKC	100		430 E	470 1		1 (10.6	3800 U	42m ()
LLSVOA	INDENO(1,2,2c,d)FVRENE	UCAKO	92 I		1 06 7	430 U		1 1129	3300	42m U
LLSVOA	DIBENZĄŁYNTIIRACENE	UCKC	- Q.		1 06)	0 EX#		260u U	0.080	4380
LLSYOA	BEXTO(LADPERYLENE	CORC	101		490 E	102		1 049	0.000	42m U
LLSYGA	1 FLUOROFII ENGL	UC/KC	2		5			8	*	*
LLSYGA	PRENOL-D3	UC/KG	7		3	3		1,2	3	\$.
LL5YUA	1-CHTOROMIENOL-DA	UCAKG	3		63	*		3	25	23
H-5VOA	1,2-DICHLOROBENZENE-DA	UGKG	ę		r	3		£		5
LISVOA	NITROBENZENE-DS	UCKG	3		٤	3		92	•	3
LLSVOA	247.UOROBIFRIENYI.	UG/KG	3		67	S,		11	2	3
LLSVOA	244-Teleroniophenol.	DC/KC	Ş		2	23		×	9	7
LISVOA	TERPHENYL-D14	DCAKC	Z		2	R		ድ	%	2
T-SVOA	MIENGI	UCJKC	2 2		490 D	9		2600 U	3500 0	4XID U
FISAUY	MAT-CHIGAGETHYL, ETHER (I-CHLOROETHYL ETHER)	UUVKG	2		490 ft	3 n.		26X) U	380 0	42KF J
LISVOA	ZCIII.OR(IPIIENOI.	HUKC	D 047		430.1	45 C		26×3 U	350 0	0 (1927
resvo.	SAIETHYLPHENOL (+CRESOL)	UCWG	2 : 2 :		O :	2 T		1900	35tb U	42KH U
¥0.63	AMEND OF THE PROPERTY OF THE P	3 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2 1		6 8	2 5		2000	300	4200 U
LESTON		9000	2 5		3 5	2 5		2660	0.000	1 002
POSTI	HEXACHLOROETHANE	DC/KG	79.0		200	2 2		3600	140 0	7000
LLSVDA	HTROBENZENE	DC/KG	20 00		D 064	2.5		2500 U	380 0	130
LLSVOA	ISOFIIORONE	DOMO	(10 C)		7,00,7	75 C		26KB U	3500 0	4200
LLSVOA	1-NITROPHENOL	DC/KG	D 02.		490 U	410 U		2600 C) (D (and u
LISVOA	14-CAMETHYL MISNOL	DONG	7 04		06)	440 C		2600 U	350 U	480 U
1.1.8 VOA	MAZZIII.OROFIIIOXY) MITTIANE	HOKO	I) ()()		D (14)	D ()(+		16KD U	380.0	42010
1.15704	14-DICHTOKOMIENOL	5555	730		2) (K	∩ 2Ł		36KN U	JAK C	11 (312)
TCSV0A	LATRICTILOROBENZENE	COKC) (*)		= 100±	470 U		2600 U	D (MKC	n crat
LESVOA	NAPITHALENE	O C	2		130 T	410 C		16to U	3300 C	0 (XX)
LLSVOA	4.CIILOROANILINE	newe	2		130 C) (4)		2600 U	35to U	1 (LX)
LLSVOA	HEXACHI, DROB(TA DIFNE	UC/KG) P. +		∩ 064	130 C		281) U	35tt) (1	42010
LLSVOA	4-THI.ORD-TAIETHIYLPHENOL	COKC	○ P.		2	₽		2M3) ()	35to U	O 1612
LISVOA	LAIETHYLAAFITTIALENE	UC/KG) (A		₹	₽		16th U	3500-0	43a U
LL5V0A	HEXACHI, DEDCCYCLOPENTA DI ENE	OC/KG	4		⊃ \$	1		16IN U	3500 0	1741 C
1.5V0A	1,4,6-TBICITI,DROPHENDL.	- acyke	⊃ 2. 7		400 C	₽		2611 U	3800 U	7331 O





		Station (D.	10MB	10WB	BW02	£ WG3	BWD#	EWON	8 W 05	90,469	TO-ME	BWOL	• •
		Sample ID;	goods	STOCKID	SDONO Om 4		50036 0 5	SD090D		6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	S103	2 0100	
		Sample Dute:	10/10/95	I (VI IPS)	107.0093	(Milw)	ICVRIVS	TURING	11VIUM55	tev luras	IQUINS		
Group	Parameter	Alai I											ja Pa
VOAST'S	JAS-TRICILOROPIENOL	OC/KG	D ::	000	0001	- : - :			11 126	1 1 1 1 1 1		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
LLSVDA	J-CIILORONAPHTIALENE	UGARG		9 :		3 2			2 2 2	2 5			
LLVOA	CIILOROMETTIAME	OCARC	2 :	7.	2 5	2 5			2 :	2 2	2 2	2 2	
V0.77	ALETINE ETINE RETURE (LBUTANONE)	HCMG	2 5		2 2	2 2	==		2 2	2 2	? =	2 2	
1 to 0	CATALITY OF THE STATE OF THE ST	DOVOC	2	2	12 0	n 2	; =		2	13 U	n 21	12 11	
11.604	L.L. TDICHLOBOETHANE	DCAKG	12.0	13.0	13 0	13 C	? =		2 6	12 U	12 0	ם כו	
11.404	CABBON TETRACHLORIDE	UCAKG	12.0	0 21	12 U	n 21	- -		12 U) []	13 U	0 EI	
LLVOA	BENZENE	DC/KG	12 U	13.0	0 ZI	0 2	חם		חזו	<u>.</u>	2 0	O 21	
TAOA	LEDICALOROETHANE	DC/KG	12 1)	0 0	13 U	12.0	a 11		0 21	U []	n 21) I	
Tryoy	TRICITOROETHY (FIE)	UC/KG	12 U	0 61	U 61	13 U	11 0		2	0 11	7 C	11 C	
T VOV	LADICHLOROPROPANE	HOKG	12 10	n n	12 U	n ::	O 11		13 D	2	U 51	n 21	
T, VOA	BROMODICHLOROMETHANE	DC/KG	12 17	2	0 21	15 O	- -		13 D	D 61	12 U	13 C	
LLVDA	VINYL CIA.DRIDE	DCAKC	2 0	<u> </u>	<u>∩</u>	13 D) =		12 U	2	13 17	=======================================	
VOATT	METHYL LEIBHTYL KETONE (4 METHYL 2 PENTANONE)	DEDIKG	מנו) :	0 21	0 2)	3 3		12 12	=	2 2	13 11	
LLVOA	ch-1,3-DH:HI.OHOPROPENE	HEVKG	חנו	0 0	13 0	13 N	=		13 O	⊋ : ≃	2	= :	
LLVOA	TOLUENE	DENKC	0 5) [13 C	13 N	n 		13 N	≃	12.0	<u> </u>	
LLVOA	BARELL, LOKULORUPROPENE	DCAKG	2	20		ממ	⊋ : =		2	n :	n :) 	
LLVOA	I,I,2-TRICKLOBOETIIANE	DCKC		o ≃	11 C	12 D	= : = :		120	n :	0 :	0 :	
LLVOA	LIEAANONE	DOKO	- : - :	⊃ : ≏ :	= :) : 		o :	2 :	2 :) 2 (
LLVOA	1ETRACIII.OROETIIYI.ENEJPCE)	DCAKE	2 :	2 :		2 !) : : :		2 2	2 5	2 5	2 2	
LLVOA	DIBROADCHLORDNIETHANE		2 :	2 5	2 2	2 :	= =		2 5	2 2	=======================================	= =	
TLVOA	CILOROBENZENE	Design of the second	2 5	2 2	=======================================	2 : 0	=======================================		2 2	2 2	2 2	2 2	
Trov	ETHYLDENGENE		2 =	2 = 2	2 2	2 2			2	2 2		0.2	
T.VOA	# CONTROL I I AND	DEVE	2 5	n 21		2 2	=		2	2	n ::	13 0	
507	CONTRACTOR OF THE CONTRACTOR O	DC/KG	2	13 U	n 21	מני	9		0 21	12 11	17 (1	2.0	
TVO	BONDFORM	DIVING) [1	12 0	n ~1	13 U	n 11		0 5	12 D	0 [) ti	2
LLVOA	I.I.ZZ-TETRACHLOROETHANE	UCKC	חני	12 0	n 21	D CI) :		2	12 D	<u> </u>	n 1	
LLVOA	1,4-1)CORDETIIANE.DA	DCMC	9	69	<u> </u>	<u> </u>	횽		8	\$? 01	쿌	
LLVOA	TOLUNESE	HICKE	8	<u>6</u>	₫	ê	Š		<u>5</u>	<u> </u>	3	6	
LLVOA	I-DROMO-4-FLIXOROBENZENE (+BROMOFLUOROBENZENE)	OC/KG	8	8	2	6	8		103	8 :	8 :	9 :	
LLVOA	CHLOROETHANE	CCARG	o ::	⊒ : 2 !	2 0) 2	- :		2 9	2 :	2 7) : : :	
LVOA	ACETONE	URARIC	3 : 2 :	5 2 2	2 :	3 :	3 : : :			2 2	2 2	: :	
Y0.7.		144/41	2 2	2 2	2 5	2 2	: = : :		1 2 2	2 2		= =	
LVOA			2 6	- 67	1 07	1 07	130 U		190 1	380	0 00	1308 U	
T ALL	LANGE TO COMPANY OF THE COMPANY OF T	DC/KG	130 0		7 007	n cor	130 ti		3900	J 0K	4111 0	D ONE!	
	3/2//38080 1:010.61	UG/KG	420 U	O OUP	400 U	£00 E	370 U		J DAGE	190 U	() DQ	3	_
TADA	METHYLENE CHILORIDE	UCMG	D 9 1	12 U	12 U	10 U	11 17		13 U	n ~!	D C1	0	_
LVDA	LI-DICHLOROETHANE	DCMG	0 2	U []	12 0	N 21	<u>-</u>		12 U	13 N	110	8	_
PEST	ALPHA BIIC (ALPHA HEXACHLOROCYCLOHEXANE)	UCAKG	7.1 E	ם יי	7.	2 10	0 61		2 U	D ~	7 () (
5	BETA BIIC (BETA HEXACHLOROCYCLOHEXANE)	UCIKG	2.1	2	7	2 U	73 6° I		2 1)	2 5	7 C	<u>ر</u>	_
7	DELTA BIIC (DELTA HEXACHLOROCYCLOHEXANE)	DOWE	2.1 U	2	7	7 F	0 6 T		- -	2 2) 	. 4	
PEST	CANTMA BIIC (LINDANE)	OCIKG	 	ה י	7	2 D	0 6T		7 0	2 .) 	7	
PEST	(IEPTACIILOR	OCIKG	7. U	<u>ت</u>	?	2 U	9		2 0	5 .	⇒ :	, - :	_
EST.	ALDRIN	DOKE	210	⊃ : ~ •) ;	2 6	6.		<u> </u>	2 7		2 :	
每	HEPTACHLOR EPOXIDE	9800	7.10	- : :	•	7 6					-) <u>-</u>	
탏	ALMIA ENDOSULFAN		3 3) : 	? :	7 -							
FST	DIELDRIN		,	•	2	a P	ì		:) •	:	;	

		Station ID:	BWG	BWIO	BWII	BW/12	CIAR	HW14	BWIS	BW16	BW()	DWI
		Sampta ID:	SDI 40	SDISS	SD 160	Spine	okias	8	SDZU	5D210	517270	SpzzuA
		Sample Depth:	2, at 0	•	€ 90 ° 50 ° 50 ° 50 ° 50 ° 50 ° 50 ° 50 °	5, oi 0	0 to 5	6.010	d to .5	2. ea d	0 to .5	5' લા 0
Group	Parameter	Unde	Table 1		6	(<u>%</u>	8	6	10/11/03	101131	10/11/95	IN11.95
LLSVOA	24.5-TRICHLOROPHENOL	UC/KG	∩ 066	П 0066	f) 00091	100001	7400 11	1 0005	11000	11 1241	1 021	, <u> </u>
LISVOA	3-CHLURONAPIITIIALENE	UC/KG) (C)	U 000%	O OKS9	0 002	XXIII U	2002	9	5	25	4
YOA'T1	CITLOROMETHANE	UG/KG	7	26 U	2	25	22 0	73.0	= = = = = = = = = = = = = = = = = = = =	2	2	£ 2
LLVOA	METHYL ETHYL KETONE (2-BUTANONE)	UC/KG	2	1.1	7	0	1.	~	= =	-	2 -	2.1
LLVOA	TOTAL LADICILLOROSTHENS	DCAKG	0 EI	2 9 U		2S U	D 64	n <u>~</u>	10	=	191	20 ng
LLYOA	CHIOROFORM	UC/KG	13 D	⊋ 92	그 및	23 13	13 U	o =	0.0	n ►1	16 (1	3
LLYOA	1,1,1-TEICHLOROETHANE	UCVKG	13 f)	D 90	⊃ R	72 0	33 C	n [J (1	⊃ <u>*</u>	7 91	ا د د
LLYOA	CARBON TETRACIILORIDE	UCAKG	13 C	26 U	∩ 02	U 22	D 66	BE	13 0	2) 9	1,091
11,704	DENZENE	UCVKG	12 10	79 CI	3 OZ	2	0 CE	20	I7 U	2	7 92	191
LLYOA	1.3-DICITLOROETIANE	UCAKG	12 0	3 6 U	3 9 2	25 U	0 52	0 2	U 11	17 17	O 91	2 2
TLV0A	TRICILLORGETIIYLENE (TCE)	UGAKG	N 21	26 U	⊃ 82	13 U	11 U	0 61	17 13	=	16.0	n 91 .
LLVOA	12. DICHLOROPROFANE	11C/KG	J 21	?	☐ 2 2	2 5 U	73 N	0 21	11 21	= 1	-	2 4
LLVDA	BROMODICHLOROMETIANE	UCKC	n 1	2 2	70 C	n sz	22 C	13 (2	1 1	⊐ <u>*</u>	2 4	10 01
Trov	VINYL CISLORIDE	UUNKC	? 2	⊃ %	2	13 C	□	13.0	17 1	⊋ ±	0 41	D 91
LL.VOA	NETHYL ISOBIATY, KETONE I FALFILIYL J. PENTANONE)	DUNKC	_ 	⊃	₽ ⊐	25 U	7 F	13.10	0 t) 1	16 U	0.91
YOA'T'	ALCHIOROPROFENE	DONC	13 C	7 ¢ ∩	70 C	23 U	12 D	12.11	0.0	⊃ ⊻	16 U	0.91
LL VOA	TOLLIENE	DC/KC	2	77	2	73 C	11 E	U 21	17.0	D 12	1 9 1	U \$1
TLVOA	brake 1, DICH IL OROPROPENE	DCAKG	2 2	77 17	70 C	33 U	0 G	12 0	2 0	5 Y	1 b U	16.0
LLVOA	I,I,2-TRICII,020ETIIANE	DC/KG	<u>-</u>	3 9 C	9	23 U	2 U	(2 D	5 2	3 ¥	⊋ 9 1	16.0
LLVOA	PHEXANONE	nexe	۰ ت	76 U	2	23 CL	72 N	12 D	D C	2 ₹] 9 [16 U
YOATI	TETRACHLOBOETHYLENE/PCE)	CONCO	0 ::		2	73 C	2 0	12 0	13 f	<u>></u>	16 U	16 41
LYOA	DIBRIMINATION	DONC	0 :	⊃ : \$? ;	2 5) II	22 12	n C1	110) 1	n 9 1	0 91
rr.vov	CHICAGOBENZENE	DCMC	0:	n :	⊃ : & :	2 :	22 D	12 11	110	2	o •	N 91
Y		2000	5 :	2 2	3 : 2 :	22		12 U	> =	- -	⊐ <u>9</u>	A 91
V0477		חכיונים) : 2 :	2 :	⊋ : 8 8	22.5	D 22	12 D	=	⊐ I	□ 91	2 9
LLYGA	Lette Apienes		2 :	= : E :	= : R	12 C	73 D	0 ?!	= =	=	_ 1	16.0
10.71		CONTROL	2 5	9 ;) : G ;	950	n ==	O :	2	1	7 91	- -
Y017	DELIGHTETERS	TACAR.	2 5	2 2	2 5	: c	2 1	2:	= : = :) 1	D 91	=
YOU		DESKE		2	\$ §	9 !	2 3	= ;	- -	1	0 <u>9</u>	7
5071	TO DEAD OF THE PARTY OF THE PAR	DECKE OF THE PERSON	3 E	2 5	9 5	3 !	5 i	3 :	<u>8</u>	8 :	2	25
TEVOA	Labono44FLIOROBENZENE (+BROMOFLUOROBENZENE)	HCVKG	<u>i</u> B	2 8	<u> </u>	<u> </u>	<u>.</u>	8 8	<u> </u>	2	= ;	2 :
LLVOA	CHLOROETHANE	OCAKG	12.11	2 92	=	: X		t :	3	1	; :	S :
LLVOA	ACETONE	UCYKE	12 1/1	33.0	<u> </u>	1361	38 C	2 2	2 5	: ::	2 2	2 2
TIVOY	I, DETHEROREMENE	UCKC	17 17	16 U	디었	U 22	n #	=	2) = ! I	2 2	2 2
FLYDA	CARBON DISULFIDE	UCZKG	13 U	79 N	70 C	73 U	1) LZ	200	1) (1	2	2	: 2
LYDA	I, DICHLOROBENZENE	UCVKG	1997	0.00	A 0059	1002	D 000K	3000	∩ 19 5	7 697	D 00%	320 U
H.VDA	I.A.DICHLUROBENZENE	UCAKO	O 0	ADID U	0 0059	42m U	D COOK	DOOR O	∩ 19 9 €	700	300 U	n 025
T-VDA	L. DICHLORUGENZENE	OEKC	7007	4000 D	0 0039	42(10 U	D COOK		= 98	U 64) (MS	II 025
r voy	METHYLENE CILLORIDE	UGRG	0 5	⊃ : % :	⊋ : % :	12 U	o ₽	0	1 1	→	16 C	n 9
FIA D	CITED TO THE PROPERTY OF THE P	2 10 10 10 10 10 10 10 10 10 10 10 10 10	2 :	9 5	2 ; 8 ;	0 52	⊃ : ;;	⊃ <u>~</u>	17 L	≏ *	16 C	D 91
	ALFIIA BIII. (ALFIIA IIIZAALIKUNUK ILLUIIZAANE)	24.00)) : :	o =	7.6 U	5.1 U	2.8 U	2.3 U	250	1.7 U
FEST	PETA BBIT [BETA HEAACH LOMUCYCLOHEAANE]	DESK	n :) 	0 : 13 0	9 =	1.6 U	S.I U	2.4 U	7.3 L	2.5 11	23.0
LEST	DELTA BIJC (HELFA HEKACHLONGLACKUHEKAME)	OCAC) or	0 5	2.2	≏ =	1.6 U	3 .10	2.1 ()	73 fi	23.0	3======================================
PEST	CABINA BIC (LINDANE)	SWEET	ə :)) ()	= :	7.6 U	3.1 U	2.8 1)	2.3 U	23 U	G E
	AL DRIVA	TAPE OF	2 9	2 2	2:	= : = :	0 97	91 U	⊃ ; • .	7.7 C	2.5 U	8
		DOWG.	2 9	2 5	2 2	- : - :	0 2 2		3 : 3 :	1.3 (25.0	2,7 ()
	ALBIA ENIXER FAN	DESKE	2 9	2 5	- c	: :		7) i	2.5 U	3
į		SORG	2 2		2 =) = = =		1 1 1	2 :	o :	2.5 U	14 2
į ,		- !	! !	l I	2	;	2		9	÷	0 6.4	3 3
ת												}



Analytical Data Summary: Sediment

		Station D:	=		<u> </u>	6 A B	호		7.80	
		Sample (D)	SD236	SDINOPL	50240	SD240A	\$024tD	50775	SD266	50278
		Semple Depth:	Ø 10.5	0.00	0 to .1	£. 610	0 1.	6, 610	0 to .5	0 to .5
		Sample Date:	10/11/95	10/11/95	(0/1/03	10/11/05	10/11/95	10/12/95	10/12/95	10/12/95
	rler	Calts			40	**				
14,41 A94511	1/5 TRICLLOROPHENOL	CIC/KG	D 002		1200 U	0 QZ				U GENERAL U
LISVOA LCHU	I-CHLORONA MITTIALENE	CHANG	10 C		Q Q Q	- 27		7611	3411	(KR)
	CILOROMETHANE	THUNKE	⊒ Ξ		U 51	2		75 (71 E	=
	NETHYL ETHYL KETONE (2-BUTANONE)	UC/KG	3.		13.0	14 17		II &	7	0 16
	TOTAL LEDICHLOBOETHENE	DC/KG	14 10		13.0	0 %		13 C	71 N	910
	Maggarina	UC/KG	1		13.0	2		⊃ Ç	21 C) F
	1.1.Telchi.Deolitiane	1XC/KG	14 17		15 U	2		700	21 0	5
	CABRON TETRACTICORUSE	IXC/KG	141		13 U	2		↑ 7	21 0	0 16
		DC/KG	2 5			= =		7	3) (1	0 16
		UCYKG	2		0 51	2		n ; •	21.0	O 16
		DICARG	1		7 51	2		73 0	=======================================	11 16
	TREATE COORDINATE COOR	UKWEG	1		0.51	3		n ₹	21 U	5
		IKVKG	1		0.51	1		⊃ ∓	n f	7 5
	WALL CHI COLD FOR THE COLD FOR	DC/KG	1		3.0	2		7 ∩ ₹	0 12	7 16
	AGTIVI INGRITIVI KETONE IAMETIIYI. I.PENTANONE)	UG/KG	1		0 51	7 *1		∩ ~	21 0	016
	A. Volch DROPENE	UCVKG	2 4		15 U	2		O 24	Ð I#	⊃ •
		UKYKG	2.1		U \$1	14 0		====	=	9
	CONTRACT COORDINATE	UG/KG	2		13 U	=		77 0	21 U	7 16
	LETRICILOROETHANE	DC/KG	2		15 U	2		0.0	0 12	2 0
	1.HETANONE	(KC/KG	3		13.0	2		∩ ?	O 12	3 10
	TETRACILLORGETHYLENG/PCE)	DC/KG	2		0 51	•		□ ~	⊃ ≂	91.0
	DIBROMOCIILOROMETHIANE	UG/KG	2		0 51	_ ₹		7 7	D 17	91.0
	CHLOROBENZENE	UC/KG	2		13 U	2		∩ ~ +	חת	₽
	ETHYLBENZENE	UG/KG	ĭ		2	2		7	3 C	<u>.</u>
	BROMONETHANE	DZ/KG	0 ₹		13 0	2		3	= =	3 6
LLYOA Total Xylenes	yletes	UG/KG	_		2	2		7	=	5
	N.E.	UGAKG) : :		= : •) :		0 : C	3 : 2 :	⊃ : 5. 8
	BRONIOFDRAI	DCMC			3 : 2 :) :		7	ə : ; ;)
	1,1,11.TETRACHLOROGITIANE	UCAC	- -		- - -	5 I 2		7 5	2 7 <u>8</u>	- -
	1.DICHLOROETHANE.DA	DAG!	3		F §	\$ 5		5 5	<u> </u>	<u> </u>
-		D SACO	3 5		<u> </u>	3		2 3		
	I.Bromo-4-FLUORDBENZENE (4-BROMUFLUOROBENZENE)		2		<u> </u>	= = = = = = = = = = = = = = = = = = =		£ 5	2 2	2 2
LLYUA CHIMINOL	NOE ILANE	HOME	2		2 2	2 3		42 U	21 C	0 16
		DC/KG	: <u>-</u>		12.0	2		2	21 D	0 16
		DOWG	· •) S C	3		42.0	21 12	0 16
	L'ADICHTOROBENZENE	UC/KG	10 OZ		7 06F	130 U		7600 U	3300 U	U UKE
	14-DICHLOROBENZENE	HC/KC	II 02.7		430 D	2 2 7		7000 E	J CONSE	42m
	13-DICHLOROBENZENE	DEVKG	470 [O 069	130 C		2600 U	3500 U	4200 U
	AIETHYLENE CHLORIDE	UUWKG	2			٦ •		42 U	0 12	0 6
	LIPICITOROETIIANE	UCAKG	7 0		13 17	2		1) ZP	21 C	7
	ALPHA BIRC (ALMIA HEXACHLOROCYCLUREXANE)	UGAKG	> T	8	2.5 ()	240		0.5 U	0.63	<u> </u>
	BETA BUT (BETA HEXACILURICYCLOREXANE)	UCKG	n †	48	2.5 17	24.0		63 U	1.9 U	= =
PEST DELTA	DELTA BUC (DELTA HEXAUILOROGYCLODEXANE)	UCKG	7		2.5 U	24.0		6.5 U	L9 U	=
	GANIMA BIIC (LINDANE)	UCAKC) •	<u>1</u>	2.5 U	2.4.0		6.5 U	0 62	=
PEST LIEPTA	REPTACILLOR	DCKC	⊃ \$	1	2.5 U	2.4.0		6.5 U	1.9 U	=
PEST ALDRIN	Z	OCINC		1	2.5 U	7.4 U		630	0 61	=
PEST REPTY	HEPTACHLOR EPOXIBE	OCING	.		1.5 U	2.4.10		6.5 C	3.9 U	=
	ALMIA ENDOSULFAN	UGVKG	2		2.5 U	24 []		0 F 9	0.9 U	=
		041411	:							

		Station D:	BWC	BWG	BWD	BW03	BWOM	BWO	BWDS	Patrick	t was	***************************************
		Sentple ID:	\$000	SDO6AB	\$D070	Storika	5D(x)0	SDOWD	B	20110	SOLOS	S. I.S.
		Sumple Depth:	0 to 5	C, et O	г. я о	2 m C	8,000	0 m.5	0 to .5	0 to .5	5.at 0	0 81.15
S. C.		Sample Date:	Sellio!	try (495	10/10/95	10/119/53	10/10/93	SKATIAN)	TEV HAVES	HYPINAS	11/11/1995	TOVERNS 1
PEST	300,114	I/C/KG	5 7	1	=	100	1 2					
PEST	ENDRIN	DC/KG	7			100	2 2 2				•	2
PEST	BETA ENDOSULFAN	UCAKG	0 17	7	.	3.9 U	1.7 10		3.0		: =	0.1.1
PEST	ddd∵gd	UG/KG	41.0	>	<u>-</u>	3.9 U	3.7 U		2 6	7 -	•	1
PEST	ENDOSULFAN SULFATE	newe	n ;}	= +	2	3.9 U	3.7 U		3.6 U	7	• •	1 2 6
PEST	P.P. DDT	UG/XG	4.1.0	.		3.9 U	3.7 U		3.1.0) T	•	1 6
PEST	METHOXYCHLOR	LCAKG	21 17	2	D 04	2	13 G		20.02	2	2 02	; 5
PEST	ENDRIN KETONE	UG/KG	7	n 7	0	3.9 U	3.7 U		3.1.0	340	7	9.7 U
PEST	ENDRIN ALDEITHE	UC/KG	4. U	⊐ •	0	3.9 U	37 U		210	380	. .	9.7 U
PEST	ALPITA-CIILORDANE	UG/KG	2.1 U	3 17	0 7	n 2	n 6:I		7 n	7.0		43.1
PEST	GAMINIA-CIILORDANE	UG/KG	2.1 U	3 U	D •	n ~	U 6'I		7 0	7 0	. n	· •
PEST	TOXAMIENE	EG/KG	71 0 12	D 002	8	30 C	D 081		D 002	D CXX	U OUF	n ug
PEST	PCB-1814 (ABOCIÍLOR 1814)	CICYKG	7 T	₽	3	34 []	33 (1		34 U) T	2	11 to
FST	PCB-1221 (A ROCIILOR 1221)	DC/KG	2) 	0.001	O 0#	75 U		3 1	3 6) :	n 002
FEST	PCB-1232 (ABOUILOR 1232)	IKVEG	5	⊋	2) (I		38 U	J \$1	₽	97 U
131	PCB-132(ARCC)(LOR 12/2)	UCKC	⊃ ∓	⊃ \$	- 02 20	⊃ 64°)) C		34.0) 1 0	3	97 U
52	PCB-1248 (AROCHLOR 1248)	CCKG	-	2	⊋ 2) E	3 0		2 15	36 [□	D 16
FEST	PCB-1254 (A ROCIELOR 1254)	COKC	⊐ : =	\$	⊃ 9	39 O)) U) E) #	9	n ts
HEST I	PCB-1240 (A ROCIII.O B 1246)	DE/KG	-	₽ ⊃	_ 0	39 🖯	37 U		2 27	7 E	-	O 69
TEST.	2454-TETRACIILORD-META-XYLENE	LEVKG	≠ ;	8 ;	= :	F 1	2		ድ	72	33	7
3	DECACHICANOMINENTE	DENKE STORY	£ !	• !	\$;	3	Et .		1	2	2	3
TOTAL	ALUMINUM	D W C I	RAT.		1881	265	- 265	623 1549		680	186	1 64
TOTALETAL		NC/AC	9.	n s :	3.6 U	34 0	1.65	1 1982	3.5 E	3.5 U	U 6:01	15 U
TOTMETAL		ALCINC		<u> </u>	<u>.</u>	5 . 74 :	0.78 0	0.142	0.59 U	O 16:0	:	× 67
TOTMETAL		NGWG		2 00	- E	,	- 2.00	1.0121	- 5	1.7.1	2.5	177
TOTMETAL	CADMIUM	MG/KG	0.670	3	500		3 00 00	1000		0170	0.16 U	D 77.0
TOTALETAL	CALCIUM	NIG/KG	282	1092	436 J	127 131	- - -	2787 (13%				0.000
TOTMETAL.	CHEOMIUM, TOTAL	MG/KG	114	4.2.1	111	1.62	=	10 1931	1 7	<u> </u>		1 114
TOTALETAL.	COBA).T	MG/KG	חנו	0.71 U	ם ניו	1.2.1	0.17	1,9715	0 13	2	-	421
TOTMETAL	COPPER	MC/KG	2.9 U	13 0	0.5	1.7.1	36 U	1 (4)	n 61	0 11	21,7 ■	2.1.5
TOTAIETAL	NON	MC/KG	3330 -	1250 -	- 084	2	- CT)	9177,9693	- O1.5+	- 010	167UD =	13400
TOTALETAL	LEAD	MCAKE	22	2.9]	121	2.3	1.9 J	ΚďΙ	(N 9 I	110	133	18.31
TELEVISION		A LOCAL CO.	- -	1 661		7	37.7 J	746	7.7	666.1	103	121
TOTALETAL	MARCANISE	NC/KG	를 ;	43.9	.ic	10.2	- 83	150 6723	•	1.86	2610 -	477 =
TOTMETAL	MERCURY	NIG/KC	0 II II	O 1 C	0.E1 U	0.1 U	D 6070	0.0966	0.1 td	010	O 11:0	9 -
TOTALETAL	NICKEL	NSC/KG	1.9 [\$2 U	2.7 U	n ~	3.5 U	3.0369	24 U	0 11	0.8 U	7 0
TOTALETAL	POTASSIUM	PPG/RG	111	2	25.	5 69	133 U	156.1456	D 72.	14 C	J 22	174 U
TOTALETAL	SELENIUM	NG/KG	0.32 U	0.31 U.I	0.12 U	0 11 0	D 11 O	R*97.0	0.32 U	0.33 U	0 32 U	0.37 J
TOTALETAL	SILVE	NIC/KG	0.42	O † O	D-43 C	1 to	0 11 U	0.3724	0 41 N	0 43 0	D 63 O	_
TOTALETAL	SOBIUM	MCAC	19.9 ()	D : 1	⊃ ;	13.7 G	13.2 U	1991.04	4340	0 1'6	39 S U	3==
TOTALAL		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 6 7	0 5 7 0	1	0 43 C	7 ;	D 3965	T #0	^ *	O \$\$ 0	_
TOTALLAL	ואואל	NO.	**	7 ;	4.9	7	1.6.1	5.4326	9.3 1	- 5 T	1.5	_
IOINEIAL		343	[2]	y.2 J	36.	6	f F.21	21.9825	1.6	<u>:</u>	1630	1 5'6H





Analytical Data Summary: Sediment

	•	Station (D):	8MG	BWID	1140	BW12	BW13	BW14	BWIS	BW16	BW17	1 MB
	5	Sample ID:	SD140	50130	SOUN	\$5170		Sp190	SDM	01203	Sn226	SD220A
	Elea S.	Somple Depth:	0 to .5	ā	0 in 5	2,410	0.00	0 m.s	8. or 0	5.410	e and	0 to .5
	Page 1	Semple Date:	low (DPG)		10/11/95	16/11/95	30/11/95	111/11/95	CVI I/V	10711795	10711795	(VIIV)
Group		that.	:	:								
PEST		UC/KG) 	ə : A ;	2 2	2 5) - -	0 2 4		2 9	
		DE NO	2 5	3 5	2 2	2 2	2 2	7 4 6	350	3	0.67	310
	BEIN ENCOURTAN	DICKE .	2	2 4	9 91	; n	-	7	33.0	2.8 1	1181	ה לינ מיני
	SAN SIN ELTR	JC/KC	2	2 42	9	2	2	- -	3.5 U	4.5 D	4.9 U	33.0
153		UCVKG	2	76 U	O 91	∩ ₹	20 00	0 1.6	950	4.5 D		5.2 43
	#OTION	DC/KG	9	() OC1) ;	11 0 U	76 U	51 (1) II	23 U	25 (1	0,0
TS.		DCVKG	2	79 ∩ 20	20 02	31 C	15 U	0.1%	13 U	43.0	764	5.2 U
Ę	- E	DC/KG	2	26 U	D 91	21 U	13 12	0 1 6	5.5 U	43 U	T 6'7	3.2 U
FEST		DE/KG	1.7 3) CI	4.9 J	=	7,6 17	1.6.1	1.1	23.0	33.0	0. 7.2
TEST		DEVKG	36.3	0.0	? I 9) 	7.6 U	1.9	0 72	1.1 U	25.0	2.7 U
FEST		UG/KG	D 0001	O 0061	130 fl	O 0017	760 U	310 U		J 06.2	250 U	U 017.5
FEST	DCIII.02 (016)	UGAKG	tto t	760 U	0.091	210 U	3 8	_ 6	3	7	0 O	2 23
FEST		David	400 11	O 023	330 C	435 C) (8)	700 C	100	5	9 <u>1</u>	<u>8</u>
PEST		IIIVKG	1001	O 092) 9	210 0	3. 05.	□	13.0	= **	2 3	23 13
FEST		DIVIG	11 OOK	∩ 09 2) (3)	2)O U	D 051	<u>-</u> -	33.0	7	= \$	52 I)
YEST		UCKG	7 OOK	D 092	n 091	210 U	O 051	⊇ #	33 C	7 €	\$	12 U
121		UCZKG	D 00 1	366 U	D 091	7 IO ()	D 051	= #	7 T	□ \$	49 C) ZS
1531		UCAKG	T 00#	260 U	J 091	210 U	⊐ 0 <u>\$</u> 1	□	25 L	÷ ;	4	O 22
Į.	A-XYLENE	CAKG	2	F	3	3	\$	=	3	Z	£ ;	Z 1
TSJ		OKC CKC	365	11	5	8	<u></u>	=	2	7.5	1	.
TOTMETAL	ALUMINUM	MCORG	1270 =	. 0097	- 0309	- 20101	- 0486	- 0979	12100	9160	3.50	# OF 92
TUTMETAL	ANTIMONY	MC/KG	1.7.1	o Ca	7.6 U	→ *	٠ •	1.6 U	3.7 0	7) : i	D 6:E
TOTMETAL	ARSENIC	MCVKG	3.4 =	2	5.7 1	3.9 J	- T	3.4	191	- - - -	5 7	6
TOTMETAL	GA BILINA	MG/KG	70.6 1	136 =	- 602	6	• <u>•</u>	23.9	3	# 611	4	200
TOTALETAL	BERTLIUM	MG/KG	0.23 U	67.	2 tc	0 52 J	0.77	⊃ : = c	36	3 5 5		5.00
TOTNIETAL	CADMIUM	5		2	0.14) : 	U 54:D	.		0 410	5 640	0 110
TUTMETAL		MCAC	27500	9		9		• Critical			2:	1 64
TOTMETAL	UM, TOTAL	MC/KG	17.56	• •	 	1 7 1	- 7°C	-	19.6		-	
TOTMETAL		PK./KG	7 7			- 1			. 4.			
TOTMETAL		04004	- puter	007.01	1 2000	- Gay	0.50	. 010			1970	- 00149
TOTALETAL		MC/KG	1 50	38.5	10 6 3	12.21	12.4	149	£	11.62	<u>-</u>	15.1.1
TOTMETAL	Mille	NG/KG	1730 -	2530	1340 J	- 0061	- 0981	2420 =	- 0191	1430 =	1 729	101
TOTANSTAL		NCACC	213 -	- 995	- 121	4	- 819	5	- 159	517	227	=======================================
TURNETAL		NC.WG	0.11.0	U.11 U	0.13 C	Q. () U	G 14 U) = =	010	0 24 0	a 12 I)	0 110
TOTMETAL		NGAGG	1).A =	- [3]	13.4	<u>+</u>	16.6 =	531	139 .	119.	7 8 7	3
TOTMETAL		NGMG	D [L]		Į	T GMG	113.1	36	121	=	- \$	1.42
TOTMETAL		MGMG	0.33 U	ű	(A 140	(1) 6£ 0	- - -	111 CK 0	0 33 UJ	(I) 9 (0	70	U. 15 UJ
TOTMETAL		MG/KG	0.43 U	0.89	0.53 U	0.150	350	D.42 U	D ## 0	0.47 U	D 43 C	□ 99 □
TOTAL		MG/KG	16.E U	2	0.53	D 5.95	53,2 U	J 7.7	D 7 C9	13.2 U	156 U	# # # # # # # # # # # # # # # # # # #
TOTALETAL	THALLIUM	MCMC	0.43 U	D 56.0	0.57 U	그 동	0 62 0	∩ 1 7 0	0.32	D 50	3	} (
TOTALETAL	VANADILIM	MCJKG	1.6.1	1.5.1	6.81	15.3 1	=	7.	112	64	(()	
TOTMETAL		MG/KG	90.5 J	£7.9 =	39 4 ×	# F.60	* 555	÷	16 l .	33.5 a	- 5 61	8 ₹

ORO113627.RR.ZZ/024.XLS

Analytical Data Summary: Sediment

		Stational D:	BWI	BWI	BW19	51 A.B	51 34 8	98/30	BWC	BW.22
		Sample 10:	\$0230	SD230DL	SD240	SD240A	SUMME	SUZOS	SD260	50270
		Sumple Depth:	ð. a 6	0 to .5	0.00.5	0 to .5	£. oi 0	66.5	0 to .5	0 to .5
		Sample Dute:	10/11/91	56/th/01	(0/11/93	26/1 (V)	10/11/95	10V11/95	10/12/45	10/12/95
Group	Parameter	Units								
PEST	300:40	DZ/KG	93.0	930 R	A 63	11 9 1		11 (1	コス	חות
rest	ENDRIN	tic/kG	03 E	930 R	7.9 U	1 9 P		13.0	⊋	n =
PEST	BETA ENDOSULFAN	UCARC	3 €	8 OC6	4.9 U	1 9 1		13.0	コス	11 U
PEST	000,001	HC/KG	93 U	H 000	0 €	D 0 7		13 U	×	7
PEST	ENDOSTILFAN SULFATE	UC/KG	93 (4	H 00.6	4.9 U	n or		13.0) ¥	n
RST	T.p0DT	UC/KG	D 64	930 R	4.9 ()	T 97		13.0	2	n
TEST	METHOXYCHLOR	UCIKO	7 OT	400 K	72 U	34 D		0 S9	1001	₽ 01
PEST	ENDRIN KETONE	UG/KG	D (\$	8 OX 6	0 67	7.6 U		0 6	= 1	31 C
PEST	ENDRIN ALDEHYDE	UCKC	D 66	930 R	A 6.4	0 97		13 0	n n	3 C
PEST	ALPHA-CILORDANE	DUCKE	1100 EM	2400 =	1.5 U	240		650	N 61	=
PEST	GAMMA-CHLORDANE	UCZKC		2000 a	1.5 U	24.0		200	O 6:₽	0
PEST	TOXAMIENE	IICAKC	O CORP	4MXX) R	150 U	340 0		D 084	n okt	D (82)
PEST	PCB-1016 (ARIXCHILOR 1016)	UC/KG	0 0K6	9 XIO R	∩ 6)	\$		= 0 (1	170 0	310 U
PEST	PCB-1311 (AROCHLOR 1221)	DC/KG	D 0061	ISUX R	⊋	> ¥		180 U	350 C	1 KP
FEST	R'8-1131 (ARIX:HI-0R 1233)	HC/KG	930 U	934D R	G 67	=		D 081	140	2 m ca
PEST	PCB-1241 (ARDX)10.0R 1242)	HOYKG	930 U	YAD R	20 62	4		130 C	130	3 PO C
TEST	PCB-348 (ARIXCILLOR 124)	DC/KG	930 U	9300 R	20 64	\$		13 OK 1	130	210 U
PEST	PCB-1144 (AROCIILOR 1254)	DC/KG	D 006	9300 B	O 64	2 \$		390) NC	130
PEST	PCB-1350 (A R OCITLOR 1268)	OCAKG	930 U	9300 R	→	46 U		O (192	□ 9X 1	(X)
PLST	1,4,5,6-TETRACHLORO-META-KYLENE	נוכאנט	59	0	Z	世		7	x	[9
1231	DECACHLOROSIPHENVI.	UCAKG	=	0	=	÷		2	5	£9
TOTALETAL	ALUMINUM	MGMG	#17E0 =		14200 •	14600 =	11190,26	₹ 0769	- - -	1460 -
TOTALETAL	ANTIMONY	MGMG) }		7 T	71 D	4 019%	6 9	4.2 UJ	18.8 US
TOTALETAL.	ABSENIC	NG/KG	f # ;01		1 01	7.6.7	7,9132	1.1	4.7 =	1631
TOTALETAL	BARTUN	MG/KG			- 6.19	7	91.3641	1 96	14.3.2	113.7
TOTALETAL	DERYLLUM	NIGNG	D 42 C		L 12.0	~ 90	0 5714	0.25 U	- 8 0	0.35 ()
TOTALETAL	CADMIUM	AIC/KG	1.9		1 9C II	D 52 C	U.7927	O 8.1		150
TOTALETAL.	CALCIUM	SIC/RC	2				11 01 11	S.	- DS-02	
TOTALETAL	CHRONIUM, 101AL	NIC/RC			# ·		100	4 :		97
TOTALETAL	COUNTY	MC/RG				[6]	3010		0 C	11 17
TO INTELLAT					# CC		X 17.7	7 1	£.	06.2
TOTALETAL	TROM	MG/KG	1 1 1		146	- T-	10 143	1000		- (RC)
TOTALETAL		NIG/KG	1 100		71K4) -	2140 =	W0.1791	20	9,00	16161
TOTALETAL.	MANGANESE	N#G/KG	- (99		433 =	522	450.9216	331 -	- 1.65	210
TOTAIETAL	MERCURY	N1C/KG	- 7		0.12 U	0.12 U	0.1146	0.28 U	0.00	0 (5 0
TOTALETAL	NICKEL	MC/KU	14.5 =		19.1	14.2 =	16.8571	<u> </u>	36.0	f 1'6f
TOTALETAL	POTASSILIM	NK7/KG	7 929		- 166	1240 1	M11.1194	⊃ T\$	31% U	924 ()
TOTACTAL	SELENIUM	NYC/KG	D.39 U.		1,40	0.36 UI	0.3641	0.63.0	(/) RF(I	1,7 U
TOTALETAL	SILVER	MC/KG	U 55.0		0.48 U	0420	0 4761	1,2 U	0491)	7.2 U
TOTAIETAL.	SODIUM	MG/KG	63.4 U		0 F.78	76.3 U	56.8179	33 G	M.1 IVI	(DC)
TOTAMETAL	TIALLIUM	MC/KG	0,55 U		0.51 U	0.5 U	0.503	1.2.0	0.52 U	23.0
TOTALETAL.	VANADIUNI	MC/KG	18.4		ZN.9 J	30.9 1	27,2941	17.3.1	7	22.1.1
TOTMETAL.	ZINC	MC/KG	- [·].		43.7	47.6 ×	44,7233	73.7 €	27.8 =	<u> </u>





		StationID:	BSOI	B.502	B503	BSD	#25#	803	905	LISB.	RSUZ	
		Sample ID:	SBOSS	SBIDS	SILES	\$58125	SB125DL	58135	58145	50155	Acies	<u>.</u>
Ş	1	Semple Date:	FEMOL	10909	109/93	\$600 A11	EQUIVAS FOXIONS	1000	10/10/95	10 to 6	3 to 6 10/10/03	i r
3												,
HUKEN	2.12.B-74.TRA4TH ORDIGIENZO-PDOXIN	DESKG	=	=	=	=		=	=	=	=	-
DICKIN	2,7,2-TETRACIII.OROUIDENZOFURAN	DOMO	=	=	n •	?		=	9	2	=	
DICKEN	1,23,7,8 PENTACHLOROPIDENZOFURAN	UCAKG	1.5 U	2.5 U	7.5 U	1.5 U		33.0	1.5 U	23 0	73 ∪	
DIOXIN	123.7.P.PENTACIILORODIBENZO-P.DIOXIN	DOMO	⊋ :	2	7.5 €	1.5 (1		2.5 E	150	2.5 U	2,5 U	
DIOXIN	25,4,7,FPLNTACHLUNGSIBER ZUPURAN	CORE	2 2 2	2 2	2 2	2 :		2 :	= : ::	2:	n 57	
Photos		D. C. C.	3 =		2 .	? :		3 ;		23.0	15.5	
DIOXIN	(2.4.7 P.E.E.A.C.II.O BODINESSO - POIOXIN	i GKC	77	2 2	2 2	? :		3 5	3 :) I	= 52	
DIOXIN	LALA ALIEKACII LORODIBENZO P. DIOXIN	UCAKG	130	23.0	250	130		2) S T		250	
DIOXIN	I.J.J. J. J. F. H. EXACIIL OR OD JEEN ZU-P. DIOXIN	UG/KG	1.5 U	2.5 U	2.5 U	1.5 U		n s 2	n 51	7	25.5	
DICKIN	11.4.4.7.4.(EXACIII.ORODISENZOFI)RAN	UCVKG	3.5 U	7.5	7 S U	2.5 U		1.5 ti	12.0	2.5 ()	23.0	
DIOXIN	I,J,J,J,SHIEXACHLOROBBENZOFUBAN	ticake	130	7.5 U	7.5 U	730		33.0	13.0	2.5 U	2.5 II	
DIOXIN	I,J,J,A,A,7,B-IIEPTACILLOLODIBENZOFUBAN	DEFE	33 U	150	1.5 U	2.5 U		7.5 U	1.5 U	23 U	2.5 U	
NIXOID	LLSALTHEPTACHLORODIBENZO-P-DXXXIN	DC/KG	0.014 U	7 :	n :	25 U		2	73 U	2.5 U	7.5 U	
NIXO	LILLA, ZA, F. LIEFTACIII. CRUDIBENZUPURAN	25.50) .	n 61.	13.0	0 62		23.0	O 57	2.5 U	75 U	
NI TOTO		וטאנט			[A 77	7		2 -	3	1,00	782	
NI ACIE			? =	•	•	7 7		- 5	* 3	•	,	
MACKIN	2.1.2. TETRACIII OROBISENZO DIOMENTO	UCAKO		3 9	; E	7 5		7 5	; :	7 0	÷ =	
NIXON	1214.7 ALIEXACIII. DENDIBENZO, DIOXIN.CIS	UC/KG	=	=	: =	; ;		2 2	; =	2 8	; 3	
DIOXIN	MITACHLORODISENZO P-DIOXIN-CH3	UC/KG	7	23,	\$	\$		*	2	#	ıĸ	
HERB	DALAFON	UC/KG	130	130 U	240 U	D 080		240 U	230 U	120 U	0.00	
HERB	CACANIBA	OC/KG	5	⊃ ¤	34 C	34 C		n #	n #	13 U	0.51	
HEND	MCPA	UCVKG		D 00311	D OWE	D (KKK)		D IORI		62titi D	6300 U	
1689	MICH	CCAKG	⊃ : 1009	7 and 1	D COOK!	ט טטטבו		O OKRI	1) (101)	6200 1)	() (m()	
		OCARG	3 s	3 :	3 : 8 !	3 : 2 :		3 : 8 :	5 : 9 :	i	3 :	
			2 5	2 =	2	2 2		2 :	2;	2 :	3 :	
HEER	SILVER (ACT IT DESCRIPENOS VACETIC ACID)	DC/KD	2 5	3 2				2 2) = 2	2 2		
HEKB	7408	UCVKG	9	2 2	9			2 2	9	2 2	2 2	
HERB	DINOSED	UGAKG	12 U) (I	n +:	2		7 0	22 (2	1 12) C	
HEAB	2,4-DICIII.OROPIIENYLACETIC ACID	UC/KG	Z	3	2	2		1	1	8	<u>10</u>	
LISYOA	PINTROANILINE	UC/KG	⊃ : 6	= : • :	0 (1) (1) (1)			1 000	0,30 □	TOTAL C	O GOOD	
YOAST!	DINETRITLY FILLIALS TE		9 6	96.	2 £			9 8		4 (10 U	2	
115704	24 CANTEOTOLUE	ng/kg		2 2 2	0.000	7 9 7		707		4100 0	900	
LLSVOA	ACENAPHTISYLENE	UC/KG	4 00 C	200	36.	410 0		7 0	9	(A)	= 9	
11.5VOA	ACENAPITHENE	UCAKG	O 00#	370 U	190 U	410.0		410 U	D CHE	4100 13	430 U	
LLSVOA	S,4.D(NITEOPIIENDI.	UC/KG	⊃ 000	⊒	∩ 0 3 6	D (Ka)		U COOL	N 0%6	O COCKE	O 0001	
LSVOA	4-KITROPIENOL	UG/KG	⇒	_ G ¥	n 086	0001			n 0 %	O (KKA)	D (KK)	
MSYDA	DIBENZOFURAM	UC/KC	\$	330 L	750 T	5 OF		N 011	n off	1 0 H	7 n n	
YOASTT	2.+DIVITROTOLLIENE	UC/KC	₽	J 01	380 1	10 O		N 017	380 C	D (10)	2 8	
VOASTI	DIETHYL MITHALATE	UC/KG		310	3,00	10 O		7 O T	350 U	D 1847	O 02+	,
FLSVOA	FLUCRENE	UC/KG		20 1	380 0	0 :		7 CJ 7	3 2 0 C	7 (K)	3 3	J
LEYOA	#GILUROPIENTL PILENTL ETILER	UC/KC	⊃ : Q	D 078	000	0 :		D 017	350	0017	2	
Trans.		OCAN C	⊃ : & i	9 9				0 000	3 : 96 :	O 0001	000	•
YOA	Application of the contract of	9000		9 !	3 1			1 Out	5 S	וסטונה מ	000	
LL EVOY	A BEOMODIEM I MENVI FILED	200	3 5	2 4	2 5	9 9			9	0 : 0 : 0 : 0 : 0 : 0 : 0 : 0 : 0 : 0 :	0 00	, ,
5		2	3	200	3 04	2		0 00		0 601	0 00	, ,

		StationID:	(B)	BSO	BSO	BSUS	9058	olsa	BSIG	HSI.	BSI2
		Sample Depth:	3 to 6	3106	3 to 6	340 6	3017	410 6	4 80 f	5106	5 to 6
Giodio	Property	Sample Date: Units	10/10/95	10/10/43	10/10/55	(IVIDA)	10v11Ve3	KV1179S	R214595	10/11/33	10711/95
NIXOIA	NIXOID = DZNBBIODBOTH CVBLIST Y CVC	UC/KG		7.		2		_		0 0	0
DECKIN	11.1 LTETRACHIORODIBENZOFURAN	DGAKG		_		=		7	-	7	<u>-</u>
DIOXIN	LASS EPENTACHLORODIDENZOFURAN	DOWE		1.5 U		1.5 U		n ₹	23	2.5 U	2.5 U
DIOXIN	1,2,3,7,P-PENTACIILUROUIBENZO-P-DIOXIN	DC/KG		1.5 U		1.5 U		13 U	2.5	2.5 U	2.5 U
DKIXEN	11,47,4-PENTACIILORODIBENZOFURAN	DC/KG		1.5 U		1.3 (1		73 ∪	2	1.3 U	2.5 U
DKIXIN	L23,47,4 IEXACHI.ORODIDENZOFIRAN	HCVKG		13.0		1.5 U		3.5 U	2.5	1.5 U	2.5 U
DHIXEN	LAJA,J-HEXACIILORODIBENZOFURAN	DCVKG		1.5 U		1.5 U		1.5 U	2.5	2.5 (1	2.5 U
DICKIN	LLJA7.PHEXACHI.ORONBENZO-PDIOXIN	DOKC		1.5 U		1.5 U		n 5 a	2.5	1.5 U	2.5 U
*1X1#G	LLJA,74-HEXACHI, OROHDENZO P. DIOXIN	HUNKG		13.0		1.5 U		n s ⊋	ສ	13 11	2.5 1)
DOOKIN	LAJALFAREXACIIL-URODIDENZO-P-DIOXIN	DCAKG		77 0		1.5 U		73 [ສ	1.5 U	13.0
DIOXIN	LAAA, B-MEXACIII. ORODIBENZOFURAN	DC/KG		13.0) 12 (□ ; ;	ដ	2.5	7.5 U
NIXOID	LLATBAHEXACHLORODIBENZOFIEAN	DOMO				2 :		⊋ : 2 :	: r) ; ;	7
NICO S	TATA A PROPERTY CHI CHO DIRECTOR DELLA CONTRACTOR DELLA C	OLCAGO.		12.0		2 7		2 2 2	2	73 C	0.0
	11 A 2 B CONTRACTION OF THE CONTRACTOR OF THE CO	00000		1.5 U		0 57		12.0	2	13 C	2.5 U
NIXOIO	OCTACILICAGOUSENZO-DIOXIN	DC/XG		3.0		3.439.)		9.415	10 444	0.209	1 6K3 J
DIOXIN	OCTACILLORODIBENZOFURAN	VCAG		3.0		3.0		3.0	s	n f	3.0
DIOXIN	LL7.4-TETRACHLORODIBENZOFIIRAN-C13	DC/MC		∓		2,		53	7	2	Ç
DIOXIN	13,7 A-TETRACHLORODIB ENZG-p-010XfN-C13	DCXC		\$ 1		3		S :	#	e 1	4
NIXOID	LASA, PHEXACHLORUDIBENZO-POIOXIN-CIS	5000		3;		8 ;		F: :	5 ;	8 :	3 ;
NIXOID	OCTACILLOROUSEN 2U-p-010 XIN-C13	DE NO		2 5		3 5		- F	5	8 5	ā ;
	DALANDA	COKG		2 2		2 =		2 ~		2 2	, ×
	TAUTH	DEVICE		1 000 E		J 0072		1 000 E		D 00011	12000 R
HERD		DCAKG		0009		1 00£5		D 0011		J 000H	12000 B
HERB	DICHOROPROF	DOKC.		E E		57 UJ		110 (1		110 U	<u> </u>
HERB	1,4-D (DICHILOROPHENOXYACETIC ACID)	DEVKG		n 79		n 45		110 11		7 01	F 021
HERB	SILVEX IL4.5·TP	LEVKG		n ==		= =		n 22		7	X
HERB	1,4,5-T (TRICHI,0ROPUENOXYACETIC ACLD)	DISKE		n ~		<u>-</u>		= ==		= 22	Z Z
HERD		UDIKC		95 U		2 : 2 :		0 1		2	£
ILERE	DENOSED	DENC		2 :		= £		# E		3 2 :	¥ 9
HERB	APPROXIMATION TO THE PROPERTY OF THE PROPERTY	DC/KG	ZOOOD (E	2000	\$100 R	7000	4700 8	1 696		71 096	000
LISYGA	DUSTRIET PHILIPLATE	UG/KG	E200 R	130 U	2000 R	O O	19X0 B			370 U	O (III)
LLSVOA	LNITACIANILINE	UC/KC	ZOCKOÐ R	1000 T	SIGN R	0.6	4700 8	D 596		940 U	0 4401
LLSVOA	14-DINITROTOLUENE	HC/KG	S GOCS	= 02	2000 R	20 CE	13G			370 U	400 U
LISYGA	ACENAPHTINLENE	UGVKG	200 R	2	2000 R	30.0	1 DOK	7 024		S E	43 C
LISYGA	ACENAPHTIENE	UUKG		O 1		701	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				7
LISVOA	SADINTERNIT		Terrain B	2002	¥ 6	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	4 /K				
CASAGA			2000								
11.5VOA	DISENCITURAN	NINKO NINKO			2000 E	1000					
LISYGA	OFFINE MATINETE	UCIKG	EDU R	0.21	E CHICA	2000		0 036) P.C	10) C
LLSYUA	FLUORENE	UG/KG	BOU! R	20 02	MAN R	300	1 DK	O BE		370 U	400 0
TT-SVGA	ACHLOROPHENYL PHENYL ETHER	UGAKG	\$200 R	20 021	JOUG R	n ott	E (1)(1)	350 U		370 U	O 00#
LLSVOA	+NITROANII.INE	UGVKG	20000 R	2000	5100 R	D 0X6	4700 (4) 100 100 100 100 100 100 100 100 100 10		0 016	D 0001
roasii	4,6-ININTRO-1-METHYLPHENOL	UGAKG	20000 R	2000	3100 R	3 S.	4,000	⊃ 1786			D 0.01
£1.5V0A	n-Nitrosodimieny Lanine	UCKG	100 R	29 C	2000 R	<u>0</u>	8			376 0	0 (14)
NOV211	+3ROMOPHENYL PHENYL ETHER	OGRE	# 02 1		3000 K		N DOM			ê	





Deep Soil
Summary:
Data
Analytical

		Sta thou ID:	1158	B512	ESE)	BSI3	BS14	BSIS	8515	B\$16	BS16
		Sumple (D):	SBZOSDE	SBZOSRE	\$1285	SB213DL	SB225	58235	SEZINDL	SB245	\$8245DI.
		Sample Depth:	9000	3 10 6	Sm &	3 to b	3 25	9 E Ç	5 to 6	5 to 6	5 to 6
į	P. comments	Sample Dute:	\$V1140	1841392	10/11/95	[(A1)A3	(12)	10/11/03	(INTERNS	58/11411	10/11/95
}											
DICKEN	23,7.ETETRACILORODIBENZO.P.BIOXIN	UG/KG			2 -		- -	-		=	
MONOR	2,1,2, TETRACIII.OBODIBENZOPURAN	UWKG			<u>-</u>		7	-		2	
DROXIN	12,2,7,6. PENTACHLORODIBENZOFURAN	UCKC			23.0		33.0	O 5:2		73 U	
OLOXD	1,2,1,3 PENTACHLORODIBENZO-POIDXIN	UGAKG			2.5 U		15 U	1.5 U		130	
DICKE	2,7,7,7 Pentaciilorodibenzofuran	COKC			2.5 U		2 \$ U	1.3 [1		1.5 U	
MYON	1,1,4,1,4 liexaciilonodibenzofurah	UCAKG			2.5 U		150	2.5 U		1.5 U	
NIXOM	1,2,1,4,7,4-HEXACHLORODIBENZOFURAN	UCARG			1.5 U		2.5 U	1.3 U		3.5 U	
MIXOR	1,1,4,1,4,1,6,16,10,10,10,10,10,10,10,10,10,10,10,10,10,	UG/KG			2.5 U		2.5 U	13 U		7.5 U	
DIOXIN	\$	UC/KG			∩ \$7		2.5 U	3.5 U		25 0	
DIOXEN	\$2,17,4.5.HEXACHLORODIBERZO-P.DIUXIN	OGNEG			2.5 U		2.5 U	7.5 U		2 S U	
MOXON	2, 2, 4, 2, HEXACHLORODIBENZUFURAN	UGAKG			1.5 U		1.5 U	13 u		2.5 U	
DIOXIN	1,2,1,7,3,9.HEXACULORODBENZOFURAN	UC/KC			2.5 U		2.5 U	2 5 U		2 S U	
DIOXIN	ILLAMALL HEPTACHLORODIBENZOFURAN	CICKE			2.5 U		2.5 U	1.5 (1		2 S U	
DICKIN	I 23,446,74-NEPTACHI ORODISENZO-P-DIOXIN	CHARG			730		2.5 U	DIM3 U		1 5 61	
DIOXIN	ILLATA, HET ACHLORODIBENZOFURAN	HISKG			2.5 U		2.5 U	2.5 U		0.5%	
DICKIN	OCTACHLORODIDENZO-p-DIOXIN	HC/KG			1.141.1		0.645	5.432 •		3.0	
DICKIN	OCTACILORODIBENZOFURAN	UC/KG			2 0		0 S	n f		5 U	
DICKIN	23,7, J. TETRACHLORODIBENZOFIRAN-CI3	UCAKG			Ç		33	*		<u>\$</u>	
DIOXIN	2,2,7,FTFTTACHLOSOBGENZO-9-DIOXIN-CT3	UG/KG			1		4	Ş		Ŧ	
DIOXIN	1,2,3,6,7,9 HEXACHLORODIBENZO-9-DIOXIN-CH3	UG/KG			u		£	=		2	
DICKIN	DCTACH LONG DIBENZO-P-DIOXIN-C13	0C/KC			=		=	63		£	
HERB	DALAPON	DEVKG		140 (1)	120 U		110 U	140 11		1 30 U	
HERB	DICANDA	UGKC		14 M	12 []		0 =	7		12.0	
HERB	MCFA	UWKG		U OCCET	O COOP		3700 U	D COXI		ACCID U	
HERB	MCP	UG/KG		O OKE	(NO 1)		57cm U	Date (0.008	
HEAB	DICTILOSKIPRUP	UCAKC		2 €	= : 3 :		25 17	2		= :	
HERB	24-D (DICHE, OROPHEND XYA CETTC, ACID)	UCAK		∄ :	2 : 2 :		37 U	2 :		3 !	
HERB	SILVEX (1,4,5-TP)	UCKC		3 : 2 :	o :) 	7 t D		12.0	
IIERB	2A,S-T (TRICHLOROPHENOXYACETIC ACID)	UGAKG		3 :	0 : 2 :) 	: n		0 2 1	
168				3 :) 13) : ()	2 7		9:	
	DIMURSE	9400		3	2 5		- ş	• •		2 1	
HERE	2, FORTH LUK OF BLACK IN A CIU	2000	d order	•	1	than to	5 5	91 62	0 00.27	a de	9 13.55
VOLCEN		HCKC							(40)	=	
40A511		INVKC	Z (E) Z		U (KX)	KIII) R	386	1 ack	4 CH 27	D 000	X 515
LLSVOA	2+GANTROTOLUENE	UC/KG	Z0100 R		400 U	MAD R	388.0	390 U	H CTAG	(1) (I) (I)	ZORE) R
LLSVOA	ACENAPITITIVENE	UCKC	A COCK			R CLOS) 06E	HOOL R	0	MINES IN
LISVOA	ACENAPITHENE	DC/KC	ACCOS R		O 03+	300 R	380	390 U	PUL R	3 44	ZIKKI R
LLSYOA	2,4-ninitrophenol	UG/KG	S000 R		O 0001	SULO R	O 956	970 U		0 0x51	State R
LLSVOA		UGAKG	\$000		0 0001	\$000 R	0.00	970 U	APPEL R		g cos
LISYGA	DIBENZOZNAN	COME	2000 R		O GUP	MICK!	380 (3	390 U		(to ct)	ZCKET B
VDASTI	2+DUNITROTOLUENE	DC/KG	ZCCC R		400	2000	Office Co	= 0%		4.0 L	
VDASTI	DIETHYL HITIMLATE	UC/EG	2000 R		400 C	B COOK	130 (1			400 t	ZUKK) M
LLSYOA	FLUORENE	OCYKG	ACCOUNT.		4 00 €	E CHINA	380 (2	390 U	1900 R	T (X)	M CXXIZ
YDA5T1	4-CHLOROPHENYL PHENYL ETHER	UCAG	ZOTOZ		⊃ <u>@</u>	ZOCIO B	300		1 9 35	O CY	Z1X 21 M
VDAST1	4-NITROANII.INE	UG/KG	3000 R) (M)	E 000X	380		di tty R	O (7)	# THE
LLSVOA	4. DINITRO-2. NETHY LPHENOL	UC/KG	98		200		286	2 8		n one	
LLSVOA	NAITEOSODIFIENYLAMINE	UG/KG	900		2 5	M Once	200	⊃ : \$£ :	3 (00) K	⊃ : Q :	2000 H
LLSVOA	4-BRONKOPICENY L PICENY L ETILEN		ZODO K		2		380 U	e E	Š	2	H (207

68 Burn

		Surdent D:	BS17 SR245	8511	B5116 SB264A	8519 \$8114	BS19 \$87154	BS19 5827501.	BSX	0550	I CS II	D\$22	
Group	Parametet	Sample Depth: Sample Date: Units	5 to 6 10/1 2/95	5 to 6 10/1 2/95	\$ to 6 10/12/95	3 to 6 (9/2/9)	5 ta 6 10/13/95	3 to 6	5 to 6 16/12/95	5 to 6 IQV12/55	5 to 6 10/11/95	5 to 6 13712/95	
NIXING	117 KITTEACH ORODIRENZO. B. MOXIN	BCAKG	=	= -	=	=	=] =		=	=	
DIOXIN	1.1.1. TETRACILORODISENZOFURAN	UCVKG	2 =	2 =	2 =	? =	? =		2 2		: =	: =	
DIOXIN	1,3,3,5.PENTACHLOROMBENZOFIIRAN	UCOKG	1.5 1.1	2.3 U	2.5 U	13.0	13.0		1.3 U		2.5 ()	23 U	•
DIOXIN	1,1,3,1,4-PENTACHLORODIBENZO-POIDXIN	DCXC	2.5 U	2.5 U	2.5 U	1.5 U	2.5 U		1.1 13		2.5 U	2.5 D	•
DIOXIN	1,1,4,1,4-PENTACILLORODIB ENZOYBAN	UG/KG	23 U	2.5 U	1.1 U	2	1.5 U		1.5 U		2.5 U	2.5 U	
DIOXEN	I, J, J, J, F. HEXAUTLORODIBENZOFÜRAN	UCAKG	13 U	2.5 U	2.3 U	7.5 U	1.5 U		2.5 U		2.5 U	7.5 U	
DIOXIN	I.J.A.T.B-HEXACIIL ORODIBENZOFURAN	COKC	2.5 U	25 U	13 U	7.	130		73 U		2.5 to	2.5 U	
DICKIN	J.J.A.7.2-HEXACHLOROPHENZO-PODYIN	DC/KG	23 13	23 0	D 6.5	2.5 €	73 C		250		⊋ \$2	73 U	
DIOXIN	1,1,3,4,7,2-HEXACILLOROPIBENZO-P.DIOXIN	UC/KG	2.5 U	2.5 U	2.3 U	7? 7?	77		= = =		73 U	2.5 U	
NIXOID	1,1,3,1,4,9,HEXA CHI, DRODIBENZO-F-DIOXIN	DC/KC	25.0	٦; ټټ	0 5 5	77.) ;		110		2 :	2.5 1)	
NIXOES NIXOES	LANGE TO THE CONTRACT OF THE C	DC/KG	2.5.0	2 2 2	3 :		3 :		2 2		2 2 2	25.5	
	1.1.1.4.2.3.EPT.LCIT.ORODBEYZOFIRAN	UC/KG	25.0	3 2 2	ה ה ה	130	2 2		25.0		2.50	25.0	
NICELIA	1.1.4.7.3. THEPTACHLOROPHENZO-P. PIOXIN	UGVKG	0	2.5 1/2	25 U	70	17 (100		0		0 5100	0 100	
DICKIN	1.1.4.7.1.9.11EFTACTU.ORCDIBENZOFIJRAN	UC/KG	2.5 U	2.5 U	13.0	1.5 U	2,5 U		2.5 1)		25.0	251)	
NIKOIO	OCTACIII.ORODIDENZO-p-DIDAIN	UKVKU	2.469.1	0.165 U	0.515 J	7.619 -	4.443.5		2 +54		1.11(1	1.484.1	
DIOXIN	OCTACII. DROMBENZOFIJAN	UC/KG	3.0	3.0	3.0	3.0	3.0		9 n		2.0	\$ I)	
DIOXIN	\$3,7,8-TETRACHI,OROOMBENZOFURAN-CI3	DC/KG	2	2	2	-	=		Ξ,		=	増	
DIOXIN	LLT LETRACIII.ORODIBENZU-P-DIOXIN-CIS	DC/KG	S	4	7	\$	Ŧ		₹		\$	\$	
CHOXIN	1,1,4,1,6.HEXACIILORDDIBENZO-PUIOXIN-C13	DO/KG	÷	2.	2	Į	7		ž,		P.	2	
Dioxin	OCTACILLOROMBENZU-p-(MOXIN-CI)	UCVKG	3	S R ;	3	स :	× ;		?		×	S.	•
FIERB	DALAMON	I KURE	0 :	220 02) (F	⊃ : Q; ;) i		8 :		고 : 윤 :	O 072	
LERB	DICAMBA		2 1 00077	0 22	= = = = = = = = = = = = = = = = = = = =	D 22			0 27			⊒ : Z :	
ITERE	MCPA		7000										
HERB	ALCE COLUMN COLU		2411						711112		1076	1 04.1	
IFER	24.6 (b)CHI (BEOFIEROX YACETICACIO)	UCAKE	240 U		2 2	2 2	2 2		3 3		3 67 7		
ILERB	SILVEX (245-TP)	1K/KG	a 1 5	22 G	22 U	33 U	11 U		7		→	7 C	
IERB	243-T CTRICIL OROPHENOXYA CETIC A CID)	CIC/KG	5 17	22 U	12 11	73 N	12.0		7		□	2 5	
HERB	00 71	UCARC	240 U	0 011	O 011	N 011	110 11		230 U		0 OPZ	130 E	
HERD	DUNDSEB	UCVKG	> •	: :	∩ ## :	2) II		7		⊒	2	
LERB	\$4DICHUROPHENYLACETIC ACID	2000	9 5	A 90	701	9 5	¥ 6		B 6		8 8	1	
118404	CANIFOLNIA PITTI ALATE	TKYKO	38.0	3	9	4 2					3		٠
LISVOA	PNITROAMILINE	DC/KG	0 016	0 006 0	n i g	KM) R	1000 U	D (NIE	970 R	4 KKO U	060 D	D 066	
LISVOA	24 DINITROTOLLIENE	UC/KG	390 U	i 95	£ 0.00	4 10 8	0 017	n axis	¥ 04	0 (36)	000	HXI U	
LISVOA	ACENAMITINLENE	DG/KG	190 ti	A DAY	D 090	4 EG 18	A10 U	D (KK)Z	70°E	1940	(A)	1	
LLSVOA	ACENA PITTIENE	DG/KG	360 ft	O 096	D 091	2	O 01	7 (X)	Š	1 UNK	4KD }	-1 (1)	
LLSVOA	2.4.Dinitropienda.	UC/KG	in one	10 DE	CO CING	1513 R	1001	1000	976 H	4EX U1	71 D64	60 066	
LLSVOA	+-NITROPHENOL	UG/KG			3	HAN R	3	9	5 E	4EKI 0.1	26	23 266	
LISVOA	DIBENZOFIRAN	UG/KG	⊃ ; 0%;	D : 000) 3	2	2	310	e e	<u> </u>	⊃	? ₩	
LISVOA	2.4 DINITROTOLIENE	CIG/KG	300) 1990) (2)	æ ₽	2) 	a a	(ACI)	=	= ==	
LISVOA	DIETTIVLPHTHALATE	UG/KG	300	O :	⊃ 3g.	<u>~</u>	0 Q		≃ ₹			C) (S)	
LISVOA	FLUGRENE	OC/KG	300) 196	⊃ : 09:	2	2	D 000	2		=======================================) ()	
POAST	A-CITLOROPHENYL PITENYL ETHER	OC/KG		98	⊃ : 84 }	2 9			2) () ()		A :	
LISVDA	4-NTROAMILNE			3 E		2 1			2 2) 	
LLSVDA	A PINT RO-SALE HATCHENDL					¥ 4		1 (1)		7 20 2	3 2		
LISVDA	N-NITROSOBIFIED TLANDA	OCAL C				¥ 4) (i k)			
rrzy DA	4-BRONIDFIENYL FIFENYL ETHER	24/20	200		<u> </u>	# O	0	000	Z.			⊃ €	





		Stationti	S	BSD2	. 1058	P COM	5	P.C.	808	n Çer	u di
		Security ID:	SBD9	SBICS	58113	53125	SBI2SDE	SB135	\$8145	58135	SBISSA
		Sample Depth:	5 to 6	3 to 6	3 to 6	Smé	3 to 6	3 to 6	3 to 6	\$ to 6	5 80 6
į		Semple Date:	10/9/95	10/Mg2	(109/95	10/10/95	10/10/93	10x10x3	10/10/93	10/10/93	10/10/95
CACOA	TENERAL OROGENZENE	UC/KG	1007	130 11	390 13	710 0		1 017	3100 63	2) (3)17	430 11
USAGA	PENTALLICORDALISMOL	HUKG	Ē	2 2 2				ממ וו	2	71117	
LISVOA	MENANTIRENE	UCKC	3	7 00	D RKF	1 1		ח מו) A	4101	2
LISVOA	ANTIRACENE	UGWG	200	370 U	390	10 C		1 OI	2	700	2
VOAST1	CARBAZOLE	UG/KG	700	330 U	330 C	410 U		O CIT	350 C	4100 U	120
LISVOA	DI-B-BUTYL PITTIALATE	OCAC	D 00#	370 U	390 U	410 U		1 0 P	340 U	4100 t	1 0Z F
40A577	FLUORANTIENE	UG/KG	11 027	370 U	11 066	45.1		410 ()	330 (1	4100 U	420 U
LLSVOA	PYRENE	UC/KG	11 (C)\$*	330 11	390 [1	7 7		410 10	350 (1	4100 U	420 0
LISVOA	DENZYL BUTYL PIITIIALATE	UCVKG	D 93	370 []	390 ti	410 U		410 U	350 (1	(111) n	1 927
LISVOA	DENZOIOMNTHRACENE	UGNEG	O. 0.	370 [390 U	410 U		410 U	120 U	7 (1)	17 0 E)
LLSVOA	3, DICHLOROBERZIDINE	UCIKG	7 OC	370 [390 U	410 0		410 U) (#E	4110 0	420 U
LISVOA	CHRYSENE	UG/KG	D (14	370 U	D (ME	O 414		0.01	11 035	46 X8)	138
LISYOA	NATATIVILIES YE) PILTUALA TE	DOME	D 00#	330 (390 U	410 O		410.0	380 U	400 DI	1 R7
LLSYGA	DI-9-OCTYL-MITHALATE	DC/KC	9	330 C	390 (1	710 0		10 C	340 11	4100 UI	420 ()
LLSYOA	BENZOIBFILIOSANTIIENE	UGVKG	9	30 C	390 U	410 C		410 0	350 []	1/1 U(1)	450 11
LLSYOA	DENZON FLUGRANTIENE	DEVKC	T 007	330 (130 CI	410 C		410 U	320 [4100 UI	7 OZ
LLSVOA	BENZOGENTRENE	DOMG	O 00+	370 U	J90 U	O 01₹		410 17	310 U	4100 UI	420 U
LLSVOA	INDENO(1,1,1-e,4).PYREVE	UGVKG	D 00+	330 L	190 C	700		410 1)	380 U	4100 DI	450 U
LISYOA	DIBENZAMMATTIRACENE	DC/KG	7007	130 C	130 E	700		410 t	3 t o n	100 (1	420 U
LLSYOA	BENZO(E.A.) IPER Y LENE	DOMC	⊇ 64	3 g C	380 C	410 C		410 U	380 U	150 CH	430 U
LLSYOA	1-FLUOROPHENOL	UC/KG	\$	z	ス	<u>-</u>		3	3	8	æ
LLSVUA	PRENOLDS	DEVKG	3	9	2	1 2		4	3	S	£
LLSYOA	1 CHLOROPHENOL DA	UGIKG	3	æ	7	3 2		2	63	×	=
LLSYOA	13-DICHLOROBENZENE-D4	DCMC	2	8	8	=		3	ž	7	7
LLSVOA	NTROBENZENE-DS	UGKG	3	53	62	Ž		3	2	x	F
LLSYOA	J.F.L.UOBOBIPHENYL.	UC/KG	3	۶	23	ድ		3	2	3	7
LI.SYAA	14,6-TRURGMOPHENOL	UCXC	3	\$	Ç.	ţ		2	Z	5	2
LLSVOA	TERPHENYL-DIA	neke	2	59	\$;	= ;		2	=	5	\$
LLSYUA		HORE	9 (2 :	200						
LL-SYOA	66(2-CHILOROETHYL) ETHER (2-CHILOROETHYL ETHER)	UGRG			0.00					400 0	5 :
LLSVOA	ACTIONOPHEMIA,	2 2 2 2 2	3 5	25.		2 9		2 :			2 5
LL.SVUA	PRICHAIL THE NAME OF CREATES	TO NO.	3 1		2 3	2 5		2 5			ê
VOLETT	ANETHYLMIENDI (8-1'0EXDL)	UCKC	n out	1 02X	2000	700		410.17	9	100	750
YOUYST)	NINITECTOR PROPERTY	UC/KG	1 Q1	370	36	; <u>a</u>		9	3	in mar	50 03
LSVOA	HEXACILLOROETHANS	UCKC	D 00	370	390 U	0 01+		410 O		100 A	O 927
LLSVOA	NITROBENZENE	UCAKG	3	330 C)))	D 017		410 U		1100 f	n ort
LL-SYOA	BOPHORORE	UCIKG	400 C	370 U	390 1	□ 0 !		418 U	300 C	D (3)	⊐ Q;
YOASTI	1-NITROPIENDL	UCIKG	9	U 07.	330 -	7 C		7 O F	300	001	2
TT2NOY	LADIMETHYLPHENOL		0 0	U 0.	200	D :			<u> </u>	7 (3)	D :
CLSV0A	MAD-CHIODEOFTHOXY) METHANE	OCKC	9	0 12.0	200	0		200		00	2 ; 24 ;
LLSVOA	14-DICILOROPHENOL	OCKC	0 0 0	0 2 5	⊃ ; 8	⊃ : •		2 :		0 00	2 2
LISYDA	LA-TRICHTOROBENZENE	CHESTAGE	0 0	1 0 C) 06.	D :		9	=		2 :
LLSVOA	NAMITIALENE	CCAC	T .) 1 1			a i
LLSVOA	4-CIII.DROANILINE	OCCE	00	□ Q.		0 01		2	⊃ ⊒:	3	7
LLSVOA	HEXACHLOROBUTADIÊNE	UC/KG	00	1 0 C	200	⊃ : •••		0 0		7	2
LLSVOA	#CHILORO-S-MET IF YEMIENOL	UGARG	00		5 : 6 :	n :		0 :) in [720 1
LLSVOA	2-B(ETTIYLNAFIITIKALENE				2 : 2 :	5		7 10 0		4111	1 (2)
LASYOA	HEXACHLOROCYCLOPENTADIENE	OCARC	2	D T		0 : 2 :		⊃ : 2 :		4101	7 12
LLSVOA	24.6 TRICILLORUPITENOL	DC/KG	3		D 050	0 00		2) 20 20 20 20 20 20 20 20 20 20 20 20 20	100	24

Analytical Data Summary: Deep Soil

Deep Soil
Summery:
ical Data
Analyti

		Stacked D.	BSM	BSG	BSDB	B.Szro	850	8510	8510	BSH	BS12
		Sample (D;	SBISSDL	20165	SB163DL	58175	SB175DL	7188	SBILLED	SBINS	20202
		Sample Depth:	3 10 6	9 9	3 10 6	3 to 6	5 120 6	# D	4 to 6	\$ 10 \$	5 to 6
Š		Sample Date:	10/10/95	10/10/95	10/10/95	SMIIM	(0/10/95	56/11/01	10/11/95	10/11/93	10/11/95
		270	0 554.4		6 999		E CONTRACT	100			ļ
LISVOA	PENTACH OROM SEND	COXC		2 2		= = =	¥ 0			2 5	7 6 6
LLSVOA	FIENANTIRENE	UG/KG	8200 R	0.00	2010		1000	n oper			2 0.7
LLSVOA	ANTHRACENE	UCAG	8 200 R	200	2010 R	₽	1900 K	U 080		370 11	t co
LLSVOA	CABBAZOLE	DCAG	\$200 B	820 0	2000 R	⋺	3 006I) ago		U OFE	007
CL-SVOA	DLe-BITYL PIITIALATE	UGWG	8 0023	D 92	\$ 00x		1900 R) (ME		U OKE	N 00+
LLSVOA	FLUDRANTIENE	COKG	1.200 H	D 92	3000 B	7 5 0 €	N Curk	O 0000		J OL	O COP
LISYOA	PYRENE	LC/KG	[CC2	D 02	1000 R	3	1900) 14 (1906)	D 001		378.0	435 (1
LJ-SVQA	BENZYL BUTYL PITTIALATE	UC/KG	E 200	⊃ 02	300 B	<u> </u>	19E	380 0		U ONE	#UD 11
ADV2.LL	BENZDAMATIIRACENE	UG/KG	E OXI	O 041	ZCC) R	≘ 9	19m 20m 20m 20m 20m 20m 20m 20m 20m 20m 20	0 000		U OM C	7(1) C
(T-SVOA	TrDichiporobenzionne	UC/KG	H 0021	□ 06	NXX R	300	19cm &) arc)
LLSYOA	CHRESENE	UG/KG	1200 R	D 00.5	MIN R	350 S	300 H	340)))E ()	
LLSYOA	WALLETTYLLIEXYL) MITHALATE	UG/KG	8200 R	O 02	BAIL R		Į OK			370 ()	(I)
LLSVOA	DI-D-OCT/LMITIALATE	CIC/KI:	8200 R		2000	380	<u> </u>			ט מני	□ 00 ∓
LLSVOA	BENZO(B)FLIORANTHENE	UG/KE	2 CSD 15		2000 E	380	1061	350 (370 171	5 00
*TZVOA	BENZO(L)FLIORANTHENE	DC/KC	E200 R			36	2	360 [5		370 171	#100 CIE
LISVOA	BENZCALVRENE	CKARG	N C					380 01		37 67	415 (1)
LISVDA	INDENCY LITERATE	DOM:	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5 : R (360 11		370 (1)	E E
LISVOA		3 4 6 5	¥ 00 4		AND R					170 171	
LESVOA		3 (2)	* GP *		777 K) 	¥ :			10 0 2 5	
LISVOA				2 3	2 #	2 3	яс	ទ		2 :	I
LESTOR	THE CONTRACTOR OF THE CONTRACT			. 2	2 8	ξ 5	ñ \$	3 3		2 5	2 3
10.51	1 2.Dr.Tu. OROBENZENE.OM	UCKC	• •	: 2	: =	2	ŧ 2	3 3		3 3	5 5
LISVOA	NITEOBENZENE.OS	UCAKC	• •	3	? =	8 3	1 9	; 5		3 2	i S
LISVOA	1-FL UORDB IPHENYL	UCAKG	٥		2	2 2	2	3		3	: 38
LISVOA	2,44-TRIBROMOPHENOL	UG/KG	٥	Z	3	ę	×	\$		\$	3
LISVOA	TERMIENYLDIA	UCAKG	٥	5	<u>=</u>	==	=	42		ž	=
LLSVOA	Li ENOT	UGYKG	NOIOO R	3900	46CK) R	350	X 03	O ONE		J70 U	(I (II)
POASTI	MAJ-CITI.ORAET(IYL) ETILER (1-CITI.OROET(IYL ETILER)	UCAKG	E200 R	15 n.2	XXII) R	n car	1900 A	1 636		170 11	440
LISVOA	ZCHIAROPHENM.	HINKG	END R		Mari R		F 014	360 13		370 U	(III
LLSVOA	Z-METHYL, MIENOL (o-CRESOL)	LICKG	# 00 E	200	2000 R	7 OF	1 (1) (1)	3 6		370	€KI U
POAST!	ZZ-OXYBIS(I-CHI.DEC)PROPANE	DONE	1200 R		X00 K	380 (1)	8	360 C		370	- 103
LISVOA	CANETINAL MICHOL (P-CRESOL)	OCAN C				D 02.	E 006			378 ()
LISVOA			X 000							2 6	
LSVOA	NTRUBENZENE	UCAKG	200			9	2 0	101		200	
POASTI	ISOPHORONE	UCKG	1300 R	200	ZEEU R) OH	80 B	380 U		370 U) DE C
POASTI	3-NITROFILENOL	UG/KG	B COO R	820 U	2000 R	3100 C	1900 R	350 U		370 (1	₩
LLSVOA	1,4 DINIETH YLPHENOL	UGKG	8200 R	0 021	ZOCO R	n cet	3 Q 5	310 U		370 U	O IXP
1.L.SVOA	MgJ-CHLOROFTHOXY) METHANE	UCAKG	BAXD R	n ez	ZONCI R	360 U	(910 R	310 U		370 U	4 EE U
LLSVOA	2,4-DICHLOROPHENOL	UWKG	EXOD R	120 C	2010 A	n one	Z 12.	380 U		370 U	1
LLSVOA	I A TRICKLOROBENZENE	DOXC	R OOL	O 023	2000 R	300	# U56	380 U		370 U	7 OQ
LLSVOA	NAPIITIIALEVE	DC/KG	N DOOR	0.021	2002 F) (T)	13cm R	380 U		370 U	400 U
LLSVOA	+CIILUROANIJNE	CCYKG	EXCO R	OZ1	2002 F	310 U	100 R	3\$0 U		370 U	(1) (1)
LLSVOA	HEXACHLOROUTADIENE	LCAKG	8200 R	⊋ 21	¥ 65	380 U	1900 R	130 U		J 078	A COOP
LISVOA	←CHLORO-3-vSTIIYLMIENOL	DCXC	#200 R	O 021	2002 P) OH	1900 R	n ork		370 (5	O CKIP
LISVOA	2-METHYLMAPHTHALENE	UGAKG	\$200 R	1 20 1	2000 R) 1 1 1	1400 R	n car		370 43	411 H
LESVOA	HEXACHLOROCYCLOFENTADIENE	DC/KG	2 00E	707	1 DX 1	3 <u>10</u> C	30 8	1 1 0 0		370 ()	4 20 E
VOAST!	2.4.4.TRUCHLOROPHENOL	- Sake	8 OR	0 02	2000 K	0 0 C	2 2 3	n 016		0 02	=



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Ĭ		Analytical Data Summary: Deen Soil	to Summ	arv: Dee	Soil)
				<u> </u>							
		Sudoniti	1128	6512	8513	CiSA	BSM	BS13	B515	B516	9150
		Semple ID:	SBZOSON	SHIOSKE	58215	7011795	58715	50235	S0215DL	\$8245	SB245Dt.
,		Sample Date:	14/1/95	SM INVITABLE	5 (A) (4)	3100 IVI 1A3	DE LINE	210 c	2 IN 10 AS	JEE 1775	510 6 HVI 1955
Group	HERACHLOROBENZENE	UG/KG	3000 R		400 EI	XXXX R	300 03	380	8 0061	71 000	No B
4.1.5VDA	PENTACTILOROPIENOL	UCAKG	1000 R) (IK	1000 1000	190 U	0.061	9 02 6	200 10	Haro R
LISVOA	PHENANTHRENE	UG/KG	ZOLO R		O 01#	M COLOR		390 €	2 <u>1</u> X	CO	MAID R
LLSYDA	ANTHRACENE	OGIKG	MACON R) (1)	ZKR R		D :	200	G D	Mus) R
V0.571	CARBAZOLE) () ()	2 6 2		2 i	<u> </u>	9 5	2 C
LISVOA		no se	2000		0 0	ZEDE			200	3 9	
LSVOA	PYENE	OZ/EC	2000 R) () ()	AUD X			19(C) R	9	No R
LLSVOA	BEKZYL BIJTYL PITTIIALATE	UGYKG	Janu R		D (13)	A CITE		390 U	1900 R) (1)	ZIXIO R
I.I.SVOA	BENZO(#MATTIRAL:ENE	(IG/KG	ZUM R) 1	ZUID R		390 C	N GWI		ZIXX) R
LLSVOA	1J. DICHLOROBENZIDENE				3 5	300			<u> </u>	₽ (XX.D.R.
LISVOA	CHRISENE Material III SVI. MITHALATE		2000 R			8 00%			8 08	9 9	Man K
LLSVQA	DA-P-OCTYLMITISALATE	THOME	2000 R		10.00	Strin B		330	1900 R	400	MID R
LISVOA	DENCHAPILIORANTHENE	THEAT	20KN R		(A)	Man R) (SEC	330	(SCI) R	4(3) A	D OKE
LLSVOA	DENZONIFLUDRANTHENE	SMOIL	2000 R		410 03	ZHIO R) 05 0	390 U	I SOL	# OC#	D OKA
LLSVOA	BENZO(sJPYBENE	חכיאכ	2000 R		4 00 (1)	ZCKIO R	뮻	390	19(f) R	410 B	30:00 U
FF3V0A	INDENO(1,2,3-c,d)FTRENE	UCAKC	A OUR		4 0	a QUX	<u>ş</u>	2006	1900 M	Q	SONO U
LLSVOA	DIBENZ(ab) WTITRACENE	OCARC	2000		3 : Q	X 00 K		3 : 8 :	200 H	3 !	300 E
LLSVOA	RENZO(QAJIVER VIEWS	3 0 0 0	× 700		3 2	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4			X COX	¥ \$ 7	200
LISTUA	FILENOIS SERVICES	OXO	5 \$		\$ £	8 8	3 54	: 5	4 9	i 2	5 E
FLSV0A	2-CIILOROPIJENOL-DA	UC/KG	Z		: \$	3	: #	9		3	2
LLSVOA	1,3-DICHLOROBENZENE DA	UC/KG	2		F	ğ	я	3	5	Ę	z
LLSVOA	NITROBENZDNE-DS	UUNKO	2		3	3	5	3	8	Ł	\$9
LISYOA	2-PLUOROBEHENYC	OCINC	3:		# :	3 ;	3 :	' 20 '	2 :	:	3 :
LISYOA	ACETRIBACHOPHENUL		7 F		2 \$	£ £	2	3 6	9 \$	3 5	- -
YOA T		O DE	2000		9 \$	3000	Ę	7 004	190	Į	<u> </u>
TESTOA	MACACILLORDETHIVL) ETITER (3-CIILORDETHYL ETHER)	UCKC	2000 R		1 07	XXX0 R	B	386	E 00.00	1 93	7010 R
LLSVOA	1CHIOROPHENDL	UC/KG	MANU R		400 U	N DODZ	⊃ #(U DAG	H 0061	⊃ (X ¥	ZOKE) R
LLSYOA	2-METHYLPHENOL (o-CRESOL)	UG/KG	2000 R		202	A UNUS		⊃ :	2 CE	O (12)	H CHIN
LLSYOA	LINGREDISCHOLLORO)PROPANE	UCARC	3000 3000 3000 3000 3000 3000 3000 300		= : Q;	2000 R	O :	⊃ : 86 8	8 9		M CONT.
LEVILL	N.N. D. C. C. C. C. C. C. C. C. C. C. C. C. C.									7	A DISC
TC3VUA	HEXACILLOROETHANE	THEY KE	A COOK		n (xp	E CALLS	380	390 U	1900 R	D (1)	P CALLS
LLSVOA	NITROBENZENE	UCARC	2000 R		400	ZCCC) B	⊃ 9	330 0	I Skill R	() OI#	2010 A
LLSVOA	ISOPIIORONE	COKE	2000 R		400 ti	ZXXII B	3	= 9 66	1 VCD (1	E) (#	Stant R
LLSVOA	CANTROPRIENCE	CORCE	2000 2000 2000 2000 2000 2000 2000 200		9	X100 H	→ :	⊃ : 86 }	9 !	3 : G :	
LLSVOA	A DIMETHAL BROOK AND A STATE OF THE STATE OF	2000	7 C C C C C C C C C C C C C C C C C C C						H 1000		H 1971
LISVOA	14. DICHLOROPHENOL	KOKG	200		2 0 3	A LIE) ()		7	A DEST
YOASTI	I A-TRICILLOROBENZENE	1KZ/KG	2000 R		A CUS	2000 R	O ORE	D 26	£ 156	D 0.7	Z(M) R
LLSVOA	NAMITHALENE	DX/XC	2000 R		(LO U)	ZOLIO R	360 13	⊃ 24	B 10061	D CHI	PLANT W
MSVDA	+CHORDANITINE	THEYED	2000 R		(1 O)	ZEEG R	360 03	D 004	Pari R	E) (1)	ZONEL R
LLSVOA	HEXACHLOROBUTADIENE	UC/KG	ZOLO R		→ :			3	1900	□	Z(XA) H
11.5704	+CHLORO-METHYLMIENOL		2 00 00 2 00 0		D 03				3 mm	= = = = = = = = = = = = = = = = = = =	
L SYDA	FARETH LANGUAGE CONTRACTOR CONTRA	10/20	4 0004		3 5						E GAA
70.57D	14.6 TRICHLOROPHENOL	OC/KG	800		9 9	000	9 9	2 2	1900 F	2 2	Z000 R
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		Semple ID:	\$8095	20102	SDIIS	20125	SB123DL	SEI33	SB145	\$8135	58155A
		Sample Date:	10/4/43	S CO C	104495	1000	5601701 10710795	10/10/95	5 EU G 10/10/95	5 m c	5 to 6 10/10/93
Group	Parameter	Chats									
LISVOA	14.5-TRICHLOROPHENOL	COME	⊒ : 8	= : ₹ :		- S		 122	⊋ \$\$	11 00001	f) OKOI
1.1.5VIIA		(XXXIII		= : P:		= = =		= :	9	T (80) 7	= ?
YO ATT	CHECKONETHANE	LYCHE	O :	9	13 0	2		12 17	⊋ =		ה ה
T NOW	NETHYL EHHYL REJONE (J-BUJANONE)	OCARG	2 :) :	0 :	⊃ : ≃ :		: c	□ : = :	0 :) = :
40 A		2000	2 5	3	2 5	2 2		2:	2:) : : :	2 :
II VOA	LI L'ENCHI DEDETRANE		2 2) = = =	2 2	=======================================		2 2	= =	2 :	3 5
LLVOA	CARBON TETTACHLORIDE	HCARC	2 2	=	12 13	; <u>-</u>		2 2	=======================================	2 2	? :
TLYOA	BENZENE	DCARG	2	2 =	2 2	2		2 :	: =	2 :	2 =
LVOA	1. DICHLOROETIANE	UCKG	12.0	=	12 13	2		12 12	: =	: =	2 2
LLYGA	TRICHLORGETHYLENEITCE	UCKG	12.0	=	12 13	7		= =	=	7 2	2 2
LLYUA	1.3-DICHI.OROPROPANE	UCARG	2	<u>-</u>	12 C	2		= 2	=	2 7	2 2
LLYOA	BRONODICHLURONETIANE	CHARG	12 13	2	n 21	=======================================		12.0	==	=======================================	=
TAUY	VINYL CIO.OBIDE	UG/KG	13 U	=	0 0	110		0.51	0 11	13 0	=
LLYOA	METHYL BOBUTYL KETONE (4-METHYL-1-PENTANONE)	UCAG	n cı	n 11	12 U	11 0		12.0	20	0 21	2
TLYOA	CA-1,3-DACHLOROPROPENE	UC/KG	n 21	11	12.0	11 0		12 17	11 0	0.21	=
LLYOA	TOLUENE	DC/XG	⊃ ≃	5 =	O 21	D 23		12 U	n =	110	0.0
TLYOA	Energy Dictiloroproper	DC/KG	n 21	<u> </u>		2		12.0	9 11	12.0	=
TT.VOA	I,I,J-TRICILLORDETJIANE	53/50	D 61		12 D	<u>=</u>		n 21	9 =	0	2
LLVDA	24IEXANONE	DEVKG	7 13 10	D ==	13 T	12 0		12.0	9 =	n :	○
LLVDA	TETTACIILOROETIIYLENKIPCE)	DEVKG	12 C	⊃ =	12 0	2		2 0	: :	0 13 10	0.11
LLVDA	DIBEDAIOCTILOROMETHANE	DCVKG	7	11 n	12 C	12 (1		12 U	: :	13 ()	0
LLVDA	CHLOROBENZENE	DC/KG	2	=	7 7	12.0		2 2	= =	11 O	110
LLVOA	ETHYLBENZENE	DC/KG	⊃ : ≃ :	=	7 0	חנו		2 C	5 =	⊃ :	100
רראמע	BROMOMETIIANE	DCAKG	ے ت	= :	2 .	2		2 5	3 2	=	0.01
T AGY	Total A plemes	DONCO	~ ;	- :	2 .	2		2	= =	12 U	=
LVOA	STARENE	DCAKG	o :	= : = :	15 0) 		12 0	5 : = :	<u> </u>	2
LVOA	BRONOFILEM	DCKC	0 2 2	= :	12.0	D :		12 C	=	=	2
TVOV	I,I,II.TETRACHLORGETIIANE	DCAKG	9 2 1	= = !	0 ° :	5 5		2 2 1	3 =	∩ ~	⊃ = :
TAOA	L-DICHLOROETHANE-04	DCKC	<u>o</u> :	8	3 !	<u>.</u>		<u>6</u>	8	Ē	፸
Y 04		DOKC	2 !	≘ :	<u>6</u> ;	8		2	<u>a</u> :	5	z :
	I-BROND-4-FLUOXUBENZENE (+ BKONIO)-LUOKUGENZENE)	5 C C C C C C C C C C C C C C C C C C C	<u> </u>	<u> </u>	: = :	S :		<u>.</u>	; ;	<u>g</u> :	8: 3
* C	CHLUXUE ITIANE		2 2	= = = =	25	2 5		2 5	a i	2 :	
		DESKE	3 :	3 2	3 : : :	3 5		2 :	5 :) : :	ā :
1,404) Care	2 5	= =	2 2	· •		2 2	=======================================	2 2	2 5
TAOA	1-DICHTOROBENZENE	DC/KG	1 007	330 6	068	1917		0 617	11 011	7 0017	2 65
LLVOA	I A-DICHILOROBENZENE	UCAKG	7 03	200	390 0	0 01+		017	389 13	4100 11	70.0
TLVOA	I,J.DICHLOROBENZENE	DCAKG	400 U	J 02.0	390 U	2		410 U	350 U	U 0014	70.02
CLVOA	METHIVIENE CHLORIDE	DC/KG	13 0	2 :	13 0	D 92		0.61	0.51	2	0.1
LLVOA	1,1-DICIILOROETIIANE	DC/KG	13 U	=	13 U	D []		0 21	=======================================	13 0	200
PEST	ALPHA BIIC (ALPIIA HEXACHLUROCYCLOHEXANE)	DOWEG	7.0	1.9 U	2 U	0 17	4	2.1 U	11.6.1	11 E	22.0
PEST	BETA BIIC (BETA HEXACHLOROCYCLOHEXANE)	DC/KG	2 0	1.9 U	□	017	7	2.1 U	0.61	J.1 U	22.0
PEST	DELTA BIIC (DELTA HEXACHLOROCYCLOHEXANE)	DCVKG	7.7	1.9 U	2 0	D 1.7		2.1 U	N 61	3.1 (1	2.2 U
PEST	CAMINIA BITC (LINDANE)	UC/KG	7	1.9 U	2 II	n (7	Ţ	2.1 U	0.61	1.1 U	7.2 U
PEST	HEPTACHLOR	DC/KG	7.7	1.9 U	3 II	n		2.1 U	1.9 U	1.1 U	1.2 U
<u> </u>	ALDRIN	DC/KG	7 n	1.9 13	3 E	F) (7		2.1 U	U 6,1	1.1 U	1.2 U
F23	HEPTACHLON EPOXIDE	DC/KG	7 T	Л 6.1	2 D	==	=	2.1 U	u 6'1	1.1 U	1.2 U
E	ALPHA ENDOSULFAM	DC/KG	7	1.9 1.	2	n		7.1 U	0.61	1.1 C	2.2 U
}		*********									

Analytical Data Summary: Deep Soil

Deep Soil
Summary:
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	Sample Lu: Sample Depth: Sample Dute:	3 to 6 10 to 93	58165 5 to 6 10/10/45	5 to 6	9 cr 6 9 cr 6 8 cr 6 8 cr 6 8 cr 6 8 cr 6 8 cr 6 8 cr 6 8 cr 6 8 cr 6 8 cr 6 8 cr 6 8 cr 6 8 cr 6 8 cr 6 8 cr 6 8 cr 6 8 cr 6 8 cr 6 8 cr 6 8 cr 7 8	3 to 6 1 to 6 10 Hilbys	4 to 6 HV11/95	4 to 6	5 to 4	5 to 6
	(lein			4		1	4.5			Ĭ
	HOKE:	20005 R				¥ (8)				
LISYDA PLILLOHONAMIIIALENE	34441	W 200	12 12		3 =		3 =] =	12 0
LEVON CHICAGONIE IN THE CONTRACTOR (LEITANONE)	מכיונים		0 21		n =		=======================================		1 11	12 U
	UGAKG		12 17		11 0		<u>-</u>		? ::	
LLYOA CIILOROFORM	UCZKG		13 U		0		<u> </u>		1 11	
I.P.THICHDROETHANE	INCIRC		12 U		0 =		9		3 11	ם נו
CARBON TETRACILIORIDE	NOKG		12 U		? =		2		<u> </u>	
BENZENE	IKYKG				1		<u>-</u>			
1.DICHLOROETHANE	DC/KG		12 0		<u>-</u>					
TOUCH TO BE THE PER PAGE	INCKE		12 D		=		<u>-</u>		=	
1, DICHLOROPROPANE	DC/KC		12 0		_ U		<u> </u>		=	
BROMODICHLOROMETHANE	DCARG		n ≅		-					
VINYL CHLORIDE	UC/KG		U 51		-		2		<u>-</u>	-
METHYL BOBUTYL KETONE (4-METHYL 1-PENTANONE)	UC/KG		12 D		n 1		1		-	=
CHILDROPHOPENE	DC/KG		13 U		- -		n ::		<u>-</u>	=
LLYON TOLUENE	UG/KG		n €1		2		<u> </u>		- -	=
	UCVKG		0 21		5		<u> </u>		=	=
1,1,2-TRICHLOROETHANE	UG/KG		0		<u>=</u>					2
	DC/KG		12 0				<u>-</u>		=	=
IJ.YOA TETRACIILOROETIIYI.ENE(PCE)	UG/KG		7		= :		= :		5	= 1
	DC/KG) (I		<u>=</u>				> :	= :
CITOROBENZENE	CICYKG		= =		= :) I:			2 :
CLVOA ETHYLBENZENE	CC/KG		0.0		=		=		⊃ :	≃ :
BROMGHIANE	11C/KG		2) = :) = :		= :	~ :
	ncke		<u>-</u> :		- :) : 		= :	2 :
	D COKE		o :) ::		= =			2 :
	SCOC) :::) : : :		= :		• : • :	2:
	3133		2 ;		= ;		= {		= ;	2 3
	2440		<u> </u>		R 8		;		2 3	1
TOCUENEDS			8 9		\$ 2		3 2		5 5	2
LOROMO-FILUOROBENZENE (4-BROMOFILUOROBENZEN	E) UC/KG		9 :		g :				3 :	2 :
	UCKG		2 :		= : = :		- :		3 5	2:
	DENG		3 :		3 :				3 :	5 =
	SCR		2 .) : : :		: :		= =	2 5
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	DAME:			E PERSON	3 =	2				
			2 :		2 2		: :		: =	2
LIVIA 1,1-milliokoetukae	0900		= =							-
ALTIN BILL (ALTIN BEAACHEUNDESCHOOLS)	2000									
PETA BILL DE LA MENACINO DOCTOR DE COMPANIO			1 1 2		2		2 2		51 67	7
	HEAR		1 1 2				n ~		2167	
CARING DIE (CINDANG)					9		- ~			
HEFINEDA	ORDI		12		2		2 4		9	7
	CHANGE				0				-	
HETACHLUK ETOKIDE	O ACAD		3 7		2 =					
ALITIA EXEOSULEAN	0000		- ·		2 2		•			
DIELLOKIA		_	•		į) }	
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Promote Prom	Comparison	B 0		Sample ID:	SUMBER	SBZOSKE	\$11.8	SB21500.	\$022	58235	SB235Di.	SD245	58245D1.
A A CATIONOMENTALINE CANA	Columbic Columbic	B 0		Sample Depth:	5 ED 6	5 to 6	S to 6	\$ es	\$ 10 6	2 in 6	\$ 10 6	3 to 6	995
	Columbia Columbia	VOA	Parameter	Senapte Date:	(8/11/g)	10/11/95	IIIVIIVA	10/11/93	10/11/05	10/11/25	(0) 1/93	10/11/95	1011795
	ILLEANING BANKANING LIGAGE		245-TRICHLOROPHENOL	UCAKG	8 ELX		11 (110)	Crant D	11 (11)	1. 000			
COLUMN C	Colored Colo	LISVOA	2-CIII.ORONAMITIIAI.ENE	DC/KG			9	Name of	7 22		¥ 6		Ħ :
TOTALL JANKSTHURENTINE CORNEY COR	NET NET	YOA	CILOROMETHANE	UC/KG			12.0		=			1	7
CAMERON CONTINUES CUCKC CONTINUES CONTINUES CUCKC CONTINUES	CONTINUE CONTINUE	VD4	METIIYL ETIIYI, KETÜNE (1-BUTANONE)	VCAC			12 0		=	2 2		2 2	
Company Comp	CAMPACTOR CAMP	VO.	TOTAL 1.2-DICHLOROETHENE	DCMG			0 21		=	2 2			
CARBON PERSONAL MANUEL AND PERSONAL MANUEL A	CHICAGON CHICAGON	¥0.4	CHLOROPOLN	UCAKG			13 U		0 =	12.0			
MANUAL PROPERTIAL PROPERTIAL PROPERTIAL PROPERTIAL PROPERTIAL PROPERTIAL PROPERTIAL PROPERTIAL PROPERTIAL PROPERTIAL PROPERTY 100 11	Color Colo	¥ 60 A		DCMC			0.0		?	13.0) =	
The Control of Part The Control of Part	The color of the	5 5		DENG			2 2		<u>-</u>	2		n 71	
THE STATE AND	The state of the			DC/KG			2		1	20		N 21	
1.00 1.00	The control of the	5 5		DICKE			<u> </u>		<u> </u>	12.0		110	
DECOMPTION RETAILS ASSUMETHINE CORTION C	The property color		FELTICOLOGISTES (1/E)	OCACC			⊐ ≃		011	ם מ		13 (1	
NEW COLLONG NEW COLLON	No. No.	504		2000			⊃ : ≃ :		-	12 0		0.0	
A STATE ST	THE RETURNE CHARTITLY TEXTANONE) USAGE THE RETURNE CHARTITLY TEXTANONE) USAGE THE RETURNE CHARTITLY TEXTANONE) USAGE THE RETURNE CHARTITLY TEXTANONE) USAGE THE RETURNE CHARTITLY TEXTANONE) USAGE THE RETURNE CHARTITLY TEXTANONE) USAGE THE RETURNE CHARTITLY TEXTANONE TO THE TEXT TEXT TEXT TEXT TEXT TEXT TEXT	¥0X	VINE CHI ORDE) : :		-	13 N) ti	
The color of the	NOTICE COLOR COL	¥0¥	METHYL ISOBITYL KETONE IAMETHYLJ PENTANONE)	OWN			⊃ ; ≃ ;		<u> </u>	0 : 1 1		0 C	
TOTAL PROPERTY TOTA	I	AOA	CF-L-DUICH ORDENE	Division of					= : = :	2 :		a :	
Interview Inte	DESCRIPTION DESCRiption DESCription DESCRiption DESCRiption DESCRiption DESCRiption DESCRiption DESCRiption DESCRiption DESCRiption DESCRIPTION DESCRiption DESCRiption DESCRiption DESCRiption	,Y04	TOLLENE	UGAKG			= =		a :	2 :		2 :	
10	Colored Bills Colored Bill	LVOA	trace-1,4-DICHLOROPROPENE	HGKG			=======================================		3 E	2 2		2 9	
DETECTION NOT STREAM	CONTRICTOR CON	LLYDA	I,1,2 TRICHLOROETHANE	UCARC			2 2		: =			2 2	
The component of the	RENTELLAKE (P.T.) RENTELLAKE (P	VOA.	2-IIEXANONE	UC/KG			2					2 2	
DENCE DENC	NE CONTRET CONTRE CONTRET	,V04.	TETRACHLOROETHYLENE(PCE)	DC/KG			12.0		:=			: :	
CHICADOMENTENEE UCKGC	NE CONTROL	VOA.	DIBROMOCHLORUMETHANE	UC/KG			13 0		=			2 2	
PROMINETIANE CUCKG	Part Part	¥0.	CIILOROBENZENE	UC/KG			13 U		2	ם מ		2 2	
Total Street DAY STATEMY	UCMC UCMC UCMC UCMC	V O.	ETIYLBENZENE	UCAKG			12 U		=	7 21		2 2	
The color of the	UGMG 12 12 13 13 13 13 13 13	YO.	BEOMONICHIANE	מכאכם			12 17					12.0	
1.00 1.00	LORDETIANE UCANG 12 U 11 U 12 U 12 U 13 U 14 U 15 U	4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	Constitution of the consti	DOMO			13 0			=		12.0	
1,1,1,1FTPACHIANE UCMG	1.0 1.0	X OX		5000			2 :			17 (1		12 0	
1, Dictilgrobe 1, D	THAME DATE UUNG	YO.	1.1.1.TETRACII.OROETHANE				2 !			n :		7 C	
TOLLIENE DA	CONTRICTOR CON	YOA	1, DICHLOROETHANE DA	מכאכם			= = §			⊋ 2		9 2 1	
1-8FGMO-4-FLUGROBENZENE (4-8FGMOPFLUGROBENZENE) UGKG	B	ΥΩΥ	TOLLENE.DA	CCARG			<u> </u>		R 8	7 9		⊒ :	
CHILOROETHIANE UGKG	B	YO4	I-BROMO-4-TLUOROBENZENE (4-BROMOFLUOROBENZENE)	DC/KG			5		: 8	5 6		5 5	
NEW NEW	INCOME I	VOA	CHLOROETHANE	UG/KG			2					3 :	
14-Diff 10-Diff 10-Diff 11-Diff 0	۲OX	ACETONE	DC/KG			12 17		=	17		2 2		
CARROLL PROJECTURE CUCKG 2000 R 400 U 210 U 13 U 13 U 14 U 13 U 14 U 13 U 14 U 14 U 15	HOLE HOLE	¥1.		IKYKG			n ~		=	0 21		= ~	
CHARGE 2000 R 400 U 2000 R 20	MOZINE MOZINE<	XIIX		CKYKG			7 2		<u>-</u>	ם מ		I2 U	
COLOR COLO	UCKG 2000 R 200	X 0X	LAURITOROBENZENE	CICARC	2000 R		n co+	ZCKIO R)#0 (**	36C	X 00.00	T) (U,7+	200
NETTOTAL CARD 1900 100	UGNEG	465		USEC	2000 R		D 00	2100 R) DKC	1900 R	T 00#	Ä
11-DICTILLOROETHANE	11	. O	AUSTRALIA CHI CIRILI CHE CHI CIRILI CRI CIRILI CHI CIRILI CIRILI CIRILI CIRILI CIRILI CIRILI CIRILI CRI CIRILI CIRILI CIRILI CIRILI CIRILI CIRILI CIRILI CIRILI CIRILI CRI CRI CRI CRI CRI CRI CRI CRI CRI CR		2002 R) ()	2000 R		⊃ <u>86</u>	19CO R	7 Q.#	77
ALPHA BIC (ALPHA HERACHLOROCYCLOHEXANE) BETA BIC (BETA HEXACHLOROCYCLOHEXANE) DELTA BIC (BETA HEXACHLOROCYCLOHEXANE) DELTA BIC (BETA HEXACHLOROCYCLOHEXANE) LICAKG GAMMA BIC (LDDANE) LICAKG GAMMA BIC (LDDANE) LICAKG 1 U	HA HEXACILOROCYCLOHEXANE) UGNG	YO.	LI-DICHLORDETHANE	2000			2 :		= :	n ::		2	
BETA BIC (BETA ILEXACHLOROCYCLOREXANE) UCKG 10 15 U 16 U 17 U 15 U 16 U 17 U	UCAKG	F	ALPIN BIICIALPIA HEXACIILOROCYCLOHEXANE	HENCE			2 -		- :	12.0) : C	
DELTA BHC (DELTA HEXACHLOR OCYCLOHEXANE) UGKG 1 U 19 U	UCAKG	E.	BETA BIRC (BETA HEXACHLOROCYCLOHEXANE)	UCAKC						7 .		2:	
CAMMA BILC (LIDDANE) UCXG 1 U 1.9 U	UCAG	t	DELTA BIJC (DELTA IJEXACJILOROCYCLOHEKANE)	UCAKG								2 :	
IEPTACHLOR	100KG	Ŀ	GANIMA BIIC (LDIDANE)	UC/XC			1 D) <u>-</u>) <u>-</u>	
ALDRIN LEFTACHLOB EPOXIDE LECTACH EPOXIDE ALPHA ENDOSULFAN DIELDRIN ALCHA ENDOSULFAN LOGAG ALCHA ENDOSULFAN 19 U 19 U 19 U 19 U 19 U 19 U	UCMC	E	HEPTACHLOR	1)CAKG			10)) = • ~) = 7 F	
HEPTACHLOB EPOXIDE 10 19 UGAKG 1 UGAKG	FOXIDE 2.U 19.0 2.U 19.0 2.U 19.0 2.U 19.0 2.U 19.0 2.U 19.0 2.U 19.0 2.U 2.U 2.U 2.U 2.U 2.U 2.U 2.U 2.U 2.U	E	AL,DRIN	UCAKG			·			? ~		? =	
ALPHA ENDOSULFAN UGAKG 1 U 1.9 U 1.9 U 1.9 U 1.9 U	1.PAN UGNG 2U 19U 2U UGNG UGNG 4U 3.7U 3.EU	E	HEPTACHLOB EPOXIDE	UCIKG) Z		n 61	. n.		: .	
DIELDRIN CONKG AU 17 11 1	17 JEU	E	ALPHA ENDOSULFAN	UGAKG			7		0 61	7		= :	
1		E	DIELDRIN	UCING			>		3.7 U) 1 (: ⊋	

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Analytical Data Summary: Deep Soil

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		Station ID:	1128	150	BSIB	BS19	6188	6158	02.50	BS20	B571	BS22
		Seattle Di	SB255	\$100	5 to 6	5 to 6	5 to 6	30470L		3 to t	300	5 120 6
		Sample Date:	ion 1995	10/17/93	10/11/95	56/71/01	10/12/95	10/12/95	10/12/93	10/12/95	10/12/95	10/17/95
Grand	Printite	Units				1		1000	952	20 (2007	10.10	12 (88)
TTSVOA	14.5 TRICHLOROPHENOL	UCVKG	⊐ : 02 :	906		X 000	1 200				2 5	1 127
LISVOA	1-CHLORONAPHTHALENE	OGRE	2 5		3 =	2 5			1 7		17 10	Ę
LLVOA	CHLOROMETHANE	00/200	2 2	::	==	2 2	2 2		0		n 21	12 U
YOA'T'	METICYL ETHYL KETONE (2-BUTANONE)	I CKC	2 2	=	: =	=======================================	2		5 21		12 13	() ()
LLYOA	TOTAL LLDICIII.OROETHENE	UCKG	2 2	=	=	n ~	11 0		11 0		13 U	.0 E
11,04		DCMG	2	01	D II	2	13 ft		11 0		7	o, ≃'
Troy		UGVKG	13.0	<u>-</u>	5	2	n 21		2		13 N)
T NOT		UC/KG	0 21	0 11	ב כ		12 0		2		0 :	2 :
707		DCAKG	13 10	-	<u> </u>	12 11	12 C		<u>-</u>) : :	- : - :
1000	TRICKLORDETTIVLENE (TCE)	DCAKG	D []) =	3 =	= ==	12.17		⊃ : ≃ :		= :	2 0
S T NOT	La DICILIO ROPRIDA NE	HEVICO	2	? =	= =		= : = :		= :		3 : 2 :	2 2
LLYOA	BROMODICHLUROMETICANE	UIVEG	9 : 2 :	= : = :) : = :	2 5	2 5		2 :		2 2	2 2 2
LLYOA	VDVL CIII.ORIDE	DENKE	= :	- : - :	3 : 2 :	2 :	2 5		2 :		= :	12.1
LL.YOA	METHYL EXBLITYL KETONE (4-METHYL-3-PENTANONE)	DENE	= : = :	- : - :) : : :		2 5		2 2		: =	2.5
TYOY	45-13-DICHLOROPKOFENE	DCAKC	n :) :	: c		2 5		2 =		: =	1 2
TLYOA	TOLUENE	UCKC	- : - :) : : :	> : : :	2 5	2 2					2
LLYOA	trad-1,3-DICIII.0780PRUPENE	OCARC	2:	- :	= =	2 5					12.10	2
YUATI	I,I,D.TRICHLORDETHANE	THEFE) : 2	2 2	3 2	2 2	2 :		2 2		12 1	20
LLYGA	2-IIEX ANGNE	OCARO	2 5		2 =	2 2	2 2		2 2		2	n 21
LLYOA	TETRACHLOROSTHYLENE/PCE)	O SOLIT	2 2	=======================================	2 =		2		110		O 27	0 21
LLVOA	DIBROMOCILLOROMETHANE	5480		=======================================	2 =	2 2	2		11.0		13 U	11 0
LLVOA	CHLOROSENZENE	CONCO	2 2) <u> </u>) =	⊃ ≃	2		2		13 N	D [2
LLVOA	ETISTERE	DC/KG	12.0	-	1	n ~1	13 G		2		13 0	11 C
V CT	BACHICALE	UGAKG	13 U	5 =	11.0	2	12 (1		n c		<u> </u>	1 0
TTAON.		COXC	2 5	5 =	D	13 U	13 O		⊋ ≃		<u> </u>	n :
T AOA		UC/KG	110	0 =	=	13.0	⊃ : ≃ :		= : = :		⊃ : ≃ :	ə : :: :
	1111-TETEACILOROETIANE	UC/KG	110	<u> </u>	=	2	2		= ;		> = 3	- -
11.404	1. DICH LONG THAN E. DA	DC/KG	8	ð	<u>6</u>	멸 !	€!		2		5 3	9 5
TANDA	TOTOENE-DB	UGVKG	<u>e</u> :	5	= 1	Ē !			<u> </u>		5 8	•
LL.YOA	I-BROMO-4-FLHOROBENZENE (+BROMOFILLIOROBENZENE)	UGVKG	8	<u>s</u> :	<u>.</u>	3 :	: !		3 5		=	
YOATI	CIILOROETIIANB		2 2) = =	2 =	2 5	2 2		2 2		1 21	071
LLYUA	ACETONE	OCK C	2 2	: =	=	10 12			13 0		13 0	11 0
LYOA		CCKG	13.0	-	2	0 2	0		10		0 21	11 O
LLVOA	CARBON DESCRIPTION	UC/KG	390 U	360 U	360 U	∩ 01 ∓	410 (1	ECCC R	⊃ <u>06</u> 1	19(1)	⊒ : 29	1
VOAT I		UG/KC	386	340 U	O 090	D 017	∩ 91 7	ZIKIO R	⊃ 25.	# I		
11 804	1.DICHLORUBENZENE	UCAKC	O DEE	O 60K	360 U	= = =	19 T	ZKE K	⊃ : ₹ :	# SE		
VOA TI	METRY LENE CHLORIDE	UCAKG) []	5	n :	= : = :	o :		2 :		2 5	2 2
TTAO	LI-DICHLOROSTIJANE	newa) 12	= ;	= ;	2 ;	o ;		= =		2 -	2 ~
1534	ALPIJA BIIC (ALPIJA (IEXACHLOROCYCLO)IEXANE)	UCIKG	-	5 -) : :	a :		2 :		2 -	3 -
H-ST	BETA BIIC (BETA HEXACHLOROCYCLOHEXANE)	1)C/KG	٦ ٦	7 1	7 :) i	0 17		7 .		2 =	3 5
1531	DELTA BIIC (INCLTA HEXACHLOROCYCLOHEXANE)	UEVKG	⊋ ;	<u> </u>	= :	o :) : ; ;		3 =		2 =	: == • F
1534	CANINA BIIC (LINDANE)	CONC	n :	= : = :) : ; ;	77		3 = F		2 -	
Ž	HEPTACHLOR	UG/KG	⊃ ;	= :) : : :	3 .		9 =		? ?	2 .
PEST	ALDRIN	OUTRE	- :			; ;			-		7 0) T
FEST	HEPTACHLOR EPOXIDE	0200			•		-		2 =		7 0	7 7
PEST	ALMIA ENDOSULFAN		7 5		2 2	7	7		7		3.9 U	19 (1
PEST	DIELDRIN	} 5		!	! !							





Deep Soil	
Summary:	
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		State of the state		8205	820	ESDA E	Š	B503	BSOS	(Ka	BS07
		Sample III.	SECPS	8	SBIIS	SE 133	SBIZEDL	58135	SBIS	SBISS	SBISSA
		Sample Depth:	106	200	9	200	- P	\$ to \$	900 6	S to 6	5 to 6
Group	Parameter	Sungle Date: Units	5868	10/8/63	10/9/95	10/10/95	\$60i.001	10/10/95	10/10/95	10/10/95	10/10/95
PEST	300:00	UCZKG	39.0	3.7 U	19 U	=	R CI	7	2	A 17	10.4
PEST	ENDRIN	DARK	39 U	3.7.10	191	=	8 2	=======================================	33.6	=	= ==
PEST	BETA ENDOSULFAN	DINKE	390	3.7 U	1.9 U	-	# 2	71.0	1.1 U	0	7
FEST	OGG-, d'al	UEVKG	39 U	3.7 U	3.9 U	-	#0 #	4.1 G	U 1.1	D 7	7
FEST	ENDOSULFAN SULFATE	UENKC	3.9 U	3.7 U	1.9 U	1	#0 B	4.0 U	ט גינ	D #	42 U
F	p.p. ODT	UC/KG	1.9 U	3.7 U	3.9 13	7.2.1	8 9	017	1,10	D T	4.3 U
rest	METHOXYCHLON	DC/KG	멅) 61	9	□ ∓	410 R	11 n	U 61	7 7	n ≈
rest	ENDRIN KETONE	DONKO	3.9 U	3.7 U	J.9 U	•	9	0.1.4	1.1 U	1	4.2 U
5	ENDRIN ALDEIIYOE	DOWG	J.9 U	3.7 U	J.9 U	•	2	1 1 (*)	3.3 U	∏ I"ŧ	□ ~
EST	ALMIA-CILORDANE	DC/KG	7 0	D 6'1	2) 	# =	2.1 U	1.9 U	2.1 U	11 ∪
돲	CAMMA-CILLORDANE	UCAKG	1	D 61	0.7	4.1 U	₹	2.1 C	U 6:1	71 N	2.1 U
151	TOXAMIENE	UCAKG	⊃ ĝ	n 061) (XX	410 1)	4100 K	216 U	⊃ (16)	710 U	720 U
FEST	PCD-1016 (AROCHLOR 1016)	מכשכם	2	J C) 2	9	2 (XII)) =	חת	- -	□ ‡
rest	PCB-1211 (A ROCILLOR 1221)	DEVED	2	1	P.	1 091	1 0091	0 8	14 U	n 61	O S#
FEST	PCB-1231 (A ROCIILOR 1232)	UGAKG	⊐ £		د ۾	20	3 000	7	J1 [[□	7
PEST	PCB-1241 (A B OCISL OB 1242)	COMC	⊃ £,	310	⊃ \$£	2	8 000 ft	O ∓	J (=	7
FST	PCB-1249 (A ROCHLOB 1248)	newa .	∩ £6	31 U	ے ج	- - -	200	7	חנו	□	7 7
rest	PCB-1254 (A BOCIILOR 1254)	ncorce	⊃	31 C	⊃ 8£	급 요	\$ 100 \$	⊃ ∓) (I	⊃ ₹	O #
FEST	PCB-1260 (A ROCTILOR 1260)	DCACG	□) H	£	9) ;), C	→	⊃ 💝
FEST	14.5.4-Tetracilloro-meta-xylene	חכשכם	F	2	F	2	=	S	=	2	2
rest	DECACHLOROBIFICENYL	חמשנפ	8	2	2	DG1	924	9	ğ	8	3
TOTMETAL	ALUMINUM	MG/KG	- D0#11	• 0000	13900	14583 =		13700 =	- 000 II	910	4310
TOTMETAL	ANTIMONY	MG/KG	330) L (35.0	3.6 U		D 97	110	36 U	361
TOTALETAL	ARSENIC	MG/KG	4	9.4	11,7 *	12.1 =		¥. ¥.	- 57	4.9	÷
POTMETAL	BARTUSI	MG/KG	3	- 11 -	99	Ĕ		M.	193	3	3.
TOTALETAL	BERYLLIUM	MC/KG	1 650	0 62 J	1 190	0.59		f 69 D	0.39	0 (a n	0.0
TOTALETAL	CADMITUM	MG/KG	7	O 190	30	D.66 U		D 19:0	0 49 0	0.71	80
TOTAIETAL	CALCIUM	MG/KG		743 J	100	623		1430	1070	7007	2010
IDTALETAL	CHRONICM, TOTAL	MG/KG	=	. F.91	* * *	15.2)		15.4.)	12.4 3	13.6.1	=
TOTMETAL	COBALT	NG/KG	6	9.4	11.6 J	1.41		20.4	9.2.1	=	199
TOTNETAL	COPPER	NG/KG	-2.6	17.6 -	- 17	1 6:61		13.1	17.6 J	15.5 1	- 5
TOTALETAL	LEDN	NG/KG	000	73600	24900 *	27570		24Ni0 =	MINU.	17810	16200
JOINETAL	Trans		• •	= ;	-	22.7		-	17.6	1.7	-
TOTAL STAL	PIALACEMENT	MCMC	# E		- OLG			- 0.00	1510	200	510
DINETAL		2000			9 7	• : • :		•		- 12/	- 5/2
TOTALETAL		NGARG	2 ;) 	-	O 11.0		=	1 = 0	= = = =	0 110
TOTALETAL	NICKEL	MC/KG	77	9 00	Z.)	17.9		77.4	187	1.91	
COTACETAL	POTASSIUM	MECALE		* 090	1010	7070		9	₹ 286	1 62	929
TOTACETAL		NAC/KG	5	93 G	0 32 J	0.32 U		U.32 U	0.25 U	0.32 [7	0.32 U
TOTALE TAL	511. VER	PACING	0.4 C) 6F II	- T-	0 2		D 45 O	0.11 U	042 U	0.42 U
FOTMETAL	Sobium	SACKC	138 U	2. 3.	⊃ R	15.2 U		235 U	== == ==	U 69 D	144
COTAIETAL	THALLIM	PAC/KC	0.00	2	0.43 U	110		0 43 0	D + 0	0.45 U	2 4 5
TOTALETAL	VANABIUM	MC/KG	26.1 =		<u>-</u>	30.6 =		* * # R	# T 'E	262 m	- 615
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Deep Soll
Summary:
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		Starboal D:	8507	8528	B Sra	6203	8309	BS10	BSIO	BŞII	B\$12
		Series D.	SB135D4.	SBI65	SB163DL	\$8175	SB17SOIL	5B114	SRIBED	58195	SBXIB
	2	Sample Depth:	3 to 6	Stob	5 10 4	3106	3 to 6	4104	9 4	3 to 6	3 to 6
		Sample Dete:	t0/10/95	18/10/93	SANIAN	CV1(1/V)	1910/93	CV11/03	1811/95	10/11/93	10/11/95
Group	Parameter	DE/KC				=======================================		18.11		11	=
		ICAKO		n 1 7		111		1 5		11 11	=======================================
	NAS CAN	UCAKG		1 7		3.1) ((11.0]
		UCAKG		7		11 n		3 0		33.0	7
100	SAN SHIEFATE.	UCVKG		7		17.0		2 0 0		0.0	7
		UCKG		a e •		1.1 U		380		3.7 U	¬
		UCKC		n 12		2		2		0 61	n 92
		UC/KG		9 7		3.1		38.0		3.00	7
	100	UCAKG		1 7 *		3.7 C		210		חור	7
	•	UCKC		2.1 U		n 6:1		7		N 6'1	n 2
PEST	1.1	UCKC		2.1 U		D 6:1		n ~		D 61	n 7
i sa		UCAKG		210 0		D 061		NO U		D 081	WO U
FIST	DCHLOR 1016)	UCKC		===		37 13		31 U		13 U	7 QF
FEST		UGAKG		D (8		16 U		٦ ۲		3 0	=
		UG/KG		⊃ ∓		ם נו		⊃ 5 5		J7 U	70 C
153		UUNKG		D =		J) (33 C		33.0	J 0
		UG/KG		D		J) (3 C		33 0	3
127		UG/KG		7 •		33 (31 0		33.0	n 07
152		DEVKG		=		11 (1		38 U		J) (I	T 07
PEST	A.KYLENE	UG/KG		F		92		F		3	2
FEST		UCIKG		J		t		5		2	ま
TUTMETAL	ALUMINUM	MGAKG		0000		M300 *		14900	14472,625	= 000	#300 *
TOTMETAL	ANTIBROWY	MC/KG		3.7 U		3.3 U		3.4 III	980	3.3 (1)	3.5 (1)
TOTAL		MG/KG		- 67		=		5.6	9.3241	-	13.
TOTALETAL		MEAKG		<u>5</u>				: = :	9968.69	92	ž.
TOTAL	3	MC/KG		0.51		3		Į,	0 4919	0.53	1 590
TOTACTAL		MCAKG		300		0.71		0 83 0	0.6207	0 20	0.65 U
TOTALETAL		MECING		92		<u>.</u>		Q ;	632.2114	9 9	# U.92
TOTMETAL	IM, TOTAL	MCMC		-		= ;			F1641	* .	4
TOTMETAL		MUKC		1.				4 Z EZ	10 7033	1 1	- ,
TOTALETAL		MUNIC		14.8		1707		13.7	18.774)		•
TOTALETAL		2000							115.00		
TOTALETAL						1000			100.00	2419	- 5567
TUTMETAL		THE CONTRACT OF THE CONTRACT O							DIAP LS	100	- 45
TINTAILTAL	20	2000		, :					400.00		
TOTALETAL		PHONE C		3 :		1) 	Cherry	200) (3)
TOTALETAL		AUCKE						- 0.1	193780	97	
TOTALETAL	-	PUCKE		81		- CE - CE - CE - CE - CE - CE - CE - CE			955.174)	***	
TOTALETAL	Y.	MC/EG		0.33 U		0.59		0.3 1.1	61520	0.79	0.3) 1.0
TOTALETAL	SILVER	MUMC		043 E		045.		- 45	0.1901	1 T C	0.41
TOTALETAL	SODIUM	MC/EC		70.4 U		72.E U		66.2 U	112.03	139 C	23.1 U
TOTALETAL	TIALL:UM	MC/KC		0 46 U		0.41 U		045 U	04161	0.41 U	⊃ ∓ 3
TOTALETAL	YANADIUM	MG/KC		3		20.0		31.3 -	33.443	37.1	=
TOTALETAL	ZINC	NGARG		19.56		1 6'99		19.5 1	\$6.7341	76.2 1	11.3





ORO113627.RR.ZZ/024.XLS
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		Station ID:	NS12	BS12	6513	8513	BS14	BSIS	8513	9216	8516	
		Sample (D):	SB205D4	SBMSRE	SB215	SB24SD4	\$8225	\$8135	SB135DL	\$B245	5B245DL	
		Sample Depth;	S to 6	3 to 6	5 to 6	3 m \$	3 to 6	Stob	5 to 6	5 to 6	5 to 6	
9	Principle of the Control of the Cont	Second Pare:	(VIIV)	to live	1:711.693	INTINS	104 1795	10/11/95	CVIIVI	10/11/01	ECT LOS	
PEST	30.000	UCAKG			-		12.1					
PEST	ENDRIN	UCYKG			- -		33.0			7 7		
rst.	BETA ENDOSILFAN	DCVKG			1		7	0 10		7		
FEST	QQQ; et al.	UGVKG			7		1.1 U	38.0		=		
FEST	ENDOSULFAN SILFATE	DC/XG			•		110	38 U				
FEST	F4:001	DCMC			0		U C.E	3.8 U		· •		
ž	METHOXYCHLOR	UCAG			200		O 61	⊃		200		
FEST	ENDRIN KETONE	CGACG			D •		3.7 U	34.0		7		
PEST	ENDRIN ALDEITYDE	UG/KG			ם ד		33.0	3.6 U		7		
PEST	ALPIA-CIILORDANE	UC/KG			3 C		D 61	3.0		2.0		
FEST	Gamna-Chlordane	UC/KG			n 2		1.9 U	≈		1 C		
PEST	TOXAMIENE	UC/KG			n ox		D 081	200				
Į.	PCB-1016 (ABOCHLOR 1016)	UG/KG			1		J) U	a R		₽		
FEST	PCB-1221 (ABGCHLOE 1221)	DG/KG) =		76 ()	71 12		0 :		
FEST	PCB-1211 (ABGCHLOR 1231)	UGYKG			D 07		11 II	0 B		⊃ ¥		
PEST	PCB-1241 (ABOCILLON 1242)	UC/KG			□		37 U	38.0		4		
EST	PCB-1248 (AROCHLOW 1243)	DC/KC			₽		J7 U	31.0		□		
FEST	PCB-1254 (AROCHLOR 1354)	OZ/KG			-		J (f	n #		□		
PEST	PCB-1246 (AROCELON 1260)	UCARC			7 07) (C	3 E		₽		
PEST	24.54-TETRACHLORO-META-XYLENE	UCIKO			=		μ	3		t		
1 5	DECACHIOROBIPHENYL	CCKC			8		2	8		:		
TOTALETAL	ALUMINUM	MGRG			- 200421		• 00ZDI	16CD .		(2300 -		
TOTALETAL	ANTIMONY	MC/KG			3,5 tu		33 55	34 UI		3.5 UI		
TOTALETAL	ABSENIC	MG/KG			13.4 =		:	.		36.		
TOTALETAL	DARIUM	MCAKG			-		3	≛		6.63		
TOTALETAL		MC/KC			0 63 7		640	040		0.59 J		
TOTAL	LADMIDA	MCAG			0.63.0		0.73	n 29 n		30		
TOTALETAL		MENT			063		93	95		- DKS		
TOTALIAL	CIIXOFFICAL JUINE	MUKC			17		12.7	. W.		- 2		
TOTACETAL							- 22	4.5		93.		
TOTAL		MCAKO			- 0000		• **/-	• • • • • • • • • • • • • • • • • • • •		- 1		
TOTMETAL	LEAN	MG/KG			188			9 2 9		1 2 2 2		
TOTMETAL	NACHESIUM	MC/KG			2900		2680	991		1740		
TOTMETAL,	ALANCANESE	MC/KG			1 020		43	151		1376		3
TOTMETAL	NERCURY	MC/KG			0.110		0.1.0	0.0		0 1.0		Û
TOTALETAL	MICKEL	MC/KG			19.7 ×		19.1 =	11.6 -		17.6 -		8
TOTMETAL	POTASSIUM	MCAKG			- 2		90	7		572.1		}
TOTMETAL	SELENIUM	MC/KG			4.31 0.1		0.3 UI	03 UJ		13 53		,
TOTALETAL.	SILYER	MG/KG			0.41 U		0.39 U	0.39 []		0410		3 (
TOTMETAL	SUCHIM	MCAKG			O 691		9.3 U	J 7.0%				3
TOTAL	71.41.4.14.14	MGAKG			94 D		∩ 1¥0	042 CD		0 43 U		7
TOTALETAL	YANADIUM	MGAKG					24.2 •	<u>-</u>		31.7 =		
TOTALETAL	ZUAC	MCAKG			- Ci		- 55	-		33.5 (

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Analytical Data Summary: Deep Soil

Analytical Data Summary: Deep Soil

		Station ID:	12	BSI	BSIS	6519	B\$ 19	BS 19	0250	0250	1250	B.522
		Semple 10:	58235	SB265	SB265A	SB275	\$827\$A	SB275DN.	\$B782	SB21SDF	SB293	SB305
	so.	mple Depth:	3 to 6	300	5 to 6	5 m 6	3 to 6	5 to 6	Sm.	366	3 to 6	5 15 6
,		Sample Date:	10/13/95	10/12/95	10/17/95	10/12/95	10/12/95	84ZIQI	10/12/95	10/12/95	10/12/95	10/12/95
9 5	ranament Drs.	UG/KG	39 U	3.6 U	3.6 U	2	=) I		3.9 U	39.0
2 1	NICOL	UG/KG	3.9 U	3.6 17	3.6 U	?	7) I U		390	3.9 ti
1534	BETA ENDYSULFAM	UC/KG	3.9 U	3.6 U	3.6 U	?	7) 1 U		19 U	3.9 U
15	000,00	UG/KG	3.9 U	3.6 U	3.6 U	2	₹) ! (19 U	70 n
	ENDOSULFAN SIILFATE	UG/KG	3.9 U	3.6 13	3.6 U	7	7) II U		19 U	73.65
12		SCHO	3.9 U	3.6 U	3.6 U	7	7		3,00		J9 U	3. 5.
EST	NETHOXYCIILDA	UC/KG	200	<u>.</u>) !	⊃ =	∩ #		2		⊃ 22	70 C
PEST	ENDBIN KETONE	UG/KG	3.9 U	3.6 U	3.6 U	=	?		3.8 U		3.9 U	3.9 E
Į.	ENDRIN ALDEHYDE	UC/KG	3.9 U	3.6 U	J. Ø. U) †	÷		3.1 U		39 U	3.9 U
FEST	ALPRIA-CITLORDANE	UC/KG	7 n	0 9 1	ווו	7.1 O	2.10		7		7 N	26.
1534	CAMIMA-CHLORDANE	UG/KG	7 0	n 1 .1	0 11	7.I G	2.1 U		10		7.0	1.1 -
1534	TOXAPIENE	UGNG	n 002) (8)	310 C	210 U		300 C		O 002	O DING
FEST	PCB-1016 IAROCHI, OR 1016)	UCAKG	39 E	□ #	O 90	9	9		3 7		39 U	⊋ 24 24
12	PCB-1221 (A ROCHLOR 1221)	UCMCG	79 []	ט נג	J (1	2	2		=		_ Q	
1534	PCB-1222 (AROCHLOR 1232)	UCAKG	36	⊃ \$	⊃ %	⊃ ‡	⊋		<u>=</u>		39 🗅	30 C
	PCB-13/2 (ABOCIII.OR 13/2)	DWDA	39 65	⊃ #	36 U	D	⊋) 		⊃ £	J3 E
	PCB-1348 (AROCHLOR 1245)	TICARG	22 68	⊃ #) % (Ş ⊃	2 9) X		39 E	39 C
I SZ	PCB-1254 (ABOCHLOR 1254)	UGAKG	3 66	⊃ **	36 U	□ 0¥	9		n #		39 €	39 O
	PCB-1346 (ABOCHLOR 1340)	UGJKG) er	z	36 U	D 04) (†		⊃ #:		39 0	36 U
153	14.14-TETRACHLORO-META-KYLENE	CCAKG	5	Į	\$	Ç	*8		=		2	=
EST	DECACILOROBINIENYL	DOVICE	2	*	2	2	Ŧ		3		=	=
TOTMETAL	ALUMINUM	MGMG	10000	# (KXZ)	1340	1300	12100 =		# QZ 19		1 230 -	- 011
TOTMETAL	ANTIMONY	MGAKG	3.5 U)	33.03	11 W	36 UJ	34 U		3 €		3	3.3
TOTALETAL	ABSENIC	MCAKG	- [']	7.7	7.8	12.3 ×	<u>+</u>		14.		53	
TUTMETAL	BARIUM	MG/KG	- 4	<u>-</u>	=	<u>.</u>	192		200		8	- T
TOTACTAL	BEBYLLIUM	MGAGG	O 89'D) ; 	0.39 U	0 10 1	0 67 U		⊃ ;) ;	0 0 0
TOTMETAL	CABNIUM	MG/KG	790	O 65 0	5 2 2	99.0	30		D : 90		0 63 0	0.50
TOTALETAL	САГСІВИ	MCAKG	- 9151	- 059	09	9	2		3		<u> </u>	101
TOTMETAL	CHROMIUM, TOTAL	MCAKE		- 171	87	1 :	-		: :		= =	
TOTMETAL	COMPLT					2	11.6					
TOTALETAL	COPPER	MGAKG	224D	1000	- 0062	12100 =	177.0 =		9380		- 0027	£340 =
VOTAGE	I CAD	MEAKG	11.1 •	- 7	9.4	12,5 -	=		6.9		==	- 91
TOTALETAL	MACNESTIN	MC/KG	32.50	2820 -	1120 -	2850 =	3110		1XI)		- 0(4)	1240 •
TOTALETAL	NAME OF THE PROPERTY OF THE PR	MG/KG	:	206	1	- 13	• QUE		4 9 9		= OTS	256 =
TOTALETAL	MERCHEY	MEJKG	0.11.0	D 1.0	n 60 o	0 1.0	G. □		(F. L)		n 10	n II'a
TOTMETAL	MCKE.	MG/KG	- 702	4 1 B	17.4	Z0.2	20.9		8.6		2	7.6
TOTALETAE	FOTASSIUM	NG/KG	1 OE 01	116	7K6 J	1 7 1	1 92 1		48		=======================================	T 660
TOTALETAL	SELEVIUM	MC/KC	0.31 U	0 29 UI	0.M J	0.32 LH	0.34 1		- E 9		0 31 U	0.31 (1
TOTAL	STLVER	MG/KG	0410	0.57 []	0.37 U	0.42 D	0.42 U		040		D = 0	D = 0
TOTALETAL	SOUIUM	MC/KC	U 22 I	182 U	262 U	Ħ	92		2		∏ (∩+	38.4 U
TOTALETAL	Tilatitis	MC/KG	D 63 U	0.4 U	0.4.0	U.45 U	2.0		0.42 U		0430	0 13 U
TOTALETAL	VANA DIUM	MC/KG	11.1	31.2 *	19.2 =	25.9 •	29.4		-		27.5 .	- 9
TOTALETAL	3/07Z	MG/KG	119.1	(9.3.1	41.6	F	17.1		32.1		19.7	3041





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		StatlentD:	N.W.IS	MW19	N	FCW24	MW24	NW29	MW30	MW45	MW#	M		SFALM.	9	MAC	3
		Sample (D):	MWISI	MW191	MWISTRE	MW241	MWZ41A	MWZEI	MW301	MW451	MW461	NW481			NAWANI	MW 52 I	MWIN
		Sample Depth:	D test	0.00	0.74	0 6.4	0 40	13 m ()	G 49 C	O tri O	D en C	0 m 0		U Pri II	D to G	0 10 0	0 40
		Sample Date:	271,3996	377746	1774	THE	ZIENA	*70%	2710996	SAMA	WASC.	278.98		2/3/%	7117	2/1/26	*4.14
Group	Porameter	Unib					٠									l	l
Hrrb	DALAPON	IKM,	ns	30		s U	1015	310	1	30	릁	L	300	10.	Ę	nıs	۳
Herb	CHTANDA	tKth.	0.5 U	0.5 (1)		0.50	0.50	USU	0.51	11 5 11	=	=	 =	1 2 2	0.50	0.51	100
II:4	AICPA	UGAL	250 11	190		250 U	O IKE	U 1982	250 U	<u> </u>	25.0	250	28011	250 U	18€2	n IKZ	D (KZ
Herb	Att PP	ung.	150 U	241 (1		291 [1]	1911	25ti U	250 [5	2	() [18.Z	1000	L	234) [1	01852	3.5	nis:
IIab	DICHLORDFHOF	CHIA.	150	1.10		2.9 11	11 5.5	2.5 U	1872	25.0	2.5 U	L	L	130	100	7	2
flerb	2.4-D (DICHLORDPHENOXYA CETH, ACID)	UGAL.	2.5 U	2.5 U		2.5 U	11 2.5	2.5 U	2.5 U	250	15.0	2		250	1 S 7	2.511	2
lkrb	511.VEX (2,4,5-TP)	TH:AL	030	U 8 U		U.S.D	กรช	0.517	0.50	Σ.II	ū\$u		Ļ	0.50	=	100	100
lkrb	245 TORICHOROPHENOXYACETIC ACID; JUST.	111:11.	0.50	U \$ 0		0.50	กรถ	U.S.E.	43.0	0.5 U	0.50	L	L	9	200	100 m	100
lkrb	2,4 DB	11121.	2.5 U	2.5 1		7 S.U	150	1251	2.5 U	2.510	25.0	_	2	1000	1 2	1 2	Ī
1lerb	DIMOSED	DCA,	18.5 41	0.80		11.5.11	115.0	0517	0.51	25.0	11.5.1	S B			3		0.50
Metals TA1,	At linimins	THEM.	2h7ki =	1307		718	1,174	l 7XZ	186		ta tai	L	┖	JES 2 173	1 2	3	וואג
Metals TAL.	ANTMINY	lica.	UVU	18,91		U 6,61	716.01	19,713	0 11	L	0641	L	L	 	3	7	7
Metals TAI.	ARSENIC	7230	1,1 8,1	1.1		II MAK II	73 75 75	DAMO	D 89 C	2	Ĺ	Ļ	┞	11 69 0	(1 %)	1 K9 0	130
Metab TAL	DERYLLUM:	T/Dta	0.1510	0.15 U		0.1510	0.151	1120	0150	0.35 J	L	Ļ	Ļ	0.150	210	10	0 151
Metab TAL	CABAILUM	ncv.	1.8.1	I.N.I		1 K	3	⊃¥.	<u> </u> =	3	3	Ļ	Ļ	=	=	-	-
Metals TAL	CHROMIUM, TOTAL	UCAL	7.	2.2 []		20.3	74.I.s.	230	120	2	7	L	Ļ	ļ	ž	=	1,7
Nietała TAL	COPPER	ואנת	11 E.S.	315=		=	1184	3	7	1.5		╀	-	ļ	1	-	-
A Tetals TAL		חמאז.	- 4''	3.95	F	1 1 S	=======================================	7	=	2.1	10 52	, ,	. 3		1 5	-	
Alcteds TAI.	MERCURY	ואכער	n wo	0.1		U Mile	0.34 []	7 2		200		Ľ		178 (2118)	11 11 11	1070	100
Mtctals TAL	NICKET	tien.	23.61	12,1		7	18.81	170	110	17.0	1.7	╙	=	17.0	2.7 U	7	7.7
Ate Lada TAL	SELEVION	10501	LU 1.2	m 67		13.00	13 (3)	1 6 (1)	2.3	1111	m v Z	Ļ	==	2.3 (1)	101	1	7.0
Metals TAL	SILVER	HEAT.	2.2 U	77				2.2 UU		1.2 (1)	1 2	L	13	22 UI	2.7 [18]	10	22.0
Melab TAL	THALLRUM	, inc. in	U XA UJ	f), yx (i		0 85	(1) 48 (1)	U AN O	0.86	0.86(3)	11 866 11	OKA	5) 149	10 9% 61	0 %6	1 1 1
Metab TA1.	DNIZ	DEM:	UNI	V3.4 U		0	n D	1) K.F.I	U 8.51	12.2 U	22.2	11.3	-	125	13.2 U	1,21	10:47
Metab TAL	BARIUM	HEM.	447	42.9		(Sup	7508	13.6.1	¥1.1	ſ 421	17.66	1.19	*	- -	307	1	=
Metals TAL	CALCIUM	וומב	44933	= (KWL)		E(15/66	= [Bibb	141411	22981	LUMPA,	174(X);=	ISSKI	<u>-</u>	-		417tt)=	297083
Metab TAI.	COBALT	DGA.	12.3	4	_	2.2 j	1.2.1	0 1.9	1.8 U	15.6	U.S.M	4+	=	1317	10 16 13	18.2	1961
Metalk TAI.	IRUN	ECA.	3470 -	199 112		51903 a	7450	1 XXX	Jun [J]	12161	× KF≱	1130	_	32K U	4900	7960	36101=
Metab TA1.		lich.	19100	- (84)		5250 =	\$270 =	= 170	1238R) =	19500	Me(4) =	X47X	-	e (th P8	24HH) =	225fel =	- INIME
Aktab TAI,	ı	uch.	F F	204 a		17.2=	19.3	75.6=	3.2 U	,12fs ==	22X =	112	= 37 h	= ų	441 =	-167	- 1414
Meists TAI.	UNI	UGA.	1300	T (2) 17	-	1,54	136	767 1	767	I I I	85K J	1,930	1 1364	100	33.90 J	1,1351	747 U
Metals TAL		DOM:	45.2011	LI MEET		21300 UJ	21600110	(7) OXIS	1700m UJ	ff) untez	U INTELL	23)000 [13	III HARA	111	* INIZ 19	74(48) =	JAMEL
Metats TAL		ugh.	15.1	261		2.K U	2.3 U	5.1	1.6 13	1351	1.6	n o'i		1,611	160	n.e.u	1 4.0
PetriCit		ווניט	Д (1.1)	0.10	8.1 R	0.1 U	0.1 U	ΠIO	0.1	(10)	n i n	1 11	ı	12 0	0.10	10	7
Fest/PCB	ENDRIN ALDEHYDE	1624.	ΩII	O 1	9 I K	U.1 U	010	0.10	0.1 (1	0 1	11 11	f 13	=	0.13	0.11	11 11	U I
Pest/FCB	ALPHA-CHLORDANE	IXZAI.	0.05 U	D 907	S (0:4)	11 SOD	0.885 U	0.05 U	0.05	0.05 U	11 50 0	11 5/0 ()	800 [1	11.50	0.03 (1	0.03 []	USUA
PeuPCB	ORDANE	IKM.	11 (19)	11 050 11	0.053	11 9000	D 900	n sno	0.05 U	E 0.05	0.056	11 50 11	1410 TB	74.11	0.00	(1.50.1)	U SU U
Pess/PCB	TOXAMIENE	UCH	ΣΩ	30	5 R	5 11	s u	5 u	5 0	s]n	ns	5	511	10	5	11 8	111
		UCAL.	=	ŋ	-	n	n	n	10	1 1	n i	1	101	10	1)	11 11	1 1
		תכער	7	n ~	1 R	n ~	2 U	3 U	10	10	2 10	7	2 (1)	1,0	10	211	111
Peu/PCD	PCD-1232 (ARGCHLOR 1232)	ענאר	11	12	<u> </u>	ı	101	0	10	n I	ηl	1	10	- n-1	유	<u> </u>	11
				1	1			<u> </u>]					1	ŀ		

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Analytical Data Summary: Groundwater

		Station(D);	MWIB	MWIP	MWIS	MW24	MW24	MW23	MWW	MW45	MW46	MW48	MW49	NWN	MW52	MW53
		Sample ID:	MWIN	MWISH	MWINE	14WM	MW241A	NCW2A)	HW.W	MW45	191MH	MW431	MW49	HWWM	MW:521	MWS31
		Sample Depth:	0 10 0	0 00 0	0 00 0	O m O	() In ()	0 101 ()	041	11 63 41	0 m 0	() PM ()	0 10 (1	010	000	0 to 0
		Sample Date:	WATER.	WALKE	2775%	2/10/96	2/10/2/6	2/7/96	Ziers	27236	2/4/16	2/11/9/6	2/54/9/6	2/11/96	2711746	21,3956
Group	Parameter	Units														
PestPCD	PCB-1142 (AROCHLOR 1142)	.F.511	=	1		=	=	-	Ξ	=	=	=	=	=	=	=
Fest/PUB	PC:D-1348 (ARUCHLOS 1248)	UGA.	=		-	=	n I	l1	П	1.	=	=	크	=	=	쾰
PestPCB	PCB-1154 (A ROBOTH ON 1254)	HGA.	1	11		<u> </u>	Π	n I	п	1	-	n		=	=	=
Pest/Pit	PCR-1360 (ABOKTILOR 1360)	11071.	1	1	-	-	n ·	<u> </u>	7	2	=	-	=	=	=	=
PeruPCD	ALMA BIIC (ALPITA JIEXACIILOROUYCLOHEXANE)	ופע	U.\$0.0	กรถแ	- <u>2</u>	U 80 th	กเรา	0.0511	0.415	11 500	Si 50	90%	200	0.05 U	n sp n	2530
Preference	BETA BIIC (BETA	alca.	= 	190	\$ E	75 50 50 50 50 50 50 50 50 50 50 50 50 50	n soo	0.0510	n sno	0.69.0	TI-GOTO	0.00	A Su o	0.050	U 800	11 SO 11
Per rept.	DELTA DHU (142.TA	10CM			99	90.0	n şaa	\$	D 900	D 800	200	n sar o	(1) (2)	0.00	(1)	U Sta Ci
President	CAMMA BIIC (LINDANE)	11071.	0.00	O ISO	900							1904	300	0.0513	10 8 EU	DISU
Pest/PCB	HEPTACILLOR	נוכע	0.00	U SILO	0.05 R	0.05 U	D SIS U	USID	OIISU	0.05 11	0.0843	(1 505.0)	0.051	O SIS LI	U 63 U	0 50 0
PestFCII	ALDRIN	DCA.	A 909 H	(1900)	0.05 R	n gino	0.05 U	0.05	n suo	0.03	DENO	0.00	0.05,10	0.05 17	0.03	U 05 U
PERTO	HEPTACHLOR EPOXIDE	ucar.	D 2010	л 90 0	0.05.8	0.0511	0.0511	0.05 []	0.0511	0.05 13	D 200	0.05	0.0517	0.05 U	0 63 0	0 63 U
PHUTCD	ALPHA ENDOSULPAN	11071.	A 50:0	прин	0.05 R	UALO	0.05 33	0.03 11	0.0511	0.03 13	0.05	0.05 U	(1 50 0)	(1302.0)	D CIS 1)	ดเมรา
PewPCB	DIELDRIN	nan.	D IN	11 (0	B.0	O I	0.0	0.11	II IO	0.1	3 1 0	П (110	0.1	<u>-</u>	n 1 a
PestFCD	p.p. DDE	(1621)	0.10	ПО	0.0	Π	() I ()	1111	0.11	0.11	D 1 (1	0.6	11 I	0.10	6 1 0	D1:0
Pertro	ENDRIN	11621.	Ā 130	U.2 U	H (R	n la	0 11	0.10	0.111	0.11	0.1	11 (4)	10 1	(4) 1 (8)	<u>(1</u>	<u>.</u>
Post/FCB	DETA ENIXOSULFAN	UGAL	0.11	U.8 U	N 1 R	010	0.11	0.10	0111	o i u	0.1	0.1	U I I	<u></u>	(II)	O I
Percent	p,p'.DDD	HG/L	U.1.0	u i n	K) U	010	0.11	0.1 [1]	n I o	0.1	0.1	110		0.10	<u> </u>	<u> </u>
PerPCB	ENDOSHLFAN SULFATE	UGZL	0.0	0.1	=	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.10	#1 0	n 1 a	(D.1 LV	0	<u> </u>
PROTOB	p.pDDT	UGAL	II II	110	=	n I o	0.1 U	0.1 U	U I O	O.I U	0.10	0.1	Q	10	2	= =
PROTEB	METHUXYCHLOR	uga.	11.51.1	1150	0.5 8	U 2 ()	0.5 U	0.5 U	0.5 U	0.5 U	0.5 (1	0.5 U	_	0.5 U	0.50	0.510
SVOC	PIENIA.	116.71.	10 13	Л,0)		II) U	IO	Π	DOL	0	п	12	교	11	2	
SVOC	N-NITRUSODI-P-PROPYLAMINE	1)G7).	D (B)	(1 (t)		10 U	I O O	10 U	LO O	100	D 117	<u>1</u> 2	D III	in C	2	D.
SVOC	HEXACIII.OROETIIANE	uch.	D (S)	n di		11	n	ΠΠ	n (ii	D OI	10 [1		=	2	<u>n</u>
SVDC	NITROBENZENE	11GAL	130) (I		7	n	: :	2	D	=	=	_	J I III	2	<u>=</u>
SVOC	ISOPHORONE	UGAL	2	A GI		=	2	(III	DOL	n Oil	<u> </u>	=	4	72	<u>⊇</u>	=
SVOC	L'NITROPHENDE.	UGAL	2	101		=	101	=	3	<u> </u>	=	2	4	12	=	73 13 13 13 13 13 13 13 13 13 13 13 13 13
SAOC	1,4-DARITHYLPHEAGL	tkin.	2	=		=	2	12	2	101	=	=	4	=	3	20
SVOC	SMACHICAROETHONY) METHANE	UGAL	=	2		<u>n</u>	13.0		201	2		200	_		2	2
SVOC	1,4-DICHEOROPHENOL	ULV.	Ξ	<u>a</u>		=	10		D Q			3				3
SVOC	1,2.4.TRICHLOROBENZENE	UGA.	=	2		=	T)		0				4	2		2
SVOC	NAPITHALENE	tkin.	2	201		2	101	2	2	O	3	=	<u> </u>	Q EI		<u>=</u>
2005	65(2.C)II.OROETHYL) ETHER (2. CHLOROETHYL ETHER)	uga.	<u> </u>	13		<u> </u>	201	000	2	2	2	= =	. (a)	D. III	D CI	D
SVOC	4-CHLORDANILINE	UGA.	n	n wi		n ur	nω	100	n oi	10 01	n n	A CII	(a)	O DE	II) (II	14)
20.45	IDIENE	1000	III III	កាមា		10 11	TO O	UUI	nai	IO O	=	O	(I)	3) (1	<u>ء</u>
SVOC	4 CILORO, SMETHY LPHENOL.	IN 27L	Π(I)	10 01		10 01	ROIL	111	D	Ici O	1) 	Ω		=	<u>D</u>	1301
SVOC	AMETHYLMAPHTHALENE	W.A.	n us	ועומ	i I	10 01	D OI	tin O	130	10,01	=	=	_	<u>=</u>	Ē	1 E
SVOC	TADIENE	ואמים	nes	n oi		<u>п</u>	To O		D H	D I	Ξ	=	_	=	=	D IN
SVOC	2.4.6-TRICHLOROPHENOL	tka.	n m	ח		TCI D	III) U	Ω.	D U	5	Ξ	8	_	_	=	<u>=</u>
20.05		WAL	13 U	25 U	i	23 U	23 U	25 U	25 U	23.0	<u></u>	22.0	12/11	2541	23 (0	23,13

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	ı	Sample Death:	040	DIWIN	MSW ISING	147WZ#1	MW241A	MANZE!	MW.mi	NFW451	MW461	I KF-MIY	MM	MW931	MWS2I	MWS31	
		Named Pate	7/1 1/A	177.4	A PA	o in	O find	0 10 2	Pm 0	0.0	0 10 0	O III	9	O PECO	0 141 0	OFF C	ì
Group	Parameter	(Jedts				K PI	IK TI	94177	O lime	W/4/2		200-W	74.4.K	2/11/26	*17	MAX.	- 1
SVOC	2-CIII CORDNAPITTIAL ENE	(113/L	G DH	R (II		alui				101							Ė
SVOC	2-NITRDANILINE	וונאר.	25 U	25 U		35	2511	1 1 1	X	2	_	F	7				
SVOC	DINIETHYL FULHALATE	l'GA.	ומות	(II DH		7.11			3	=	=	L				0 3	J.
SYCIC	2-CHLOROPHENOL	IICAL	10 n	(1 0)		12		11 (8)	2	=		Ļ					
SVIXC	8	UCH.	10 17	Пи		2	n E	7	ij	E	=	E	-	1 1			T
SAOC	N.F.	UCAL	(B)	nui		Ξ		3	=	2	٤	=	=				T
JOAS		nen.	25.0	∏ \$2	-	13 27	2110			<u>∓</u>	_	*	ř	7		,	
SVOC	ACENAPITHENE	ואיזר	tu ni	20		noi	9			=		Ĭ	3 5	4			
SVOC	2.4.DINITROPHENOL	ווכער	25 111			135 (1)					1	ľ			1	1	т.
SVOC	+NITROFILENOI.	ንደነበ	7) 172	D \$2			25.11	=	ř					5 ;	7	1	<u>-</u> T
SVOC		Disa.	<u>n</u>				7	9			=	3 =		9 3			
SVOC		TOTAL TOTAL	=	<u>=</u>				1		-		1	1				
SVOC	THALATE	DCA.	Uni	10 (1)		III		<u> </u>				2					Т
SVOC		HGJ.	nui	FI D1		701	200	201				2					
SVOC		UCA.	nai	(I D)		2	3	2					12				Т
SVOC	I. PIIENYI, ETHER	IICAL	n ni	(IIII		2	3	┋									Т
ZOAS		IICA.	75 U	13 23		n S2	7 22	250			150		1 2	7		2 ; 2 ;	_
SVOC	71.	1527.	tn 82	25 17		N 52	U &		<u> </u>	ž	7 7						т.
SYCC	N-NTTROSODIPHENYLANINE	IKM.	10 01	ли		9				_			1 01				
SYOC	AL ETTIER	tica,	n or	n ea		0	n îi						-	2 2			_
SVOC	HEXACIL, OROBENZENE	11137,] nai	ПW		O GE	D N	0.01					9			2 2	Τ.
SVOC	IENDL	UCA.	50	3 0		0.5	s U	S	3			=	-	1	_		_
SVOC	Ę.	UCM.	n m	Uni		101) E		2			1	1 1			_
SVIC	H	DCB.	nπ	រាជា		11 DT	Πni	O DI	ПÜ			=	2 =	1			7
SVOC		NGAL.	n n	n III		(1 II)	nu	O III	Ω			12		13			I
3045		UCAL	O III	U		(101	រា បះ	n	O DI				12				Т
SVOC	IAL,ATE	UGA.	=	O.O.		ПОП	130 (3)	ti) U	Λmi –	(1) (D)	II		DWI		73 01	33	_
STORE	MTHENE	DC/J.	2	2		2	Ξ	IBI	n at	ក្នុងរ	10 01	100	3	Die	(1) (1) (1)		_
T		נונזט.	=			70	2	100	(1)	n ai	10 10	II OI	<u> </u>	3	ngi	11	_
STOR	ATE	Octo.	70	2		7	2	3	77 (S)	n ui	10,11	D DI	II III	100	11 EL	ti	,
		IKCA.	=	3		3	2	nuı	T) III	to U	100	Um	11 (31	n oi	201	11	_
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T		UGA.	3	2	1	3	=	חו	lo ti	10.0	113 11	U III	njat	n ou	7	n n	_
SVOC	HALATE	HZH.		3	1	n œ	2	2	Dit	10 [1]	1001	(10)	n	n	F) (H)	2	,
T), ESA	3	2	1	n n	2	<u> </u>	n (ri	10 01	10 17	(1) (1)	100	n	13	<u>=</u>	_
	3	lica.	2	<u> </u>		2	<u> </u>	Ω	10.01	10 0	D III	11 111	Л	₹	n Di	1 1	_
		DCM.	Î	Ð	7	2	191	<u>=</u>	D E	10 0	D 01	11111	16 101	=	n H	201	. -
2000	AT HENE.	uch.	2	2		20	200	3	Đ	ICE U	To II	11711	(1) (1)	O Di	n Di	n ()	_
		UCA.	2	2	7		7	ì	D	III D	16 11	Nu)	(10)	U al	n oi	101	8
300.0		tigh.		a P	7	=	7 (1)	2	ם	III U	10,01	10017	11 111	a ai	O M	nos	_
	DIDENZIABIAMITIRACEME	11621,	n n	701	7	2		O (II)	וני	1	0.01	TI III	 	2		2	_

Analytical Data A. Imary: Groundwater

Analytical Data Summory: Groundwater

		- Classical	MW26	200	MW 14	MW21	MW24	M;W3H	OEM5M	MW45	MW16	MW4B	MW49	MW50	MWS2	MW53
		Sample 10:	MWibi	MW(9)	MWISIRE	MW241	MWZ41A	MWIN	MW.los	MW451	MW461	MW4R1	MW491	HEAM	HWSZ	HWS31
		Sample Depth:	11	<u>e</u>	000	0 14 0	66.4	0mg	0.40	ll to II	U (a) U	0 10.0	940	() PM ()	0 44 0	0 th 1
		Sample Date:	21,1096	377.0%	ANN.	2710936	27313956	27.6%	2/113/56	272.946	2/9/4/6	2/16/46	274546	VIIA	VIIV6	2/13/9/6
Group	Paramoter	Units									Ì	ĺ				F
Γ	AUPERYLENE	11.71.	000	10 (1		E E	=	3	<u> </u>	=	3		=			
	RESOL	una.	D [H	D [14	-	귀	2	n III	2	2			<u> </u>	= :	3 2 3	
<u> </u>	31	11134.	D)	Ð	7	2	2	=	=					2 :		3 2
		UCA.	ΠOI	D S	7	<u>⊃</u> ⊒,	2	2	3	2						3 E
		UCM.	to u	101		2	=	<u>=</u>	=							
		UGA.	fin U	10 11		D 2	<u> </u>	=	2							
, oca		IXM.	=	пu		D and	101	10	5	2	3	2		n		=
		UKIN	10	101		1101	10 01	U (ri	D OI	Π	FI III	2	<u> </u>	2	3	3
		11:31	12			=	IO O	not	II (II	n Tur	1101	<u> </u>	= E	=	34	<u>⊃</u>
301	474) FLOOR	III.S.A.	1			7	οei	noi	1001	7 1	10 17	1101	□	(191)	2	2
YOC.		163	=	12		3	2	2	=	DIII	n et	1m C	100	T FOR	2	<u>⊃</u>
20,		100	1			3	2	3	=======================================	nu	រាមា	ti	10) 11	U	D (3)	<u> </u>
AOC.	_	11147.							3	3	2	0	II OH	U) (I)	I I	III II
voc		HCAL.	2		+				2	2		1 2	201	njoi	0.01	Uni
voc	TANONE	IICA.			+	2			=			3	20	3	ח	13
VOC	TOTAL 1, PRICHLOROETHENE	11CM.			+		2					3	1		=	n n
VOC	CHLOROFORM	IICA.	=	1	1			3 3	0 :	1	1			_	=	11
voc	1,1,1-TRICIII,OROETIIANE	IICA.	<u> </u>	2					2			: :				12
VOC	CARBON TETRACHLORIDE	IIGA.	<u>=</u>	2		3		2	2							1
VOC		INCAL.	<u> </u>	<u> </u>		2	3	1	2		3	3 :	2			
, COC	DROETHANE	1100	ШU	HOU		○	=	3	2		=	2	3	n 1	3 :	
	CITE	LC3.I	II III	TI (II) III	(181)	2	2	를	2	202	2	n n		-
20,		UZII.	11(11	រាល		DØI	17	7) 191	ᅙ	<u> </u>	<u>11</u>	3		n E	9	⊃ :
2002	TANE	1531.	3 3	noi		Пm	U DI)(I)) III	3	3	<u> </u>	2	12	2	=
	HMETHYL.2.		:	1000		- 1	1	3	2	=	2	2	-=	- Clai	IND	<u>D</u>
YOC		700	2 9					Ē	3	3	100	7,001	[4]11	U DI	UP (II	=
YOC	H, DROFROPENE	116.50	2 2			2	1		2	3	D (01	2	í	0 01	II) CI	13
YOC		7,511	- -	5 5			1	Ē	12	001	201	í) III	U 0#	(1) (1)	10.0	ы
VOC	NE	THE THE	3 3		Ì		=	2	3	3	12 81	3	11:01	III III	11 (1)	n (il
VOC	ROETIIANE	TEN.		-			69	3	2	3	11 (1)	101	15	(10)	n m	DI
VOC			2 5						=	3	III	<u>=</u>	1) [14	n od	10 (3	101
YOC		IN WA						2		1	(1)(0)	(I) Di	NO.	I ON	7	ונו נו
VOC	METUANE	UGA.	2				2			5	9	1	7	nus	(1) (1)	O
VOC	CHLOROMENZENE	UCN.				,	2 :	, I			1			1		D Di
30A	ETHYLDENZENE	UCAL.	<u>a</u>				3							12		¥
304		UCA.	D BI	립		3		2	3					1		=
NOC		ıl Gı L	<u> </u>	3		2		<u>n</u>	2	0						
ADC	DRAI	IIGA.	0	프		D D	=	n Di	<u> </u>	2	2	<u> </u>			2 1	
VOC	THLOROETHANE	liGA.	윤	골		2	מונו	1001				7		all lines	Alan I	֚֭֭֭֭֭֭֭֭֭֭֡֝֟֝֟֝֟֟֟֟֜֟֟

TAB

Appendix E

Appendix E Summary of Background Data Qualifiers

Appendix E Sackground Analytical Data Qualifiers Background Sampling Program Defense Depat Memphis Tennessee

	Τ''	1				Qualif	101		
Class	Matrix _	Chemical	<u> Tatal</u>	-	ĒR	1	R	U 22	m
DIOXIN	Sub Soil	1, 2, 3, 4, 6, 7, 8-HEPTACHLORODIBENZO-p-DIOXIN	22					22	\dashv
NIXOIC	Sub Soil	1.2.3.4.6.7.8-HEPTACHLORODIBENZOFURAN	22					22	-
DIOXIN	Sub Sali	1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	22					22	
DIOXIN	Sub Soll	1.2.3.4.7,8-HEXACHLORODIBENZO-p-DIOXIN	22			 		22	
DIOXIN	Sub Soil	1.2.3.4.7.8-HEXACHLORODIBENZOFURAN	22			├ ──	-	22	
DIOXIN	Sub Soll	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN				⊢ −	_	22	-
DIOXIN	Suito Soli	1.2.3,6,7,6-HEXACHLORODIBENZOFURAN	22			<u> </u>		22	
DIOXIN	Suito Soil	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	22			1		22	
DIOXIN	Suto Soil	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN				├		22	_
NIXOIO	Sub Soll	1,2,3,7,8-PENTACHLORODIBENZO-p-DIOXIN	22			├ ──		22	\dashv
DIOXIN	Sub Soil	1,2,3,7,8-PENTACHLORODIBENZOFURAN	22			├──-		22	
DIOXIN	Sub Soil	2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	22			├ -			
DIOXIN	Sub Soil	2,3,4,7,8-PENTACHLORODIBENZOFURAN	22			├ ──	_	22	\dashv
DIOXIN	Sub Soil	2,3.7.8-TETRACHLORODIBENZO-p-DIOXIN	22			↓	<u> </u>	22	
DIOXIN	Suto Soil	2.3.7.8-TETRACHLORODIBENZOFURAN	22			₩		22	—
DIOXIN	Sub Soll	DIOXIN/FURAN TOTAL EQUIVALENCY FACTOR	22	17	_	!	<u> </u>	5	
DIOXIN	Sub Soll	OCTACHLORODIBENZO-p-DIOXIN	22	3	<u> </u>	14		. 5	
DIOXIN	Sub Soil	OCTACHLORODIBENZOFURAN	22		<u> </u>	\leftarrow		22	
METAL	Sub Soll	ARSENIC	22	22		↓		<u> </u>	
METAL	Sub Soll	LEAD	22	16		1 0		└ ─	
METAL	Suto Soil	SELENIUM	22			1	<u></u> ,	10	11
METAL	Sub Soll	THALLIUM	22	<u> </u>				21	
METAL	Sub Soil	ALUMINUM	22			⊥ —		!	
METAL	Sub Soil	ANTIMONY	. 22			<u> </u>	<u> </u>	9	13
METAL	Sub Soll	BARIUM	22				<u> </u>	—	<u> </u>
METAL	Sub Soil	BERYLLUM	22			14		<u> </u>	
METAL	Sub Soil	CADMIUM	22] 3	_	19	
METAL	Sub Sall	CALCIUM	22			16	<u>k</u>	Щ.	
METAL	Sub Soll	CHROMIUM, TOTAL	22			1 -		<u> </u>	
METAL	Sub Soil	COBALT	22	4		16	<u> </u>	↓	
METAL	Sub Soll	COPPER	22				<u></u>		
METAL	Sub Soll	IRON	22			Ι			
METAL.	Suto Soil	MAGNESIUM	22	22		<u> </u>			<u> </u>
METAL.	Sub Soil	MANGANESE					7		
METAL	Sub Soll	NICKEL	27	2			ŀ		
METAL	Sub Soil	POTASSIUM	27		<u></u>	20			
METAL	Sub Soil	SILVER	22			7	2	20	
METAL	Sub Soll	SODIUM	27	2			<u> </u>	22	
METAL	Sub Soil	VANADIUM	27	2	2		T'		I
METAL	Sub Soil	ZINC	2	2	3	11	ર્ગ		<u> </u>
METAL	Sub Soil	MERCURY	2	2			1	21	
PEST	Sub Soll	2.4.5.6-TETRACHLORO-META-XYLENE	2	2	2	7	1		
PEST	Sub Soil	ALDRIN	22	2				22	
PEST	Sub Soil	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	2:	2	Ī	T		22	
PEST	Suto Soll	ALPHA ENDOSULFAN	2:	2	Ţ	1		27	4
PEST	Suto Soil	ALPHA-CHLORDANE	2:		1			2	ıl
PEST	Sub Soll	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	2					27	
PEST	Sub Soll	BETA ENDOSULFAN	2	2			T_{-}	2:	2
PEST	Sub Soll	DECACHLOROBIPHENYL	2		2				
PEST	Sub Seil	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	2					2.	2
PEST	Sub Soil	DIELDRIN	2		ī	1	1	11	
PEST	Sub Soil	ENDOSULFAN SULFATE	2		1.			2	
PEST	Sub Soil	ENDRIN	2		1 –		1	2	
PEST	Sub Soil	ENDRIN ALDEHYDE	2		T^-	1		2	
PEST	Sub Soli	ENDRIN KETONE	2		1	\top	1 -	2	
PEST	Sub Soil	GAMMA BHC (LINDANE)	. 2		1		1	2	
		GAMMA-CHLORDANE			1		T	2	
PEST	Sub Soil	I G ANNIAN-CUTOKONIA	-	-	-1		_		

Appendix E Background Analytical Data Qualifiers Background Sampling Program Defense Depot Memphis Tennessee

	 -	Deserve nebos wastrans s				Quali	ier		
Class	Matrix	Chemical	Total		ER	1	R	U 22	ü
PEST _	Suto Soil	HEPTACHLOR	22			⊢—	 	22	
PEST	Sub Soll	HEPTACHLOR EPOXIDE	22	_		├──		22	
PEST	Sub Soil	METHOXYCHLOR	22			├──		22	r—-
PEST	Suto Sail	p,p'-DDD	22			 	1	21	
PEST	Sub Soil	p,p'-DDE	22			 	╁──╌	21	\vdash
PEST	Sub Soil	p.p'-DDT	22			! '	┼─-	22	
PEST	Sub Soil	PCB-1016 (AROCHLOR 1016)				 	 	22	
PEST	Sub Soil	PCB-1221 (AROCHLOR 1221)	22			1	- -	22	
PEST	Sub Soil	PCB-1232 (AROCHLOR 1232)	22			╁─	 	22	
PEST	Surb Soil	PCB-1242 (AROCHLOR 1242)	- 22		┢	+	┼─	22	
PEST	Sub Soll	PCB-1248 (AROCHLOR 1248)	- 22		├──	+	+	22	
PEST	Sub Soil	PCB-1254 (AROCHLOR 1254)	22		├	+	╅──	22	
PEST	Sub Soil	PCB-1260 (AROCHLOR 1260)	+ - 22		\vdash	+	+	22	
PEST	Sub Soil	TOXAPHENE	- 22	 	 	┼	1 2		
SVOC	Sub Soil	1,2,4-TRICHLOROBENZENE	22	 -		+-	╅	22	
SVOC	Sub Soll	1,2-DICHLOROBENZENE	22	├ -	╌	╅	1	22	
SVOC	Sub Sall	1,3-DICHLOROBENZENE	22		\vdash	╅─	+	27	
SVOC	Suito Soli	1,4-DICHLOROBENZENE	- 22		\vdash	+	1 7	-	
SVOC _	Sub Soil	2.2'-OXYBIS(1-CHLORO)PROPANE	22		╁	┿	1 -		
SVOC	Sub Soil	2.4,5-TRICHLOROPHENOL			. 	+	┿	 	┯
SVOC	Sub Soil	2,4,6-TRIBROMOPHENOL	27	1	╄—	+	+ ;	21	
SVOC	Sub Soli	2,4,6-TRICHLOROPHENOL	22		┼──	+	 		
SVOC	Sub Soil	2.4-DICHLOROPHENOL			 	╫	+ :	_	
SVOC _	Sub Soil	2,4-DIMETHYLPHENOL	22	-	 	+	1 3	_	
SVOC	Sub Soil	2.4-DINITROPHENOL			┼	+-	+ -	2	
SVOC	Sub Soll	2.4-DINITROTOLUENE	- 2		╁	+-	+ -	2	á
SVOC	Sub Soli	2.6-DINTROTOLUENE	- 2		╁	+	+ -	2 2	
SVOC	Stato Stati	2-CHLORONAPHTHALENE	2		+	+		2 2	
svoc_	Sub Soll	2-CHLOROPHENOL	- 2		,	+	+	 -	
SVOC	Sub Soil	2-FLUOROBIPHENYL				+	+	╅─	+-
SVOC	Sub Soil	2-FLUOROPHENOL	- 2	1	1	+	1	2 2	ᇟ
SVOC	Sub Soll	2-METHYLNAPHTHALENE	- 		+	+		2 2	
SVOC	Sub Soil	2-METHYLPHENOL (o-CRESOL)	- 2		+	+	_	2 2	
SVOC	Sub Soil	2-NITROANIUNE	- 2		+	 -	+-		d
5VOC	Sub Soil	2-NITROPHENOL	- 2		+		+		9
SVOC	Sub Soll	3.3'-DICHLOROBENZIDINE			+	+-	+		á
5VOC	Suito Soli	3-NITROANIUNE	 		┿	+	+-	_	6
SVOC	Suto Soll	4.6-DINITRO-2-METHYLPHENÖL	- 2		┿	+	+-		d
SVOC	Sub Soll	4-BROMOPHENYL PHENYL ETHER			+-		-		20
SVOC	Suto Sail	4-CHLORO-3-METHYLPHENOL	- 2		+		+		io .
SVOC _	Sub Soll	4-CHLOROANILINE	- 2		╅━		+		20
SVOC	Sub Soil	4-CHLOROPHENYL PHENYL ETHER		 _	┪	+	1		ă –
SVOC	Sub Soll	4-METHYLPHENOL (p-CRESOL)		2	╅─	+	+-		XO TO
SVOC	Sub Soil	4-NITROANIUNE		2	+	+	┿	2 1	16
SVOC	Sub Soli	4-NITROPHENOL	- 	2	╅	+	+-		zol _
SVOC	Suito Soli	ACENAPHTHENE		2	+	+			20
SVOC	Suto Soil	ACENAPHTHYLENE		2	╁		+	5 - 5	žď.
SVQC	Sub Soll	ANTHRACENE		2	╫	+			19
SVOC	Sub Soil	BENZO(a)ANTHRACENE		2			+-		12
SVOC	Sub Soil	BENZO(a)PYRENE		2	+	+	~┼		12
SVOC	Sub Soil	BENZO(b)FLUORANTHENE		2	┪		+		12
SVOC	Sub Soil	BENZO(p.h.i)PERYLENE		#	+-	+	+		12
SVOC	Sub Soil	BENZO(k)FLUORANTHENE	- 	22	╅╌	+	+		19
SVOC	Sub Soll	BENZYL BUTYL PHTHALATE	- 	12	+-	+	+		20
SVOC	Suto Soil	bis(2-CHLOROETHOXY) METHANE		22	+	+	+		14
SVOC	Suto Soil	bls(2-CHLOROETHYL) ETHER (2-CHLOROETHYL		22	+-	+	+		18
SVOC	Sub Soll	bis(2-ETHYLHEXYL) PHTHALATE		22				4	···

Appendix E Background Analytical Data Qualifiers Background Sampling Program Defense Depat Memphis Tennessee

					_	Qualif	101		
-	1	Chemical	Total	E	ER	1	R	U	W
Class	Sub Soil	CARBAZOLE	22				2	20	
VOC	Sub Soil	CHRYSENE	22				2	19	1
VOC	Sub Soil	DI-n-BUTYL PHTHALATE	22			<u> </u>	2	20	
SVOC	Sub Soll	DHn-OCTYLPHTHALATE	22				2	17	3
SVOC	Sub Soil	DIBENZ(Q,h)ANTHRACENE	22				3	12	7
	Sub Soil	DIBENZOFURAN	22				2	20	
SVOC	Sub Soll	DIETHYL PHTHALATE	22			[2	20	
	Sub Sail	DIMETHYL PHTHALATE	22			<u> </u>	2	20	
SVOC	Suto Soil	FLUORANTHENE	22			2			
SVOC	Sub Soil	FLUORENE	22				2		
SVOC	Sub Soil	HEXACHLOROBENZENE	22				2		<u></u>
SVOC	Sub Soll	HEXACHLOROBUTADIENE	22				2		<u> </u>
SVOC		HEXACHLOROCYCLOPENTADIENE	22				2		
SVOC	Sub Soil	HEXACHLOROETHANE	22				2	20	
SVOC_	Sub Soil	INDENO(1.2,3-c,d)PYRENE	22				3		7
5VOC	Sub Soli	ISOPHORONE	22			T^{-}	2	20	
SVOC	Sub Soil	N-NITROSODI-n-PROPYLAMINE	22			†	2	14	
5VOC	Sub Soll	N-NITROSODI-HENYLAMINE	22			T	2	20	
SVOC	Sub Soll		22			-	2	20	\Box
SVOC	Sub Soil	NAPHTHALENE	22			\top	2		
\$VOC	Sub Soil	NITROBENZENE	- 22			 	2		
SVOC	Sub Soil	PENTACHLOROPHENOL	22			+	2		
SVOC_	Suto Soil	PHENANTHRENE	22	6		+	1 2		-
SVOC	Sub Soll	PHENOL	22			†~~~ <u>`</u>	2 2	_	
SVOC	Sub Soil	PYRENE				+	╫─╌	22	
9	Sub Soll	1,1,1-TRICHLOROETHANE	22		_	╅	+-	22	
VOC _	Sub Soil	1,1,2,2-TETRACHLOROETHANE	22			+	+	22	
VOC	Sub Soil	1,1,2-TRICHLOROETHANE			\vdash	+	+	22	
VOC_	Sub Soll	1,1-DICHLOROETHANE	22	ļ	┢	+	+-	22	
VOC	Sub Soil	1.1-DICHLOROETHENE	22		⊢–	+	+-	22	
VOC _	Sub Soll	1.2-DICHLOROETHANE	22	<u> </u>	├	+	+	22	
VOC.	Sub Soil	1,2-DICHLOROPROPANE			ļ-—	+-	┼	 "	┼—
VOC	Sub Soil	1-BROMO-4-FLUOROBENZENE (4-	22	22	₩	+	⊹	╁	ᅪ
VOC	Sub Soil	2-HEXANONE	22	 	₩	+	 	22	-
voc _	Sub Soil	ACETONE	22		1—	┷		٢	
VOC	Sub Soll	BENZENE	22		<u> </u>	┿	┿	27	
VOC	Sub Soil	BROMODICHLOROMETHANE	22				┿┈	27	
VOC	Sub Soll	BROMOFORM	27		↓	┿	→—	22	
VOC	Sub Soll	BROMOMETHANE	22		╙	-↓		22	
VOC	Sub Soil	CARBON DISULFIDE	2		<u> </u>	+	2	20	
VOC	Sub Soil	CARBON TETRACHLORIDE	. 27		 _	4	—	27	
voc	Sub Soil	CHLOROBENZENE	27		╙	┿	┿	.27	
voc _	Sub Soil	CHLOROETHANE	2		↓	┵	┵	2	_
voc_	Sub Soll	CHLOROFORM	2		<u> </u>		┷	2	<u>2</u>
voc	Sub Soil	CHLOROMETHANE	22						
voc	Sub Soil	cis-1,3-DICHLOROPROPENE	2					2	
VOC	Sub Soli	DIBROMOCHLOROMETHANE	22					2	
VOC	Suto Soil	ETHYLBENZENE	2:				\bot	2	
VOC	Sub Soil	METHYL ETHYL KETONE (2-BUTANONE)	22	2			Ш	2	
VOC	Sub Soll	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2	2			<u> </u>	2	
voc	Sub Sail	METHYLENE CHLORIDE	2					2	
VOC	Sub Soll	STYRENE	2			\Box		2	2
<u>voc</u>	Sub Soii	TETRACHLOROETHYLENE(PCE)	2	2					2
VOC	Sub Soil	TOLUENE	2	2	\mathbf{I}^{-}			2	2
	Sub Soil	TOLUENE-DB	2		2			T	
VOC _		TOTAL 1,2-DICHLOROETHENE	2	2	\top	1	\top	2	2
	Sub Soil	Total Xylenes	2		1	\neg	4		8
VOC	Sub Soll Sub Soll	trans-1,3-DICHLOROPROPENE	2		1	\neg		7 2	2

Appendix E Background Analytical Data Qualifiers Background Sampling Program Defense Depot Memphis Tennesses

		Datense Depot Mamphis Tenr						-
	T		 		<u>Quall</u>	THOIR	ר ט ד	ᆔ
Class	Matrix	Chemical	Total	-	ER J.	┼┺	22	——
/OC	Sub Soil	TRICHLOROETHYLENE (TCE)	22	 +		┰	22	
VOC _	Sub Soil	VINYL CHLORIDE	22			 	21	\dashv
-IERB	Sub Soll	2.4 DB	22			╀┼┼	21	-
HERB	Sub Soil	2.4.5-T (TRICHLOROPHENOXYACETIC ACID)	22		- -	 	21	-1
HERB	Sub Soll	2,4-D (DICHLOROPHENOXYACETIC ACID)	22	- 22			' ' '	—
HERB	Sub Soli	2.4-DICHLOROPHENYLACETIC ACID	22	- 22	_		1 21	—-
HERB	Suto Soil	DALAPON	22			┼╌┼	21	
HERB	Sub Soll	DICAMBA	22		_	ᠰ᠊᠆᠆;	1 12	
HERB	Sub Sail	DICHLOROPROP	22	 +		+	1 21	一一
HERB	Sub Soll	DINOSEB	22	 -			1 21	
HERB	Sub Soil	MCPA	22			┿╾	1 21	\vdash
HERB	Sub Soil	MCPP	22			╂	1 21	$\vdash \vdash$
HERB	Sub Soll	SILVEX (2.4.5-TP)	22		_	╉──	'} - { '8	
METAL	GW	ARSENIC	12	-		╫	5	-
METAL	GW	LEAD	12			;;;;	+ - ?	10
METAL	GW	SELENIUM	12			4	+ +	_
METAL	GW	THALLIUM	12			╌	1 2	1- 14
METAL	GW	ALUMINUM	12	1		4-	1 1	
METAL	GW	ANTIMONY	12			#—	11	⊢⊢
METAL	GW	BARIUM	12			1	+]
METAL	GW	BERYLLIUM	12			4—	1 10	
METAL	GW	CADMIUM	12			┿-	12	├
METAL	GW	CALCIUM	12	12		↓ —		 _
METAL	GW	CHROMIUM, TOTAL	12	2		 _	30	 -
METAL	GW	COBALT	12			5		} _
METAL	GW	COPPER	12	_1		3	- 8	_
METAL	GW	IRON	12	6		3	<u> </u>	1 2
METAL	GW	MAGNESIUM	12	12			Д.	—
METAL	GW	MANGANESE	12	11		┵	 _	<u> </u>
METAL	6W	NICKEL	12			3		4
METAL	GW	POTASSIUM	12			9		3
METAL	ew	SILVER	12			—		2 10
METAL	GW	SODIUM	12	2		2		2 6
METAL	GW	VANADIUM	12			4		8
METAL	GW	ZINC	12			—	1:	
METAL	GW	MERCURY	12					9 3
PEST	GW	2,4,5,6-TETRACHLORO-META-XYLENE	12	12				↓
PEST	GW	ALDRIN	12			—		
PEST	GW	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)		·				
PEST	GW GW	ALPHA ENDOSULFAN	12					
PEST	- GW	ALPHA-CHLORDANE	12				1	
PEST	GW GW	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	12			—		2
PEST _	GW	BETA ENDOSULFAN	12	11		—		2
PEST	GW	DECACHLOROBIPHENYL	12			—	→—	┷
PEST	GW	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	12			—		2
PEST	GW -	DIELDRIN	12					2
PEST	GW	ENDOSULFAN SULFATE	12			—		2
PEST	GW	ENDRIN	12			Щ		2
PEST	ew ew	ENDRIN ALDEHYDE	_ 12					2
PEST	GW	ENDRIN KETONE	12					2
PEST	lew	GAMMA BHC (UNDANE)	12					2
PEST	GW	GAMMA-CHLORDANE	1;					2
PEST	GW	HEPTACHLOR	1					2
PEST	GW	HEPTACHLOR EPOXIDE	1:					12
PEST	GW	METHOXYCHLOR	1:					2
PEST	GW	p.p'-DDD	<u>)</u>					12
	GW -	p.p'-DDE	1					12
PEST	JGW_	ININ-DOL						

Appendix E Background Analytical Data Qualifiers Background Sampling Program Defense Depat Memphis Tennessee

	 _	Deserted Dopper montplant	T			Quali	l e r		
Class	Matrix	Chemical	Total		ER	J	R	U	w
PEST	GW	p.oʻ-DDT	12			<u> </u>	L	12	
PEST	GW	PCB-1016 (AROCHLOR 1016)	12			├	└	12	
PEST	GW	PCB-1221 (AROCHLOR 1221)	12			↓ —	├	12	
PEST	GW	PCB-1232 (AROCHLOR 1232)	12			—-		12	
PEST	GW	PCB-1242 (AROCHLOR 1242)	12			↓		12	
PEST _	GW	PCB-1248 (AROCHLOR 1248)	12			↓	<u> </u>	12	
PEST	GW	PCB-1254 (AROCHLOR 1254)	12			—	⊢ —	12	
PEST	GW	PCB-1260 (AROCHLOR 1260)	12		L	<u> </u>	↓	12	
PEST	GW	TOXAPHENE	12			—-	₩-	12	<u> </u>
SVOC	lgw	1,2,4-TRICHLOROBENZENE	.12		Ь_	 _	└ ─	12	
SVOC	lgw -	1,2-DICHLOROBENZENE	12		Ь	└	↓ _	12	
svoc	GW	1.3-DICHLOROBENZENE	12			↓	↓	12	
SVOC	GW	1,4-DICHLOROBENZENE	12			<u> </u>	↓	12	
svoc _	- GW	2,2'-OXYBIS(1-CHLORO)PROPANE	1;	:[<u> </u>	<u> </u>	ـــــ	12	
	GW	2,4,5-TRICHLOROPHENOL	13			<u> L. </u>	\perp —	12	
SVOC_	GW.	2.4.6-TRIBROMOPHENOL	13	12			1	<u> </u>	<u> </u>
SVOC_		2,4,6-TRICHLOROPHENOL	12			Ţ	<u> </u>	12	
SVOC	GW	2.4-DICHLOROPHENOL	12	2				12	
SVOC	GW	2.4-DIMETHYLPHENOL	12				<u>L</u>	12	
SVOC	GW	2.4-DINITROPHENOL	12	2				4	8
SVOC		2,4-DINTROTOLUENE	1:				Γ	12	2
SVOC_	GW	2.6-DINITROTOLUENE	1;					12	2
SVOC	GW	2-CHLORONAPHTHALENE	1:	2		1		12	4 <u> </u>
SVOC	GW	2-CHLOROPHENOL	 	2	1	1		12	2
SVOC	GW	2-FLUOROBIPHENYL	1:		2	\top			T
SVOC	GW	2-FLUOROBIFHENTL	1:		žĺ.		Ī	Ţ	Τ
SVOC	<u>e</u> w	2-METHYLNAPHTHALENE	<u> </u>		─ ─	\top		12	2
SVOC_	GW	2-METHYLPHENOL (O-CRESOL)	- 1		1	1		1,7	4
SVOC	GW		i					12	2
SVOC	GW	2-NITROANILINE 2-NITROPHENOL	<u> </u>		 	ī	T	12	2
SVOC	GW	3,3'-DICHLOROBENZIOINE	1		\top			12	2
SVOC	GW	3-NITROANIUNE		2	1			1. 13	2
SVOC	GW	4.6-DINITRO-2-METHYLPHENOL	1	2	\top	1	7		a (a
SVOC	GW	4-BROMOPHENYL PHENYL ETHER	 		\top		\top	10	2
SVOC	GW	4-CHLORO-3-METHYLPHENOL		2	十一	\top	7	1:	2
SVOC	GW			2	 	\top	1	1:	2
SVOC	GW	4-CHLOROANILINE		21	+-		丁一	1	2
SVOC_	GW	4-CHLOROPHENYL PHENYL ETHER		2	+	 		1	2
svoc	GW	4-METHYLPHENOL (p-CRESOL)		2	1	-	1	1	2
SVOC	GW	4-NITROANIUNE		2 -	 		1	1	2
SVOC	GW	4-NITROPHENOL		2	1	1	1	1	2
svoc	GW	ACENAPHTHENE		2	1	1	1	1	2
SVOC	GW	ACENAPHTHYLENE		2	1			1	2
SVOC	GW	ANTHRACENE		12	1		1	 1	2
SVOC	GW	BENZO(O)ANTHRACENE		2	\top		\top		2
SVOC	GW	BENZO(O)PYRENE		12	\top	\neg	1 -		2
SVOC	GW	BENZO(b)FLUORANTHENE		12	\top	\dashv	\top		2
SVOC	GW	BENZO(g,h.i)PERYLENE		12	1 -	\top	1		2
SVOC	GW	BENZO(K)FLUORANTHENE		12	┪		╗		11
SVOC	GW	BENZYL BUTYL PHTHALATE		12	\top	-1-	-		2 _
svoc	GW	bis(2-CHLOROETHOXY) METHANE		12	一	\top	\neg		12
SVOC	GW	BIX(2-CHLOROETHYL) ETHER (2-CHLOROETHYL		12	┪	+	1		12
SVOC	GW	bis(2-ETHYLHEXYL) PHTHALATE		12		+-	_		12
SVOC	GW	CARBAZOLE		12	+	╅	\dashv		12
SVOC	GW	CHRYSENE		12	+-	+	+		12
SVOC	GW	DHn-BUTYL PHTHALATE		12	$\dashv -$	+	+		12
SVOC	GW	DI-n-OCTYLPHTHALATE		12	+	+	_†_		12
SVOC	GW	DIBENZ(a,h)ANTHRACENE		14					

Appendix E Background Analytical Data Qualifiers Background Sampling Program Defense Depot Memphis Tennessee

		Detense Depot Mamphis Tenn				Quali	Ne:		
	1	Chemical	Total	=	ER		R	U	3
Class	Matrix	<u> </u>	12					12	
VOC	GW_	DIBENZORURAN DIETHYL PHTHALATE	12	_				12	<u></u>
VOC	GW	DIMETHYL PHTHALATE	12					12	
SVOC	GW		12				<u> </u>	12	
svoc	GW	FLUORANTHENE	12					12	
svoc	GW	FLUORENE HEXACHLOROBENZENE	12					12	
SVOC	GW	HEXACHLOROBUTADIENE	12					12	<u> </u>
SVOC_	GW	HEXACHLOROCYCLOPENTADIENE	12				Ī	12	
SVOC_	GW	HEXACHLOROETHANE	12			Ι		12	
svoc	GW	INDENO(1.2.3-c,d)PYRENE	12			Ι		12	
svoc	GW		12					12	<u> </u>
svoc	GW	ISOPHORONE N-NITROSODI-0-PROPYLAMINE	12			1		12	<u> </u>
SVOC	GW	N-RITROSODI-N-PROPYLAMINE	12			1	i –	12	
<u>svoc</u>	GW	N-NITROSODIPHENYLAMINE	12			1		12	
svoc	GW	NAPHTHALENE	12			1		12	
SVOC	GW	NITROBENZENE	12			1	 	12	<u> </u>
SVOC	GW	PENTACHLOROPHENOL	12			1		12	Ī
SVOC	GW	PHENANTHRENE	12			1	1	12	<u> </u>
SVOC	GW	PHENOL	12		├─	1	1	12	<u> 1</u>
5VOC	<u>[ew</u>	PYRENE			 	+-	1	11	
VOC	GW	1,1,1-TRICHLOROETHANE		 -		 	1	12	ž i
VOC	GW	1,1,2,2-TETRACHLOROETHANE	12		 	+	 	12	
VOC	GW	1,1,2-TRICHLOROETHANE	12			+	+	12	
VOC	GW	1,1-DICHLOROETHANE			i 	1	╗	111	
VOC	GW	1,1-DICHLOROETHENE	12		\vdash	+	1	12	
VÖC	GW	1,2-DICHLOROETHANE			┿	+	+	12	
VOC _	GW	1,2-DICHLOROPROPANE	12		,—	+	+	 	┯
VOC	GW	1-BROMO-4-FLUOROBENZENE (4-			-	+	+-	1 10	a i —
VOC	GW	Z-HEXANONE			╂──	+	┪	17	
VOC]GW	ACETONE			┼	+	+	17	
VOC	GW	BENZENE	12		┼-	+	+	1:	_
VOC	GW	BROMODICHLOROMETHANE			┿┈	+-	+	1	
VOC	GW	BROMOFORM	12		╁		+	+	
VOC _	GW	BROMOMETHANE			┿	┿	+	 	
VOC	GW_	CARBON DISULFIDE	12	_	╁		+	+ 1	
VOC	GW	CARBON TETRACHLORIDE	<u>1;</u>		┼-	+	+-		1
VOC	GW	CHLOROBENZENE	1:		┼	+	+-		2 -
VQC	GW	CHLOROETHANE			╁	+			2
VOC	GW	CHLOROFORM	1		╁─	+-	-}		2
VOC	GW	CHLOROMETHANE			╁—	+	-1-		2
VOC	GW	cis-1.3-DICHLOROPROPENE	1:		+	+-			2
VOC	GW	DIBROMOCHLOROMETHANE	<u> </u>		+		+		2
VOC	GW	ETHYLBENZENE	<u> </u>		+			_	_
VOC	GW	METHYL ETHYL KETONE (2-BUTANONE)	1:		┿	-	-	╼╂╼╼╬	12
voc	GW	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)			┿		+		12
VOC	GW	METHYLENE CHLORIDE		2	⊹				12
VOC	GW	STYRENE	1		+-	+-			12
VOC	GW	TETRACHLOROETHYLENE(PCE)	1		+-	-	-		
VOC	GW	TOLUENE		2	┰	+	+		12
VOC	GW	TOTAL 1,2-DICHLOROETHENE		2	4-	+	+		12
VOC	GW	Total Xylenes		2		+	+-		12
VOC	GW	trans-1.3-DICHLOROPROPENE		2	├	+	- - -		
VOC	ĞŴ	TRICHLOROETHYLENE (TCE)		2	-	_	4-		11
VOC	GW	VINYL CHLORIDE		2	4	_	__		12
HERB	GW	2.4 08		2					12
HERB	ĞŴ	2.4.5-T (TRICHLOROPHENOXYACETIC ACID)		2		_			12
HERB	GW GW	2.4-D (DICHLOROPHENOXYACETIC ACID)		2			\bot	——	12
HER8	GW_	2.4-DICHLOROPHENYLACETIC ACID	1	2 '	12				

Appendix E Background Analytical Data Qualifiers Background Sampling Program Defense Depot Memphis Tennessee

	 -	Defense Depot Memphis Jeni	101100			Qualif	10		
Class	Matrix	Chemical	Total	=	ER	J	R	U	W
HERB	GW	DALAPON	12			┡		12	\dashv
HERB	GW	DICAMBA	12			┝	—	1 12	-
HERB	GW	DICHLOROPROP	12					12	\dashv
HERB	GW	DINOSEB	12			⊢⊣		12	\dashv
HERB	GW	MCPA	12			╂──┤	—	12	—⊣
HERB	GW	MCPP	12			 -	 	12	
HERB_	GW	SILVEX (2.4.5-TP)	12			3		19	\dashv
DIOXIN	Sediment	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-p-DIOXIN	22			 		22	\dashv
DIOXIN	Sediment	1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	22			├ ┈─		22	
DIOXIN	Sediment	1,23,4,7,8,9-HEPTACHLORODIBENZOFURAN	22	———		├ ─	\vdash	22	
DIOXIN	Sediment	1.2.3.4.7.8-HEXACHLORODIBENZO-p-DIOXIN	22			+	 -	22	
DIOXIN	Sediment	1.2.3.4,7,8-HEXACHLORODIBENZOFURAN	22	 -		+	⊢-	22	
DICXIN	Sediment	1.2.3.6,7,8-HEXACHLORODIBENZO-P-DIOXIN	22			+-		22	
DIOXIN	Sediment	1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	22			+-	╁──	22	
NIXOID	Sediment	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN				₩-	╄	22	
DIOXIN	Sediment	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	22			┼	├─-		_
DIOXIN	Sediment	1,2,3,7,8-PENTACHLORODIBENZO-p-DIOXIN	22				₩	33	$\vdash \vdash$
DIOXIN	Sediment	1,2,3,7,8-PENTACHLORODIBENZOFURAN	22			+-	├	22	$\vdash \vdash$
DIOXIN	Sediment	2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	22			↓	↓ —		⊢—
DIOXIN	Sediment	2.3.4.7.8-PENTACHLORODIBENZOFURAN	22	_		↓ —-	₩	21	<u> </u>
DIOXIN	Sediment	2,3,7.8-TETRACHLORODIBENZO-p-DIOXIN	22			₩-	┷	22	
DIOXIN	Sediment	2,3,7,8-TETRACHLORODIBENZOFURAN	22	_	_	—	╄	22	Ь——
DIOXIN	Sediment	DIOXIN/FURAN TOTAL EQUIVALENCY FACTOR	22	11	_			11	
DIOXIN	Sediment	OCTACHLORODIBENZO-p-DIOXIN	22	2	<u> </u>		4	11	
DIOXIN	Sediment	OCTACHLORODIBENZOFURAN	22		<u>L</u>	↓	ــــــ	22	_
	Sediment	ARSENIC	22	5		1:		3	2
METAL	Sediment	LEAD	22	3		11	3	Д.—	L'
METAL	Sediment	SELENIUM	22				4	10	
METAL	_	THALLUM	22		Γ	T	2	. 19	<u> </u>
METAL	Sediment	ALUMINUM	22	18	Γ.	T -	4		
METAL	Sediment	ANTIMONY	22				2	17	<u> </u>
METAL	Sediment	BARIUM	22			1.	4		<u> </u>
METAL	Sediment	BERYLLIUM	22			T	5	17	
METAL	Sediment	CADMIUM	22	3	3	T_{-}	Ι	19	<u> </u>
METAL	Sediment	CALCIUM	22	7	7	<u>. </u>	3		<u> </u>
METAL	Sediment	CHROMIUM, TOTAL	22		4	1	d	<u> </u>	
METAL	Sediment		22			1	4	E	3 .
METAL	Sediment	COBALT	22		1	7	5		1
METAL	Sediment	COPPER	22		<u> </u>		\top		T
METAL	Sediment	IRON	27		_	7	3		\Box
METAL_	Sediment	MAGNESIUM	22			\top	$oxed{\Box}$		
METAL	Sediment	MANGANESE	27		3		5		9
METAL	Sedment	NICKEL					위	1:	3
METAL	Sediment	POTASSIUM	2	2	T	\top	ī	2	1
METAL	Sediment	SILVER SODIUM	2		1	\neg	1	19	9
METAL	Sediment		- 2		1	7	22		
METAL	Sediment	VANADIUM	2		3	 	Ÿ.		
METAL	Sediment	ZNC	2		3	1	\top	2	1
METAL	Sediment	MERCURY			2	\top	\top		\top
PEST	Sediment	2.4.5.6-TETRACHLORO-META-XYLENE	2		1 –	 	十	2	2
PEST	Sediment	ALDRIN			+	_	\top		2
PEST	Sediment	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)			+		╅		2
PEST	Sediment	ALPHA ENDOSULFAN	 		+-	-1 	4		7
PEST	Sediment	ALPHA-CHLORDANE	2		+	- 	-} 	1 2	
PEST	Sediment	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	2		+	 -	+		2 -
PEST	Sediment	BETA ENDOSULFAN			2		+	┿	-
PEST	Sediment	DECACHLOROBIPHENYL		1	-	+	+		22
PEST	Sediment	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	<u>ا۔۔۔۔۔</u>	4	Щ.		—		<u></u>

Appendix E Background Analytical Dato Qualiflets Background Sampling Program Defense Depot Memphis Tennessee

	_	Detense Department				Qualit	ler		
Class	Matrix	Chemical	Total	8	ER	J	R	U	W
PEST	Sediment	DIELDRIN	22	1				21	
PEST	Sediment	ENDOSULFAN SULFATE	22			L	<u> </u>	22	
PEST	Sediment	ENDRIN	22					22	
PEST _	Sediment	ENDRIN ALDEHYDE	22			L.—		22	
PEST	Sediment	ENDRIN KETONE				<u> </u>	<u> </u>	22	
PEST	Sediment	GAMMA BHC (LINDANE)	22			<u>1</u>		22	
PEST	Sediment	GAMMA-CHLORDANE	22	2	1	2	<u> </u>	17	
PEST	Sediment	HEPTACHLOR	22			<u> </u>		22	
PEST	Sediment	HEPTACHLOR EPOXIDE	22	1	<u> </u>	<u> </u>		21	
PEST	Sediment	METHOXYCHLOR	22			Ь_	<u> </u>	22	
PEST	Sediment	p.p'-00D	22			3	<u>!</u>	19	
PEST	Sediment	p,p'-DDE	22	1		<u> </u>	1	20	
PEST	Sediment	p.p'-DDI	22					22	
PEST	Sediment	PCB-1016 (AROCHLOR 1016)	22		Г.			22	
	Sediment	PCB-1221 (AROCHLOR 1221)	22					22	
PEST		PCB-1232 (AROCHLOR 1232)	222		I		_	22	
PEST	Sediment Sediment	PCB-1242 (AROCHLOR 1242)	22					22	
PEST		PCB-1242 (AROCHLOR 1242)	22		I			22	
PEST	Sediment	PCB-1254 (AROCHLOR 1254)	22					22	
PEST	Sediment Sediment	PCB-1260 (AROCHLOR 1260)		\vdash	1			22	
PEST		TOXAPHENE	22		1	T -		22	
PEST	Sediment_	1,2,4-TRICHLOROBENZENE	22		i i			22	
SVOC	Sediment		22		1	+-		22	
SVOC	Sediment	1,2-DICHLOROBENZENE	22		1	1	1	22	
SVOC	Sediment	1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE	22		 	1	1	22	
SVOC	Sediment		22		+-	 	1	21	1
SVOC	Sediment	2.2-OXYBIS(1-CHLORO)PROPANE	22		+	1	1	22	
SVOC	Sediment	2,4,5-TRICHLOROPHENOL	22		,	+	1	 	
SVOC	Sediment	2.4.6-TRIBROMOPHENOL	22		┪	 	1	22	_
SVCC	Sediment	2.4,6-TRICHLOROPHENOL	- 22		+	+	+	22	_
SVOC	Sediment	2.4-DICHLÖROPHENOL			+	+	+	22	_
SVOC	Sediment	2.4-DIMETHYLPHENOL	22	} -	+	+	1	18	<u> </u>
SVOC	Sediment	2,4-DINITROPHENOL	22		+	+	+	22	-
SVOC	Sediment	2,4-DINITROTOLUENE	- 2		+	+	+	22	
SVOC	Sediment	2,6-DINITROTOLUENE	2		+	+	+	22	╂
SVOC	Sediment	2-CHLORONAPHTHALENE			+	+	+	22	1
SVOC	Sediment	2-CHLOROPHENOL	27			+	+		├
SVOC	Sediment	2-FLUOROBIPHENYL				+	┪—	+	\vdash
SVOC	Sediment	2-FLUOROPHENOL	22		⁴—	-	- -	22	-
SVOC	Sediment	2-METHYLNAPHTHALENE	22		+	+	+	22	
5VOC	Sediment	2-METHYLPHENOL (o-CRESOL)	22		┿╌	+-	+	22	
SVOC	Sectiment	2-NITROANILINE	27		+-			22	
svoc	Sediment	2-NITROPHENOL	2		∔-	+	+	22	
SVOC	Sediment	3.3'-DICHLOROBENZIDINE		4	↓ —	┿	+-	22	
SVOC	Sediment	3-NITROANILINE			+		+	27	
SVOC	Sediment	4,6-DINITRO-2-METHYLPHENOL	2		+-	+	+		
SVOC	Sediment	4-BROMOPHENYL PHENYL ETHER	2		+	+	+	27	
SVOC	Sediment	4-CHLORO-3-METHYLPHENOL	2		+-	+	+	27	
SVOC	Sediment	4-CHLOROANILINE	2		+-		+	27	
SVOC	Sediment	4-CHLOROPHENYL PHENYL ETHER	2		- }	+		27	
5VOC	Sediment	4-METHYLPHENOL (p-CRESOL)	2		+		+	2	
SVOC	Sediment	4-NITROANILINE	2			4	+	2	
SVOC	Sediment	4-NITROPHENOL	2		┷	4.—	_	2	
SVOC	Sediment	ACENAPHTHENE	2			Щ.	4	20	
svoc	Sediment	ACENAPHTHYLENE		2				2	
SVOC	Sediment	ANTHRACENE		2	1		1	21	
SVOC	Sediment	BENZO(a)ANTHRACENE		2	2		4	1	_
SVOC	Sediment	BENZO(a)PYRENE	2	2	2		5		5

Appendix E Background Analytical Data Qualiflers Background Sampling Program Defense Depot Memphis Tennessee

		Detense Depoi Memphis Tenne				Qualifier	
		Chamberl	Total	- 1	ER	J R	T U W
Class	Matrix	Chemical		- 2		5	15
SVOC	Sediment	BENZO(b)FLUORANTHENE	_22 22			 	15
SVOC	Se <u>diment</u>	BENZO(g,h.i)PERYLENE	22	2		5	15
<u>svoc</u>	Sedimen!	BENZO(K)FLUORANTHENE	22			 	22
SVOC	Sediment_	BENZYL BUTYL PHTHALATE	22	_			22
SVOC	Sediment	bis(2-CHLOROETHOXY) METHANE	22			1	17
SVOC	Sediment	DIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL	- 22		_	1 1	21
SVOC	Sediment	bis(2-ETHYLHEXYL) PHTHALATE	22			1 2	20
SVOC	Sediment	CARBAZOLE		- 2		1 0	14
SVOC _	Sediment	CHRYSENE	22		-	1 1 -	22
SVOC	Sediment	DI-n-BUTYL PHTHALATE	22		 -	1	21
SVOC	Sediment	DH-n-OCTYLPHTHALATE				2	20
SVOC _	Sediment	DIBENZ(a,h)ANTHRACENE	22		├	1 2	20
SVOC	Sediment	DIBENZOFURAN	22		-	┿	22
SVOC_	Sediment	DIETHYL PHTHALATE	22		 	 	22
SVOC	Sediment	DIMETHYL PHTHALATE	- 22		_	8	12
SVOC	Sediment	FLUORANTHENE			├	 3 -	20
SVOC	Sediment	FLUORENE			₩	- 	22
svoc	Sediment	HEXACHLOROBENZENE	22				22
SVOC	Sediment	HEXACHLOROBUTADIENE	22		₩		22
SVOC	Sediment	HEXACHLOROCYCLOPENTADIENE	22		₩	┽──┼─	22
svoc	Sediment	HEXACHLOROETHANE			 	- 	15
SVOC	Sediment	INDENO(1,2,3-c,d)PYRENE	22		├	4	
5VOC	Sediment	ISOPHORONE	22		└	↓	22
SVOC	Sediment	N-NITROSODI-n-PROPYLAMINE	22		↓ _		16
SVOC	Sealment	N-NITROSODIPHENYLAMINE	22		↓		22
SVOC	Sediment	NAPHTHALENE	22		ــــــ	- 	21
svoc_	Sediment	NITROBENZENE	22		<u> </u>		17
SVOC	Sediment	PENTACHLOROPHENOL	22		↓	+-+	21
SVOC	Sediment	PHENANTHRENE	22		4	4	16
SVOC	Sediment	PHENOL	22			5	17
SVOC	Sediment	PYRENE	22		4	8	12
VOC	Sediment	1,1,1-TRICHLOROETHANE	22				22
VOC	Sediment	1.1.2.2-TETRACHLOROETHANE	22		<u>1 </u>		22
VOC	Sediment	1.1.2-TRICHLOROETHANE	22				22
	Sediment	1.1-DICHLOROETHANE	22				22
VOC	Sediment	1), 1-DICHLOROETHENE	22				22
VOC	Sediment	1,2-DICHLOROETHANE	22		Ι.		22
<u>voc</u>		1,2-DICHLOROPROPANE	22		T		22
voc	Sediment	1-BROMO-4-FLUOROBENZENE (4-		2	2	7 \	
VOC_	Sediment	2-HEXANONE	22				22
VOC	Sediment	ACETONE	22		7		17
voc	Sediment	BENZENE	22		1 -		22
voc	Sediment	BROMODICHLOROMETHANE			1		22
voc	\$ediment	BROMOFORM.	22		1	\top	22
voc	Sediment		27	1	1	-11:-	22
VOC	Sediment	BROMOMETHANE	2				22
VOC	Sediment	CARBON DISULFIDE CARBON TETRACHLORIDE	2		1_	\neg	22
voc	Sediment		2		十		22
VOC	Sediment	CHLOROBENZENE	2.		1		22
voc	Sediment	CHLOROSTHANE			\top	- [22
VOC	Sediment	CHLOROFORM	2		┪-	1 1	21
VOC	Sediment	CHLOROMETHANE	2:		_	+ +	22
VOC_	Sediment	cls-1,3-DICHLOROPROPENE	2	; 	+		22
VOC	Sediment	DIBROMOCHLOROMETHANE			+		22
VOC	Sediment	ETHYLBENZENE			+	10	12
VOC	Sediment	METHYL ETHYL KETONE (2-BUTANONE)			+		22
VOC	Sediment	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2		+		22
VOC	Sediment	METHYLENE CHLORIDE	2	4			1 24

Appendix E Background Analytical Data Qualiflers Background Sampling Program Defense Depat Memphis Tennessee

		Dalause nabol Matuhum				Qualif	ìor		
-1	Matrix	Chemical	Total	-	ER	1	R	U	w
Class		STYRENE	22					22	
VOC	Sediment	TETRACHLOROETHYLENE(PCE)	22					22	∤
VOC	Sediment	TOLUENE	22			3		19	
VOC	Sediment	TOTAL 1.2-DICHLOROETHENE	22			L		22	—
VOC	Sediment	Total Xylenes	22			ļ		22	-
VOC	Sediment	trans-1,3-DICHLOROPROPENE				l		22	<u>—</u> і
VOC	Sediment	TRICHLOROETHYLENE (TCE)	22			Ь	<u>L</u> .	22	
voc	Sediment	VINYL CHLORIDE						22	
HERB	Sediment	2.4 DB	22			ــــــ		22	
HERB	Sediment	2,4,5-T (TRICHLOROPHENOXYACETIC ACID)	22			<u> </u>	<u> </u>	22	
HERB	Sediment	2.4-D (DICHLOROPHENOXYACETIC ACID)	22				<u> </u>	22	
HERB	Sediment	2,4-DICHLOROPHENYLACETIC ACID	22	22	<u> </u>	└		 	
HERB	Sediment	DALAPON	22			└	↓	22	
HERB	Sediment	DICAMBA	22			<u> </u>	L	22	
HERB	Sediment	DICHLOROPROP	22				↓	↓	22
HERB	Sediment	DINOSEB	22			<u> </u>		22	
HERB	Sediment	MCPA	22			<u> </u>	↓	22	
HER8	Sediment	MCPP	22			<u> </u>	 	22	
HER8	Sediment	SILVEX (2.4,5-TP)	22				╙-	22	
DIOXIN	Surf Soil	1.2.3.4.6,7,8-HEPTACHLORODIBENZO-p-DIOXIN	22			10	<u> </u>	16	
DIOXIN	Surf Soll	1.2.3.4.6.7.8-HEPTACHLORODIBENZOFURAN	27				<u> </u>	22	<u> </u>
DIOXIN	Surf Soil	1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	22		Ľ.	Щ,	<u> </u>	22	
DIOXIN	Surf Soll	1,2.3,4,7,8-HEXACHLORODIBENZO-p-DIOXIN	22	<u> </u>	<u>L_</u>	⊥	<u> </u>	22	
NIXOID	Surf Soll	1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	27		oxdot			22	<u> </u>
DIOXIN	Surf Soil	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	22		l			22	
NIXOIQ	Surf Soll	1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	22	2		<u> </u>	┷-	22	<u> </u>
DIOXIN	Surf Soil	1,2,3,7,8,9-HEXACHLORODISENZO-P-DIOXIN	2				<u> </u>	22	Щ.
DIOXIN	Surf Soil	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	2	2	Ι''	1		22	
DIOXIN	Surf Soil	1.2.3.7.8-PENTACHLORODIBENZO-p-DIOXIN		2			Ш.	22	
DIOXIN	Surf Soil	1.2.3.7.8-PENTACHLORODIBENZOFURAN	2:		ļ	1_		22	
DIOXIN	Surf Soil	2.3,4,6,7,8-HEXACHLORODIBENZOFURAN	2					22	
DIOXIN	Surf Soil	2.3.4.7.8-PENTACHLORODIBENZOFURAN	2	2				22	
NKOID	Surf Soll	2.3.7.8-TETRACHLORODIBENZO-p-DIOXIN	2	2[27	
DIOXIN	Surf Soil	2,3,7,8-TETRACHLORODIBENZOFURAN	2	2			Ι	22	
DIOXIN	Surf Soil	DIOXIN/FURAN TOTAL EQUIVALENCY FACTOR	2	2 2	4		Ι.		
DIOXIN	Surf Soil	OCTACHLORODIBENZO-p-DIOXIN	2	2 1	a	1	2		<u> </u>
DIOXIN	Surf Soil	OCTACHLORODIBENZOFURAN	2	2		Ι	3[15	1
METAL	Surf Soll	ARSENIC	2	2 2	2	1		Щ.	
METAL	Surf Soil	LEAD	2	2 1	6	<u> </u>	6	Ш.,	
METAL	Surf Soll	SELENIUM	2	2			3	1	
	Surf Soil	THALLIUM	2	2				27	4
METAL	Surf Soil	ALUMINUM	- 2		2			Ш.	Щ.
	Surf Soli	ANTIMONY	2	2			1)
METAL METAL	Surf Soil	BARIUM	1 2	2 2	2			1	<u> </u>
METAL	Surf Soll	BERYLLIUM		2		1	15		<u>/</u>
METAL	Surf Soil	CADMIUM		2			4	<u> </u>	В
METAL	Surf Soil	CALCIUM		2	7		15		
METAL	Surf Soil	CHROMIUM, TOTAL			6		6		
METAL	Surf Soil	COBALT	7	2	4		18		<u> </u>
METAL	Surf Soll	COPPER		2 1	6		6		
	Surf Soil	IRON		2 2	2				
METAL METAL	Surf Soll	MAGNESIUM		2 2	22				
	Surf Soil	MANGANESE			5		7		
METAL	Surf Soil	NICKEL			22		T		
METAL	Şurf Soll	POTASSIUM		22	9		13		
METAL		SILVER		22			1	2	
METAL	Surf Soll	SODIUM		22	\top			2	2
METAL	Surf Soil					_	_		

Appendix E Background Analytical Data Qualifiers Background Sampling Program Defense Depot Memphis Tennessee

			<u>l</u>			Qualif			
Class	Matrix	Chemical	Total	-	ER	┸	R	U	3
METAL	Surf Soll	VANADIUM	22	22				╀	
METAL	Surf Soil	ZINC	22	3		19	<u> </u>	 	 -
METAL	Surf Soil	MERCURY	22	3		 '	<u> </u>	18	⊢-
PEST	Surf Soil	2,4,5,6-TETRACHLORO-META-XYLENE		22			<u> </u>	┸┈┈	├—
PEST	Surf Soil	ALDRIN	22				<u> </u>	22	├—
PEST	Surf Soil	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)	22					22	├──
PEST	Surf Soll	ALPHA ENDOSULFAN	22			.			
PEST	Surf Soll	ALPHA-CHLORDANE	22			4	├	17	
PEST	Surf Soll	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	22				-	22	
PEST	Surf Soll	BETA ENDOSULFAN	22		<u> </u>	⊢ —	⊢-	 ZZ	├
PEST	Surf Soll	DECACHLOROBIPHENYL	22	22	<u> </u>	↓	├ ─	+	;──
PEST	Surf Soil	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	22		<u> </u>	 	<u> </u>	22	_
PEST	Surf Soil	DIELDRIN	22	5	<u> </u>	<u> </u>	—	1 8	
PEST	Surf Soil	ENDOSULFAN SULFATE			 -	↓	₩	22	
PEST	Surf Soil	ENDRIN	22		Щ-	₩-	├ ──	22	
PEST	Surf Soil	ENDRIN ALDEHYDE			<u> </u>	-	₩	22	
PEST	Surf Soll	ENDRIN KETONE	22		<u> </u>	 	₩	22	
PEST	Surf Soil	GAMMA BHC (UNDANE)	22		Ь	↓	<u>↓</u>	22	
PEST	Surf Soil	GAMMA-CHLORDANE	22	<u> </u>	<u> </u>	1 4	4—	17	
PEST	Surt Soil	HEPTACHLOR	22		<u> </u>	↓	⊢	22	
PEST	Surf Soll	HEPTACHLOR EPOXIDE	22		<u> </u>	<u> </u>	ـــــ	21	
PEST	Surf Soll	METHOXYCHLOR					—	22	
PEST	Surf Soll	p.o'-DDD	22		<u> </u>	<u> </u>	Щ	21	
PEST	Surf Soll	p.p'-DDE	22	1		1	ــــــ	20	
PEST	Surf Soil	p.p'-DDT	22	2	<u> </u>	1	<u>!</u>	19	
PEST	Surf Soll	PCB-1016 (AROCHLOR 1016)	22				Щ.	22	
PEST	Surf Soil	PCB-1221 (AROCHLOR 1221)	22				<u> </u>	2	<u> </u>
PEST	Surf Soil	PC8-1232 (AROCHLOR 1232)	22		<u> </u>		┷	27	
PEST	Surf Soll	PCB-1242 (AROCHLOR 1242)	22		<u> </u>		 	27	
PEST	Surf Soil	PCB-1248 (AROCHLOR 1248)	22			<u> </u>	Ь.	2.	
PEST	Surf Soil	PCB-1254 (AROCHLOR 1254)	22		<u> </u>			2,	
PEST	Surf Soil	PC9-1260 (AROCHLOR 1260)	22				4	20	
PEST	Surf Soll	TOXAPHENE	. 22				1	2.	
SVOC	Surf Soil	1,2,4-TRICHLOROBENZENE	22				<u> I </u>	2	
SVOC	Surf Soll	1,2-DICHLOROBENZENE	22		Π.		Ι	2	
SVOC	Surf Soll	1.3-DICHLOROBENZENE	22				Ι"	2:	
svoc	Surf Soil	1,4-DICHLOROBENZENE	22			T	1	2:	2
SVOC	Surf Soll	2.2-OXYBIS(1-CHLORO)PROPANE	22			L.,	<u> </u>	11	
SVOC	Surf Soll	2.4,5-TRICHLOROPHENOL	22				<u> </u>	2	2
SVOC	Surf Soil	2.4.6-TRIBROMOPHENOL	22	2	2		$oldsymbol{oldsymbol{\perp}}$	Щ.,	┸
SVOC	Surf Soil	2,4,6-TRICHLOROPHENOL	22				丄	2	
SVOC	Surf Soil	2,4-DICHLOROPHENOL	22					7 2	
SVOC	Surf Soil	2,4-DIMETHYLPHENOL	22				上	2	4
SVOC	Surf Soll	2.4-DINITROPHENOL	22			<u> </u>	Щ,		8
SVOC	Surf Soil	2.4-DINITROTOLUENE	22		1	Ш.		2	
SVOC	Surf Soll	2.6-DINITROTOLUENE	22		I _			2	
SVOC	Surf Soll	2-CHLORONAPHTHALENE	. 22	1			<u> </u>		2
SVOC	Surf Soil	2-CHLOROPHENOL	22				\perp	2	2
SVOC	Surf Soil	2-FLUOROBIPHENYL	22				<u> </u>	4	
SVOC	Surf Soll	2-FLUOROPHENOL	22		2				4
SVOC	Surf Soll	2-METHYLNAPHTHALENE							2
200C	Surf Soil	2-METHYLPHENOL (o-CRESOL)	2						2
\$VOC_	Surf Soil	2-NITROANIUNE	22						22
SVOC	Surf Sall	2-NITROPHENOL	2				I^-		22
SVOC	Surf Soil	3,3'-DICHLOROBENZIDINE	2				1	2	22
SVOC	Surf Soil	3-NITROANILINE	2		\top	T	1		22
SVOC	Surf Soil	4.6-DINITRO-2-METHYLPHENOL	2:			\top	\top		18

Appendix E Background Analytical Data Qualiflers Bockground Sampling Program Defense Depat Memphis Tennessee

		T		Qualiflet					
Class	Matrix	Chemical	Total		ER	1	R	U 22	티
SVOC	Surf Soil	4-BROMOPHENYL PHENYL ETHER	22			-		22	
SVOC	Surf Soil	4-CHLORO-3-METHYLPHENOL	22		<u> </u>	⊢ −		22	
SVOC	Surf Soil	4-CHLOROANILINE		<u> </u>	├—		├─	22	
SVOC	Surf Soil	4-CHLOROPHENYL PHENYL ETHER	22		├	ł		22	
SVOC	Surf Soil	4-METHYLPHENOL (p-CRESOL)	22		 	-		22	
SVOC	Surt Soll	4-NITROANILINE	22		├	-	├ ──	18	
SVOC	Surf Soil	4-NITROPHENOL	22		⊢—	-	⊢—	22	
SVOC	Surf Soll	ACENAPHTHENE	22		_	 ,	─	21	
SVOC	Surf Soil	ACENAPHTHYLENE	22	 		 	├	21	
SVOC	Surf Soll	ANTHRACENE	22	<u> </u>		╄╌	├	13	
SVOC	Surf Soil	BENZO(a)ANTHRACENE	22	 	├			1 11	-
SVOC	Surf Soil	BENZO(o)PYRENE		<u> </u>	-	F 6		_	-
SVCC	Surf Soil	BENZO(b)FLUORANTHENE	22			8		- 11	
svoc_	Surf Soil	BENZO(g,h,))PERYLENE	22		<u> </u>	8		11	
svoc	Surf Soil	BENZO(k)FLUORANTHENE	22		↓	8	! -	11	
svoc	Surt Soll	BENZYL BUTYL PHTHALATE	22		!	—	↓	22	
svoc	Surf Soil	bis(2-CHLOROETHOXY) METHANE	22		┺-	┷	—	22	
svoc	Surf Soll	DIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL	22			ــــــــ	╄	16	
SVOC	Surf Soil	DIS(2-ETHYLHEXYL) PHTHALATE	22		<u> </u>	 	↓	21	<u> </u>
SVOC	Surf Soil	CARBAZOLE	22		┸-		4	21	
svoc	Surf Soll	CHRYSENE		<u> </u>	<u> </u>	,	4	12	<u> </u>
SVOC	Surf Soil	DHn-BUTYL PHTHALATE	z			ـــــــــ	<u> </u>	22	L
SVOC	Surf Soil	DI-n-OCTYLPHTHALATE	7 2		<u> </u>		$oldsymbol{ol}}}}}}}}}}}}}}}}}$	20	<u></u>
SVOC	Surf Soll	DIBENZ(G.h)ANTHRACENE	27		<u>L</u>		3	17	
SVOC	Surf Soil	DIBENZOFURAN	2:		1		┸–	22	
SVOC	Surf Soil	DIETHYL PHTHALATE	2.		<u> </u>	Щ.		22	↓ _
SVOC _	Surf Soil	DIMETHYL PHTHALATE	2	2				22	-
SVOC	Surf Soll	FLUORANTHENE	2		<u> 1 </u>	10	<u> </u>	11	
SVOC	Surf Soll	FLUORENE		2[Ш.	22	
svoc	Surf Soil	HEXACHLOROBENZENE	2	2		Τ	<u> </u>	22	
svoc_	Surf Soil	HEXACHLOROBUTADIENE	2		L	1		22	
\$VOC	Surf Soil	HEXACHLOROCYCLOPENTADIENE	2	2		<u> </u>	<u> </u>	22	
SVOC	Surf Soil	HEXACHLOROETHANE	2	2		Ι		22	_
SVOC	Surf Soil	INDENO(1.2.3-c.d)PYRENE	2	2	1		6	13	
SVOC	Surf Soil	ISOPHORONE	2	2				27	<u>!</u>
SVOC	Surf Soil	N-NITROSODI-ri-PROPYLAMINE	2	2				16	
SVOC	Surf Soil	N-NTROSODIPHENYLAMINE	2	2				2.	
	Surf Soll	NAPHTHALENE	2	2	T		\mathbf{I}	22	
SVOC	Surf Soli	NITROBENZENE		2			\top	20	
SVOC	Surf Soil	PENTACHLOROPHENOL		2				2	
SVOC	Surf Soll	PHENANTHRENE		2	1		В	1;	
SVOC	Surf Soll	PHENOL	2	2	3	_	2	1	
			2	2	ì		0	1	
SVOC VOC	Surf Soil	1,1,1-TRICHLOROETHANE		2				2:	
VOC	Surf Soil	1,1,2,7-TRICKEOROETHANE	7	2				2	
		1,1,2-TRICHLOROETHANE		2	\mathbb{I}			2	
VOC	Surf Soil Surf Soil	1,1-DICHLOROETHANE		22	T		$oldsymbol{\mathbb{I}}$	2	
VOC	Surf Soll	1.1-DICHLOROETHENE		2				2	
	Surf Soil	1.2-DICHLOROETHANE		22		\Box		2	
VOC	Surf Soll	1,2-DICHLOROPROPANE		22				2	2
VOC.)-BROMO-4-FLUOROBENZENE (4-			22		I		
VOC	Surf Soll	2-HEXANONE	-	22	\top		1	2	2
VOC	Surf Soll	ACETONE		22	1		\top		9
voc	Surf Soil			22	1	\neg	\top	7 2	2
VOC	Surf Sall	BENZENE		22	\top	\neg	 		2
VOC	Suri Soi)	BROMODICHLOROMETHANE		22	\top	\top	_		<u> </u>
voc	Surf Soil	BROMOFORM		22	\top		十		2
VOC	Surf Soil	BROMOMETHANE							_

Appendix E Background Analytical Data Qualifiers Background Sampling Program

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eanered	Deboi	Memphis	Tennessee

		T	Ţ	Qualifièr					
- 1	Matrix	Chemical	Total	-	ER	1	R	U	W
Class		CARBON DISULFIDE	22	$\neg \neg$	-	2		20	
oc	Surf Soil	CARBON TETRACHLORIDE	22				\neg	22	
OC_	Surf Soil	CHLOROBENZENE	22			1 1	\neg	22	
oc _	Surf Soil		22			T		22	
oc	Surf Soll	CHLOROETHANE	22			1	\neg	22	
OC	Surf Soll	CHLOROFORM	22			+	\neg	22	
/OC	Surf Soll	CHLOROMETHANE	22			+	$\neg \neg$	22	
<u>/OC</u>	Surf Soil	cis-1,3-DICHLOROPROPENE	22			++	$\neg \neg$	22	
/OC	Surf Soll	DIBROMOCHLOROMETHANE	- 22			╅╼═╅╴	\dashv	22	
/ÖC	Surf Soll	ETHYLBENZENE	- 22			╌┼	\dashv	21	_
/QC _	Surf Soil	METHYL ETHYL KETONE (2-BUTANONE)	22			 	\dashv	22	
/OC	Surf Soil	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)				╅━━╅	\dashv	22	
/OC	Surf Soll	METHYLENE CHLORIDE	22			+	\dashv	22	—.
/OC_	Surf Soil	STYRENE	22			+	\longrightarrow	22	_
/OC	Surf Soil	TETRACHLOROETHYLENE(PCE)	22		<u> </u>	+			
/OC	Surf Soll	TOLUENE	22			+ +		21	_
VOC	Surf Soll	TOTAL 1,2-DICHLOROETHENE	22			4		22	<u> </u>
70C	Surf Soil	Total Xvienes	22			10		12	Ь—
<u>/oc</u>	Surf Soll	trans-1,3-DICHLOROPROPENE	22			$\perp \perp$		22	ļ.—
voc	Surf Soll	TRICHLOROETHYLENE (TCE)	22					22	<u> </u>
VOC	Surf Soil	VINYL CHLORIDE	22			\Box		22	
HERB	Surf Soll	2,4 DB	22			7 <u>.</u> 1	_ 1	21	
		2,4,5-T (TRICHLOROPHENOXYACETIC ACID)	- 22				1	21	
HERB	Surf Soil	2,4-D (DICHLOROPHENOXYACETIC ACID)	22			\top	1	21	
HERE	Surf Soil	2,4-DICHLOROPHENYLACETIC ACID	22	22		$+ \neg$			${}^{-}$
HERB	Surf Soil		22		<u> </u>	1		21	Г
HERB	Surf Soil_	DALAPON			\vdash	1		21	\vdash
HERB_	Surf Soil	DICAMBA			┥	+	<u></u>	_	┰
HERB	Surf Soil	DICHLOROPROP			₩	- 	<u></u>	21	
HERB	Surf Soll	DINOSEB			├	+	-	21	
HERB	Surf Sall	MCPA	22 22		╁	┵	 ;	21	_
HERB	Surf Soll	MCPP			├	+ +	 ;	21	
HERB	Surf Soil	SILVEX (2,4,5-TP)	22		├	+ .	<u> </u>	17	
NIXOIG	SW	1,2,3,4,6,7,B-HEPTACHLORODIBENZO-p-DIOXIN	22		-	4			
DIOXIN	SW	1, 2, 3, 4, 6, 7, B-HEPTACHLORODIBENZOFURAN			┡	1 1		22	
DIOXIN	SW	1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	22		₩	+		22	
DIOXIN	sw	1,2,3,4,7,8-HEXACHLORODIBENZO-p-DIOXIN	22		↓			22	
DIOXIN	SW	1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	22		<u> </u>			22	
DIOXIN	ŚW	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	22	<u> </u>				22	
DIOXIN	sw	1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	27					22	<u> </u>
DIOXIN	SW	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	22					22	
DIOXIN	SW	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	22		Т			22	2
	SW	1.2.3.7.8-PENTACHLORODIBENZO-p-DIOXIN	22		1	1		21	ı
DIOXIN		1.2.3.7.8-PENTACHLORODIBENZOFURAN	22		1	3		19	ग
DIOXIN	SW	2.3.4.6.7.8-HEXACHLORODIBENZOFURAN	22		 			27	2
DIOXIN	. SW	2.3.4.7.8-PENTACHLORODIBENZOFURAN	2		1-	2		27	1
DIOXIN	SW		2		†—	-1 ·		27	
DIOXIN	SW _	2.3.7,8-TETRACHLORODIBENZO-p-DIOXIN	2		┿	6		10	
DIOXIN	SW	2.3,7,8-TETRACHLORODIBENZOFURAN			╂			 ``	7-
NIXOID	5W	DIOXIN/FURAN TOTAL EQUIVALENCY FACTOR	22		┦—	15		╂━╬	'
DIOXIN	SW	OCTACHLORODIBENZO-p-DIOXIN			╁	- '		2	:-
DIOXIN	SW	OCTACHLORODIBENZOFURAN	2		+		—		_
METAL	SW	ARSENIC	27		3	- 8	_		- 밖
METAL	SW	Arsenic, Dissolved	2		—	6		1	
METAL	sw	LEAD	2		ሷ		Ь—	1,	_
METAL	sw	Lead, Dissolved	2:		4_		\vdash	2	
METAL	SW	SELENIUM	2		\bot			1	
METAL	SW	Selenium, Dissolved	2	2		2	<u></u>	1.	
METAL	SW	THALLIUM	2	2			L	2	
METAL _	SW	Thallium, Dissolved	2	24	T		1	1	71

Appendix E Background Analylical Data Qualifiers Background Sampling Program Defense Depot Memphis Tennessee

	, 	IVētrae	Qualifier						
Class	Matrix	Chemical	Total	=	ER	٦	R	U	W
METAL	sw	ALUMINUM	22	5		13		20	
METAL	SW	Aluminum, Dissolved	22	1		'		22	
METAL	SW	ANTIMONY	22			 	_	21	
METAL	sw	Antimony, Dissalved	22			22	┝	 '	
METAL	SW	BARIUM	22					 	
METAL	sw	Bartum, Dissolved	22		<u> </u>	19	_	22	
METAL	SW	BERYLLIUM	22		<u> </u>	-		22	
METAL	sw	Berylfium, Dissolved	22		ļ	 		22	
METAL	sw	CADMIUM	22		<u> </u>	-	}	22	
METAL	SW	Cadmium, Dissalved	22		<u> </u>	╄,	-		-
METAL	SW	CALCIUM	22	19		- 3		┼-	⊢-
METAL	SW	Calcium, Dissolved	22	19	 	3	-	1.	
METAL	sw	Chromium, Dissolved	22		!		} 	17	├ ─'
METAL	SW	CHROMIUM, TOTAL	22	2	<u> </u>	↓—	_	20	
METAL	sw	COBALT	22		ļ	↓—	<u> </u>	22	
METAL	sw	Cobait, Dissolved	22		└	╀—-	_	22	
METAL	SW	COPPER	. 22		<u> </u>	3		17	
METAL	SW	Copper, Dissalved	22		└	—	₩-	22	1
METAL	2M	IRON	22		<u>1</u>		<u> </u>	↓	
METAL	SW	Iron, Dissolved	22				↓	16	<u> </u>
METAL	sw	MAGNESIUM	27			1 12		<u> </u>	<u>↓_</u>
	SW	Magnesium, Dissolved	22		•	_16	<u> </u>	1	
METAL_	SW	MANGANESE	22	2	2	Τ		Ш.	
METAL	SW	Manganese, Dissolved	2	2	ľ	$oldsymbol{\mathbb{L}}$.		1	
METAL	SW	NICKEL	22				3	17	1
METAL	SW	Nickel, Dissolved	2		1			2	l
METAL		POTASSIUM	2		5	3,4	4		3
METAL	SW	Potassium, Dissolved	2		3	17	4	,	T_
METAL	SW	SILVER SILVER	2			1	2	20	3
METAL	SW		2		 			2	27
METAL	SW	Silver, Dissalved	- 2		3	1	5	1	4
METAL	SW	SODIUM	2		1	1	7		Т
METAL	5W	Sodium, Dissolved	2		1		5	1	7
METAL	SW	VANADIUM	 - 2		1-		1	2:	2
METAL	SW	Vanadium, Dissolved	- 2		1	1	2		8 1
METAL	sw	ZINC	2		il	1	7	2	1
METAL	SW	Zinc, Dissolved	2		1		+	2	
METAL	sw	MERCURY	 		+		 	1	
METAL	SW	Mercury, Dissolved	1 2		2		1	 	1
PEST	SW	2.4,5,6-TETRACHLORO-META-XYLENE	- 2		╫		╅─	1 2	,
PEST	SW	ALDRIN_	2			 	+	7 2	
PEST	5W	ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE)				+	+	7 2	_
PEST	SW	ALPHA ENDOSULFAN	 		+		┪─		2
PEST	SW	ALPHA-CHLORDANE	 	2 2	+		+	1 5	2 -
PEST	SW	BETA BHC (BETA HEXACHLOROCYCLOHEXANE)		2	+	-1-	+		2
PE\$1	SW	BETA ENDOSULFAN			2		+		+
PEST	SW	DECACHLOROBIPHENYL			-	+	+	+ -	2
PEST	sw	DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)		2	+	+	┥┈-		2
PEST	SW	DIELDRIN		2	+	 -	+		
PEST	SW	ENDOSULFAN SULFATE		22	+		+		2
PEST	SW	ENDRIN		2	+		 -		22
PEST	SW	ENDRIN ALDEHYDE		2	+	-			22
PEST	SW	ENDRIN KETONE		22	—	-	⊣		
PEST	sw	GAMMA BHC (LINDANE)		22	 -	-	+		22
PEST	SW	GAMMA-CHLORDANE		22	+		+-		22
PEST	SW	HEPTACHLOR		22	+	_ _	┿~		22
PESI	SW	HEPTACHLOR EPOXIDE		22	4.	Щ.	+-	_	22
PEST	SW	METHOXYCHLOR	1 7	22		l			22

Appendix E Background Analytical Data Gualiflers Background Sampling Program Delense Depot Memphis Tennessee

Class			Qu				Qualifier			
PEST SW D. D. CHOOL 27	Class	Matrix	Chemical		p	ER	Li_	R		ω.
PEST SW			p.p'-00D				├	 		
PEST SW					_		⊢ —	├		
PEST SW PCB-1016 (ARCCHLOR 1016)			p.p-DDI				-	 	\rightarrow	
PEST SW PCB-1291 (ARDCHLOR 1221) 22 22 22 22 22 22 2			PCB-1016 (AROCHLOR 1016)				├	╁		
PESI SW PCB-1232 (ARDCHLOR 1232) 22 22 22 22 22 22 22 22 22 22 22 22 2			PC8-1221 (AROCHLOR 1221)				├	 		
FEST SW PCB-1282 (ARDCHLOR 1242) 22 22 22 22 22 23 23 24 24 25 25 25 25 25 25 25 25 25 25 25 25 25			PCB-1232 (AROCHLOR 1232)				├	1		
PEST SW POB-1246 (AROCHLOR 1246) 22 22 22 22 22 22 22 22 22 22 22 22 22							↓—	-		
PEST SW PGB-1254 (AROCHLOR 1254) 22 22 22 22 22 22 22 22 22 22 22 22 22			PCB-1248 (AROCHLOR 1248)				↓	-		
PÉST SW POB-1200 (ARCOFILOR 1260) 22 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>↓</td><td>-</td><td></td><td></td></t<>							↓	-		
PEST SW 1,0 APHENE 22							_	<u> </u>		
SYCC SW 1,2 4-TRICH_OROBENZENE 22 22 22 22 22 22 22			TOXAPHENE		_		_	↓ _		—-
1,2-OICHLOROBENZER			1.2.4-TRICHLOROBENZENE	22			—	├ ──		
SYOC SW 1.3-DICHLOROBENZENE 22 22 22 22 22 22 22			1.2-DICHLOROBENZENE		<u> </u>		—	↓		
SVOC SW 1.4-DICHLOROBENZENE 22 22 22 22 22 22 22					<u> </u>		↓ —	↓		
SYOC SW 2.4-OXYBIŞ(1-CHLORO)PROPANE 72 72 72 72 72 72 72 7							<u>ļ </u>	.↓		\vdash
SVOC SW 2.4.5-TRICHLOROPHENOL 22 22 22 22 22 22 22			2.2-OXYBIS(1-CHLORO)PROPANE				↓	↓		\vdash
SVOC SW 2.4.6-TRICRED (OPPERO) 22 22 22 22 22 22 22						<u> </u>	—	—	22	
SVCC SW 2.4-DICH.COROPHENOL 22 22 22 22 22 22 22						Щ_	↓	┿	 	$\vdash \vdash \vdash$
SVOC SW 2.4-DICHLOROPHENOL 22 22 22 22 22 22 22						₩	\vdash	↓—		┝╼┥
SVOC SW 2.4-DINTROPHENOL 22 22 22 32 32 32 32 3						ــــــ	—	↓		├
SVOC SW 2.4-DINTROPHENOL 22 22 22 22 22 22 22						∟_	4	.		
SYOC SW 2.4-DINTROTOLUENE 22 .22			2.4-DINITROPHENOL			!	↓—	╄		1
SVOC SW 2-CHLOROPHENDLENE 22 22 22 22 22 22 22						<u> </u>	↓—	┿		
SYOC SW 2-CHLORONAPHTHALENE 22 22 22 22 22 22 22						<u> </u>	—	—		}
SVOC SW 2-CHLOROPHENOL 22 22 22 22 22 22 22						└ ─				
SVOC SW 2-FLUOROBIPHENVL 22 22 22 22 22 22 22						↓	<u> </u>	 	<u> Z</u>	-
SVOC SW 2-FLUOROPHENOL 22 22 22 22 22 22 22							_	┷—	↓	—
SVOC SW 2-METHYLNAPHTHALENE 22 22 22 22 22 22 22			2-FLUOROPHENOL			1		4—	 	
SVOC SW 2-METHYLPHENOL (0-CRESOL) 22 22 22 22 22 22 22						<u> </u>	↓	┵		
SVOC SW 2-NITROANILINE 22 22 22 22 22 22 22						1	Д	—		
SVOC SW 2-NITROPHENOL 22 22 22 22 22 22 22							<u> </u>	↓		
SVOC SW 3,3*-DICHLOROBENZIDINE 22 22 22 22 22 22 22						<u> </u>		┵		
SVOC SW 3-NITROANILINE 22 22 22 22 22 22 22			3.3'-DICHLOROBENZIDINE			Щ				
SVOC SW 4,6-DINTRO-2-METHYLPHENOL 22 22 22 22 22 22 22						<u> </u>				
SVOC SW 4-BROMOPHENYL PHENYL ETHER 22 22 22 22 22 22 22						<u> </u>	┸~	┷		
SVOC SW 4-CHLORO-3-METHYLPHENOL 22 22 22 22 22 22 22									_	_
SVOC SW 4-CHLOROANILINE 22 22 22 22 22 22 22			4-CHLORO-3-METHYLPHENOL			1_	Ш-			
SVOC SW 4-CHLOROPHENYL PHENYL ETHER 22 22 22 22 22 22 22						J			<u> 2</u>	4
SVOC SW 4-METHYLPHENOL (p-CRESOL) 22 22 22 22 23 22 23 23 23 24 24						Ц.				
SVOC SW 4-NITROANILINE 22 22 22 23 25 25 25 25						<u> </u>				
SVOC SW A-NITROPHENOL 22 21 22 22 22 22 23 22 23 24 25 25 25 25 25 25 25										
SVOC SW ACENAPHTHENE 22 22 22 22 22 22 22						<u> </u>				
SVOC SW ACENAPHTHYLENE 22 22 22 22 23 23 24 24								_		
SVOC SW ANTHRACENE 22 22 22 22 22 22 22							ــــــــــــــــــــــــــــــــــــــ	\downarrow		
SVOC SW BENZO(d)ANTHRACENE 22 22 22 22 22 22 22										
SVOC SW BENZO(Q)PYRENE 22 22 SVOC SW BENZO(Q)FLUORANTHENE 22 22 SVOC SW BENZO(Q,h,i)PERYLENE 22 22 SVOC SW BENZO(K)FLUORANTHENE 22 22 SVOC SW BENZYL BUTYL PHTHALATE 22 22 SVOC SW BIS(2-CHLOROETHOXY) METHANE 22 22 SVOC SW DIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL 22 22 SVOC SW DIS(2-ETHYLHEXYL) PHTHALATE 22 22 SVOC SW CARBAZOLE 22 22 SVOC SW CHRYSENE 22 22								<u> </u>		
SVOC SW BENZO(b)FLUORANTHENE 22 72 SVOC SW BENZO(p,h,i)PERYLENE 22 22 SVOC SW BENZO(k)FLUORANTHENE 22 22 SVOC SW BENZYL BUTYL PHTHALATE 22 22 SVOC SW bis(2-CHLOROETHOXY) METHANE 22 22 SVOC SW bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL 22 22 SVOC SW bis(2-ETHYLHEXYL) PHTHALATE 22 22 SVOC SW CARBAZOLE 22 22 SVOC SW CHRYSENE 22 22										
SVOC SW BENZO(Q.h.)PERYLENE 22 22			BENZO(b)FLUORANTHENE					<u> </u>		
SVOC SW BENZO(K)FLUORANTHENE 22 22 22 22 22 22 22								ــــــــــــــــــــــــــــــــــــــ		
SVOC SW BENZYL BUTYL PHTHALATE 22 22 SVOC SW bis(2-CHLOROETHOXY) METHANE 22 22 SVOC SW bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL 22 22 SVOC SW bis(2-ETHYLHEXYL) PHTHALATE 22 22 SVOC SW CARBAZOLE 22 22 SVOC SW CHRYSENE 22 22									<u> 2</u>	<u> </u>
SVOC SW bis(2-CHLOROETHOXY) METHANE 22 22 SVOC SW bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL 22 22 SVOC SW bis(2-ETHYLHEXYL) PHTHALATE 22 22 SVOC SW CARBAZOLE 22 22 SVOC SW CHRYSENE 22 22										
SVOC SW bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL 22 22 SVOC SW bis(2-ETHYLHEXYL) PHTHALATE 22 22 SVOC SW CARBAZOLE 22 22 SVOC SW CHRYSENE 22 22			bis/2-CHLOROFTHOXY) METHANE							
SVOC SW bis(2-ETHYLHEXYL) PHTHALATE 22 22 SVOC SW CARBAZOLE 22 22 SVOC SW CHRYSENE 22 22			ISIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL							
SVOC SW CARBAZOLE 22 22 SVOC SW CHRYSENE 22 22			DIS(2-ETHYLHEXYL) PHTHALATE						_ 2	2
SVOC SW CHRYSENE 22 22 22 22 22 22 22 22 22 22 22 22 22					22					
	SVOC	5W	DI-n-BUTYL PHTHALATE		22				2	2

Appendix E Background Analytical Data Qualifiers Background Sampling Program Defense Depot Memphis Tennessee

	, -	Damense papor manipriss ran		Qualitier					
		Chemical	Total	-	ER	J	R	U	Ш
Class	Matrix	DI-D-OCTYLPHTHALATE	22			Ţ		22	
SVOC	SW	DIBENZ(o,h)ANTHRACENE	22					22	
VOC_	SW	DIBENZOFURAN	22					22	
SVOC	SW	DIETHYL PHTHALATE	22			<u> </u>		22	_
SVOC	SW	DIMETHYL PHTHALATE	22					22	
SVOC_	SW	FLUORANTHENE	22					22	
SVOC	SW	FLUORENE	22					22	
SVOC	2M	HEXACHLOROBENZENE	22					22	
SVOC	5W	HEXACHLOROBUTADIENE	22			I		22	
SVOC SVOC	SW	HEXACHLOROCYCLOPENTADIENE	22					22	
SVOC _	SW	HEXACHLOROETHANE	22				1	22	
	SW	INDENO(1,2,3-c,d)PYRENE	22			<u> </u>	<u> </u>	22	
SVOC SVOC	SW	ISOPHORONE	22			1	<u>l</u>	22	
SVOC .	SW	N-NITROSODI-II-PROPYLAMINE	22			<u> </u>	<u> </u>	22	
	SW	N-NITROSODIPHENYLAMINE	22					22	
SVOC	SW	NAPHTHALENE	22]	Ţ <u></u>	22	L
SVOC		NITROBENZENE	22				Γ	22	
SVOC	SW	PENTACHLOROPHENOL	22	<u> </u>		1	Τ	22	
SVOC	SW		22			\top		22	
svoc	SW	PHÉNANTHRENE	22			1	1	22	
SVOC	SW	PHENOL PYRENE	- 22			1	1	22	
\$VOC	SW	1,1,1-TRICHLORGETHANE			_	 	1	22	
VOC_	sw		22			1	1	22	_
VOC	sw	1,1.2.2-TETRACHLOROETHANE	- 22			1		22	
voc	sw	1,1.2-TRICHLOROETHANE	- 22	 	\vdash	1	1	22	
VOC	SW	1.1-DICHLOROETHANE	22			+	+	22	
voc	SW	1.1-DICHLOROETHENE	22		├──	+	+	22	
VOC	SW	1.2-DICHLOROETHANE	27		├	+	+	27	
VOC	sw	1,2-DICHLOROPROPANE	22		}	+	} 		┼
VOC	SW	1-BROMO-4-FLUOROBENZENE (4-	22		₩	+	+	22	,
VOC	SW	2-HEXANONE			\vdash	+-	+	22	
VOC	SW	ACETONE			 	+	┪	2	
VOC	SW	BENZENE	2		┢	+	+-	22	
VOC	SW	BROMODICHLOROMETHANE	2.		-	-}	╂	27	}
VOC	SW	BROMOFORM	2.		- -	+	┽─	2	
VOC	SW	BROMOMETHANE			├ ──	+	+-	27	
VQC	SW	CARBON DISULFIDE	2:		₩	╂	┿	22	
VOC	SW	CARBON TETRACHLORIDE	22		╄	+-			
VOC	SW	CHLOROBENZENE	27		┿		+	27	
VOC	SW	CHLOROETHANE	2		₩		+		
VOC	SW	CHLOROFORM	2:		+-		+	27	
VOC	SW	CHLOROMETHANE	2:		↓ –	+	+	2	
VOC	SW	cis-1,3-DICHLOROPROPENE	2	_	↓ —	+	+	2:	
VOC	SW	DIBROMOCHLOROMETHANE	2	2	-	+	┿~	2	1 —
VOC	SW	ETHYLBENZENE				+	4-	2	
VOC	SW	METHYL ETHYL KETONE (2-BUTANONE)	2	3	╄	 -	5	j j	
voc	SW	METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	2		1—	↓	+-	2	
VOC_	SW	METHYLENE CHLORIDE	2		₩		+	2	
VOC	SW	STYRENE	2		↓	+-		2	
voc	SW_	TETRACHLOROETHYLENE(PCE)	2		₩	┿	+	2	
VOC	sw	TOLUENE	2		₩		+-	2	
VOC	sw	TOTAL 1,2-DICHLOROETHENE	2	2	\downarrow		_	2	
VOC	sw	Total Xylenes	2		↓_		2	2	
VOC	sw	trans-1,3-DICHLOROPROPENE	2		<u> </u>		┷	2	4_
VOC	sw	TRICHLOROETHYLENE (TCE)		2				2	2
VOC	SW	VINYL CHLORIDE	2	2	$oxed{\Box}$			2	
HERB	SW	2.4 D8	2						2
HERB	SW	2,4,5-T (TRICHLOROPHENOXYACETIC ACID)	2	2				2	2

		Appendix E Background Analytical Da		-			_		
		Background Sampling Delense Depot Memphis							
	1-	Deterine Debot Metropine	1011101110			Quali	fler		
Class	Matrix	Chemicai	Total		ER	Ţ,	R	U	w
HERB	sw	2,4-D (DICHLOROPHENOXYACETIC ACID)	22			 	↓ —	. 22	_
HERB	sw	2.4-DICHLOROPHENYLACETIC ACID	22	22	<u> </u>	Ь			—
HERB	SW	DALAPON	22		<u> </u>	├ —	├ ─	22	
HERB	sw	DICAMBA	22		<u> </u>	├ —	⊹	22	_
HERB	sw	DICHLOROPROP	22		<u> </u>	₩	├ ──	22	
HERB	sw	DINOSEB	22		Ь—	 	↓ —	22	
HERB	SW	MCPA	22		Ь.	├	₩	22	
HERB	SW	MCPP	22		ļ	↓	₩	22	_
HERD	SW	SILVEX (2.4.5-TP)	22		i	<u> </u>		22	

TAB

Appendix F

Appendix F Background Data Statistical Tables

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F-1	Background Statistics for Metals	F-1
F-2	Organic Compound Background Statistics	P-0
F-3	Dioxin/Furan Background Statistics	F-26
F-4	Evaluation of Surface Soil Populations	F-27
F-5	Evaluation of Subsurface Soil Populations	F-28
F-6	Evaluation of Surface Soil Populations-Selected Pesticides	F-29

Appendix F-1 Background Statistics for Metals

			Notes		:	Offsite locations only. Dropped outlier of 27.7 mg/kg.	Offsite locations only.	No outliers. Perimeter and offsite values nearly identical.		The second secon	Utisite likcalions drily.				Offsite locations only, Outlier of 73.3 ing/kg removed.										Offsite locations only.														
		.:	Discripation	1,108,1.6 Nummal	1.8 Nonparam:	10,4 Lognormal	132,0 Lognormal	0.5 Мопрагаля.	0,4 Nonparara.	3797, I Nonparam.	14.2 Normal	9,8 Normal	18.9 Normal	20,554.6 Normal	20.3 Мопралат.	2647.4[Normat	729.4 Normal	0,1 Nonparam.	17.7 Normal	11 18,4 Normal	0,2 Nonparan,	Nonparam.	40.6 N/A	0.2 N/A	27.6 Normal	70.2 Normal	2034,4 Normal	N/A	10.6 Normal	171.6 Normal	0,6 Мопралат.	4 Nonparam.	1463.5 Normal	Normal	1.8 1.0gлоппа	18.9 Nonparam.	22189.6 Nonparam.	3 Lognornal	2812.2 Nonparan.
•			(Fognermal) NCF	1,108,1.6	R.1	10,4	132.0	0,5	0 .4	3797.	14.2	8.6	18.9	20,554.6	20.7		72	Ö		=										=							Ш	_	2812.
	SJ	E	(goung) ACE		6.1	9.8	129.0	0.5	0.4	5250.5	14.0	9.7	2.5	20149.0		``	715.9		ĺ	Ĭ							<u>=</u>			۲			<u> </u>				316		2686.1
	r Meta	Progra	bagaard Deviation)		0.18				丄							- 1	0.28					0.36				_1							.						132
.≝ .∃	istics fo	ıpling l	Lu(Mesn Value)						<u> </u>	1	1	Ţ	ı	⅃	2.76							7 -1.61			Ц	┙			ļ	J	J	l				ı	ΙI		5 7.76
Appendix F-	Background Statistics for Metals	Background Sampling Program	Standard Bevlation		0,42	2.85	21.50	\$1.0	91.16	6352.05	2.67	1.65	4.07	4432.34	5.98	629.72	174.65	0.08		249.61		0.17	15.78			16.0	2545.27	90.0			0.18		518.50	2,46	16'8		505		646.05
	Backgro	Backgr) X Menn Detected		7.0	16.4	234.0	1.1	p '	5839.7				37045.5	33.3	4616.4	1,303.7	0.4		2025.3		2.0					21829.1			300.2	2.1	1.4	2,23,2,2				384		4898.2
			Mean Detected	ľ	3.5	8.2	0.711	0.5		2919,	12.5	1.6					<u> </u>	0.2			0.4	0'1				62	1001		8.5	1;	0.6		١	_			19241.8		
			mumixal/ Detected	18500.0	3.5	13.9	141.0	0.0	0.8	30600.0	17.0	12.3	23.3	26100.0	30.5	3200.0	1080.0	0.4	21.4	1460.0	6.5	0.1				89.5			14.1	243.0		0.7	2630.0	18.0			249		3370.0
!			onuninily Octocicd	8160.0	3.5	4.2	77.1	50	0.6	424.0	8.9	5.7	7.3	10800.0	7.11	0.0111	330.0	0.1	10.4	0,114	0.3	1.0			19,1	35.6	6820.0		1.1	89.9	0.5	0.7	511.0	8.7	5.0	7.4	834		1200.0
			and the	1	E	르	Ξ	=	4	22			22	22	<u>c</u>	22	22	₹	Ξ	22	F.	Ξ		L	Ξ	[22				22	14	E i	22	22	┺			22	I . JI
			zavijan A t	+	╀	₩	Ξ	22	22	22	Н		⊢	22		22	22	22	Ξ	⊢	╁	⊢	22	H	Ξ	-	Н	77	22	22	22	7.7	77	22	┢	╂	Н	Н	22
			illered?	12	3	Z	z	z	z	z	Z.	<u>z.</u>	<u>z</u>	Z	Z	z	Z.	Z,	Z.	z	Z	Z	Z	z	z	Z.	z	z	z	<u>z</u>	z	<u>z,</u>	즈	z	z	Z	z	Z.	즈
			Constituent	ALUMINUA			•	•	САБМІЙМ	CALCIUM			_	IRON	-	MAGNESIUM	-	_	_		SELENIUM		•	THALLIUM	_	ZINC	ALUMINUM	ANTIMONY	ARSENIC	HARIUM	RERYLLIUM	CADMIUM	CALCIUM	_		_	IRON		MAGNESIUM
			silat.	1 % 1	merke	π2kg E	mg/kg	mykg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mr.	mg/kg	mg/kg	mg/kg	mg/kg	ingks	ing/kg	mg/kg	mg/kg	Жубш	mp/kg	mp/kg	mg/kg	THE/KR	ing/kg	EA/KE	TOSTAR E	me/kg	a Jan	Mg/kg	mg/kg	mg/kg
			xirus}	li o	.[_	I		П	П	Surf Soil	Surf Soil	Surf Soil	Surf Soil	Surf Soil	Т		_	Т	Surf Soil	$\overline{}$	_	Т	т	Surf Soil	Т	Surf Soil	Sub Sail	Sub Sail	Sub Sail	Sub Sail	т	Sub Suil	т	Т	Т	Т	Т		Ιľ

		Notes																																				
			Lognormal	Nonparam.	20.2 Nonparam.	1032.0 Normal	0.2 Nonparam.	0.3 Nonparam.	74.8 N/A	0.2 N/A	28.0 Normal	65.4 Normal	67.7 Lognormal	8.2 Nonparam.	3.9 Nonparam.	59.8 Nonparam.	N/A	1.3 N/A	22391.9 Nonparam.	6.3 Nonparam.	0.9 N/A	N/A	1.одпотпа	Nonparam	Normal		N/A	7.4 Nonparam.	4269.0 Normal	0.8 Nonparam.	0.9 N/A	(emioN 7.7679)	0.9 N/A	0.8 N/A	9.0 Nooparam.	10110.1 Lagnormal	7.3 N/A	9.9 Nonparam.
	34,2,4	(Pokuoswej) NCF	953.3	0.1	20.2	1032.0	0.2	0.3	74.8	0.2	28.0	65.4	(1)	8.2	3.9	29.8	0.1	-	22391.9	6.7	0.6	2.3	474.5	1.0	4256.7	401.3	0.1	1,6	426	9.0	0.0	.19761				10110.		
s	u	(Normal) NCL	894.2	0.1	9.61	1001.2	0.2	0.3	68.5	0.2	27.5	63.2	67.7	8.4	3.3	46,2	0,1	1.4	18944.5	4.8	0.9	2.2	353.8	1.8	4010.5	232.3	0.1	17.4	3463.9	0,8	0.9	10487.4	0.9	0.8	27.4	3525.1	7.3	9.8
r Meta	rogent	Ln(Slandard Deviation)	0.47	0.17	0.24	0.32					0.22	0.31								1.02			1.45		0.48							1.03	0.00	0.30				0.07
istics fo	npling 1	LutMenn	4 6.55	1 -2.93	8 2.88	7 6.76	87.1- 0	'	3,86	Ĭ.	7 3.22			4 2.02					Ш					2 -0.63	9 B.04			9 1.30		5 -0.35	ľ	17.8 [7.	0.11	4 -0.41		9 6.29	_1	1.28
Background Stulistics for Metals	Background Sampling Program	brabast? Gestation	338.74	10.0	3,48	270.77	0.10	0.09	33,28	0.01	4.97	15.92	6,60	1,94	2,50	20.51	00'0	00'0	1058	7.99	0.14	1.44	437,77	2,32	1575.79	174,18	0,00	24,49)8 	0.25	0.00	1270.87	00'0	0.24		.6£		4.09
Backgro	Backgr	1 X Mean Detected	≌	0.2	36.6	1803.6	9.0	0.1			51.3	114.6		32.8		87.6			30123.6	33.4				22.6	9	352.2		236.0	6721.2	3.0		21537.6				\$076.8		18.0
		nes) A Detected	6.69T	0.1	18.3	8.109	0,3	0.5			25.0	57.3	235.5	16.4	6.2	43.8			15061.8	16.7			6.00.5	11.3	3432,3	1,76,1		118,0	3360.6	1.5		10768.8	i	i	205.0	2538.4		9.0
		mumixaM, bətəsisd		ā	22.4	1480.0	£,0	9.0			31.7	79.5	280.0	16.4	7.4	99.4			34200.0	16.7			2040.0	11.3	6550.0	713.0		118.0	6450.0	1.5		17500.0			205.0	16900.0		13.6
		Minimum Defected	231.0	3	9.6	483.0	0.3	0.4			15.0	30.9	0.191.0	16.4	1.5	23.0			3710.0	16.7			0.811		0.0221	31.9		118.0	10,50,0	4.1		6720.0			205.0	266.0		6.6
		# Detects	77	E	77	Z		7	t		22		2	E	9	61			22	Ξ			\$	Ε	22	7		Ξ	Ξ	~	L	Ξ			Ē	18		Ξ
		# Analyses	23	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	77	22	Ħ	Z	22	22	22	22	22
		Thered?	z	z	z	z	z	Z.	Z.	z	z	z	녿	<u>></u>	≻	٨	≻	≻	<u>></u>	≻	≻	≻	<u> </u> ≻	≥	>	≥	≥	≥	<u>≻</u>	>	<u> </u> >	>	>	<u> </u> -	≻	Z,	Z	z
		Constitutent	MANGANESE	MERCURY	NICKEL	POTASSIUM	SFLENIUM	SILVER	SODIUM	THALLIUM	VANADIUM	ZINC	ALUMINUM	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CALCIUM	CHROMIUM	COBALT	COPPER	IRON	LEAD	MAGNESIUM	MANGANESE	MERCURY	NICKEL	POTASSIUM	SELENIUM	SILVER	SOUTH	THALLIUM	VANADIUM	ZINC	ALUMINUM	ANTIMONY	ARSENIC
		Dia U	4		-	+	•				•	-		Г	Γ		Т	Г	Т	Γ	Γ	Γ	Τ	Τ	Т	Τ	Т	Τ	Τ	1	Т	Т	Ť	T	Ť	Γ	Γ	\square
		zhitald	Т	Sub Soil me	Т	Т	L	Т	т	Т	ī	ī	T-	NS Up	Γ			Γ	Ván MS				SW ug	N. W.			Γ	M:		Γ					MS Value			NS. ug/
		<u> </u>	V	W	15	107	10/	ľ	127	ĪΩ	103	165	100	103	ĪΩ	100	107	107	10	100	IN	īΩ	īω	ĪΩ	ī	ī	Īδ	107	.(1)	ΙQ	183	153	ī	199	<u>12</u>	न्ह्य	<u>اين</u>	ι V

Appendix F-1

				İ						Appendix F-1	K F-1						
									Backgro	ckground Sampling Program	Ming Pr	HENDINI HIRLIND	a				
																	<u> </u>
xhial/	zi nitz	}uən)lisuo(Spanariff	səsiqıtuv († Detects 	barrerad	munizal/d Detected	deab Detected	hlenn Detected	bratant? Goberts	La(Mean Value)	baladard Devladon)	UCL UCL	(ഉയാവേച്ച) വവ	DistAbudan	Notes	-
± ₩.) (S	BARIUM	z	22				62.6	4		ē			ı	75.7 Lugnomal		
ΑS	ÿān	BERYLLIUM	z	22			 			200	-2.20	0.37	1.9	0.1	V/V		Π
λS	Ş <u>a</u>	CADMIUM	z	22		_		1		000	0.30	0.00	1.4	[[]	L.J N/A		٦
X.S	Z.	CALCIUM	z	22	22	4410.0	34800.0	1.6665.1	31998.2	10885.83	9,44	0.72	19993.3	23441.9	23441.9 Nunparam.		7
λS	2	CHROMIUM, TOTAL	z	22	_	18.0	18.1	18.	36.1	4,99	61.0	16.9	4.6	3.8	3.8 Nonparam.		_
ΑS	Ván	COBALT	z	22		_				0.73	0.07	6.39	4.	Þ. l	I.d N/A		<u> </u>
ΝS	l⁄αυ	соррея	z	22	ш	10.4	76.4	37.3	74.5	21.52	1.12	1.62	18.9	41.9	41.9 Numaram.		Ŧ
A\S	l⁄gu	IRON	z	22	22	346.0	20800.0	3051.7	6103.5	4676.99	7,34	80'1	4767.8	\$450.5	Nomparam.		Τ
N.S.	l/au	LEAD	Z	22	9	5.5	16.7	9.3	18.7	4.46	0.48	<u>-</u>	4.9	6.4	6.4 Normaran.		T
ΝS	l/2n	MAGNESIUM	z	22	22	1470.0	0,0176	3850.9	X.107.7	1561.34	% -1-1	9 7	4423.8	4720.0	4720.0 Normal		T
N.S.	μZn	MANGANESE	z	22		46.5	114030	328.1	656.2	281.26	5.43	0.9	431.3	574.9	574.9 Lognornal		T
ΑNS	ug/l	MERCURY	z	22		1				8	-2.41	80.0	0	0.1	N/A		Т
A.S.	ស្រី គ.	NICKEL	z	22	٧,	6.9	19.9	1 =	22.8	4.26	=	0.58	6.4	6.1	Nonparam.		<u> </u>
M 5	μžn	POTASSIUM	z	22	61	733.0	6730.0	3637.0	7274.0	1852.77	7.90	69'0	3950.4	4755.1	Normal		<u>-</u>
NS.	Ván	SELENIUM	z	22						0.28	-0.35	0.24	0.8	0.8			T
A.S.	ľán	SILVER	z	22	2	1.8	1.8	8.1		0.28	60.0°	0.22	Ð. -	0.1	Nonparam.		_
A.S.	l⁄gu	SODIUM	z	22	18	2890.0	17900.0	10696.7	21393.3	5457.57	8.77	<u>\$</u>	10934.1				T
Al.S	l/gra	THALLIUM	z	22						00.0	-0	0,0	6.0	0.9	V/V		7
Ku	l/gin	VANADIUM	z	22	\$	13.2	39.4	19.5	39.0	9.30	0.63	1.32	B.7	11.7			<u> </u>
A.S.	μgπ	ZINC	z	122	3	64.0	221.0	143.3	287.3	53.82	2.19	1.36	46.7	503			Ī
Sec	mg/kg	_	z	22	22	490.D	14200.0	5042.5	10084.9	4736.79	7.88	1.28	6780.5	1,5028.3	Nonparaits.		T
Sed	mg/kg		z	22		3.7	3.9	8.	7.6	1.82	0.92	0,46	3.5	3.4	Nonparam.		T
Sed	тв/кв	1	z	22		<u>ح.</u>	=	0.0 0.0	2.0	1.61	<u> </u>	=	9	12.7	Normal		Ī
¥,	mg/kg	$\overline{}$	z	22	감	3.7	132.0	8.85	117.5	49.69	3.51	<u> </u>	77.0	78.7	178.7 Numparam.		T
Sec	тпр/кр	_	z	22	55	5.0	G.8	9.0	_	0.24	200	560	2	ָּבְּ	0.4 Lognormal		T
Ş	mg/kg	_	z	77	- 1		3.8.2	<u></u>	5 8 8	8.0.8	`1		B.C.	C.7	2.5 Nonparam.	Detected in only a samples.	T
<u>.</u>	ıng/kg	-	z	2	2	Z.	\$6800.0	1429.7	148X8.9	1.32M0.44	- 1	2	10.4	40.212.0	40.21.2.01.20mmat	Apr. 11	T
<u></u>	трукв		z	2	. 1	-	16,1	10.3	20.6	3.87	2.23	0.43	¥; 4	17.7	Nonparam.	Removed a Country, 174 and 40.	T
<u>.</u>	т₽№	-	z	2		7:	10.6	9.8 0	97	5.03	3		מים	7.11	vonbaram.	bend Same I was don't sold I was to a second second	T
ş	mg/kg		z	20	<u>~</u>	-	129.0	27.1	. S.	35.10	2	7	7.4.2		Lognorma	Memoved 2 Cuthers; 312 and 1230; roth are 1 qualified.	T
Sec.	пр∕кв	IRON	z	77	77	3330.0	30700.0	11538.6	E.770E.S	6989.04	6	0.65	14103.0	26			T
Şer	mg/kg	j	z	77		1.7	291.0	36.1	72,2	63.75	7.62	25	57.9	98.6	Lognornal		T
Sec	mg/kg		z	22	32	21.2	2950.0	1215.9	2431.9	890,68	6.50	1.43	346.	0.6212	Normal		F
Sed	mg/kg		z	2	1	59.3	261D.0	435.6	871.2	\$41.51	S.58	┋	6.14.3	643.2	Lognorma		Ţ
Sec	mg/kg	MERCURY	z	77		2.0	2.0	2.0	4.0	0.41	-2.58	2	0.3	0.7	Northann.	Only one detection.	7
Sec	mg/kg	NICKEL,	z	2	13	5.3	37.4	15.2	30.5	9.19	1.69	1.23		25.	25.1]Nenparam.		ן וו
	Į																35
F																7 70 6 00000	98
-	X;\UE	K;\UESERS\GUEST\026.XLS														Poge Join	}

			Notes																														
			(Lognormal)	Nonparam.	0.4 Nonparam.	0.4 Nonparam.	45.2 Lognormal	0.4 Nonparam.	22. I Nonparam.	390. I Nonparam.	1.одпотпаі	8.8 Maxdetect	0.5 N/A	166.5 Lognormal	Maxdetect	N/A	Normal	15.6 Maxdetect	22.4 Maxdetect	92.6 Maxdetect	31791.5 Normal	3.6 Maxdetect	19164.6 Normal		V.X.	Maxdeleci	1 ngnormal	/ Maxdetect	I N/A	49991.7 Maxdetect	0.4 N/A	8.1 Maxdetect	IS JIMA
			(Feg normal) DCF	824.5	0.4	1.4	45.2	7.0	22.1	-36	1700.1	8.8	0.5	166.5	0.2	=	38208.8 Norma	9:51	22.4	92.6	31791.5		_	5404.0	0.0	10.4	2638.3	1.7	= 	┙			
<u>. 1</u>	2 .		UCI, (Уотаа)	532.8	0.5	0.4	42,8	3	18.5	991.¢	803.0	6,8	0.5	149,6	0.2	Ξ	33478.5	11.2	10.2	75.1	3883.0	3.1	16553.0	192.2	0.1	10,2	2006.6	1.7	==	36400.7			16.0
	r nieu	In Eur	Da(Standard Devladon)	1.07		0.48	0,62	- 1		1.44 44	1.76	J	0,46	6,64	1,24		150		1.25	1.73	ļ			_1				- 1	- 1				1.6
ix F-1	Stics 10	DIIIK L	Lu(Menn Value)	5.46	-1.19	-1.30		Ľ					-0.93	4.56			_	1 0.89		\Box		_	╛	┙				\Box		_			3 2.15
Appendix F-1	Background Statistics for nietals	Background Sampling Frogram	brandard aobaive Jestindard	175.24	91.0	0.24	24.60	0.22	9.53	1615.67	742.99	3.50	0.14	72.81	60.0	0.26	13580.52	10.38	6.62		1679552		Ű	77		9.50	\$11		0.00	2,171			9,43
	Backgro	Васкет	Менц Менц 2 X	-	1.7	8.1	240.0	1:1	30.0	797.2	1798.4	34.4	0.0	223.8	0.6		\$2875.0	543	24.7	162.6	6728.0	9,4	26045.0	1990	0.0	31,4	3495.3	5.8		10665Q.0		14.5	0,0
			Mean Detected	779.4	8.0	6.0	120.0	5.0	15.0	398.6	899.2	2.61		6111	L.0		26437.5	27.2	12.4	81.3	3364.0	4.7	13022.5	280.0		15.7	1747.7	2.9		53325.0		7.3	
			Maximum Detected	_	-	6.0	120.0	9.0	31.5	7630.0	2670.0	17.2		307.0	0		49200.0	34.0	19.6	315.0	0.0967	7.6	7	917.0		25.6	4040.0	2.9		74600.0		14.8	
			Minimum Detected		6.0	0.9	120.0	5.0	4.4	8.A	235.0	17.7		42.9	0.2		0.0299	20.3	2.2	2,0	598.0	2.6	5250.0	17.2		9.4	œ	2.9		32300.0		2,6	
			anselects	 	7	=	-	2		22	٠.	_	_	2	1		2	Ι.	<u>l_</u>	77	6	2	2 12	11 2	2	2	2	7	2	2	7	2 4	2
			# Analyses	╁	╁╌	22	╁	┢	22	┢╌	12	12	=	~	17	╁╌	-	╁╾	╁╴	12	12	12	12	Н	r 12	12	╁	12	1 12	12	1 12	1 12	ᅰ
			Filtered?	z	Z	z	Z	Z	Z	Z	ై	Z	Z	Z	卢	12	Z	2	Z	Z	z	z	<u>z</u> .	<u>7.</u>	Z	2	z	ᆤ	Z	폰	z	Z.	Z.
) Seaustilene	POTASSIUM	SELENIUM	SILVER	SODIUM	THALLIUM	VANADIUM	ZINC	ALUMINUM	ANTIMONY	ARSENIC	RARIIM	RERYLLIUM	CADMIUM	CALCIUM	CHROMIUM, TOTAL	COBALT	COPPER	IRON	LEAD	MAGNESIUM	MANGANESE	MERCURY	MICKEL	POTASSIUM	SELENIUM	SILVER	SODIUM	THALLIUM	VANADIUM	ZINC
]		l	esta U	15	-	_	_	_	_	_	_	Т	Τ	Т	T	Van	T	Ť	Ť	T	T	Γ			Γ	Т	T	T	T	T	Γ		, Van
			xiriald						Sed		OW B		Ī			Ī	Ī	3 3			35						A.C			GW u	Γ		GW

Appendix F-2 Organic Compound Background Statistics

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		neibudinis):			П				7										ar.									Dar.					E.		Nonpar.	
			N/A	N/A	W/A	C/V	V/2/0	۷ <u>/۷</u>	N/A	V/N	K Z	N N	Z/A	V/N	¥/Z	ON/A	N/A	CN/V	2 Nonpar.	N/V	N/A	Σ̈́	₹ Ž	V _Z	Y ∑		뵑	2 Number	ž	O/A	Ϋ́Z Ξ	<u>ک</u>		× 2	5 5	Ž
		BME																																		
		UCL (Nexmal)	7.02	7.02	7.02	7,02	7,02	474,12	7,02	7,02	474,12	474,12	7.02	7.22	7.02	7.02	7.02	7.02	6.82	7.02	7.02	7.02	7.02	7.02	7.02	7.02	7.02	6.92	7.02	7.55	7.02	7.02	6.92	7.02	6.20	7,02
		(Lognormal)	6.81	6.81	6.81	18'9	6.81	197.24	6.81	6.81	397.24	397.24	6.81	7.04	6.81	18.9	18.9	6.81	7.05	6.81	6.81	6.81	(4.81	18.9	9.81	6.81	6,81	6.96	6.81	7.39	6.81	18.9	6.96	6.81	7.60	6.81
		ЭітлэнгоэЭ Меап			_														5.41	_			_					5.67					5.67	:	3.89	1
		Ln(Standord Deviation)	0,26	0.26	0.26	0.26	0.26	0.67	0.26	0.26	0.67	0.67	0.26	0.27	0.26	0.26	0.26	0.26	0.41	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0,26	0.35	0.26	72.0	0.26	0.26	0.35	0.26	0.76	0.26
		ngəld)ral (sulaV	1.78	1.78	1.78	82'1	1,78	5.44	1.78	1.78	5.44	5.44	1.78	18'1	1.78	1.78	1.78	1.78	69'1	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1,73	1.78	1.85	82'1	1.78	1.73	1.78	1.36	1.78
	S	Standard Deviation		2,29	2.29	2.29	2.29	410.75	2.29	2.29	410.75	410.75	2.29	2.33	2.29	2.29	2.29	2,29	2.60	2.29	2.29	2.29	2.29	2.29	2.29	2,29	2.29	2,46	2.29	2,43	2.29	2.29	2.46	2.29	3.38	2.29
	nd Statisti	Agine Menu 2 X		12.36	12.36	12.36	12,36	646,82	12.36	12.36	646.82	646,82	12.36	12.73	12.36	12,36	12.36	12.36	11.73	12.36	12.36	12,36	12.36	12.36	12.36	12.36	12.36	12.05	12.36	13.32	12.36	12.36	12.05	12.36	16.6	12,36
Appendix F-2	Organic Compound Background Statistics	Mean Value		6.18	6.18	9.18	6.18	323.41	6.18	81.9	323,41	32,1.41	91.9	6.36	6.18	91.9	6,18	81,0	5.86	81.9	6.18	6.18	6.18	6.18	6.18	81.9	6.18	6.02	6.18	9.66	6.18	91.9	6.02	6.18	4.95	6.18
bben	nud	Metected		T		T	-			r	T								~	T		T	-				Γ	ন				Г	C1	П	2.8	П
ľ	Comp	Maximum Detected	1	T	T						r								73									77					ਨ		ų	П
	ganic	Minimum Detected	╁	T	-	-	T					┢	T		T		<u> </u>	-	F-1	T		T	T	T				77	Ť	 	T	Г	F1		Ħ	
	် ၁	B Detects			t											L,	L		77	<u> </u>	L							Ξ					E		2	LJ
ŀ		səsilna A #	22	22	22	22	22	22	17	22	32	22	12	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	123	22	22	22	22	22	22	77
		Constituent	LILTRICHLORDE	I 1 2 2 TETRACHLOROETHANE	I. I. 2-TRICHLOROETHANE	I I-DICHLOROETHANE	1 I-DICHLOROETHENE	1 2-DICHLOROBENZENE	1.2-DICHLOROFTHANE	I 2-DICHLOROPRUPANE	I.3-DICHLOROBENZENE	I 4-DICHLOROBENZENE	2-HEXANONE	ACETONE	BENZENE	RROMODICHLOROMETHANE	HROMOFORM	BROMOMETHANE	CARBON DISULFIDE	CARBON TETRACHLORIDE	CHLOROBENZENE	CHLOROETHANE	CHLOROFORM	CHLOROMETHANE	CIS-1,3-DICHLOROPROPENE	DIBROMOCHLOROMETHANE	ETHYLBENZENE	METHYL ETHYL KETONE (2-	METHYL ISOBUTYL KETONE (4-	METHYLENE CHLORIDE	STYRENE	TETRACHLOROETHY LENE (PCE)	TOLUENE	TOTAL 1,2-DICHLOROETHENE	Total Xylenes	Irans-1,3-DICHLOROPROPENE
		quord lasitylan	YOA	YO'A	¥0X	VOA	VOA	VOA	VOA	VOA	VOV	VOA	VOA	VOA	VOV	VOA	VOA	VOV.	VOA	Ϋ́OΥ	VOA	VOA	VOA	VOV	VOA	VOA	VOA	VOA	VOA	VOV	VOA	VOA	YOY	VOA	VOA	VOA
		2) in (L	_	┰	-	_	_	T	т-	7	Т	_	_	Τ	_	_	_	_	_	7	_	_	_	_	_	_	Т	┰	┰	_	_	_	_	$\overline{}$	_
	 	xirtoh	Ę	Т	Т	Т	Т	Т	Т	Т	Т	Т	Т	T	Т	Т	Т	Т	Т	Т	Т	Т	Т	1_	Т	Т	Т	Т	Т	┰	1	Т	Т	T	1	П

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		noitadद्धाश	UN/A	N/A	N/A	N/A	W/A	N/A	V/A	V/V	N/A	N/A	N/A	VIA	N/A	N/A	N/A	N/A	N/A	N/N		۷/۷	N/A	N/A	ΝΆ	< <u>Z</u>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	۷/Ż	N/A
		SVIE			-	O	0	c	11	0	C)	0	5	0	O	O	u .	U	C	()	2	t)	()	()	٥	3	-	0	0	0	0	0	()	()	=	٦
		(Komal) UCL		7.02	5.93	5.93	5.93	5.93	5.93	414.60	5.93	5.93	434,60	434,60	5.93	16.8	5.93	5.93	5.93	5.43	16.5	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	6.50	5.93	5.93	5.43	5.93
		UCL (Legnormal)		18'9	5.93	5.93	5.93	5.93	5.93	325.20	5.93	5.93	325.20	325.20	5.93	5.91	5.93	5.9.1	5.93	5.93	6.77	5.93	5.93	5.93	5.93	5,93	5.93	5.93	5.93	5.93	5.93	0.50	5.93	5.93	5.93	5.93
		Seometric Alean														•					5.12			_												
		bashasta Dertation)	_ ,	0.26	0.04	0.04	0.04	0.04	0.04	0.52	0,04	0.0	0.52	0.52	0.04	0.04	0.04	0.04	0.04	0,04	0.43	0,04	0.04	0.04	0.04	10.0r	0.04	0.04	0.04	0.04	라. 다.	0.12	0.04	0.04	0.04	P0:04
		La(Mean Value)		1.78	1.76	1,76	1.76	1.76	1.76	5.41	1.76	1.76	5,41	5.41	1.76	1.76	1.76	1.76	1.76	1.76	1.63	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.82	1.76	1.76	1.76	1.76
	S	bradnas? nottatvo()	' !	2.29	0.24	0.24	0.24	0.24	0.24	395.96	PT'0	0.24	395,96	395.96	0.24	0.25	0,24	0.24	0.24	0.24	1.30	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.81	0.24	0,24	0.24	0.24
	Compound Background Statistics	Mean	_	12.36	11,68	11.68	89'11	11.68	89'11	578.64	11.68	89:1	578.64	578.64	11.68	11.64	89'11	11.68	11.68	11.68	10,86	11.68	89'11	11.68	11,68	11.68	11.68	11.68	11.68	11.68	89.11	12.41	11.68	11.68	11.68	11.68
F-2	kground	Value	6.18	6.18	5.84	5.84	5.84	5.84	5.84	289.32	.S.	5.84	289.32	289.32	5.84	5.82	5.84	5.84	5.84	5.B4	5.43	5.B4	5.84	5.84	5.84	5.84	5.84	5.84	5.84	5.84	5.84	6.20	5.84	5.84	5.84	5.84
Appendix F-2	ınd Bac	Detected			L									<u> </u>	_	_					5.1									_	_	_				
₹	ошрог	Detected Mean	_		Н		Н			H		L	\vdash	┝	-	_					2					H				\vdash					_	H
	Organic C	Detected Detected Maximum	_		H					\vdash					_	\vdash					1										L					\exists
	Org	Petects Alinimum	_	_	Н		Н	-	\vdash	\vdash	_	┢	┝	\vdash		H	-		Н	H	7		\vdash	H				H	\vdash	\vdash	\vdash	H		H	Н	H
		səsxlan A 🧗	22	22	22	22	22	22	22	22	22	22	22	22	77	22	22	22	22	22	22	22	77	22	77	22	22	77	22	22	22	27	22	22	22	77
		Sorrsfiluent	TRICIILOROETHYLENE (TCE)	VINYL CHLORIDE	I.I.I-TRICHLOROETHANE	I.I.2,2-TETRACHLOROETHANE	I.I.2-TRICHLOROETHANE	I.I-DICHLOROETHANE	I,I-DICHLOROETHENE	1,2-DICHLOROBENZENE	I,2-DICHLOROETHANE	1,2-DICHLOROPROPANE	1,3-DICHLOROBENZENE	1,4-DICHLOROBENZENE	2-HEXANONE	ACETONE	BENZENE	BROMODICHLOROMETHANE	вкомогокм	BROMOMETHANE	CARBON DISULFIDE	CARBON TETRACHLORIDE	CHLOROBENZENE	CHLOROETHANE	CHLOROFORM	CHLOROMETHANE	cis-1,3-DICHLOROPROPENE	DIBROMOCHLOROMETHANE	ETHYLBENZENE	METHYL ETHYL KETONE (2.	METHYL ISOBUTYL KETONE (4-	METHYLENE CHLORIDE	STYRENE	TETRACHLOROETHYLENE(PCE)	TOLUENE	TOTAL 1.2-DICHLORUETHENE
		quon S lesifylen#	_	VOA VI	VOA I.	VOV	VOA II.	VOA	VOA I.I	VOA I.2	VOA II.	†	⇈	VOA	Т	VOA	VOA BE	VOA BF	VOA BF	VOA BE	VOA C	VOA C	VOA	VOA	VOA CI	VOA CH	VOA cis	VOA DI	VOA	VOA	Π	VOA	Г	VOA	NOA TO	VOA
		səinU	br.		-			_	-	t	-	_	_	1	_	_	т	_		_				_	_			_	_	_	_	_	1			_
		xinat						Г	Г			Г		Т	Г	Г		П			П	Г			Г			П	П	Т	П			Г		П
		~=,0}	Surf Soil	Surf Sail	Sub Soil	Sub Sail	Sub Soil	Sub Soil	Sub Soil	Sub Sail	Sub Sail	Sub Soil	Sub Soil	Sub Soil	Sub Sail	Sub Soil	Sub Soil	Sub Soil	Sub Soil	Sub Soil	Sub Sail	Sub Sail	Sub Sail	Sub Soil	Sub Sail	Sub Soil	Sub Soil	Sub Soil	Sub Soil	Sub Soi	Sub Soil	Sub Sail	Sub Soil	Sub Soil	Sub Soil	Sub Soil

		Ristribution	ž	N/A	ON/A	N/A	N/A	N/A	D N/A	N/A	N/A	K/A	O N/A	N/A	N/A	N/A	0 N/A	ON/A	(IN/A	N/A	ON/A	0 N/A	N/A	0 N/A	U N/A	N/A	DN/A	ON/A	UN/A	O N/A	N/A	2 Nonpar.	() N/A	N/A	N/A	ON/A
		KVIE	2	t)	0	(1)	٦	(;	()	[]	Û	C	3	•	0	0	0	0	٥	0	5	7	C		-	1	3		-	•	-	7	_			
		(Normal) NCL	5,66	5.93	5.93	5.9.1	5.00	5.(10)	5.00	5.00)	5,(3()	5.00	5,00	2.00	5.00	5.00	5.00	51.5	5.00	5.00	5.00	2,00	5.00	5.00	5,00)	5.00)	5.(10)	5.00	5.00	5.00	5.00	4.77	5.00	4.84	5,00	2.00
		(Pognosmal) OCL	6.90	5.93	5.93	5.93	\$.00	5,00	5.00	5.00	5.00	5,00	5.00	5.00	5.00	5.00	5.00	5.15	5.00	5.00	5.00	5.00	5.00	5.00	2.00	5.00	5.00	5.00	5.00	5,000	5.00	5.62	5.00	7.64	5.00	5,00
		Geometric Afean	4.49															 :											-			3.81				
		Lu(Standard Devlation)	0.58	D.O4	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00'0	00'0	0.00	0.04	00'0	00'0	00'0	0.00	00'0	0.00	0.00	0,00	00'0	0.00	00'0	00'0	00'0	0.54	0.00	0.85	0.00	0.00
		Ln(21con Value)	1.50	1.76	1.76	1.76	1.61	1.61	19.1	1,61	1971	1,61	1971	191	191	1.61	1971	1.62	1971	191	191	19'1	1971	191	1.61	191	191	191	1.61	19.1	19.1	1.34	1.61	1.22	19.1	1.61
	SS	Standard Devlation		0.24	0.24	0.24	0.00	0.00	0.00	00'0	0.00	00'0	00.00	00'0	0.00	0.00	00'0	0.23	00.0	0.00	0.00	0.00	0.00	0.00	0.00	00'0	0.00	0.00	000	0.00	00.00	1.48	0.00	1.73	0.00	00:0
	Organic Compound Background Statistics	Yaluc Yaluc 2 X	_	11.68	89:11	11.68	10.00	10.00	10,00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	100'01	10.14	10,00	10.00	10.00	10.00	10,00	10001	10.00	10.00	10.00	10.00	10.00	10.00	10.00	8.45	10,00	8.41	10,00	10.00
ix F-2	ackgroun	Value	5.02	5.84	5,84	5.84	5.00	2.00	5.00	2.00	5.00	5.00	8.00	5.00	5.00	5.00	5.00	5.07	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	200	4.23	2005	4.20	5.00	\$.00
Appendix F-2	ound B	Mean Detected		_			H		H						┞	 	-	ig	H		l	H		H	-	-		F			-	9.1		_		H
ľ	Comp	mumixaM betreted						_						Γ										_								2		Г		
	'ganic	muminii/A Detected																	Ī													-				
	Ö	esevlana #		23	22	23	22	22	22	22	77	22	22	22	12	£1	77	22	22	22	77	22	22	22	22	EZ	22	22	22	22	22	22 5	22	77	22	77
		sasvienA t	_	-		-		-	-	-	<u> </u>	-	-		Ť		Ť	l'	ľ		Ť	-	 	.,	· ·		-		- -			 		Ħ		H
		insuilisno	Total Xylenes	1721-3-DICHLOROPROPENE	TRICHLOROETHYLENE (TCE)	VINYL CHLORIDE	I.I.I.TRICHLOROETHANE	1,1,2,2-TETRACHLOROETHANE	1.1.2-TRICHLOROETHANE	I.I-DICHLOROETHANE	I,I-DICHLOROETHENE	1,2-DICHLOROBENZENE	1.2-DICHLOROETHANE	1.2-DICHLOROPROPANE	13-DICHLOROBENZENE	1 4-DICHLOROBENZENE	2-HEXANONE	ACETONE	HENZENE	BROMODICIILOROMETHANE	ВКОМОРОКМ	BROMOMETHANE	CARBON DISULFIDE	CARBON TETRACHLORIDE	CHLOROBENZENE	CHLOROETHANE	CHLORDFORM	CHLOROMETHANE	cis-1.3-DICHLOROPROPENE	DIRROMOCHLOROMETIIANE	ETHYLBENZENE	METHYL ETHYL KETONE (2-	METHYL ISOBUTYL KETONE (4-	METHYLENE CHLORIDE	STYRENE	TETRACHLOROETHYLENE(PCE)
		duo1-D lical Group		Г	VOA	VOA	VOA	VOA	VOV	VOA	VOA	VOA	VOA	VOA	VOA	VOA	VOA	VOV	VOA	YOA	γoγ	VOA	VUA	VOA	VOA	VOA	VCA	VOA	VOA	VOA	VOA	VOA	VOA	VOA	VOA	VOV
	!	ջոկուն	ы	_	-	Т	т	Г	Π	Γ	Γ		Г	Г	Т	Т	Г	Π	Т	Т	Т	Г	Т	Г	Г	Г	Г	Г	Т	T	Τ	Т	Т			П
	1	xirilald	Ē	Ł	Т	П	Г	۸S			S.	ΑS	Γ		Ī					Γ	T		MS	Γ			SW		Ī	T		Γ	Γ			П

		noiludhleiQ	ONA	C) N/A	Nonpar.	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	ONA	ONA	N/A	QN/A	N/A	UNIA	Y/Y	ONA	0 N/A	ON/A	() N/A	Nonpar.	ON/A	0 N/A	() N/A	O Nonpur.	ON/A	ON/A
		BVIE	3	Ξ		O	Đ	n	0	\$	0	O	0	()	0	0	С	C	O	()	O	b	Ø	U	-	(1)	o	Ċ	O	3	5	0	Ö	ΪÓ	٥	Ξ
		(уоция)) ПСГ	5.00	5.00	5.07	5.00	5.00	5.00	13.24	13.24	13.24	13.24	13.24	1167.02	13.24	13,24	1167.02	1167,02	13.24	14,45	13.24	13,24	13.24	13,24	13.24	13.24	13.24	13,24	13,24	13.14	13.24	13.24	13.24	11,47	13.24	13,46
		(Fognormal) UCL		5.00	5.93	5.00	5.00	5.00	12.14	12.14	12.14	12.14	12.14	16,16,90	12.14	12.14	1636.90	1636.90	12.14	13.95	12.14	12.14	12.14	12.14	12.14	12.14	12.14	12.14	12,14	12.25	12.14	12.14	12.14	11.32	12.14	12,30
		Geometric Alesa	_	-	4.32			_	-											-	-	_								61.8				5,95		-
		Ln(Standard Deviation)	0.00	000	0.47	00'0	0.00	0.00	0.51	0.51	15.0	0.51	0.51	1.05	0.51	150	1.05	1.05	15.0	0.55	0.51	15.0	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.55	0.51	0.51	0.51	0.74	15.0	0.50
		La(Mean Value)	191	19'1	1.46	19'1	191	191	2.13	2.13	2.13	2,13	2.13	61'9	2.13	2.13	61.9	61.9	2.13	2.24	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.10	2.13	2.13	2.13	1.78	2.13	7.17
	8	Standard Deviation		0.00	1.18	00'0	0.00	0.00	8.71	8.71	8.71	8.71	8.71	80.868	8.71	11.8	898.08	80.868	8.71	16.8	8.71	8.71	11.8	B.71	11.71	11.11	8.71	8.71	B.71	8.80	11.8	B.71	11.H	9,20	17.1	B.62
	Organic Compound Background Statistics	Value Mean 2 X	_	10,00	9.27	00'01	10.00	00'01	20.09	20,09	50.05	20.09	20.09	1675.00	20.09	50.09	1675.00	1675.00	20.09	22.36	20.09	20.09	20.09	20.09	20.09	20.09	20.09	20.09	20.09	19.82	20.09	20.09	20.09	16.18	20.09	20.59
Appendix F-2	ackgroun	Mesine Value	8	5.00	4.64	5.00	5.00	5.00	10.05	10.05	10.05	10.05	10.05	837.50	10.05	10.05	837.50	837.50	10.05	11.18	10.05	10.05	10.05	10.05	10.05	10.05	10.05	10.05	10.05	9.91	10.05	10.05	10.05	8,09	10.05	10.30
ppen	und E	Menected Detected	_		-		Н									_	_													<u>ب</u>		Н	Н	4.8	H	\exists
	ிலைம்	Maximum Deiected	_		-		Н																							۳.	H	П	П	01	П	7
	ganic (Minimun Detected	_		-		П			П		-	_			-				Н		-	-	_			_		_	Ε.	Г	Н	Н	=	H	\exists
	Org	# Detects	_		7			<u> </u>					_	-																=				0		
		sas√lan∧ #	77	22	22	22	22	73	22	12	77	22	22	22	22	[22	77	22	22	22	72	22	22	7.7	22	22	22	22	77	22	22	22	22	22	22	22
		due o mon (mun	TOLUENE	TOTAL 1,2-DICHLOROETHENE	Total Xylenes	trans-1,3-DICHLOROPROPENE	TRICHLOROETHYLENE (TCE)	VINYL CHLORIDE	I.I.I-TRICHLOROETHANE	I.1.2.2-TETRACHLOROETHANE	1,1,2-TRICHLOROETHANE	I.I-DICHLOROETHANE	I,I-DICHLOROETHENE	1,2-DICHLOROBENZENE	1,2-DICHLOROETHANE	1,2-DICHLUROPROPANE	1,3-DICHLOROBENZENE	1,4-DICHLOROBENZENE	2-HEXANONE	ACETONE	RENZENE	BROMODICHLOROMETHANE	BROMOFORM	BROMOMETHANE	CARBON DISULFIDE	CARBON TETRACHLORIDE	CHLOROBENZENE	CHLOROETHANE	CHLOROFORM	CHLOROMETHANE	cis-1,3-DICHLOROPROPENE	DIBROMOCHLOROMETHANE	ETHYLBENZENE	METHYL ETHYL KETONE (2-	METHYL ISOBUTYL KETONE (4-	METHYLENE CHLORIDE
		Analytical Group	VOA	ΛΟΛ	VOA	VOA	VOA	VOA	VUA	VOA	VOA	VOV	VOA	VOA	YUA	VOA	VOA	VOA	VOV	VOA	VOV	VOA	VOA	VOĀ	VOA	VOA	VOV	VOV	VOA	VOA	VOA	VOA	VOA	VOA	VOA	VOA
		કા ં ગપ્રિ				1/2/1			និង/ ខិព		្សា/ជីព 			สมุสิก					ng/kg			_		ug/kg		ก <i>อ</i> /หัย			ug∧kg ∫							ug/kg
		xirald	ΝS	ΝS	MS	MS.	ΑS	M S	Sed	Sed	Sed	Sed	Sed	Sed	Sed		Z.	Sed	Sed	Sed	Sed	Sed Sed	Sed	Sed	Sed	Sed	Sed	Sed 1	Sed			Sed				Sed

		aoitudhtalG	ON/A	0 N/A	Nonpar.	N/A	N/A	ONA	0 N/A	0 N/A	Maxdel	ON/A	ON/A	D/A	2 Maxdet	N/A	A/A	A/A	A/A	Y.Y	N/A	V/V	۷/۷	٧/٧	ON/A	N/A	N/A	N/A C	ΝA	UN/A	0 N/A	U N/A	ON/A	N/A	O N/A	I) N/A
		HATE		0	14	0	()	n	0	t)	_	()	2	~	7	2	٦	=	2	ಶ	=	-	-	7	٦	- 	٦	٦	٦	7	_		_	Ĭ		
		UCL UCL		13,24	9.85	13.24	13.24	13,24	13.24	13.24	5.27	5.00	5.00)	5,(10)	5.20	5.00	5.00	5.00	2,00	9.00	5.00	13,06	2,00	5.00	5.00	5.00	S.tx)	5.00	2.00	5.00	5,00	5,00	5.00	\$.00	S.(K)	5.00
		UCL (Lognormal)		12.14	10.33	12.14	12.14	12.14	12.14	12,14	6.57	5,00	5.00	3.00	5.59	2.00	5.(3)	5.00	\$.00	2.00	5.00	13.52	2.00	5.00	5.00	\$,00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5,00	2.00
		Сеотейјс Мевп			7.55						4.37				4,63															i						1
		L.o(Standard Devlation)		15.0	0.47	0.51	0.51	0.51	15.0	0.51	0.42	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	000	0.00	0.58	0.00	0.00	0.00	0.00	0.00	000	0.00	00.0	O.O.O	0,00	00'0	000	00'0	00'0
		Value) Value)	2.13	2.13	2.02	2.13	2.13	2.13	2.13	2.13	1.48	1971	1.61	1.61	1.53	19:1	1.61	1.61	1.61	1.61	1.61	1.93	19:1	1.61	[191]	1.61	191	1.61	1.61	19.1	19,1	19.1	1.61	19'1	19'	1.61
	S	Standard Berjadon	1.71	[17.B	4.05	17.8	11.8	8.71	8.71	8.71	1.15	000	0.00	0.00	0.87	0.00	0.00	0.00	0.00	0.00	0.00	8.14	0.00	0.00	0.00	0.00	0,00	0.00	0.00	00.0	0.00	0.00	0.00	0.00	0.00	0.00
	Organic Compound Background Statistics	Velue Velue 2 X	L	50.05	16.73	20.05	20.09	50.09	20,09	20.09	9.33	10.00	00.01	10.00	9.50	10.00	10.00	10.00	10.00	10.00	10.00	17.67	10.00	10.00	10.00	10.00	10.00	10.00	10.00	oorai	10,00	10:00	10.00	10.00	10.00	10.00
ix F-2	ackgroun	nesh Suluk Y c	10.05	\$0.01	8.76	t0.05	10.05	10.05	10.05	10.05	4.67	5.00	5.00	5.00	4.75	3.00	5,00	5.00	3,00	2.00	3,00	8,83	9.00	5.00	5.00	5.00	5.00	5.00	. 5.00	5.00	5.00	5.00	5.00	5.00	9:00	2.00
Appendix F-2	und B	Detected			8.667	H	\vdash		L	H	_	-			7	-			+												۲		H		H	\exists
*	onipo	Detected heteran	_		14	H				H	 -				7									_							\vdash		F	Н	П	
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	nic	beteeled municals	\dashv	┝	rı				r	T	Τ		П		7										1						Г	آ	l	L		¹
	Organic	muminit/ batealad			۲۱ ۳						<u> </u>				[] 2																		L	H		
	Organic	Detected		22	F	22	22	22	22	22	13 1	र।	12	12	12 1 2	[[2]]	[[1]	12 .	12	12	12	12	12	12	12] 12[] .	12	12	1.2	12	12	12	12	12	12	12
	Organic	# Detects muminity Detected	STYRENE 22	TETRACHLOROETHYLENE(PCE)	TOLUENE 22 3	TUTAL 1.2-DICHLORUETHENE	Total Xylenes	trans-1,3-DICHLOROPROPENE	TRICHLOROETHYLENE (TCE)	VINYL CHLORIDE	I,I,J-TRICHLOROETIIANE	1.1.2.2-TETRACHLOROETHANE	1,1,2-TRICHLOROETHANE	I.I-DICHLOROETHANE	[1,1-DICHLOROETHENE [12 1]	1.2-DICHLOROBENZENE	1,2-DICHLOROETHANE	I.2-DICHLOROPROPANE	I,3-DICHLOROBENZENE	1,4-DICHLOROBENZENE	2-HEXANONE	ACETONE	BENZENE	BROMUDICHLOROMETHANE	вкомоговм	BROMOMETHANE	CARBON DISULFIDE	CARBON TETRACHLORIDE	CHLOROBENZENE	CHLOROETHANE	CHLOROFORM	CHLOROMETHANE	cis-1,3-DICHLOROPROPENE	DIBROMOCHLOROMETHANE	ETHYLBENZENE	METHYL ETHYL KETONE (2-
	Organic	Analytical Group Constituent Fonstituent Fonstituent Constituent Puetects Analyses	VOA STYRENE 22	VOA TETRACHLOROETHYLENE(PCE)	VOA TOLUENE	VOA TUTAL 1.2-DICHLORUETHENE	VOA Total Xylenes	VOA (rans-1,3-DICHLOROPROPENE	VOA TRICHLOROETHYLENE (TCE)	VOA VINYL CHLORIDE	VOA I,I,I-TRICHLOROETIIANE	VOA 1.1.2.2-TETRACHLOROETHANE	VOA 1,1,2-TRICHLOROETIIANE	VOA I.I-DICHLOROETHANE	VOA [1,1-DICHLOROETHENE [12 1]	VOA 1.2-DICHLOROBENZENE	VOA 1,2-DICHLOROETHANE	VOA 1,2-DICHLOROPROPANE	VOA 1.3-DICHLOROBENZENE	VOA 1,4-DICHLOROBENZENE	VOA 2-HEXANONE	VOA ACETONE	VOA BENZENE	VOA BROMUDICHLOROMETHANE	VOA BROMOFORM	VOA BROMOMETHANE	VOA CARBON DISULFIDE	VOA CARBON TETRACHLORIDE	VOA CHLOROBENZENE	VOA CHLOROETHANE	VOA CHLOROFORM	VOA CHLOROMETHANE	VOA cis-1,3-DICHLOROPROPENE	VOA DIBROMOCIILOROMETHANE	VOA ETHYLBENZENE	VOA METHYL ETHYL KETONE (2-
	Organic	Constituent Analyses Detects muminiff	(VOA STYRENE 22 1	VOA TETRACHLOROETHYLENE(PCE)	VOA TOLUENE	VOA TUTAL 1.2-DICHLORUETHENE	VOA Total Xylenes	VOA (rans-1,3-DICHLOROPROPENE	VOA TRICHLOROETHYLENE (TCE)	VOA VINYL CHLORIDE	VOA I,I,I-TRICHLOROETIIANE	VOA 1.1.2.2-TETRACHLOROETHANE	VOA 1,1,2-TRICHLOROETIIANE	VOA I.I-DICHLOROETHANE	VOA [1,1-DICHLOROETHENE [12 1]	VOA [1.2-DICHLOROBENZENE	1,2-DICHLOROETHANE	VOA 1,2-DICHLOROPROPANE	I,3-DICHLOROBENZENE	1,4-DICHLOROBENZENE	VOA 2-HEXANONE	VOA ACETONE	BENZENE	VOA BROMUDICHLOROMETHANE	VOA BROMOFORM	VOA BROMOMETHANE	VOA CARBON DISULFIDE	VOA CARBON TETRACHLORIDE	VOA CHLOROBENZENE	VOA CHLOROETHANE	VOA CHLOROFORM	VOA CHLOROMETHANE	VOA cis-1,3-DICHLOROPROPENE	VOA DIBROMOCIILOROMETHANE	VOA ETHYLBENZENE	VOA METHYL ETHYL KETONE (2-

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		neitrihution	O N/A	0 N/A	ON/A	V/V	N/A	V/N	N/A	ON/A	Maxdet	0 N/A	O NVA	0 N/A	ON/A	⊕N/A	N/A	N/A	N/V	N/A	ON/A	ON/A	V/N O	A/N ()	N/A	N/A	ON/A	N/A	N/A	N/A	ON/A	ON/A	N/A	A/N	e N/A	V/A
		HVIE		7	3	2	9	0	-)	-	}	,	ł)	7]	1	J		٦)	,	~	-		,	_	•	-	-	-	-			
		(Normal) OCL	- 1	5.00	5.00	5.00	5,00	5.00	5.00	5.00	5.27	5.00	474.12	474.12	[194.0K)	474.12	474.12	474,12	1194.00	474.12	474.12	474.12	474.12	474.12	474.12	1194.00	474.12	474.12	1194.00	1194,00	474.12	474.12	474.12	474,12	474.12	1194,00
	:	(Lognormal)	5.00	5.00	5.00	5.00	5.00	9.00	5,00	5.00	6.57	5.00	397.24	397,24	002.13	397.24	397.24	397,24	t (M) 2, 1, 2	397.24	397.24	397.24	347.24	397.24	347.24	1002.12	397.24	397.24	1002.12	1002.12	397.24	397.24	397,24	397.24	397.24	1002.12
		UCL Mean	4								4.37				_	_		_	_							-			_							
		ointemes D	4	æ	Q	17	Q.	O.	Į,	Ω		OX.	2.5	7.5	2.5	29	25	25	25	7.9	22	2.5	29	25	25	25	2.9	25	125	<u></u> 2	2.5	1.1	<u> </u>	12.5	1.5	<u>.</u>
		La(Standard (Goitaivad		0.00	00'0	0.42	00'0	00'0	000	00'0	0.42	00'0	19'0	19'0	29'0	29'0	29'0	29'0	29 '0	19'0	19'0	29'0	29'0	29'0	0.67	19'0	29'0	29'0	0.67	0.67	29'0	0.67	0.67	0.67	0,67	0.67
		Ln(Mean Value)		1.61	1.61	1.61	1.61	191	191	1971	1.48	1.61	5.44	5.44	6.37	5.44	5.44	5.44	6.37	5.44	5,44	5.44	5.44	5.44	5,44	6.37	5.44	5.44	6.37	6.37	5,44	5.44	5,44	5.44	5.44	6.37
	CS.	bradass2 aoitafr3G		0.00	0.00	0.00	0.00	0.00	000	000	1.15	00.0	410.75	410.75	1032.92	410.75	410.75	410.75	1032.92	410.75	410.75	410.75	410.75	410.75	410.75	1032.92	410.75	410.75	1032.92	1032.92	410.75	410.75	410.75	410.75	410.75	1032.92
	d Statisti	Agine Mean X X	- 1	10:00	10.00	10.00	10.00	10.00	10.00	10.00	9,33	10.00	646.82	646.82	1630.00	646.82	646.82	646.82	1630.00	646.82	546.82	646.82	646.82	646.82	646.82	1630.00	646.82	646.82	1530.00	1630.00	646.82	546.82	646.82	646.82	646.82	1630.00
ix F-2	Organic Compound Background Statistics	Value	5.00	2.00	5.00	2.00	5.00	2.00	5.00	\$.00	4.67	\$.00	323.41	323.41	815.00	323.41	323.41	323.41	815.00	323.41	323.41	323.41	323.41	323.41	323.41	815.00	323.41	323.41	815.00	815.00	323,41	323.41	323.41	323.41	323.41	815.00
Appendix F-2	and B	battasta							-	_	-																	H	\vdash				_	H	-	\dashv
	ошро	Munivald Detected Mean	┪								-																		H					Н	П	\exists
	anic (Detected	\forall						H		┝	_							_			H			Н	L			┢					Н	Н	
}	Org	a Detects muminité	\dashv		Н		_		\vdash	-	-	\vdash				H		H	_	Н	Н	Н	-			-	_	┝	┝	┞	\vdash	H	H	Н	Н	\dashv
		# Analyses	=	12	12	12	12	12	12	12	13	12	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
		Constituent	METHYL ISOBUTYL KETONE (4-	METHYLENE CHLORIDE	STYRENE	TETRACHLOROETHYLENE(PCE)	TOLUENE	TOTAL 1,2-DICHLOROETHENE	Total Xylenes	Inde-1,3-DICHLOROPROPENE	TRICHLOROETHYLENE (TCE)	VINYLCITLORIDE	1,2,4-TRICHLOROBENZENE	2,2-OXYBIS(1-CHLORO)PROPANE	2,4,5-TRICHLOROPHENOL	2.4.6-TRICHLOROPHENOL	2,4-DICHLOROPHENOL	2.4-DIMETHYLPHENOL	2,4-DINITROPHENOL	2,4-DINITROTOLUENE	2,6-DINITROTOLUENE	2-CHLORONAPHTHALENE	2-CHLOROPHENDL	2-METHYLNAPHTHALENE	2-METHYLPHENOL (0-CRESOL)	2-NITROANILINE	2-NITROPHENOL	3,3'-DICHLOROBENZIDINE	3-NITROANILINE	4,6-DINITRO-2-METHYLPHENOL	4-BROMOPHENYL PHENYL ETHER	4-CHLORO-3-METHYLPHENOL	4-CHLOROANILINE	4-CHLOROPHENYL PHENYL ETHER	4-METHYLPHENOL (p-CRESOL)	4-NITROANILINE
		Analytical Group	П					-	<u> </u>	Г		П					Г					_							${}^{-}$	Г		_				_
			ヿ	VOA	VOA	VOA	VOA	VOA	VOA	NOA	VOA	VOA	SVOA	g SVOA		g SVOA	SVOA	g SVOA		S SVOA	g SVOA	SVOA	8 SVOA	g SVOA	R SVOA	R SVOA	SVOA	R SVOA	SVOA	A SVOA	K [SVOA	VOAS 8	SVOA			SVOA
		atinU	[A	l/⊉n	[/ 3 n]	(/វិក ្	ug/l	(/dn]	n _E /J	[மில்]	1/dn	1/din	ug/kg	UE/kg	UP/Kg	UE/KE		UE/KE	ug/kg	ug/kg	ug/kg	រាស្ត្រ <u> (</u>	ug/kg	ug/kg	ug/kg	ង្វ√ង្គម	ug/kg	ង2 / ឱព	П	ug/kg		äy∕ån	ug/kg		П	3 3 √3⊓
		xirlald		Q.K	ĠΨ	αM	MΩ	CW	MΩ	ΜÖ	MΩ	ςw	Surf Soil	Surf Soil	Surf Soil	Surf Soil	Surf Soil	Surf Soil	Surf Soil	Surf Soil	Surf Soil	Surf Soil	Surf Soil	Surf Soil	Surf Soil	Surf Soil	Surf Soil	Surf Soil	Surf Soil	Surf Soil	Surf Soil	Surf Soil	Surf Soil	Surf Soil	Surf Soil	Surf Soil

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	Oistribution	ON/A	ON/A	190 Nonpar.	96 Nonpar.	710 Nonpar.	Nonpar,	900 Nonpar.	820 Nonpar.	780 Nonpar.	ONA	0 N/A	V/N	0 N/A	67 Numpur.	940 Nonpar.	N/N	N/A	Nombur.	N/A	N/A	N/A	Nonpar.	N/A	٧×		N/A	N/A	Nonpar.	N/A	N/A	N/A	V/N	ojn/a	O _N V
	кык	0	٦	190	18	710	960	900	820	780	()		()	0	(9	3	(t)	Û	260	3	â	O	1600	¢	3	3	U	õ	700	à	()	Ċ	a	ָרָנוֹ	.)
	(дошия) ПСГ	1194.00	474.12	474.52	470,96	472.10	491.14	496.25	480.77	487.42	474.12	474.12	474.12	474.12	469.93	492.03	474.12	474.12	467,98	474.12	474.12	474.12	570,70	474.12	474,12	474.12	474,12	474.12	481,03	474.12	474,12	474.12	474,12	474.12	259,29
	(Pognormal) IJCJ,	1002.12	397.24	397.82	397.05	505.32	582.03	495,06	518.95	490.61	397.24	397.24	397.24	397.24	409.52	518.80	397.24	397.24	453.15	397.24	397.24	397.24	64)7.58	397.24	397.24	397.24	397.24	197.24	468.43	397.24	397.24	397.24	347.24	397.24	235.87
;	Geometric Mean	_		232.14	225.05	178.86	184.75		183.64	204.52]	221.40	192.81			208,09				238.32						203.57						
	brahnas2)n.l (noiteived	0,67	19'0	0.67	0.69	0,99	10.1	0,89	0.99	06'0	0.67	0.67	0.67	0.67	0.72	0.96	0.67	0.67	0.83	0.67	0,67	0.67	0.92	0.67	0.67	0.67	0.67	0.67	0.87	0.67	0.67	0.67	0.67	0.67	0.73
	[ա(իկեսը	6.37	5.44	5,45	5.42		5.22		5.21	5.32	5.44	5,44	5.44				5.44	5.44			İ			5.44	١	١	5,44	5.44	5.32	5.44	5.44				4.83
cs	Standard Deviation	1032.92	410.75	410.59	412,54	435,35	448.IO	438.12	439.65	432.01	410,75	410,75	410.75	410,75	413,33	445.08	410.75	410.75	416.06	410.75	410,75	410.75	494.96	410.75	410.75	410.75	410.75	410.75	428.85	410.75	410,75	410.75	410.75	410.75	215.47
nic Compound Background Statistics	Z X Value	1630.00	646.82	647.73	639,18	624,73	653,45	621.00	16'88'91	6,57.82	646.82	646.82	646,82	646.82	636.55	657,45	646.82	546.82	630.64	646.82	646.82	646.82	778.18	646.82	646.82	646.82	646.82	646.82	647.36	646.82	646.82	646.82	646,82	646.82	360,45
Jackgroui	nesM sutaV	815.00	323.41	323.86	319.59	312.36	326.73	335.50	319.45	328.91	323.41	323.41	323.41	323.41	318.27	328.73	323.41	323.41	315.32	323.41	323.41	323.41	389.09	323.41	323.41	323.41	323.41	323.41	323,68	323.41	323.41	323.41	323.41	323.41	180.23
Appendix r - 2 Sound Backgr	Meteried Delected			<u> 18</u>	96	151.3	186.4	207.9	168.7	8.161		_	_	_	67	189.7			117.3				309.5	1	1	1			179.4		-				
Comp	mumikal/i Detected			190	96	710	960	900	820	780					67	940			560				<u>§</u>	1	1	1			700						
anic (Detected			061	96	43	44	15	37	4.5	П				67	40			36			+	\$	1	+	+	+		63		_			Н	
Orga	# Detects	_		╞═	H	6	6	6	6	6	Н		Н	Н	_	10	-	-	747	\dashv	\dashv	╣	ᆿ	\dashv	+	\dashv	\dashv		7	Н	\dashv	Н		Н	Н
	# Analyses	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	73	ដ	ដ	77	2	22	77	22	22	22	22	22	7.7	22
	Constituent	4-NITROPHENOL	ACENAPHTHENE	ACENAPHTHYLENE	ANTHRACENE	BENZO(a)ANTHRACENE	BENZO(a)PYRENE	BENZO(b)FLUORANTHENE	BENZO(g.h.i)PER YLENE	BENZO(k)FLUORANTHENE	BENZYL BUTYL PHTHALATE	Sis(2-CHLOROETHOXY) METHANE	bis(2-CHLOROETHYL) ETHER (2-	bis(2-ETHYLHEXYL) PHTHALATE	CARBAZOLE	CHRYSENE	DI-0-BUTYL PHTHALATE	DI-n-OCTYLPHTHALATE	DIHENZ(a,h)ANTHRACENE	DIHENZOFURAN	DIETHYL PHTHALATE	DIMETHYL PHTHALATE	FLUORANTHENE	FLUORENE	HEXACHLOROBENZENE	HEXACHLOROBUTADIENE	HEXACHLOROCYCLOPENTADIENE	HEXACHLOROETHANE	INDENO(1,2,3-c,d)PYRENE	ISOPHORONE	NITROBENZENE	N-NITROSODI-n-PROPYLAMINE	N-NITROSODIPHENYLAMINE	NAPHTHALENE	PENTACHLOROPHENOL
			SVOA	VOAS			_			SVOA	SVOA	SVOA 1			SVOA	NOVS		SVOA	╗	_	づ	_	┪	7	-	7	_			SVOA	SVOA	SVOA		SVOA	SVOA
		ug⁄kg ¦	ug/kg (ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg (ug/kg	ug/kg	ug/kg !		ug/kg 5	ug/kg !	ug/kg 5	្ និង/នីព	ug/kg		ug/kg		- —	_	-	ug/kg	ug/kg S	ug/kg S	ug/kg İS	ug/kg S	ug/kg S	ug/kg S	ug/kg 5	արդեր Տ
		Surf Soil	Surf Soil	Surf Soil	Surf Soil	Surf Soil	Surf Soil	Surf Soil		Surf Soil	Surf Soil	Surf Soil	Surf Sail	Surf Soil	Surf Soil	Surf Suil	Surf Soil				T	П	П	Т	T	7	╗				Surf Sail	Surf Soil u	Surf Soil u	Surf Soil 1	Surf Soil Lu

		GolludirisiG	610 Nunpar.	4000 Nonpar.	1500 Nonpar.	N/A	N/A	N/A	ON/A	N/A	N/A	V.V.	A/N	V/N/0	A/N.	V/V C	A/S	C/N/O	A/N	V/N	N/A	D/N/A	O/N/A	N/A	N/A	V.V.	N/A	E/N/A	Y/V	V/Z	A/X	٧ <u>/</u> ٧	A/S	V/V	N/A	N/A
		BME	919	14000	- 200 1	O	Ó	O	0	0	Ö	3	3	2	= 	=	2	=	=	٥	=	10	=	O	()	O	0	=	2	2	2	ŝ	2	0	٥	
1		(уосша) ПСГ		2544.79	549.79	522.07	522.07	1294,63	522.07	522.07	522.07	1394.63	\$22.07	522.07	522.07	522.07	522.07	522.07	1294.63	522.07	522.07	1294.63	1294.63	522.07	522.07	522.07	522.07	522.07	1294,63	1294.63	522.07	522.07	522.07	\$22.07	565.31	\$65.31
		(гобиения)) ССГ	488,14	2013.31	578.53	447.69	447.69	1115.07	447.69	447.69	447.69	1115.07	447.69	447,69	447.69	447.69	447.60	447.69	1115.07	447.69	447.69	1115.07	1115.07	447.69	447.69	447.69	447.69	447.69	1115.07	1115.07	447,69	447.69	447.69	447.69	523.67	\$23.67
		Geometric nast#			219.49																												_			
		La(Standard Devlation)	0.92	1.39	0.94	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	79'D	0.67	0.67	0.67	0.67	0,67	0,67	0.67	19'0	29'0	0,67	0.67	0,67	19'0	0.67	0,67	0.73	0.73
		Lu(Mean Value)	- }	5.64	5.39	5.56	5.56	6.47	5.56	5.56	5,56	6.47	5.56	5.56	5.56	5.56	5.56	5.56	6.47	5.56	5.56	6.47	6.47	5.56	5.56	5.56	5.56	5.56	6.47	6.47	5.56	5.56	5.56	5.56	5,6,3	5.63
	ics	Standard noisived	427.40	3312,39	488.90	442,34	442,34	1088.53	442.34	442.34	442.34	1088.53	442.34	442.34	442.34	442.34	442.34	442.34	1088.53	442.34	442.34	1088.53	1088.53	442.34	442.34	442.34	442.34	442.34	1.088.53	1088.53	442.34	442.34	442.34	442.34	461.06	461.06
	Organic Compound Background Statistics	Acan Mean X X	631.36	26.58.82	740.82	719.55	719.55	1790,45	719.55	719.55	719.55	1790.45	719.55	719.55	719.55	719.55	719.55	719.55	1790.45	719.55	719.55	1790.45	1790.45	719.55	719.55	719.55	719.55	719.55	1790.45	1790.45	719.55	719.55	719.55	719.55	792.27	792.27
Appendix F.2	Backgrou	nastā SulaV	315.68	1329.41	370.41	359.77	359.77	895.23	359.77	359.77	359.77	895.23	359.77	359.77	359.77	359.77	359.77	359.77	895.23	359.77	359.77	895.23	895.23	359.77	359.77	359.77	359.77	359.77	895.23	895.23	359.77	359.77	159.77	159.77	196.14	196.14
Appre	puno	Metected	159.4	\$238	272.2	7	7																		_									П	П	7
	Comp	Maximum Detected	3	4000	1.500	1	1		٦										_														7		П	
	anic	Detected	5	ट्र	흙	1	1	1							Н					-	-		Н							H		Н		H	H	\dashv
	ő	# Detects muminiff.	5	~	╡	\dashv	┨	\dashv	\dashv	\dashv	-	_	Н	_	Н	\vdash	\vdash	\vdash		Н	Н	\dashv	Н	\vdash	-	Н	_	Н		L	H			Н	Н	H
-		s∋svjan A #	23	ន	ន	នា	ន	ន	ន	ដ	23	22	22	22	22	2.2	77	22	22	22	77	22	77	23	ដ	22	77	22	22	22	22	22	22	z	22	ដ
		tnsviitzanƏ	THKENE		PYRENE	1,2,4-TRICILLOROBENZENE	2.2'-OXYBIS(1-CHLORO)PROPANE	2,4,5-TRICHLOROPHENOL	2,4,6-TRICHLOROPHENOL	2,4-DICHLOROPHENOL	2,4-DIMETHYLPHENOL	2.4-DINITROPHENOL		2.6-DINITROTOLUENE	2-CHLORONAPHTHALENE	2-CHLOROPHENOL	2-METHYLNAPHTHALENE	2-METHYLPHENOL (a-CRESOL)		2-NITROPHENOL	NZIDINE			HER	YLPHENOL.		HER	JL (p-CRESOL)		4-NITROPHENOL		ACENAPHTHYLENE	ANTHRACENE	PENZO(a)ANTHRACENE	BENZO(a) PYRENE	RENZO(b)FLUORANTHENE
		Analytical Group	VOA:	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVO _A	SVOA	SVOA	SVOA	SVOA	SVOA	VOVS	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA		SVOA
		1		ug/ke	ug/kg	- 1			- 1	- 1	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg		ug/kg	ug/kg	ug/kg	ug/kg		EP/kg	ug/kg	ug/kg		ពន្ធ ា វិទ្ធព	ug/kg	ug/kg	ug/kg	ng/kg	ug/kg	ug/kg	ug/kg		ug/kg	ug/kg
			- 1	Surf Soil	Surf Soil	Sub Soil	Sub Sed	Sub Sail	Sub Sail	Sub Soil	Sub Soil	Sub Soil	Sub Soil	Sub Soil	Sub Soil	Sub Soil	Sub Soil	Sub Soil		\Box	П	T			П	- 1		7						\neg	.	Suh Soil

		aeitudirtziO	CANA_	C N/A	N/A	N/A	C) N/A	N/A	GN/A	ON/A	ON/A	ON/A	N/A	ON/A	S/A	N/A	45 Nonpar.	() N/A	ONA	O/A	O N/A	(INA	ON/A	ON/A	ON/A	UNA	ON/A	N/A	O N/A	GN/A	1900x) Nonpar.	Nonpar.	NIA	GN/A	ON/A	ďN/A
		К ИЕ		₽	=	2	٥	D	÷	Č	c	0	=	5	Č	2	45	כ	0	()	C	Ξ	Ŋ	0	٥	n	O	=	5	5	190KX)	£.1	0	8	9	Э
		UCL (Normal)		565.31	\$22,07	\$22,07	\$22,07	\$22,07	\$22.07	522.07	565.31	522.07	522.07	\$22,07	\$22.07	522.07	510.74	\$22.07	522.07	\$22.07	522.07	\$22.07	16,838	522.07	522.07	\$22.07	\$22.07	522.07	259.03	\$22.07	2857.23	510.47	5.00	5.00	12.50	5.00
		UCL (Legnormal)	523.67	523.67	447.69	447,69	447.69	447.69	447.69	447.69	523.67	447.69	447.69	447.69	447.69	447.69	508.25	447.69	447.69	447.69	447.69	447.69	523.67	447.69	447.69	447.69	447.69	447,69	223.48	447.69	1775.50	516.35	5.00	5.00	12.50	5,00
		Geometric Mean							-				-		-		226.26														402.26	224.32			H	
		La(Standard Deviation)	_	0.73	0.67	1970	19.0	0.67	19.0	19.0	0.73	19.0	19.0	0.67	0.67	6.67	0.85	L970	0.67	19'0	0.67	19.0	0.73	19'0	0.67	0.67	0.67	0.67	0.67	0.67	1.20	0.87	0.00	0.00	0.00	0.00
		La(Mean Yalue)		5.63	5.56	5.56	5.56	5.56	5.56	5.56	5.63	5.56	5.56	5.56	5.56	98"8	5.42	5.56	5.56	5.56	5.56	5.56	5.63	5.56	5.56	5.56	5.56	5.56	4.87	5.56	9	5.41	1.61	1.61	2.53	19:1
	S	brabnai2 noisaireO	90.19	461.06	442.34	442.34	442,34	442.34	442.34	442.34	461.06	442,34	442.34	442,34	442,34	442.34	449.98	442.34	442.34	442.34	442.34	442.34	461.06	442.34	442.34	442.34	442,34	442,34	217.25	442.34	4015.50	450.24	00'0	00'0	00'0	00'0
	Organic Compound Background Statistics	Value Value Value		792.27	719.55	719.55	719.55	719.55	719.55	719.55	792.27	25.617	55.617	719.55	219.55	55.617	12.169	719.55	719,55	55.617	719.55	719.55	792.27	719.55	319.55	719.55	719.55	719.55	358.64	25'612	2767.73	690.55	10.00	10.00	25.00	10.00
Appendix F-2	Backgrou	Meine Value	-	396.14	359.77	359.77	359.77	359.77	359.77	359.77	396,14	359.77	126.77	159.77	159.77	129.77	345.64	359.77	359.77	359.77	359.77	359.77	396.14	359.77	359.77	359.77	359.77	359.77	179.32	359.77	1383.86	345.27	5.00	5.00	12.50	2:00
Appen	punu	Mean Detected		-								-					44.5												\vdash		4295	40.5	П		П	\neg
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	ganic	Minimum Detected	٦		H												44					П		_	+					H	880	6.	H			1
	Ori	# Detects			Ц												7													\vdash	9	7	Н		\dashv	\dashv
		sasylanA #	22	22	77	22	22	2.2	22	22	22	22	22	22	22	22	22	1 22	22	22	22	22	77	22	22	22	22	22	22	22	22	22	22	22	77	77
		Sonstituent	BENZO(g.h.i)PER Y LENE	BENZO(k)FLUORANTHENE	BENZYL BUTYL PHTHALATE	bis(2-CHLOROETHOXY) METHANE	bis(2-CHLOROETHYL) ETHER (2-	bis(2-ETHYLHEXYL) PHTHALATE	CARBAZOLE	CHRYSENE	DIBENZ(Lh)ANTHRACENE	DIBENZOFURAN	DIETHYL PHTHALATE	DIMETHYL PHTHALATE	DI-n-BUTYL PHTHALATE	DI-n-OCTYLPHTHALATE	FLUGRANTHENE	FLUGRENE	HEXACHLOROBENZENE	HEXACHLOROBUTADIENE	HEXACHLORUCYCLOPENTADIENE	HEXACILLOROETHANE	INDENO(1,2,3-c,d)PYRENE	SOPIIORONE	NAPHTHALENE	N-NITROSODI-n-PROPYLAMINE	N-NITROSODIPHENYLAMINE	NITROBENZENE	PENTACHLOROPHENOL	PHENANTHRENE	PHENOL	PYRENE	1,2,4-TRICHLOROBENZENE	2,2-OXYBIS(I-CHLORO)PROPANE	2,4,5-TRICILLOROPHENOL	2,4,6-TRICHLOROPHENOL
					_	┪			_		_	_	\neg	_	_	\neg	_		-	_	_	_	┪	_	_	_	-7	SVOA N	-	SVOA PI	SVOA PI	-	_		-	SVOA 2
			ug/kg S	ug/kg S	ug/kg S	ug/kg S	ug/kg S	ug/kg S		ue/kg S		ug/kg S			$\overline{}$	UR/KE S		_	34/30	_	_	ug/kg S	ug/kg S	_	ug/kg S	_	ug/kg S	up/kg S	ug/kg S	ug/kg S	ug/kg S	ug/kg S	S Lau	S Lan		S Lau
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		RATE	ON/A	O'N'A	N/A	ON/A	S S	A/N/O	S/N/G	ON/A	V/N	ž	C/N/C	D/A	V/N	₽/N	ž	0 N/A	ON/A	字	V/N	ON/A	ON/A	D/A	Ž	VZ C	D/VA	ONA	ON/A	A/N		ON/A	E N/A	N/A		ON/A
		(lamoV)		5.00	12.50	5.00	5.00	5.00	5.00	5.00	5.00	民	00%	5.00	₽,	₹.	5.00	5.00	€	3.00	5.00	12.50	Ş.	5,00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5,003	5.00	5.00
l		(Mormal) UCL) 45 L	1	2	٠.	5	~	ς.	v.	\$	12.50	•	~	17	12.50	8	٠,	۶.	<u>۰</u>	<u>بر</u>	2	12.50	 	S.	٧.	<u>بر</u>	35	<u>ب</u>	<u>ن</u> و	 ∽		ν.	35.	rei.	\ v;
		ՄԵՐ ՄԸՄ		5.00	12.50	5.00	5.00	5,00	5.00	5.00	\$.00	12.50	5.00	5.00	12.50	12.50	5.00	5.00	3.00	5.00	5.00	12.50	12.50	5.00	5.00	2.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	\$.00
		Seometric GesM		- 														_									-									
		L.n(Standard Devlation)		00'0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00'0	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00'0	0.00	0.00	0.00	0.00	00.0	0.00	00.0	00'0	00.00
		Ln(Mean Value)		197	2.53	1.61	197	191	19'1	1.61	19'1	2.53	191	197	2.53	2.53	191	191	1971	197	1.61	2.53	2.53	1971	1.61	1.61	19:1	197	19.1	191	19.	1,61	1.6.1	19.1	19.1	1971
	S	Standard noiteirad		0.00	00.0	0.00	0.00	00'0	0.00	00'0	OO'O	00'0	0.00	000	0.00	0.00	0.00	0.00	0,00	0.00	00:0	0.00	0.00	0.00	0.00	0.00	00'0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Organic Compound Background Statistics	Meine Value	_	10.00	25.00	00.01	10.00	10.00	10.00	10.00	10.00	25.00	10.00	10.00	25.00	25.00	10.00	10,00	10.00	10,00	10.00	25.00	25.00	10.00	10.00	10,00	10,00	10,00	10.00	00'01	10.00	10.00	10.00	10.00	10.00	10.00
F.2	kground	Value X X	5.00	5.00	12.50	5.00	5.00	5.00	5.00	5.00	5.00	12.50	5.00	5.00	12.50	12.50	5.00	5.00	5.00	5.00	5.00	12.50	12.50	5.00	5.00	5,00	5.00	5.00	\$.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Appendix F-2	nd Bac	Detected	4			_						_						4			4		4	_	4				Ц					Щ	Ц	
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	ic Co	mumixal4 balceted	_				Ц	Ц	_	_	ot	╝	_	_	┙							_			╛	_										╛
	Jrgan	Alinimum Detected	_							4	_	╛	┙					_			\Box	╛								_						╛
		# Analyses # Detects	22	53	77	77	Ħ	77	22	77	≈	F.;	57	77	22	77	≈	티	33	77	ដ	គ	ន	티	2	77	22	22	22	22	22	22	22	77	22	77
		Constituent	2.4-DICHLUROPHENOL	24-DIMETHYLPHENOL	2,4-DINITROPHENOL	2.4-DINITROTOLUENE	2,6-DINITROTOLUENE	2-CHLORONAPHTHALENE	2-CHLOROPHENOL	2-METHYLNAPHTHALENE	2-METHYLPHENOL (o-CRESOL)	INICINE	HENOL	3.7-DICHLOROBENZIDINE	NILINE	4,6-DINITRO-2-METHYLPHENOL	4-BROMOPHENYL PHENYL ETHER	4-CHLORO-3-METHYLPHENOL	4-CHLUROANILINE	4-CHLOROPHENYL PHENYL ETHER	4-METHYLPHENOL (p-CRESOL)	NILINE	HENOL	THENE	ACENAPHTHYLENE	JENE	BENZO(a)ANTHRACENE	PYRENE	BENZO(b)FLUORANTHENE	BENZO(g,h,i)PERYLENE	BENZO(k)FLUORANTHENE	BENZYL BUTYL PHTHALATE	bis(2-CHLOROETHOXY) METHANE		EXYL) PHTHALATE	
			_	_	~	┱	_	_	_	_	⇁	┰	\neg	┪	7	\neg	7	7	┱	┰	_	_	_	ACENAPHTHENE	ACENAPI	ANTHRACENE	BENZO(a)	BENZO(a)PYRENE	BENZO(b)	BENZO(R.	BENZO(k)	BENZYL.	bis(2-CHL)	his(2-CHL	bis(2-ETH	CARBAZOLE
		lositulad	SVOA	SVOA	SVOA	SVOA	VOV?	SVOA	SVOA	SVOA	SVOA	SVO.	SVOA	Š S	VO/S	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVGA	5V0A	SVOA	8 2 2 8	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA
		aliaU -	LL V	<u>LE</u>	Ne.	Į,	No.	<u>1</u>		/Sn	<u> </u>	Jan 1	Sin I	η In	Egi Pi	[/dn	V.	/an	/an	√an	/zin	/Zn	/an	/2n	Sal .) an	Į.	5	Man	/ga	/dn	νŝη	Į⁄šn	/an	<u></u>	η/ďa
	_	Matrix	ΑS	λ	<u>₹</u>	S	<u>}</u>	A.S.	<u>}</u>	¥.	<u>*</u>	× i	A S	3	à	3	*	<u>*</u>	<u>}</u>	AS.	<u>*</u>	<u>*</u>	ž,	A.S.	<u>}</u>	À	A S	<u>*</u>	≱	AS.	Si	À.	A)	λX	<u>*</u>	MS.

		neitudirtziG	GN/A	() N/A	ONA	ONA	UNIA	O N/A	O N/A	ON/A	ON/A	DN/A	A/NO	ONA	ON/A	ON/A	A/NO	C N/A	ONA	EN/A	A/NO	ON/A	O N/A	O N/A	ON/A	A/N 0	A/N O	V/V C	ON/A	A/N C	A/N C	C/N	Y/N=	V/N	ON/A	t) N/A
		RAIE (Mormal)	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	2.50	5.00	5.00	5.00	1167.02	1167.02	2858.97	1167.02	1167.02	1167.02	2858.97	1167.02	1167.02	1167.02	1167.02
		UCL,	2.00	5.00	5.00	5.00	5.00	5.00	5.00]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	2.50	5.00	5.00	8,00	1636.90	1636.90	4000.53	1636,90	1636.90	1636.90	4000.53	1636.90	1636.90	1636.90	1636.90
		Seametric Alcan																																		
		Ln(Standard Deviation)	0.00	0.00	0.00	0.00	0.00	D.OU	0.00	0.00	(JU)	00'0	00'0	00'0	00'G	00'd	000	0.00	0.00	00.0	O.DO	0.00	0.00	0.00	0.00	501	1.05	<u>5</u>	1.05	1.05	1.05	2	50.1	1.05	1.05	1.05
		Ln(Mens) Value)	19:1	19:1	1.61	191	191	1.61	19.1	1.61	1971	1,61	197	19:1	19.1	19:	1971	191	1971	191	191	0.92	1,61	1.61	19'1	61'9	61.9	7.09	6'19	61.9	61.9	7.09	6.19	61.9	6.19	6.19
	ics	Standard Deviation	0.00	0.00	00:00	00'0	000	0.00	0.00	0.00	0.00	0.00	90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00:0	0.00	00.00	0.00	898.08	80.868	2194.86	80'868	808.08	808.08	2194.86	80.868	80'868	80.868	80'868
	Organic Compound Background Statistics	X X Mean Value	10,00	10:00	10:00	10:00	10:00	10.00	00'01	10,00	10.00	10.00	10,00	00'01	10.00	10.00	10.00	10.00	10.00	10.00	10.00	2.00	10.00	10.00	10.00	1675.00	1675.00	4107.27	1675.00	1675.00	1675.00	4107.27	1675.00	1675.00	1675.00	1675.00
Appendix F-2	Backgrou	nteald SultaV	5.00	28	S	8 •	5,00	3.00	5.00	2.00	5.00	5.00	9.00	5.00	5.00	5.00)	2.00	5.(K)	5.00	5.00	\$,00	2.50	5.00	5.00	5.00	837.50	837.50	2053.64	837.50	8,17.50	837.50	2053.64	837.50	837.50	837.50	837.50
Abper	pound	Mean Defected												_																						
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		ensylen y # (<u> </u>	~	22	~	~	-	<u>۳</u>	7	7	7	7	2	22	1 2	2	7	12	17	22	2	22	17	22	-	22	2.	22	22	22	22	22	22	감	
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Page 12 of 20

Appendix F-2
Organic Compound Background Statistics
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		Bistribution	71001Z	870 Nanpar	A/N	O/N/O	O AY	V/N/G	1700 Nonpar	O/VA	O'N'A	D/N/a	UN/A	130 Nonpar	N/N/	6900 Nonra	200 Nonnar	2881.9 Lagacin	N/N/O	O N/A	O N/A	N/A	O N/A	N/A	Ž	S/N/S	N/A	A/N D	A/N D	D//A	D/V	D/N/A	N/A	V/N D	ON/A	ONA
		(Normal) UCL	1670,50	1176,47	1167.02	1167.02	1167.02	1167,02	1178.38	1167.02	1167.02	1167.02	1167.02	1149.85	586.72	1739.57	50.6511			9.00	12.50	5.00	5.00	9.00	12,50	5.00	5,00	2.00	9.00	5.00	5.00	12.50	2.00	5.003	12.50	12.50
		([Runou2o]) CCF	- 1	1711.60	1636.90	1636.90	1636.90	1636.90	2419.23	1636.90	1636,90	1636.90	1636.90)	1621.92	823,37	3247.60	2454,10	2881.87	5.00	5.00	12.50	5.00	5.00	2.00	12.50	2.00	5.00	5.00	5.00	5.00	5.00	12.50	5.00	5.00	12.50	12.50
		Осолеі Нс Меап	_7						413.29		_			453,51		532,30		499,49		_					ļ		-									
		Ln(Standard Deviation)	1.25	1.08	1.05		1.05	1.05	1.30	1.05	1.05	1.05	1.05	1.08	1.05	1.32	1.33	€.1	0,0	0.00	0,00	0.00	00'0	00'0	00'0	00'0	0.00	00'0	0.00	00.0	0.00	0.00	0.00	0.00	0.00	0.00
		Ln(Mean Value)			61.9	61'9	6.19	61.9	6.02	61'9	61.9	6.19	61.9	6,12	5.49	L	5.96	6.21	19.1	19.1	2.53	19:1	1,61	1.61	2.53	19'1	19.1	1.61	1971	1.61	191	2.53	191	1.61	2.53	2.53
	ıcs	Standard Deviation	1631.31	899.06	808.08	898.08	898.08	898.08	927.41	898.08	808.08	808.08	808.08	909.52	453.75	1570,27	918.59	1567.77	0.00	00.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.00	0,00	0.00	0.00	0.00	0.00
	Organic Compound Background Statistics	X X Value	2144,09	1693,18	1675,00	1675.00	1675,00	1675.00	1676.18	1675.00	1675.00	1675.00	1675.00	1632,27	840.45	23.26.82	1624.00	2204.36	10.00	10.00	25.00	10.00	10.00	10.00	25.00	10.00	10.00	00'01	10,00	10,00	10.00	25.00	10.00	10.00	25.00	25.00
lix F.2	ackgroun	neald Value	1072.05	846.59	837.50	837.50	837.50	837.50	838.09	837.50	837.50	837.50	03.77.8	816.14	420.23	1163.41	812.00	1102.18	5.00	2.00	12.50	\$.00	5,00	5.00	12,50	5,00	5.00	00%	5.00	5.00	5.00	12.50	5.00	\$.00	12.50	12.50
Appendix F-2	ound B	Meterica Detected	1294	003		Ц			428.3					130	-	16.51	85.8	1360	\vdash		L			_	_								H		Н	
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		3	_	_	_	_	⇁	⇁	⇁	_	_	7	\neg	NAPHTHALENE	PENTACHLOROPHENOL	PHENANTHRENE	PHENOL	PYRENE		2,2'-OXYBIS(1-CHLORO)PROPANE	2.4.5-TRICHLOROPHENOL	2,4,6-TRICHLOROPHENOL	2.4-DICHLOROPHENOL	2.4-DIMETHYI.PHENOL	2.4-DINITROPHENOL	2,4-DINITROTOLUENE	2,6-DINITROTOLUENE	2-CHLORONAPHTHALENE	2-CHLOROPHENOL	2-METHYLNAPHTHALENE	2-METHYLPHENOL (o-CRESOL)	2-NITROANILINE	2-NITROPHENOL	3,3-DICHLOROBENZIDINE	3-NITROANILINE	4,6-DINITRO-2-METHYLPHENOL
		- Analytical Group	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	5V0A	SVOA	SVOA	SVOA	SVOA	SVDA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	SVOA	_	SVOA		Т	SVOA
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		xintelA	25.	Sed	Sed	Ser	Sed	Sed	Scd	હું	Ş.	Sed	Sed	Sed	Sed	Sed	Sed	Soci	<u>*</u>	₹	<u></u>	Ç	₹	čķ	<u>}</u>	Š	ĕ	ĕ	<u>₹</u>	ĕ	ΑS	<u></u> 8	æ	<u></u>	Ğ₩	e S

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	noitudinteiC	1 V V V	V/2	A/N	V/V	D/VA	O N/A	N/A	ON/A	UN/A	ON/A	E/N	Z/A	C N/A	N/A	A/N	2 Maxdet	V/A	A/N	ON/A	EN/A	N/A		N/A	N/A	A/V	V N	V/N 0	W/N C	N/A	V.Z.	N/A	N/A	V/N
	зие																																	
	UCL (Normal)) S.	200	\$ 00.5	\$ 00	\$ 00.5	12.50	12.50	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.20	5.00	5.00	5.00	5.00	5.00	5.00	S.(90	80°C	2.00	() () ()	(II) y	(N) 5	(A)	(N) S	5.00	5.00	5.00
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	nesta)n.I (sulaV	_	19:1	19:1	19.1	9	2,53	2.53	1.61	19:1	19:1	19,1	1,61	19.1	191	19.1	1.53	1.61	1971	191	1.61	1.61	1.61	1.61	10.	9	19	191	1.61	1.61	1.61	19:1	19.1	1.61
S	Standard Revisition		00:0	000	0.00	0.00	0.00	0,00	0.00	00.0	0.00	0.00	0.00	0.00	00'0	0.00	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	200	9	000	000	000	00.0	0.00	0.00	0.00
anic Compound Background Statistics	X X Value	_	10.00	10.00	10.00	10.00	25.00	25.00	10.00	10,(K)	10,00	10,00	10.00	10,00	10.00	10.00	9.50	10.00	10.00	10.00	10.00	10.00	0.00	000	0.00	00.01	10.01	10.00	00:01	10.00	10,00	10.00	10,00	10:00
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	Constituent	4-BROMOPHENYL PHENYL ETHER	4-CHLORO-3-METHYLPHENOL	4-CHLOROANILINE	4-CHLOROPHENYL PHENYL ETHER	4-METHYLPHENOL (p-CRESOL)	4-NITROANILINE	4-NITROPHENOL	ACENAPHTHENE	ACENAPHTHYLENE	ANTHRACENE	HENZO(a) ANTHRACENE	HENZO(a)PYRENE	BENZO(b)FLUORANTHENE	BENZO(g,h,i)PERYLENE	BENZO(k)FLUORANTHENE	BENZYL BUTYL PHTHALATE	bis(2-CHLOROETHOXY) METHANE	bis(2-CHLOROETHYL) ETRER (2-	bis(2-ETHYLHEXYL) PHTHALATE	CARBAZULE	CHRYSENE	N-ROLLE PHINALALE	DIRENZO NA NITHO ACTENT	DIBENZOFURAN	DIETHYL PHTHALATE	DIMETHYL PHTHALATE	FLUORANTHENE	FLUORENE	HEXACHLOROBENZENE	HEXACHLOROBUTADIENE	HEXACHLOROCYCLOPENTADIENE	HEXACHLOROETHANE	INDENO(1,2,1-c,d)PYRENE
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		DCL DCL		5.00	5.00	5.00	5.00	2.50	5.00	5.00	5.00	155,72	20.35	103.67	203.53	20,35	99.95	20.35	(1957.(19	10940.28	20.35	67.68	13.60	67.68	135.99	09.01	89'69	13.60	7600.80	CO.8929	091	1.25	0.25	1.25	2.50	0.25
		(Pognomni) UCL		5.00	2.00	2.00	5.00	2.50	5.00	5.00	5.00	154,47	22.72	112.09	227.13	22.72	110.92	22.72	12505.11	12081,08	22.72	69.92	14,08	56'69	140.74	14.08	69.92	14.08	7948.46	6989,05	14.08	1.25	0.25	1.25	2.50	0.25
		Seametric Mean						-																_										T	T	П
İ		Ln(Standard Deviation)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	0.00	0.65	0.46	81.0	0.46	0.46	0,46	0.46	0.47	0.51	0,46	0.46	0.48	0.46	0.48	0.48	0.46	0.48	0.51	0.46	0.48	OO'O	00'0	00'0	0.00	0.00
		Ln(Mean Value)	1.61	19'1	1.61	191	1.61	0.92	1.61	1.61	1.61	4.51	2.81	4.48	5.12	2.81	4.40	2.81	11.6	9.()4	2.81	3.93	2.32	3.93	4.62	2.32	1,93	2.32	B.62	B.54	2.32	0.22	<u>er.</u> I.	0.22	0.92	-1.39
	ics	Standard Deviation	- 1	0.00	0.00	0.00	00'0	0.00	0.00	0.00	0.00	108.67	90.9	26.52	60.61	90'9	30,73	90.9	5041.02	4193.06	90.9	28.75	5.89	28.75	58.93	5.89	28.75	5.89	3518.90	2875.25	5.89	00.0	00'0	0.00	00'0	0:00
	Organic Compound Background Statistics	Z X Mean Value	10:00	10.00	10.00	10.00	10.00	5,00	00'01	10.00	10,00	229.62	36.14	187.38	361.43	36.14	176.76	36.14	20119.05	18723.81	36.14	113.71	22.76	113.71	227.62	22.76	113,71	22,76	12552,38	11371.43	22.76	2.50	0.50	2.50	5.00	0.50
dix F-2	sackgrou	пеэМ эщвУ	5.00	2.00	5.00	5.00	5.00	2.50	2.00	5.00	5.00	114.81	18.07	93.69	180.71	18.07	88.38	18,07	10059.52	06.1986	18.07	56.86	11.38	56.86	13.81	1.38	26.86	11.38	61.9229	\$685.71	11.38	1.25	0.25	1.25	2.50	0,25
Appendix F-2	ound I	Mean Detected	7	7			+	+	-				-			_						-	-	1	+	1					-	_	<u> </u> -			
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		іпэнйігаоЭ	ISOPHORONE	NITROBENZENE	N-NITROSODI-n-PROPYLAMINE	N-NITROSOLYPHENYLAMINE	NAPHTHALENE	PENTACHLOROPIIENOL	PHENANTHRENE	PRENOL	PYRENE	2,4 UB	2,4,5-T (TRICHLOROPHENOXYACETIC	2.4-D (DICHLOROPHENOXYACETIC	DALAPON	DICAMBA	DICHLOROPRUP	DINOSEB	MCPA	MCPP	SILVEX (2,4,5-TP)	2,4 DB	2.4.5-T (TRICHLOROPHENOXYACETIC	2,4-D (DICHLOROPHENOXYACETIC	DALAPON	DICAMBA	DICHLOROPROP	DINOSEB	MCPA	МСРР	SILVEX (2.4.5-TP)	2,4 DB	2,4,5-T (TRICHLOROPHENOXYACETIC	2,4-D (DICHLOROPHENOXYACETIC	DALAPON	DICAMBA
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		noliudiriteiQ	ONA	A/N/S	¥/2	V /V	N/A		V/X		A/N D		N/A		4/2	V/V	ON/A	ON/A	N/A	D/VA	A/N 0	V/N	O N/A	D N/A	₽/N(P	N/A	V.	V/N/1	2 2	N/A	V/Z □	ON/A	530 Nonpar.	ON/A	ON/A
		RAIE										ĺ		Ĺ						ľ		ľ			_	_	٦,		30	1	_	ľ	23	٦	ľ
	 	UCL (Kormal)		25.0	175 (W)	125.00	360.07	71.17	360.02	717,68	71,77	360.02	11.17	38200.34	39034.90	71.17	1.25	0.25	1,25	2.50	0.25	1.25	0.25	125.(X)	212.38	0.25	2.75	2.60	\$ 60	2.75	5.39	2.75	121.76	5.39	61.3
		UCL (Lognormal)	1.25	0.25	124 94	124.94	467.73	92.44	467.79	924.16	92,44	467.79	92,44	50102.85	56023.77	92.44	1.25	0.25	1.25	2.50	0.25	1.25	0.25	124.94	196.70	0.25	27.72	27.10	2 5	2.76	5.40	2.74	947.79	5.40	5.40
		Сеотеінс Мевп			T	Ť	ľ	T			-															1	\dagger	+	1.78				13.83		
		Ln(Standard Deviation)	0.00	0.00	00.0	000	[]				1.12	1.13	1.12	3.	1.19	1,12	00'0	00.0	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.00	0.77	27.0	18	0.72	0.72	0.72	2.02	0.72	0.72
		Մո(Meno Value)	0.22	6£11-	4.83	4.83				L	3.19	4.80	3.19	19.6	9,48	3.19	0.22	1.39	0.22	0.92	-1.39	0.22	-1.39	4,83	4.94	6. T	0.40	0.40	0.58	0.40	35	0.40	2.63	1.06	80
	ics	brahaal2 gotiafrsU	0.00	0.00	0.00	0.00	335.03	\$6.98	335.03	669.45	66.95	335.03	66.95	32854.39	34831.59	66.95	0.00	0.00	0,00	0.00	000	0.00	0.00	0.00	108.25	000	10.5	10.5	\$	2.01	3.94	2.01	132.49	3,94	3.94
	Compound Background Statistics	Y X X	2.50	0.50	250.00	250.00	474.18	94.41	474.18	944.09	94.41	474.18	94.41	16.06228	52509.09	94.41	2.50	0.50	2.50	5.00	0.50	2.50	0.50	250.00	312,50	2 5	50.4 0.4	187	06.9	4.0.	7.88	4.03	146.30	7.88	7.88
	ackgrou	Mean Value	1.25	0.25	125.00	125.00	237.09	47.20	237.09	472.05	47.20	237.09	47.20	26145.45	26254.55	47.20	1.25	0.25	মূ	2.50	0.25	1.25	0.25	125.00	156.25	67.0	201	707	3.45	2.01	3.94	2.01	73.15	3.94	3,94
	Ound D	Mean			\vdash		-			_								+	1			+	+	+	\dagger	+	+	t	9.44	H	_		4	-	
	Comb	Maximum Detected														_		1	1	+		1		†	1	\dagger	t	\dagger	29	-			230		
	ganic	Minimum Detected		-	T		-	П							7	1	7	7	7	1	7	+	1	†	t	\dagger	t	╀	3.5		H	\dashv	<u>=</u>	_	
	5	# Detects									7			\dashv	╛	1	┪	+	+	7	7	7	+	\dagger	\dagger	t	t	t	٧,	\vdash	Н	\dashv	₹	\exists	_
		estienA #	23	22	22	22	22	22	22	57	22	22	33	77	77	21	12	77	2	-	≃	끄	7	7 !	7 (1 5	2 22	77	22	22	22	22	2	2	77
		g g g g g g g g g g g	DICHLOROPROP	DINOSEB	MCPA	MCPP	2,4 DB	2.4.5.T (TRICHLOROPHENOXYACETIC	2,4-D (DICHLOROPHENOXYACETIC	DALAPON	DICAMBA	DICHLOROPROP	DINOSEB	MCPA	MCPP	SIL VEX (2,4,5-TP)	2,4 DB	2.4,5.T (TRICILLOROPHENOXYACETIC	2.4-D (DICHLOROPHENOXYACETIC	DALAPON	DICAMBA	DICHLOROPROP	DINOSEB	MCFA	SILVEY 12 AS TEX	ALDRIN	ALPHA BHC (ALPHA	ALPHA ENDOSULFAN	ALPHA-CHLORDANE	BETA BHC (BETA	BETA ENIXOSULFAN	DELTA BHC (DELTA	DIELDRIN	ENIXOSULPAN SULFATE	ENDKIN
		guon O leadylical Group	т	HERB C		П	コ	_	┪	┱	ヿ	┪	┱		7	_	_	_	┰	┰	-+	╅	_	מבטח אי	_	┰	✝	Г	PEST A	П	╗		1	7	ES I
			Т	П	пg/1 Н	┪	_	_	Т	_	-	_	_	$\overline{}$	_	Ņ,	Т	Т	Т	T	T	Т	Т	Т	Yen	<u>.</u>	_	•		\neg	_		_	_	ugykg PE
		xirial/(7	T	T		T	T	1		T	T	Ī	1	1	<u>=</u> 3 8	T	<u>=</u>	T	T	Soil	Ī	Surf Soil ug	Surf Soil us	\neg	Т	Т	Т	Т	Suri 5041 108

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	Ž	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	V V	26 Number	V N N		V/N		16() Nonpar.	74 Nonpar.	A N O	V/N	A/V	A/N	¥ ∑	۷ N E		Ϋ́	X N	XX C	N/A	6 Numpar.	ON/A	V/N/O	ON/A	370 Nompar	N/A	V/X	¥X S	V/N	N/A	2.2 Nonrar	Ž	Ž	
	BylE					<u> </u>		ءً	=	[= <u>=</u>	آ	آ		ĺ	2.6				37,		-	ĺ	ľ	ľ	7		\lfloor]
	UCL (Normal) S	5 30	2.75	£03	2.75	3.12	27.51	5.50	30.16	15.35	53.85	109.26	53.85	53.85	53.85	53.85	81.55	275.13	1.12	1.12	1.12	1.26	1.12	2.19	1.12	47.69	2.19	2.19	2,19	2.15	1.12	122	-	1.12	
	JJU (Legnormal) A	5.40	2.76	6,44	2.76	3.20	27.55	5.62	24.25	14,00	54.01	109,08	10.58	54.01	54,01	24.0	78.28	275.46	01.1	01.1	<u>2</u>	1.22	1,10	2.15	1,10	10.38	2,15	2.15	2.15	2.15	<u> </u>	5	=	<u>-</u>	
	Geometric Acast —		t	- 28:		1.57		2.95	3.85	3.59	_						32.66					TO.1				2.65			-			8	-		
	E.n(Stundard © Deviation) نیا	0.72	0.72	1.07	0.72	0.79	0.72	0,74	1.33	1.13	0.72	0.72	0.72	0.72	0.72	0.72	0.90	0.72	0.16	0.16	91.0	0.25	0.16	0.16	0.16	1.14	0.16	0.16	91.0	0,16	91.0	0.23	91.0	0,16	
	(Sulay	1.06	0,40	0.61	0.40	0.45	2.70	1.08	1.35	1,28	3,37	4.07	1.37	3.37	3.37	3.37	3.49	5.00	0.03	0.03	0.03	0.07	0.03	0.69	50.0	0.98	0.69	69.0	69'0	69.0	0.03	90°D	0.03	0.03	
bc.	brabnat2 noitaivaC ~;	3.94	2.01	6.20	2,01	2.35	20.10	3.99	85'68	17.63	39,43	80.25	39.43	19.43	39.43	39.43	75.96	201.04	0.23	0.23	0.23	0.40	0.23	0.45	0.23	78.42	0.45	0.45	0.45	0.45	0.23	0.34	0.23	0.23	
d Statistic	Mean Waluc	7.88	4,03	7.62	4.03	4.51	40.27	8.08	31.28	17.77	78.77	159.64	78.77	78.77	78.77	78.77	107.36	402,73	2.08	2.08	2.08	2.23	2.08	4.06	2.08	37.84	90°	4.06	4.06	4.06	2.08	2.19	2.08	2.08	
Organic Compound Background Statistics	neshi sulaV e. Q X X	3,94	2.01	181	2.01	2.26	20.14	4.04	15.64	8.88	39.39	79.82	39,39	39.39	39,39	39.39	53.68	201.36	1.04	1.04	20.	1.11	8	2,03	9.	18.92	2.03	2.03	2.03	2.03	HO.1	<u> </u> 101.1	1.04	1.04	
and B	Metected			11,02	L	7.7		6.7	135	43.47	+	\dashv	\dashv	\dashv	+		105		Н			2.6	+	\dashv		22	+					2.2	_	-	
Comp	muminals Detected		H	36		7.7	H	6.7	100	_ [1		1	+	-		ПG					2.6	1	+	1	<u> </u>	+	+		_		2.2			
ganic	Minimum Detected	 		2.3	_	7.7		6.7		4.6	\dashv	+	1	1	-		8	4			+	2.6	1	+	+	57	\dagger	-	+			2.2		Н	
히	# Detrects			5.			_	7	ন	۳.	+	†	+	┪	7	7	7	7	\exists	7	┨	+	┪	+	+	╗	+	┪	┨	\dashv	_		Н	H	
	esev lanA # 2	22	22	22	22	22	22	53	22	22	77	22	77	13	77	22	77	77	22	77	2	77	22	22	2	2	77	73	77	27	22	22	22	22	
	ENDRIN ALDEH Y DE	ENDRIN KETONE	GAMMA BHC (LINDANE)	GAMMA-CHLORDANE	IIEPTACHI.OR	HEPTACHLOR EPOXIDE	METHOXYCHLOR	p.pDDD	p.pDDE	pp-DDI	PCB-1016 (AROCHLOR 1016)	PCB-1221 (ARUCHLOR 1221)	PCB-12/2 (ARUCHLOR 12/2)	PCB-1242 (AROCHLOR 1242)	PUB-1248 (AROCHLOR 1248)	PCB-1254 (AROCHLOR 1254)	PCB-1260 (AROCHLOR 1260)	TOXAPHENE	ALDRIN	АГРНА ВИС(АГРНА	ALPHA ENDOSULFAN	ALPHA-CI(LORDANE	HELA HHC (BETA	BELA ENLOSULIAN	DELLIA BRC (DELTA	DISCLOSING TO THE PROPERTY OF	ENIACOULFAN SULFA I E	ENDRIN	ENDRIN ALDERYDE	ENDRIN KETONE	GAMMA BHC (LINDANE)	GAMMA-CHLORDANE	HEPTACHLOR	HEPTACHLOR EPOXIDE	
	Analytical Group	寸	寸	Т	┪	┪	Т	Т	Т	✝	┱	1	╅	十	┪	T	7	7	T	┪	_	┱	┱	十	┱	T	Ť	7	T	T	7	╗	╗		ડી
		ug/kg PE	_	-	т	т		\neg	_	\neg			т	_	1	_	т	_	_	_	_	_	_	_	Kg PEST	_	┰	7	т	т	_	\neg	_	kg PEST	1/026.)
		┪	T		т	Т	┰	Т	Т	Sur 3041 up	Т	Т	7	Т	т	Т	Т		_	Ŧ	Т	Т	Sub Soil ug/kg	Т	Sub Soil ug/kg	Т	Т	71	┪	\neg	╗	Т	Sub Soil ug/kg	b Soil lug/kg	K:\GUEST\026.XLS

		Distribution	W/A	D N/A	1.5 Nonpar.	Nonpar.	N/A	0 N/A	N/A	O N/A	N/A	N/A	V/X	N/A	A/A	N/A	A/X	V/N	N/A	N/A	N/A	N/A	N/A	N/A	0 N/A	N/A	ON/A	C N/A	0 N/A	D/V	GN/A	N/A	V/A	N/A	N/A	0 N/A
		BZIE		G	1.5	7.2	=	O	0	O	D	₽	0	=	3	=	Ξ	3	5	=	3	3	3	Đ	O	ö	b	ਣ	ē	ਙ	ਭ	Ē	=		ਤ	Ξ
		UCE.		2,19	3.18	2.59	21.93	44.49	21.93	21,93	21.93	21.93	21.93	112.48	0.03	0.03	0.03	0.03	0.03	0.05	0.03	0.05	0.05	0.05	50.0	50.0	0.03	0.03	0.03	0.03	0.25	0.03	0.05	0.05	0.50	00.1
		(peasocuse) ACT	_	2.1.5	2.15	2.39	21.53	43.71	21.53	21.53	21.53	21.53	21.53	110.40	0.03	0.03	0.03	0.03	0.03	0.05	0,03	0.05	0.05	D.0.5	0.05	0.05	0.03	0.03	0.03	0.03	0.25	0.05	0.05	0.05	0.50	1001
		Geometric Asean				2.05	}]																											ig		
1		Ln(Standard Devindon)	0.16	0.16	0.17	0.28	0.16	0.16	0.16	0.16	D, 16	0,16	0.16	0.16	00:00	00.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00°G	0,00	0.00	0.00	0.00	0.00	0.00	00'0	0.00	0,00	000	0,00
		nasM,n,1 (sufaV	2.33	0.69	0.68	0.72	3.00	3.71	90.	3.00	3.00	0.00	3.00	4.63	.3.69	-3.69	-3.69	-3.69	-3.69	-3.00	-3.69	3.00	300	90°;	90°F	00.0	-3.69	.3.69	3.69	-3.69	6£.1-	-3.00	-3.00	-3.00	-0.69	0.00
	ics	brahna)2 noitsivsU	2.29	0.45	0.46	1.12	4,46	8.77	4.45	4,46	4.46	4.46	4.46	22.87	0.00	0.00	000	0.00	0.00	0.00	0.00	0.00	00'0	00.0	20.0	000	0.00	0.00	0.00	00'0	0.00	00'0	0.00	0.00	0.00	00'0
	Organic Compound Background Statistics	X X Alean Suluc	20.82	2 0.4	4.03	4.35	40.59	82.55	40.59	40.59	40.59	40.59	40.59	20B.1B	0.05	0.05	50.0	0.05	0.05	0.10	0.05	0.10	<u>0</u>	<u>3</u>	0.10	<u> </u>	0.05	0.05	0.05	0.05	0.50	01.0	01.0	0.10	1.00	2.00
Appendix E 3	Backgrou	Mean Value	10.4	2.03	2.01	2,18	20.30	41.27	20.30	20.30	20.30	20.30	20.30	104.09	10.0	0.03	0.03	0.03	0.03	0.05	0.03	0.05	0.05	0.05	0.05	0.03	0.03	0.03	0.03	0.03	0,25	0.05	0.05	0.05	05'0	00.
A name	punoc	neold Detected			_ ~:	7,2		7	1	1	1	7	7							Ì	1	7	1	1	†	†	†	1								┨
	Com	Maximum Desceted			1.5	7.2			Ī	1	1							Ì				7	1	1	1	1	1	7	1							7
	rganik	Muminita Detected	7	1	-	7	1	7	7	1		1		Ī					1	7	7	7	1	1	†	†	†	1	1		i					7
İ	9	# Detects	21		7	22	77	1 1	77 (21 2	~ 1	72				7		2		_	_				1	1		_								_
		2937/60 A # (~	+	1	7	7	+	22	7	22	22	77	22	22	22	2	77	22	22	7	77 7	77 :	1	7	77	22	22	22	22	22	77	77	
		Insusiitzno D	MELHOXYCHLOR		4		PCB-1016 (AROCHLOR 1016)	PCB-1221 (AKUCHLUK 1221)	PCB-12/2 (AROCHLOR 12/2)	PCP (242 (ARCA:HCAR (242)	PCB-1248 (AROCHLOR 1248)	PCB-1234 (ARUCHI, UR 1254)	PCB-1266 (AROCHLOR 1260)	TENE		ALPHA BHC (ALPHA	ALPHA ENDOSULFAN	ALPHA-CHLORDANE	BETA RHC (BETA	BETA ENDOSULFAN	DELTA BHC (DELTA	N.	ENDOUGHAN SULFAIE	ENDON'S A SECURE	PNOBIN KETONE	CAMMA BUCK INDANES	CIII OPERATE	OAMMA-CHIANKIANE	HLUK	HEPTACHLOR EPOXIDE	METHOXYCHLOR				PCB-1016 (AROCHLOR 1016)	PCB-1221 (AROCHLOR 1221)
		Analytical Group	Т	Т	1	7	T	Ť	T	Т	7	十	寸	T	T	╗	ALPHA	ALPHA.	7	十	DELTA	DIELUKIN	ENLAUSE	NOON	NOVE	SAMA C	Charles	CAMMA	HEPTACHLOR	HEPTAC	METHU.	GCC did	P.PDDE	P.P. DDT	PCB-101	PCB-122
			7 PES	_	т	7	1 2	_	_	┰	_	т	т	_		PEST	FEST	LEST E					3 10	1336	Lygn	1					PEST	3	PEST	PEST	PEST	PEST
		_	Т		Т	Т	Т	┰	T	Т	Т	Т	Т	Ay/an		Į Į	ng.	<u> </u>	<u>.</u>					3	3 5			S. 5		A P	1/2 1/2 1/2	γ <u>a</u> n	<u>[]</u>	/dn	nE/	lug/l
Ĺ		xmal &	Such Soil	Top one	line and	Sub Sub	The Part	Cub Cail	Sept Sept	Lies de S	ing day	The Care	Tios and	HOS ONS	4 2	<u>}</u>	A I	* i	2	<u>}</u>	A C	110	3	3	3	3	30	Ma	A C	*	<u>*</u>	M.C.	ا اگ	<u>}</u>	A S	ا چا

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																								3	0	8		4	21	n	
		noituditteid] V/V (5	ON/A	C N/V	GN/A	N/A	0 N/A	Ν'n	N/A	N/A	N/A	¥ Ž	4/2	× ž	A/N	K.X	K/Z/C	D/N/A	N/A	N/A	N/A	0 N/A					V/Z	SN/A	ON/A	
		IME	I		O	0	2	0	(i)	C	=	₽	=		=	-	=	3	3	=	0	٥	0	2	3	3	٥	=	=	 	
		Normal)) (C	0.03	50.03	0.03	0.03	0.05	0.03	0.05	0.05	0.05	0.05	0.05	0.03	0.03	0.03	0.03	0.25	0.05	0.05	0.05	0.50	00'1	0.50	0.50	0.50	0.50	0.50	2.50	
		poliucussi) ACP		£0.0	0,0,	60.0	0.03	0.05	0.03	50.0	0.05	0.05	0.05	900	0.03	0.03	0.03	tiu'a	0.25	0.05	0.05	0.05	05.0	001	0.50	0.50	0.50	0.50	0.50	2.50	
		Seametric nest	-							_	_			l		T		-				-				-	-			H	_
		brabaal2)nJ (aoitaive0		0,00	0.00	0.00	0,00	0.00	0.00	0.00	00'0	0.00	00.0	000	0.00	00.0	00.00	00'0	00.0	00.00	O'U	00'0	00'0	00'0	00'0	0.00	00.0	0.00	00.0	0.00	
		naski)a.l Value)		-3.69	-3.69	-3.69	.3.69	3.00	-3.69	-3.00	-3.00	-3.00	3.00	3.00	-3.69	.3.69	-3.69	.3.69	6£"I-	-3.00	-3.00	-3.00	-0.69	0.00	69'0-	69'0-	69.0	-0.69	69.0-	0.92	
	23	brebnet? nobelesion		0.00	0.00)	O'O	00'0	00.0	0.00	0.00	0.00	00'0	0.00	0.00	0.00	000	0.00	0.00	00.0	00'0	00'0	0.00	0.00	0.00	0.00	00.0	0.00	0.00	000	0.00	
	Compound Background Statistics	Дв <i>і</i> пе Удеви 7 X		0.05	0.05	0.05	0.05	0.10	0.05	0.10	0.10	0.10	01.0	0.10	0.05	50.0	0.05	0.05	0.50	0.10	0.10	0.10	1:00	2.00	1.00	00'1	00'1	OO'I	1.00	5.00	
lix F-2	ackgroun	Malue Value	0.03	0.03	0.03	0.03	0.03	0.05	0,03	0.05	0.05	0.05	50.0	0.03	£0.0	0.03	0.03	0.03	0.25	0.05	0.05	0.05	0.50 0.50	00.1	0.50	0.50	0.50	0.50	0.50	2.50	
Appendix F-2	ound B	Mean Defected	\dashv	1	7	+	+	+	+	\dashv	+				H			-			+	-	1	\dashv	_						H
		mumixald Detected				1	1	†	1	1	7										7	7	1	7	7						-
	Organic	Maimum Detected																	1		7	1	1		7				1	╢	7
	0	# Analyses # Detects	≃	<u>-</u> :	<u>-</u>	<u>-</u>	27 :	2 9	7	기	2	<u>=</u>	12	12	<u></u>	12	2	ᆵ	2	2	~	27	2	2	<u>-</u> 2	<u>-</u> 2	77	~	2	2	7
									1																						-
		Genstituent	ALDRIN	ALPHA BHC (ALPHA	ALTHA ENIXOSULFAN	ALPHA-CHLORDANE	BELA BRU (BELA	DELTA BUCADELTA	INSULA BRICIDELIA	DIELUKIN	ENIXUSULFAN SULFATE	ENDRIN	ENDRIN ALDEHYDE	ENDRIN KETONE	GAMMA BHC (LINDANE)	GAMMA-CIILORDANE	HEPTACHLOR	HEPTACHLOR EPOXIDE	METHUXYCHLOR	P.pDDD	P.pDDE	luu-q.d	PCB-1016 (AROCHLOR 1016)	PCB-1221 (AROCHI,OR 221)	PCB-1232 (AROCHLOR 1232)	PCB-1242 (AROCHLOR 1242)	PCB-1248 (AROCHLOR 1248)	PCB-1254 (AROCHLOR 1254)	PCB-1260 (AROCHLOR 1260)	TOXAPHENE	
		Analytical Group	Т	resi	十	┱	T	7	1	LES I	Ť	1	7	ヿ゙	┪	T	┪	┱	7	Т	T.	٦.	T	T	T	┱	寸	┱	┪	PEST	1
			Т	Т	T	T	7	Ť	Т	T	T	T	T	┑	7	7	T	T	7	7	Т	T	T	T	T	T	7	T	Т	I/Zii	1
		xhiald	T	a a	Ţ	T	T	T		T	T	Ţ	T	7		1		3 8		٤	T	T		T	T	1	Î	Ī	Ī	<u>-</u>	

Appendix F-3 Dioxin/Furan Background Statistics

				oxio/	Apj Furna	Appendix F-3 Dioxita/Furno Background Statistics	F-3 und Sta	alistics								
				휈	рилод	Background Sampling Program	H	gram Gram								
xtriaté	છોત્રી	Cansillural	est (jan A (Detects	Minimum	hardmun Setected	dean descreted	ngal suln'	ante Acam X	brabus: notistra	nes M)n (Sule)	tvistandard (notietys	cometric trans	ostooussj) CF	314	noituditiz
Т	upling	TOTAL EQUIVALENCY FACTOR	77	, FJ	1 -	- 1			v 2 Z	a 8	4	a :	9 '	1) (1)	н	ra
Surf Soil to	ug/kg	2.3.7.8-TETRACHLORODIBENZOFURAN	22	╀	t			0.000		İ	1	10-167-6	300	0.010	0.00	3
Surf Soil In	83/20	2.3.7.8-TETRACHLORODIBENZO-P-DIOXIN	1	t	†	Ť	Ī	0,4773	1		- 1			ţ	0.0000	Ϋ́
Surf Soil	UP/KE	2347 APENTACHI DROMARNACHIDAN	1 :	†	†	1	1	O.SOM		١	اـٰــا	1.035-08		1	0.0000	Ϋ́
т		o 1233 PENTACTI OPONISENZOGISAN	77	\dagger	7	1	1	1.2500	-					İ	00000	Ϋ́
┰		1 2 1 7 8 BENTACTI OPORIORIS CONTROL	2	7	+			1.2500				4.4615-09		;	00000	ž
┰		CTACH OBONIESTORY	គ	+	7	7		1.2500		00000	0.22	4.30E-09	L		00000	Ş
Т	_	OCTACIII OROSISTIZIO	អ	~	0.045	0.393	0.163	2.1494			0.43	1.26E+00	1.533	[0.1930	ĝ
Т		OCIACHUNGOIBENCO-POIOXIN	7.1	22	747	23.325	5.519	5.5188	11.0376	5.0808	L	9.225-01	L	9.725	9.72451.N	Z
Т	_	42.4.4.4.4.4.4.A.C.A.C.A.C.A.C.A.C.A.C.A.C	ដ	1				1.1933		0.3661	-0.07	1.37E+00	L	_	0000	ž
Т	2	1.2.3.7.8.3-HEXACHLORODIBENZOFURAN	22	+	+			1.2500		0.0000	L	4.46E-09		Ī	0000	ž
Т		1.3.3.3.2.9 HEXACHUBANION CONTRACTOR	7	+	+	7		1.2500		0.0000		4.306-09		1	00000	ž
Т		1232 % A BEAACHLOROUIBENZOFURAN	7	1	1			1.2500	2.5000	0000		4,46E-09			0.0000 N/A	ž
Т.	┿┈	1.2.3.7.8. PREACHLOROPIBENZO-P-DIOXIN	ន	†	+	1		1.1933		L		1,375+00		,	0.0000 N/A	ž
7-	-	1.2.3.4.7.8. HEXACUI OBODIDENZO - MONTH	R	+	+	1	7	1.1906				1.32E+00		ï	0.0000 N/A	ž
_	_	1.2.14.7.8 CHEPTACHI OPONIBENZIO PANI	71	\dagger	+	†	7	1.2500			L.I	4,46E-09		1	0.0000 N/A	Ϋ́
_	-	1.2.3.4.6.7 8.JIEPTACH! OPODIOSNYOSIIDAN	27	+	+	1	1	1.2500				4,465-09		[0.0000 N/A	ž
т-	_	1.2.146.7 R.HFPTACHI ORONIBENZO - DIOVIN	3 5	- 1		1		0.00	1	╛		2.00E+00			0.0000 N/A	ž
Т	_	TOTAL FOLLOWING BACTOR	3 2	9 !	1/0.0	2	0.138	0.7034	- 1			1.62E+00	0.313		0.3900 NP	호
Т	_	2	3 5	- 1	30.0	800	0.003	0.0030	-	1	_	9.1215.01	0.002	0.006	0.0060 LN	Z
Sub Soil 14	_	2.1.7,8-TETRACIILORODIBENZO-P-DIOXIN	3 5	+	\dagger	†	†	0000	1	_1	ŀ	1.365-08		-	0.000	٧X
	_	2.3.4,7,8-PENTACHLORODIBENZOFURAN	ı R	+	+	\dagger	†	2000	ı	1	000	1.03E-08			0.0000	ž
	Sy/Sn	1.2.3.7,8-PENTACHLORODIBENZOFURAN	22	+	\dagger	T	T	2500	2 Snow	ĺ		6.40E-09	7	1	0000	ž
		1.2.3.7.8-PENTACHLORODIBENZO-P-DIOXIN	2	╁	\dagger	T	1	1.00	2 5000	O DOOR	0.75	4.40E-U9	1	'	00000	Š
Т		IJ	72	┝	\vdash	T		2,5000	5,000	ı	1	2 86 C. DV	Ī	3	0000	<u> </u>
_	Mx/kg	OCTACHLORODIBENZO-P-DIOXIN	22	-	0.209	9.435	2.991	2.6594	5,3189	2,3260	070	256-00	631	1	4150	<u> </u>
an ling que		23.4.6.7.8-HEXACIILORODIBENZOFURAN	77	Н	-			1.2500	2.5000	0.0000	1	4.46E-09		1	CHXII)	ž
Т	2	2.1.7.8.9.HEXACHLORODIBENZOFIJRAN	77	\dashv			-	1.2500	2.5000		ı	4.466.09	Ī	•	0000	2
Т		23 4 7 9 UEX + CHI ORODIBENZOFURAN	22	+	1		H	1.2500	2.5000	l	0.22	4.46E-09		1	00000	ž
т		33.3 6 FILST CHLURUDIBENZOFURAN	22	┥	-			1.2500	2.5000			4.46E-09		1	0,0000	ž
Т		121618 HEXACHLORUDIBENZO-P-DIOXIN	ন	+	\dashv	7	\dashv	1.2500	2.5000			4,465-09		1	0.000G N/A	ş
Т		TOWNS TO THE TANK OF THE PROPERTY OF THE PROPE	ß	\dashv	\dashv			1.2500	2.5000		22.0	4.46E-09		<u> </u>	0.000d N/A	ž
Т	X	1.2.3.4.7.8-HEXACHLURODIBENZO-PIOXIN	22	\dashv	\dashv	+	H	1.2500	2,5000	0.0000	0.22	4.46E-09	İ	-	0.0000 N/A	Į≨
Г		2.14.6.79 DESTRUCTION OF DESTRUCTION	2	┥	\dashv	7	1	1.2500	2.5000	0.0000	0.22	4.46E-09		1	0.0000 N/A	×
т	_	1.2.3.4.6.7.8.HEPTACHI OPONIBENZO - MONTH	2	+	+	1	\dashv	2300	2.5000	0.0000	0.22	4.46E-09		7	0.0000 N/A	ş
7	+ <u>·</u> -	TOTAL FOIIVALENCY EACTOR	77 5			4	1	0.9750	00567	0.5294	-0.82	2.03E+00		7	0.0000 NV	ž
MS. MS	T	2.3,7.8-TETRACHLORODIBENZOFIRAN	3 5	2 4	0.000	000	300	2000	0.0082	0.0034	0.77	1.508+00	0.001	0.018	NJ EBIOO	3
SW ned	Г	23.7.8-TETRACHLORODIBENZO-PIONIN	7 -		797	in in			2000	2.3433	9	2.78E+00	0.857	1	0.0310	a.
	1		7	\dashv	+	1	1	3,5755	7.1509	2.3374	-0.07	2,75E+00	_	*	0.0000	Y.Z
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Comparison Com					100	Appendix F-3	K F-3	in the start								
CATACALLORODIBESZOPENIAN 22 0.024 0.025 1.13 2.15 0.025		-			S S	an sock	ground &	ogram ogram								
PAGE 13.3.1.3.4.1.5.4.PMTACHLORODIBENZORIRAN 22 2 0.029 0.050 10.100 1.050 1.0	schanfd.	ւթյում .			murchalM	murnbælf	Mean		Mesa						TALE	noltudinsi
949 1.2.3.1.2.4.3.4.4.7.N.4.2.B.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0	*	<u>ş</u>		77	2 0.0	L	Ш	L	L	3.7488	-	1.776+00		1	0000	۽ اد
#87 LAZALSENTAKALLORODIBENZOP-DIOXIN 22 1 0.206 0.046 0.046 1.1800 0.050 <	× S	<u>β</u>	1.2.3.7.8-PENTACHLORODIBENZOFI,RAN	27	3 0.0		li	1	L	ļ_	1,74	2.03E+00	5.68	1	002500	2
up/li> CTACALLORODIBENZOPIRANI 22 15.000 55.000 5.000 3.500 <td> غ</td> <td>Įģ.</td> <td>1.2.3.7,8-PENTACHLORODIBENZO-p-DIOXIN</td> <td>22</td> <td>1 0.0</td> <td>L</td> <td>L.</td> <td>l</td> <td>L</td> <td></td> <td>2.26</td> <td>1,226+00</td> <td>1450</td> <td>Ť</td> <td></td> <td>9</td>	 غ	Įģ.	1.2.3.7,8-PENTACHLORODIBENZO-p-DIOXIN	22	1 0.0	L	L.	l	L		2.26	1,226+00	1450	Ť		9
gdf 12.3.5.3.±HEXCHLORODIBENZOPINAN 22 15 0.206 1.525 0.000 1.525 0.000 1.525 0.000 0.	≱	1/8	OCTACILORODIBENZOFURAN	22	_		L	l	l	l	3.22	\$.00E-08		1	0	
up/li> 12.3.6.7.8-HERACHLORODIBENZOPIURAN 22 96641 19.383 5.351 0.93 30TE-60 - 00000 up/li> 12.3.6.7.8-HERACHLORODIBENZOPIURAN 22 0.0800 1.23 </td <td><u>*</u></td> <td><u>5</u></td> <td>OCTACHLORODIBENZO-p-DIOXIN</td> <td></td> <td>Ш</td> <td></td> <td></td> <td>L</td> <td>\Box</td> <td>L</td> <td>80</td> <td>1.72E+00</td> <td>1040</td> <td>†</td> <td>2000</td> <td>2 2</td>	<u>*</u>	<u>5</u>	OCTACHLORODIBENZO-p-DIOXIN		Ш			L	\Box	L	80	1.72E+00	1040	†	2000	2 2
wft 12.3.6.3.8.HERACHLORODIBENZOFIRAN 22 0.1314 23.060 4.378 1.66 1.67 2.164-de -0.000 mft 12.3.4.3.8.HERACHLORODIBENZOFIRAN 22 0.134 23.04 5.25 1.23 2.36.3.8.HERACHLORODIBENZOFIRAN -0.000 mft 12.3.4.3.8.HERACHLORODIBENZOFIRAN 22 0.134 23.04 6.109 4.01 1.66-de -0.000 mft 12.3.4.3.8.HERACHLORODIBENZOFIRAN 22 0.134 3.24 0.134 3.14 0.13	×	2	2,3,4,6,7,8-HEXACHLORODIDENZOFURAN	22	L				L		0.93	3.07E+00		1	V V	
wft 12.2.6.2.6 HEXACTILORODIBENZOPINENN 22 0.0131 20.566 5.566 0.09 - 0.0000 wft 12.2.6.2.6 HEXACTILORODIBENZOPINENN 22 0.0131 8.102 8.102 8.102 8.102 9.102	ا ڊ اج		1.2.3.7.8.9-HEXACHLORODIBENZOFURAN	22	Ц			10.800	L		1.69	2.16E+00	T	1	0000	ş
φγ 11.2.4.7.8 + HEXACHLORODIBENZO-PIOXIN 22 9.2153 18.4306 5.6469 6.99 3.70E-406 - 0.0000 φγ 11.2.4.7.8 + HEXACHLORODIBENZO-P-DIOXIN 22 8.10 1.2.3.6.6.6 6.1090 - 0.0000 φγ 11.2.4.7.8 + HEXACHLORODIBENZO-P-DIOXIN 22 0.0315 20.4639 4.924 1.31 E-00 - 0.0000 φγ 11.2.4.6.7.8 + HEYACHLORODIBENZO-P-DIOXIN 22 0.045 0.2315 20.4639 3.7327 3.616-00 - 0.0000 φγ 11.2.4.6.7.8 + HEYACHLORODIBENZO-P-DIOXIN 22 0.049 0.345 1.9460 3.7327 2.01 -1.665-00 - 0.0000 φγ 11.2.4.6.7.8 + HEYACHLORODIBENZO-PIOXAN 22 1.0040 0.345 1.9460 5.303 1.43 2.12E-00 - 0.0000 φγ 12.3.4.6.7.8 + HEYACHLORODIBENZO-PIOXAN 22 1.0000 0.000 0.034 0.031 0.043 0.030 0.031 0.034 0.031 0.446 0.000 0.030 0.032 0.032 0.032 0.032 0.032		Į.	1,2,3,6,7,8-HEXACHLORODIBENZOPURAN	12	Ц	L	_	10.123	<u> </u>		13	2.78E+00	T	1	00000	ş
Page 1.23.4.3.8-HEXACILLORODIBENZO-PDIOXIN 22 0.0000	*	<u>ş</u>	1.2.3.4.7.8-HEXACHLORODIBENZOFURAN	22				9.215.	L		S9:0	3.20E+00	Ī	Ī	0.0000	Ş
april 1.2.3.7.3.FERTACHLORODIBENZOP-DIOXIN 2.2 0.000 9.3802 18.7637 5.5810 0.79 315E-00 0.000 april 1.2.3.7.3.FERTACHLORODIBENZOP-DIOXIN 2.2 0.0031 2.3.6.5.9 4.7524 1.31 2.6.6.0 0.000 april 1.2.3.4.7.8.FHETACHLORODIBENZOP-DIOXIN 2.2 0.003 0.0	*	<u>s</u>	1.2.J.7.8.9-HEXACHLORODIBENZO-P-DIOXIN	22		_		8,130			0.03	3.615+00		;	00000	3
Page 1.2.3.4.8.9-HETACHLORODIBENZO-PIDANIN 22 1.3.46.5.2.8.9-HETACHLORODIBENZO-PIDANIN 22 1.3.46.7.8.9-HETACHLORODIBENZO-PIDANIN 22 1.3.66.1.3.7.3.7.8.6.6.2.8-HETACHLORODIBENZO-PIDANIN 22 1.0.003 0.00			I,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	я				9.380.	L	L	0.79	3.15€+00		7	00000	Š
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PSP 1.2.3.45.7.8 HETATACHLORODIBENZO-PUIAN 22 4 0.043 0.109 9.7421 9.4403 5.303 1.43 2.18E-d0 4.185 - 0.184 0.109 9.7421 9.4403 5.303 1.43 2.18E-d0 4.185 - 0.184 0.184 0.195 9.7421 9.4403 5.303 1.43 2.18E-d0 4.185 - 0.184 0.184 0.184 0.184 0.184 0.184 0.184 0.184 0.184 0.184 0.185 0.1970 - 1.43 2.18E-d0 0.002 - 0.003 0.002 0.003	داء	ş .	1.2.3.4.7.8.9-HEPTACHLURODIBENZOFURAN	77			Ц	11,3148	Ш		2.01	1.65E+00	Ī	1	00000	Ş
Park 1.2.3.6.7.8 HEPTACHLORODIBENZO-P.DIOXIN 22 4 0.043 0.184 0.105 9.7432 19.4903 5.3033 1.43 2.17E+00 4.183 - 0.1840 0.0002 0.0002 0.0003		120	1.2.3,4,6,7,8-HEPTACHLORODIBENZOFURAN	77	Щ			3.766	L	5.8661	-2.12	3.18E+00	Ī	†	0000	Š
99Kg 1U.J.L. BOUNDLENCY FÁCTOR 22 11 0.000 0.003 0.0031 -6.46 1.08F-400 0.003 99Kg 2.3.3.8-TETRACHILORODIBENZO-PIDIXIN 22 1 0.002 0.002 0.003 0.003 0.1590 -1.89 2.66E+40 0.003 0.000 99Kg 2.3.4.7-ETRACHILORODIBENZO-PIDIXIN 22 1 0.002 0.002 0.002 0.003 0.1590 -1.26 1.000 99Kg 1.2.3.7-EPENTACHLORODIBENZO-PURAN 22 1 0.002 2.506 2.506 0.000	\ \ !		1.1.3.4,6,7,8-HEPTACHLORODIBENZO-p-DIOXIN	22	4 0.0			L	L	5,3033	1.43	2.12E+00	4.185	†	V 19401	9
ug/kg 1.3.7.3.FERNACHLORODIBENZOPURAN 22 0.002 0.002 0.003 0.1534 1.1.8 2.6GE+00			TOTAL EQUIVALENCY FACTOR	727	0.0	•				0.0031	-6.46	1.09E+00	0.002	†:		9
up/kg 2.3.4.3.8-PENTACHLORODIBENZO-PIOXIN 22 1 0002 0.2000 0.003 0.003 0.002 0.003 0.002 0.003 0.002 0.003 0.002 0.003 0.002 0.003 0.002 0.003 0.002 0.003	, , ,		12.5.7.8-1 ET RACILORODIBENZOFURAN	77				0.409		0.1970	-1.89	2.60E+00		T	0000	Ş
wight 1.23.4.3-FERTACHLORODIBENZOP-DIAZAN 22 1,0002 0.002 1,1933 2,3865 0.2661 -0.07 1,37E+00 0.933 0.000 wight 1.23.7.8-PERTACHLORODIBENZOP-DIOXIN 22 1,1932 2,3865 0.2661 -0.07 1,25E+00 -0.000 wight 1.2.1.3.8-PERTACHLORODIBENZOP-DIOXIN 22 1 0.431 8.356 2.650 5.000 0.000 0.22 2.94E-0 -0.000 wight OCTACHLORODIBENZOPURAN 22 1 0.431 8.356 2.650 5.000 0.000 0.22 2.94E-08 -0.000 wight 0.2.3.6.7.8-HEXACHLORODIBENZOPURAN 22 1 0.431 8.356 2.650 2.500 0.000 0.22 2.94E-08 -0.000 wight 1.2.3.6.7.8-HEXACHLORODIBENZOPURAN 22 1 0.431 2.250 1.1310 2.260 0.000 0.22 2.94E-08 -0.000 wight 1.2.3.6.7.8-HEXACHLORODIBENZOPURAN 22 1 0.431 0.245 </td <td>, ,</td> <td>_</td> <td>23.43 BEST CHURUDIBENZO-P-DIOXIN</td> <td>27</td> <td>_</td> <td>]</td> <td>_ !</td> <td></td> <td></td> <td>0.1534</td> <td>-1.26</td> <td>1.74E+00</td> <td></td> <td>:</td> <td>0.0000</td> <td>ş</td>	, ,	_	23.43 BEST CHURUDIBENZO-P-DIOXIN	27	_]	_ !			0.1534	-1.26	1.74E+00		:	0.0000	ş
up/Let/13.8 Pental Call District 1.2500 2,5000 0,000 0,22 4,30E,09 - 0,000 up/Let/13.8 Pental Call District 1.2500 1.1932 2,3865 0,263 - 0,10 1,52E+00 - 0,000 up/Let/14.0 CALL DRODIBENZO-PHOXIN 22 1.1 0.431 8,556 2.620 5,000 0,000 2,94E-08 - 0,000 up/Let/14.0 CALL DRODIBENZO-PHOXIN 22 1.1 0.431 8,556 2.620 5,000 0,000 0,000 2,94E-08 - 0,000 up/Let/14.0 CALL DRODIBENZO-PHOXIN 22 1.1 0.431 8,556 2.620 5,500 0,000 0,22 2,94E-08 - 0,000 up/Let/14.0 CALL DRODIBENZO-PHOXIN 22 1.1310 2,2620 0,3758 0,649 2,23E+0 - 0,000 up/Let/16.1 Libration DIBENZO-PHOXIN 22 1.1310 2,2620 0,3758 0,525 1.23E+0 - 0,000 up/Let/16.1 Libration DIBENZO-PHOXIN 22 1.0310 2,3260 0,502 1.0471 2.74E+00 - 0,000	, ,		1717 S DENTA CHUDA ODI BENZOFURAN	22	8	П				0.2661	-0.07	1.37E+00	0.933	1	0.0020	÷
wind 1.1932 2.3865 0.2663 -0.10 1.526-40 -0.000 wind 1.1932 2.3865 0.2663 -0.10 1.526-40 -0.000 wind 1.000 0.000 0.000 0.000 0.000 0.000 -0.000 wind 1.130 2.260 0.000 0.000 0.000 0.000 -0.000 wind 1.130 2.260 0.000 0.000 0.000 0.000 -0.000 wind 1.130 2.260 0.000 0.000 0.000 0.000 -0.000 wind 1.236.7.8-HEXACHLORODIBENZO-PUOXIN 22 1.1310 2.260 0.3758 2.1620 -0.000 wing 1.23.6.7.8-HEXACHLORODIBENZO-PUOXIN 22 1.0715 2.260 0.3758 0.62 -0.50 -0.000 wing 1.23.6.7.8-HEXACHLORODIBENZO-PUOXIN 22 1.0715 2.262 0.04 0.244-60 -0.000 wing 1.23.6.7.8-HEXACHLORODIBENZO-PUOXIN 22 2 1.0123		_	1 2 1 7 9 BENTACHLOROUNDERNOOT TO THE PROPERTY OF THE PROPERTY	22	_	-	\int	1.250K		0.0000	0.22	4,308-09		7	00000	٧ ۶
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UNT 12.3.4.6.7.8-HEPTACHLORDDIBENZOL-DIOXIN 22 3 0.064 0.583 0.238 0.9295 1.8389 0.5313 -0.71 1.68E+00 0.490 -	,[,	-	12 1 4 6 2 8 HERE CHI CHECK DIBLINGO THE	22	_[1.1933		0.2062	BO'0-	1.43E+00		7	O.Ocxo	ş
10064 0.533 0.238 0.5313 0.511 1.68E+00 0.490 - 0.5830 0.338 0.5313 0.5113 0.71 1.68E+00 0.490 - 0.5830	,		121457 BURDIACHIORODIBENZOFURAN	- 1				_		0.5323	-1.07	2.50E+00	r	1	0.0000 N	Ş
			TACHLOKUNIBENZU	╝		_	_			0.5313	-0.71	1.68E+00	0.490	1	0.5830 N	è

Appendix F-4 Evaluation of Surface Soil Populations

	-		Within Critical Region of Rejection?	S	Ž	Š	ž	z	Š	Yes	ž	Š	Yes	ž	S _O	Š	ž	ĝ	°Z
			IZI < dor¶	0.1006	0.1007	0.0816	0.2364	0.1677	0.2243	0.0416	0.4115	0.131	0.0255	0.1149	U.2372	0.0612	0.1486	0.0659	0.131
			91092 Z	1.6421	1,6416	1.7416	1.84	1,3797	1.2152	2.0379	0.8213	1.5103	2.2332	1.5764	1.182	1.872	1.4446	1,8391	1.5103
		Sum Statistics	Perimeter Mean of Ranks	13.8	13.8	14	13.2	13.5	13.2	14.4	12.7	13.6	14.6	13.7	13.2	14.1	13.5	14.1	13.6
ns	43	Rank Sun	Offsite Mean of	9.2	9.2	6	8.6	9.5	8.6	9.8	10.3	9.4	8.4	9.3	8.6	6'8	5.6	6'8	9.4
Appendix F-4 Evaulation of Surface Soil Populations Rockground Someting Progress	Defense Depot Memphis Tennessee	Wilcoxon Rank	Perimeter Expected Sum of Ranks	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5
Appendix F-4 of Surface Soil	efense Depot Memphis Tenness		Offsite Expected	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5
Appe ion of Sur	ground S se Depot A		Perimeter Observed Sum of Ranks	152	152	153.5	145	148	145.5	158	139.5	150	191	151	145	155.5	149	155	150
Evaulati	Defens		Offsite Observed Sum of Ranks	101	101	99.5	801	105	107.5	95	113.5	103	92	102	801	97.5	≅	86	103
			Perimeter Mean of Detections	12687	11.9	135	0.56	4222	9.63	14.9	17.6	20100	1115	2551	129	17.9	20.8	27.9	89
		Summary Statistics	offisite Mean of	11123	9.96	117	0.53	1617	8.65	12.5	15.9	16945	016	2065	632	15.1	21.8	24.2	57.7
		Summar	Perimeter Number of Detections	=	==	=	=	=	=	=	=	=	11	=	=	=	=	=	=
			Offisite Number enoissats to	=			4	=	=	=	=		Ξ	=		=	=	=	
			тэзэглетеЧ	AI,	AS	BA	BE	٥	ပ	క	2	护	×	Σ	Σ	ž	<u>8</u>	>	ZN

Appendix F-5

Evaluation of Subsurface Soil Populations

			Vithin Critical Region of Rejection?	į	Š	ž	ź	ž	ź	ź	ž	°Z	ŝ	°N	ŝ	ŝ	ž	ŝ	N
			Z < dor¶	0.189	0.7179	0.7427	0.9213	0.7928	0.3573	0.1579	0.6454	0.4904	0.0569	0.4116	0.189	0.324	0.8438	0.1891	0.9476
			91092 Z	1.3137	0.3613	-0.3283	0.0988	0.2627	0.9206	1.4122	0.4602	0.6897	1.9043	0.821	-1.3137	0.9864	-0.197	1.3133	-0.0657
1		Statistics	Perimeter Mean of Ranks	13.4	12	=	11.7	611	12.8	13.5	12.2	12.5	14.2	12.7	9.6	12.9	11.2	13.4	11.4
	ions	Wilcoxon Rank Sum Statistics	Offsite Mean of	9.6	=	12	11.3	11.1	10.2	9.5	10.8	10.5	8.8	10.3	13.4	10.1	11.8	9.6	11.6
	Evaulation of Subsurface Soil Populations Background Sampling Program Defense Depot Memphis Tennessee	Wilcoxon	Perimeter Expected Sum of Ranks	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5
Appendix F-5	lation of Subsurface Soil Popula Background Sampling Program efense Depot Memphis Tenness		Offsite Expected Sum of Ranks	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	126.5	1 26.5	126.5	126.5	126.5	126.5
Appe	n of Subsu ground Sa e Depot N		Perimeter To muč bavrasdO Ranks	147	132.5	121	128.5	131	141	148.5	134	137.5	156	139.5	901	142	123	147	125
	Svaulation Back Defens		Offsite Observed Sum of Ranks	106	120.5	132	124.5	122	. 112	104.5	119	115.5	97	113.5	147	Ξ	130	901	128
	<u>-</u>		Perimeter Mean snoissass to	11693	8.79	148	0.59	1236	10.6	13.8	17.3	20355	986	2649	661	19.1	12.2	27.3	57.7
		Statistics	To nearly stiction of sections	96101	8.24	152	0.58	1197	9.77	12.6	15.3	18129	807	2249	879	17.5	8: -	24	56.9
	,	Summary	Perimeter Number of Detections	П	-	=	ው	=	=	=	=	=	11	=	=	=	=	=	=
			Offsite Number anotises of Detections	=	=	=	5	=	=	=	=	=	=	=	=	=	=	=	
			Рагатетег	٩Ľ	AS	BA	BE	ర	ප	ర	2		×	MG	Σ	Z	PB	>	ZN

Appendix F-6

Evaluation of Surface Soil Populations-Selected Pesticides

	i			Evalua	tion of Surf Back Defens	Appendix F-6 of Surface Soil Populations-Selecter Background Sampling Program Defense Depot Memphis Tennessee	Appendix F-6 Soil Populations—5 md Sampling Pro	Appendix F-6 nation of Surface Soil Populations–Selected Pesticides Background Sampling Program Defense Depot Memphis Tennessee	iticides				
		Summar	Summary Statistics					Wilcoxon	Wilcoxon Rank Sum Statistics	Statistics			
Рагашетег	to nedmuN stizMO znoticestons	Perimeter Number of Detections	Natice Mean of	Perimeter Mean of Detections	Offsite Observed Sum of Ranks	Perimeter Observed Sum of Ranks	Offsite Expected Sum of Ranks	Perimeter Expected Sum of Ranks	Officite Mean of Ranks	Регітетет Мезп от Капка	91038 Z	Z < dor¶	Within Critical Region of Rejection?
CHLORDANEA	2	3	17.4	4.17	109.5	143.5	126.5	126.5	2	13	1.1218	0.2619	S _o
CHLORDANEC	7	3	17	7.07	108.5	144.5	126.5	126.5	6.6	13.1	1.1898	0.2341	Š
DIELDRIN	٣	=	47.4	132	83.5	169.5	126.5	126.5	7.6	15.4	2.8003	0.0051	Yes
HEPT-EPOX	-	0	7.7	NA	106	147	126.5	126.5	9.6	13.4	1.3606	0.1736	Š
Notes:													
NA = not applicable	ble												
CHLORDANEA = Chlordane, alpha	= Chlord	ane, alpha											
CHLORDANEG = Chlordane, gamma	= Chlord	ane, gamm	<u> </u>										
DIELDRIN = Dieldrin	eldrin												
HEPT-EPOX = Hentachlor-Fnoxide	Ientachlor	-Frontide											

308 429

TAB

Appendix G

Appendix G

Comment Responses

EPA Comments on the Draft Background Sampling Program Technical Memorandum

1. Units

Comment: Several of the tables were presented without units. Units should be included in all tables.

Response: Units were included for most of the tables as footnotes. The revised report will include units in the table or the table headers.

2. Proximity of Sampling locations to Railroad Tracks

Comment: Background samples locations BS02, BW14, BS15, and BS16 appear to be close to railroad tracks in Figure 2-1. This issue requires some discussion in the text to assure that the locations have not been impacted by rail traffic and associated contamination.

Response: All four samples listed in the comment are at least 50 meters from the closest railroad tracks. Due to the condensed scale used in Figure 2-1, it may appear that these samples are within the railroad track areas. Text will be modified to included a discussion of the location of these samples and their proximity to the railroad tracks.

3. Non-parametric approach to sample size determination

Comment: The text (pp. 2-9, 10) discusses the non-parametric tolerance interval used to determine a level of confidence associated with sampling coverage. The formula on p. 2-10 requires more explanation vis-à-vis its applicability here. This section should be expanded to include all relevant equations and explanations.

A related question is the determination of a 90% confidence for each medium. How was this determined? The choice of sampling confidence levels is close to being a risk management decision is needed.

Response: In place of a random non-specific sampling approach, a statistical approach to sampling was implemented, with a pre-specified confidence level in selecting a representative data set for the background. This approach has been approved during the work plan. The confidence limits for each media were identified and discussed in Section 5.3.2 of the approved Remedial Investigation Workplan (Generic Remedial Investigation/Feasibility Study Workplan, Defense Distribution Depot Memphis, 1995).

4. Table 3-1, use of the term RME

Comment: The 95% upper confidence limit (UCL) on the mean is used as a health-protective surrogate for the true mean of a set of environmental samples. Because it is inappropriate to call the Exposure Point Concentration an RME. The acronym RME stands for "Reasonable Maximum Exposure." It pertains to exposure assumptions such as daily water intake, incidental soil ingestion, etc. The use of the 95% UCL on the mean represents a health-protective estimate of the mean concentration in the face of unavoidable uncertainty in sampling the site characterization. Because the 95% UCL is an estimate of the mean, it should not be considered as a reasonable maximum. In short, the acronym RME should not be used to determine the concentration term.

Response: The term RME will be replaced with UCL95% concentration. Although these (UCL95%) values are provided for reference, they are not used as background values.

Table 3-2, PRG criteria used

Comment: The reviewer spot-checked this table and was not able to duplicate calculations for several of the criteria. For example, the criterion (labeled a PRG) for arsenic in surface soil is 0.000876 mg/kg. This value is three orders of magnitude lower than other PRG/screening values with which the reviewer was familiar. Details of these calculations should be provided here, perhaps as an appendix, rather than as a reference to another document.

Some of the criteria are labeled 'ARARs." This term is not sufficiently specific. For example, dioxin/furan TEQ in surface soil are shown to have an ARAR of 4 ppt. This reviewer is unaware of statutory requirements regarding dioxin in surface soil from either the federal government or Tennessee. More explanation is needed.

Response: The arsenic PRG is based on groundwater protection (GWP) value calculated for soil, using carcinogenicity health based drinking water standard which is lower than an MCL and a Kd value from the literature. A direct exposure based PRG value included in the work plan for arsenic is 0.231 mg/kg. Lower of these two values was included in the background report. The revised report will include additional information on PRG values either in an appendix or within the text, as appropriate.

The available dioxin PRG value from EPA Region IV could perhaps be considered a "to-be considered, (TBC)" ARAR. However, this may not be critical issue and reference in the table will be changed in the revised report to read as PRG.

6. Tables 3-5 and 3-6, use of the t-test

Comment: This common statistical test was used to determine whether off-site and perimeter soil samples could be considered as coming from the same population. The use of t-test assumes that both groups of samples are normally distributed. This assumption is in conflict with the assumptions underlying the use of non-parametric methods earlier in the document. Non-parametric methods can be used for any distribution and make no assumptions regarding distribution. Therefore, the appropriate choice for statistical test would have been the non-parametric Mann-Whitney U test or a variant.

Response: The statistical evaluation of the off-site and perimeter soil samples will be performed with the Mann-Whitney U-test, as suggested by the reviewer.

7. Page 3-21, Units

Comment: Metals concentrations in the sediment are given in ug/L (micrograms/L). This is incorrect. The reviewer believes that the intended units are ug/kg. Assuming these values are in ug/kg, both lead and zinc are considerably above Region 4 sediment screening levels. Therefore, Cane Creek should not be used as a background sampling location - it has probably been impacted by non-DoD human activities.

Response: The correct units for the reported concentrations are mg/kg. We agree with the comment that the reported lead concentration in the Cane Creek (147 mg/kg) are higher than sediment screening value of 30.2 mg/kg from EPA Region IV. So also for zinc the maximum detected concentrations in the background locations are above Region IV

screening value of 124 mg/kg. The revised background values will eliminate the outlier samples identified through the boxplots, which could eliminate these samples from inclusion in the background value calculation.

8. Table 3-12, background levels dioxin/furan

Comment: The reviewer points out that the national surface soil background for dioxin/furan TEQ is about 8 ppt. The mean level here of 6 ppt is equal to the national background level. The third paragraph on page 3-37 ends with the statement about elevated dioxin levels. This statement should be removed.

Response: Agree with the comment. The referenced statement will be modified in the revised report. The statement in the text refers to the elevated concentrations in samples BW16 through BW19, which is relatively high compared to the other samples within the population. No comparisons to national averages were made.

9. Figure 3-11 and accompanying text

Comment: This figure is misleading because it suggests two soil groups. The text does not bear this out (p. 3-43). The text should be left as is, and the figure should be removed from the document.

Response: The dioxin statistical analysis in reference was performed to correlate surface soil and subsurface soil. The conclusion of the analysis was that there is no apparent reason to split the sample groups. The entire analysis will be eliminated from the report, as the text by itself is not self-explanatory. Therefore, both the figure and the text associated with it in the paragraph will be removed from the revised report.

Tennessee Department of Environment and Conservation Comments on the Draft Background Sampling Program Technical Memorandum

General Comments

TDEC/DSF is concerned about the submission date of this document (April 1997) compared to its publication date (September 1996). In addition, considering the nature and length of this document, TDEC/DSF views it as a report, not a Technical Memorandum.

TDEC/DSF reserves the right to further review any or all of the statistics presented in the report.

Response: The revised report will be titled "Background Sampling Program Report."

Specific Comments

1. Section 1.0, page 1-1, second paragraph

Please strike the word "the" before "Section 1.1."

Response: Suggested change will be made in the revised report.

2. Section 1.2, page 1-3, last sentence

Has the referenced report been submitted to TDEC/DSF?

Response: This report has not been submitted for regulatory review. The reference to it will be removed.

3. Section 2.1, page 2-8, Figure 2-3

It is noted on page 2-12 that monitoring well MW-23 was dropped as a background well. Should it be removed from this figure?

Response: Agree with the comment. MW-23 will be removed from this figure in the revised report.

4. Section 2.2, page 2-9, first paragraph

Should the word "forming" in the next to last line of this paragraph actually be "farming?"

Response: Yes. Typographical error will be corrected in the revised report.

5. Section 2.2.3, page 2-13, Figure 2-4

The following item in the legend has no symbol (which should presumably be an arrow): "GROUNDWATER GRADIENT DIRECTION IN THE FLUVIAL AQUIFER."

Response: Figure will be corrected as suggested in the revised report.

6. Section 3.0, page 3-1

The paragraph in this section does not mention groundwater data, although groundwater data is included in the later sections, tables, etc.

Response: Agree with the comment. Information on groundwater will be added to the introduction in the revised report.

7. Section 3.1.1, page 3-2, Table 3-1

The word "anti-logarith" in the definition of "Geometric-Mean" should be "anti-logarithm."

Response: typographical error will be corrected in the revised report.

8. Section 3.1.2, pages 3-1 & 3-2

Some of the paragraphs that discuss various matrices refer to table 3-3 and other do not (e.g. groundwater). Please review the text and references for consistency.

Response: Comment noted. References will be added to the text as suggested in the revised report.

9. Section 3.1.2, page 3-7, Table 3-3

"CRDL" is defined in the footnotes but not used in the table. Is a column missing from the table?

Response: The Definition of the CRDL is provided for the acronym used in the definition of 'U' qualifier. The revised report will clarify the CRDL acronym use.

10. Section 3.2.1, page 3-14, Soil section

Chromium and arsenic are referred to as "man-made" metals. Should the word "anthropogenic" be used in this context?

Response: Agree with the comment. Correction will be made in the revised report.

11. Section 3.2.1, page 3-15, Figure 3-1

Unlike on other similar figures, the red circles representing Total Metals are printed in the foreground and therefore obscure the underlying bar graph that represent the Distribution of Selected Metals. In addition, although the legend indicates that bars are plotted on individual scales, scales for bars on figures 3-4, 3-5, and 3-6 are present. Please consider clarifying the legend.

Response: Comment noted. An attempt will be made to further clarify the figure legend in the revised report. [Note: during preparation of the final report, it was noted that individual scales were necessary for this figure due to the differences in ranges of detection between the metals. The relative scale was not changed]

12. Section 3.2.1, page 3-22 through 3-24, Figures 3-4 through 3-6

Are the units for the red circles symbol the same as for the bars? (See Figure 3-7 for an example of units labeling for both bars and circle symbols).

Response: Yes. Units are the same for circles and the bars. The revised report will have units included for the bars also.

13. Section 3.2.1, page 3-24, Figure 3-6

It is noted on page 2-12 that monitoring MW-23 was dropped as a background well. Should it be removed from this figure?

Response: Yes. MW-23 will be dropped from the referenced figure in the revised report.

14. Section 3.2.4, page 3-3, Table 3-11

No units are provided for the data in this table.

Response: Units will be included in the revised report.

15. Appendix B

Is there a reason why copies of the log book for the groundwater background sampling are omitted here

Response: Filed sampling logs for monitoring well sampling will be included in the revised report.

16. Appendix D

Why is the analytical Data Summary for Groundwater omitted.

Response: The revised report will include groundwater data summaries.

17. Appendix E

Please consider a cover page for this table that explains among other things, the following:

- a) does a total column represent total samples or total detects?
- b) does the sum in the Qualifier row equal the number of detects? (the sum in some rows equal the "total" and less that the total in other rows)
- c) should qualifier definitions be annotated?
- d) is there any need for a summary per sample location

Response:

- a) The total represents the number of times a chemical was analyzed.
- b) The sum of all qualifiers should be equal to total. Qualifiers '=' and 'J' represent detected number.
- c) Qualifier definitions will be provided as footnotes in the revised report.
- d) The included summary is by medium, c.g. soil (surface and subsurface, surface water, etc.).

18. Appendix F.

There are several examples in the tables where means are provided for contaminants with no detections reported. Please clarify.

Response: The table included in this appendix represents a data summary of the information used for different statistics. Typically, ½ the detection limit of the chemical not detected is used in calculation of statistics such as UCL 95%. However, if a chemical was

never detected, no background value was calculated.

Tennessee Department of Environment and Conservation: Nashville Central Office Comments on the Draft Background Sampling Program Technical Memorandum

Comment: The report utilized the methodology of combining site boundary data with
off-site data prior to the statistical analysis on each chemical. Separate statistics should
also have been run for these two data sets for comparison prior to validation of
methodology. The possibility of outliers in the site boundary data set jacking up the
computed mean detection values is high.

Response: A statistical evaluation of the site boundary and off-site data populations will be performed using the Mann-Whitney U test if the populations are non-parametric or a one-way analysis of variance (ANOVA) if the populations are normally or log-normally distributed. If there is not a significant difference between the populations, both will be combined to represent the entire background dataset. If there is a statistically significant difference between the population means, then the onsite dataset will be excluded. The reason for combining the two populations when they are equivalent is to maintain a 90 percent coverage and a 90 percent confidence of the sample population, as proposed in Section 5.3.2 of the Generic Remedial Investigation/Feasibility Study Work Plan (August, 1995). Outliers will be evaluated and removed from either the off-site only or the combined datasets, as appropriate based on the statistical evaluation.

2. Comment: Metals data from off-site and chemical compounds commonly deposited via vehicular traffic could represent naturally occurring and anthropogenic background respectively. Plugging in these values into the suggestion given in Comment No. 1 above could serve to verify if generic background assumptions used during Data Quality Evaluation are well suited to the DDMT site.

Response: Comment noted. Considering DDMT is in a highly urban environment, the selected background locations are intended to mimic the site conditions in locations selected offsite and throughout the city. Atmospheric deposition due to vehicular traffic is expected to be similar throughout the area including the background locations in the offsite areas. However, the fence-line is unique, where facility maintenance activities may have localized impact at these locations. The rationale for the selected sampling locations was previously presented in the work plan. The statistical evaluation discussed in response to Question #1 will identify any differences in the perimeter (fence-line) and other off-site samples. If there is an impact on the perimeter of DDMT due to vehicular traffic around DDMT, the perimeter data will be excluded.

Comment: The DDMT comprises a large expanse of land which may undergo activities
under new ownership that could disturb the soil (such as demolition and construction).
The response level should consider additional pathways and fugitive dust.

Response: This comment pertains to the baseline risk assessments to be performed at the site. The background values for the surface soils as well as subsurface soils presented in the *Background Sampling Program Report* will be used in the baseline risk assessment to evaluate these exposure scenarios. For areas with known construction, it is appropriate to compare the surface soil values with subsurface background values due to the excavation activities.

4. Comment: Under page 3-3, will the current values in the criteria column be the remedial action levels agreed upon between MFO and DDMT?

Response: These proposed values are conservative comparison (screening) criteria protective of human health and the environment under default conservative exposure scenarios. Remedial goals will be developed for the site at a later time for areas that may present risk above acceptable levels.

5. Comment: TDSF has compiled non-parametric background metals statistics from ninety (90) Memphis area sites. Outliers were not filtered out during the survey. The data are available for your information upon request.

Response: Comment noted. We may request for a copy of this data for evaluation.

Defense Distribution Depot Memphis Response to Review Comments on the Background Program Technical Memorandum

- 1) Please change the name of this document to the Background Sampling Data Report.
 - In accordance to the TDEC general comment, the final report will be titled, "Background Sampling Program Report."
- 2) Executive Summary (ES-1), 1st paragraph, sixth bullet: Is the development of clean-up criteria appropriate to mention as an objective of this report (see also page 1-3)?
 - The development of cleanup criteria and preliminary remediation goals is not a specific objective of this report. However, it is anticipated that the results of the background data analysis presented in this report will be used in future documents. In terms of supporting the overall objectives of the environmental program, it is appropriate to include development of this cleanup criteria as a programmatic objective in the Executive Summary.
- 3) ES-2, 2nd paragraph, fifth sentence: This sentence is confusing. What does it mean? The sentence will be rewritten as follows:
 - "That is, if twenty two samples were repeatedly taken from the background population (e.g. background surface soil), in 90 percent of the samples the sample 90th percentile would be below the true 90th percentile of the population."
- 4) ES-1, 3rd paragraph, third sentence: Does this sentence state that since the perimeter sample values are not double (100% higher) the values of the offsite samples, the perimeter samples are assumed to be unaffected by DDMT waste management practices? If I am interpreting this sentence correctly, what is the justification for stating that the perimeter samples are unaffected by waste management operations? Is there some sort of EPA rule that established twice background as critical?
 - The DDMT background sampling program was designed to characterize background in areas surrounding DDMT that were not impacted by waste management operations at the Depot. The decision to include the 11 DDMT perimeter samples in the sample design was documented in the Generic Remedial Investigation/Feasibility Study Workplan (US Army Corps of Engineers Huntsville Division, 1995) [page 5-8] and is based on the need to include samples representative of environmental conditions surrounding DDMT that were not affected by waste management operations. The on-site samples were selected along the perimeter of DDMT where there was no known impact from DDMT operations other than grounds maintenance and other potential anthropogenic affects associated with traffic, previous land uses, and other local industrial sources. The percent relative difference statistic was presented to indicate that concentrations of background constituents in the perimeter samples are not grossly above those of the non-perimeter background samples. A large difference would indicate direct impact from DDMT waste management operations. A minor difference is expected that is not necessarily due to DDMT operations, but to the previously mentioned anthropgenic conditions.

To clarify this point in the Executive Summary, the last two sentences of this paragraph will be rewritten as follows:

"The difference in the concentration of background constituents between the perimeter and offsite sample groups is low (less than 100 percent relative difference), indicating that the difference is representative of variations in anthropogenic conditions between the two sample groups rather than gross impact from waste management at DDMT. Therefore, perimeter and offsite data were combined into one background data set."

5) ES-1 4th paragraph, second sentence: Does Region IV have RBCs?

No. The sentence will be rewritten to correctly identify Region III as the source for the RBCs.

6) Section 1.1, page 1-3, 2nd paragraph: Who agreed that all investigations would be done under CERCLA?

The first portion of this paragraph will be rewritten as follows:

"As a result of DDMT status as an NPL site, DDMT entered a Federal Facilities Agreement on March 6° , 1995. The signatories of that agreement; DLA, EPA, and TDEC, agreed that the investigation of all..."

- 7) Section 1.1, page 1-3, 3st paragraph: When was the BRAC announcement made?

 The first sentence of the paragraph will be prefaced with, "In July 1995, DDMT..."
- 8) Figure 2-3, page 2-8: This figure indicated 13 monitoring wells. Please delete the unsampled well from this figure. Some offsite wells are not sampled, even if they were not associated with the Dunn Field TCE plume. An example of this is well 47. Why?

MW-23 was included as an error and will be removed. Some wells that were not impacted by the Dunn Field plume but were nonetheless associated with groundwater contamination were not included as background wells (see the discussion in Section 2.2, page 2-12). Specifically, organic contamination detected in wells MW-23, MW-47, and MW-51 indicated anthropogenic impacts that, even though not necessarily from DDMT, suggested that these wells were not representative of ambient conditions throughout the Fluvial Aquifer.

- 9) Section 2.2, page 2-9, 1" paragraph, last sentence: please change forming to farming. The change will be made as suggested.
- 10) Section 2.2, page 2-9, 2nd paragraph: Are either the "quartile (4th sentence) or quantile (6th sentence) misspelled?

Quartile is the proper term and will be used in both sentences.

11) Section 2.2.3, page 2-11, 1" paragraph, fifth sentence: Please state that samples were taken from some of these wells.

The change will be made as suggested.

12) Section 2.2.3, page 2-12, top of page: Please remove the two chemical concentrations (IJ) from this sentence. Make the concentrations a second sentence for clarity. Please state that the data was qualified.

The parenthetical "1J"s will be removed from the sentence and the following sentence will be added:

"Trace detections of both compounds were estimated at 1 μ g/L, which is below the detection limit."

13) Section 2.2.3, pages 2-11, 1-12, Last paragraph on 2-11: Only wells 16, 19, 24, 28, and 30 are mentioned as background wells. Yet in the next paragraph wells 45, 46, 48, 50, 52, are mentioned as background wells. Other than the age of these wells, is there any reason why all twelve of these wells are not grouped together?

There isn't a compelling reason to discuss the existing and new background wells separately. The paragraphs will be reassembled so that both sets of wells are discussed together.

14) Section 3.1.3, page 3-6, 2nd paragraph: The beginning of this sentence is confusing. Please explain how a greater number can be found exceeding threshold criteria in sediment yet still in fewer that the samples of surface soils.

To clarify, the beginning of this sentence will be rewritten as follows:

"Fewer sediment samples had SVOC detections relative to the number of soil samples with SVOCs. However, a greater range of SVOC compounds were detected in sediment at concentrations exceeding criteria:..."

15) Section 3.2, page 3.8, 2[™] paragraph: This is a very good point. You may want to state, in general, whether or not there were any gross differences between perimeter samples and offsite samples in this paragraph.

In addition to further discussion in Section 3, this point is strengthened in the Executive Summary (see response to DDMT comment #4) and is also discussed in Section 5.0. Additional discussion here is probably not necessary.

16) Section 3.2.1, page 3-14, Soil, 1" paragraph, first sentence: Chromium and arsenic are elements. I am not aware of these elements being man-made. It may be more appropriate to call them typical industrial or anthropogenic metals.

The term man-made will be replaced with anthropogenic.

17) Section 3.2.1, page 3-14, 3rd paragraph, second sentence: Table 3-1 is referenced in error.

The referenced statistical summary has been moved to Appendix F and the subject table was removed.

18) Table 3-5, page 3-18: What is the significance of the "t" value for vanadium being highlighted?

Per comments by EPA Region IV, the t-test has been removed and replace with the Wilcoxon Rank Sum test as discussed in Appendix F of the final document.

- 19) Section 3.2.2, page 3-27, 3rd paragraph: 1,1-dichloroethane and TCE were not detected in Well 45 according to the Groundwater Characterization Technical Memorandum. 1,1-Dichloroethane was detected in well 45.
 - 1,1,1-Trichloroethane and 1,1-dichloroethane were detected in Well 45, as presented on pages 54 and 62 of Appendix H and Table 3-6. 1,1,1-Trichloroethane was not discussed in the body of the Groundwater Characterization Technical Memorandum because it was not a primary VOC constituent in groundwater. TCE was not detected and will be removed from the paragraph.
- 20) Section 3.2.3, page 3-27, 2[™] paragraph, last sentence: The including of phenol in this paragraph is confusing when compared to the second, sixth, and seventh sentences. While the last sentence is correct (6600 ug/kg offsite vs. 4898 ug/kg onsite), the issue of phenol's as a whole in this paragraph is confusing. Maybe the confusion is between the sixth and seventh sentences.

To improve clarity by separating the surface and subsurface soil discussion, this paragraph will be rewritten as follows:

"SVOC concentrations were significantly higher in surface soil samples BS04 (located outside the northeast corner of the DDMT property fence) and BS15 (located along the western perimeter of the Main Installation). Phenol concentrations were also elevated at BS01 (Dunn Field), BS08 (DDMT southwest perimeter), and BS09 (residential area 1.5 miles east of DDMT). Other SVOC concentrations in surface soil samples were estimated at below the CRDL. SVOC values for perimeter and offsite surface soil samples are summarized in Table 3-10. With the exception of phenol, mean surface soil SVOC values are higher in the perimeter samples than offsite.

The range and concentrations of detected SVOCs decrease from surface to subsurface soils. Concentrations of fluoranthene and pyrene in the subsurface soil samples are about a factor of seven lower than their corresponding surface soil samples. Phenol concentrations do not substantially decrease in the subsurface soil samples most likely because of leaching of water soluble phenol and adsorption of other insoluble SVOC compounds in the surface soil (CRC, 1971). Five out of six phenol detections in subsurface soil are from perimeter soil samples and are all higher than the single offsite phenol detection also at BS09."

21) Section 3.2.5, page 3-37, 3rd paragraph, first sentence: Are the units reported in this sentence applicable to Table 3-13? If they are, then those units should be indicated either in the table or in the table notes on page 3-40.

The units in the table are consistent with those discussed in this paragraph. The units in the table will be appropriately identified.

22) Section 5.0, page 5-1, 1" paragraph, second sentence: This sentence states what the objective of this entire effort was. It also says that such a background statistical database was established (developed). After hearing what TDEC and EPA had concerns with in terms of pesticides and PAH concentration at our fenceline versus offsite, I question the validity of this sentence's statement.

As discussed on page 5-8 of the EPA- and TDEC-approved Generic Remedial Investigation/Feasibility Study Workplan (CEHNC, 1995), areas within the DDMT property

that were not affected by DDMT operations were selected for background characterization based on information regarding former and current land usage, existing soil analytical data, and avoidance of areas of known or potential contamination. Potential sample locations were chosen by delineating areas throughout the installation that were not appropriate for sampling, including areas of know or suspected contamination and areas covered by buildings or roads. Because DDMT is heavily populated, relatively few areas were available for sampling. The 11 onsite locations were chosen to represent the most reasonable geographical distribution possible over the site, considering the site limitations.

Since there are no know waste operations in the background sampling areas, differences in the parameter concentrations between the perimeter and offsite sample locations are likely due to differences in anthropogenic background conditions. This difference is considered to be acceptable in the background sampling program, particularly since the background data are being applied to sample locations on the DDMT Main Installation. To strengthen this point, the last portion of this paragraph will be rewritten as follows:

"...determine whether site-specific waste management operations or releases of hazardous materials at DDMT have contributed contaminants exceeding background levels."

23) Section 5.0, page 5-1, table: The title of this table refers to Remedial Action Criteria. If the exceedances mentioned are exceedances of screening criteria, do not refer to this table as Remedial Action Criteria, but instead refer to it as Risk Screening Criteria.

The table is in reference to the screening criteria. The term "Remedial Action Criteria" will be replaced with "Screening Criteria."



April 15, 1998

113627.RR.ZZ

Mr. Terry Templeton
State of Tennessee Department of Environment and Conservation
Memphis Environmental Field Office
Suite E-645, Perimeter Park
2510 Mt. Moriah
Memphis, TN 38115-1520

Dear Terry:

Subject: Response to December 8th, 1997, Response to Comment Resolution on the Draft Background Program Technical Memorandum

This letter provides a response to comments received from TDEC on December 8th, 1997, regarding the Draft Background Program Technical Memorandum. These comments were on the comment response document prepared by CH2M HILL and received by the TDEC office on November 3, 1997. The responses are provided as follows:

Response to TDEC/DSF General Comments:

The response states that the revised report will be titled "Background Sampling Program Report." However, the cover letters accompanying the comment responses refer to the document as the "Background Characterization Technical Memorandum." Please clarify.

Response: The report will be titled "Background Sampling Program Report."

Response to TDEC/DSF Specific Comments:

TDEC

Comment: Regarding Appendix E, is there any need for a summary per sample

location?

Response: The included summary is by medium, e.g. soil (surface and

subsurface, surface water, etc.).

TDEC

Comment: The response to this comment does not seem to actually address the

comment.

Mr. Terry Templeton Page 2 April 13, 1998 113627.RR.ZZ

Response:

The table provides a summary of the qualifiers (e.g. number detections, number of estimated values) for each parameter in each media sampled. The purpose of the table is to provide a summary of the parameter detections and qualifiers in a manner similar to the way the data is presented in the report. Summarizing the qualifiers by sample does not organize the data in a manner that supports the data interpretations discussed in the document.

The comments will be incorporated and the final Background Sampling Program Report will be issued on May 13th, 1998.

Sincerely,

CH2M HILL

Greg Underberg Program Manager

ORO/TDEC_fin_resp.doc

c: Dorothy Richards/CEHNC Glenn Kaden/DDSP-FE

FINAL PAGE

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