

Final

**Remedial Investigation Report
Operable Unit No. 4
(Sites 41 and 74)**

**Marine Corps Base
Camp Lejeune, North Carolina**

**Appendices P through U
Volume 3 of 3**



Prepared For:

**Department of the Navy
Atlantic Division
Naval Facilities
Engineering Command
Norfolk, Virginia**

Under the

LANTDIV CLEAN Program

**Comprehensive Long-Term
Environmental Action Navy**

TABLE OF CONTENTS

	<u>Page</u>
EXECUTIVE SUMMARY	ES-1
1.0 INTRODUCTION	1-1
1.1 Report Organization	1-1
1.2 Operable Unit Description	1-2
1.3 Site Descriptions and Histories	1-3
1.3.1 Site 41 Description	1-3
1.3.2 Site 41 History	1-3
1.3.3 Site 74 Description	1-4
1.3.4 Site 74 History	1-4
1.4 Previous Investigations	1-4
1.4.1 Initial Assessment Study	1-5
1.4.2 Confirmation Study	1-5
2.0 STUDY AREA INVESTIGATION	2-1
2.1 Remedial Investigation Objectives	2-1
2.2 Site 41 - Camp Geiger Dump Near Former Trailer Park	2-1
2.2.1 Geophysical Investigation	2-1
2.2.2 Soil Investigation	2-2
2.2.3 Groundwater Investigation	2-6
2.2.4 Surface Water and Sediment Investigation	2-9
2.3 Site 74 - Mess Hall Grease Pit Disposal Area	2-11
2.3.1 Geophysical Investigation	2-11
2.3.2 Preliminary Site Survey	2-12
2.3.3 Soil Investigation	2-13
2.3.4 Groundwater Investigation	2-16
2.3.5 Surface Water and Sediment Investigation	2-19
2.4 Decontamination Procedures	2-20
2.5 Investigation Derived Waste (IDW) Handling	2-20
3.0 PHYSICAL CHARACTERISTICS OF THE STUDY AREA	3-1
3.1 Topography and Surface Features	3-1
3.2 Surface Water Hydrology	3-1
3.3 Geology and Soils	3-2
3.3.1 Regional Geology and Soils	3-2
3.3.2 Site Specific Geology and Soils	3-3
3.4 Hydrogeology	3-4
3.4.1 Regional Hydrogeology	3-4
3.4.2 Site Specific Hydrogeology	3-5
3.5 Land Use Demographics	3-8
3.5.1 Regional	3-8
3.5.2 Site 41	3-9
3.5.3 Site 74	3-9
3.6 Climate and Meteorology	3-9
3.7 Water Supply	3-10

TABLE OF CONTENTS
(Continued)

	<u>Page</u>
4.0 NATURE AND EXTENT OF CONTAMINATION	4-1
4.1 Data Quality	4-1
4.1.1 Data Management and Tracking	4-1
4.2 Non-Site Related Analytical Results	4-2
4.2.1 Laboratory Contaminants	4-2
4.2.2 Naturally-Occurring Inorganic Elements	4-3
4.3 State and Federal Criteria and Standards	4-5
4.4 Site 41 - Camp Geiger Dump Near Former Trailer Park	4-7
4.4.1 Surface Soil	4-7
4.4.2 Subsurface Soils	4-12
4.4.3 Groundwater	4-17
4.4.4 Surface Water	4-27
4.4.5 Sediments	4-31
4.4.6 Engineering Parameter Results	4-36
4.4.7 Quality Assurance/Quality Control Results	4-37
4.4.8 Summary	4-37
4.5 Site 74 - Mess Hall Grease Pit Disposal Area	4-39
4.5.1 Surface Soil	4-39
4.5.2 Subsurface Soils	4-43
4.5.3 Groundwater	4-46
4.5.4 Surface Water	4-48
4.5.5 Sediments	4-50
4.5.6 Engineering Parameter Results	4-52
4.5.7 Quality Assurance/Quality Control Results	4-52
4.5.8 Summary	4-53
5.0 CONTAMINANT FATE AND TRANSPORT	5-1
5.1 Chemical and Physical Properties Impacting Fate and Transport	5-1
5.2 Contaminant Transport Pathways	5-2
5.2.1 On-Site Deposition of Windblown Dust	5-3
5.2.2 Leaching of Sediment Contaminants to Surface Water	5-3
5.2.3 Leaching of Soil Contaminants to Groundwater	5-3
5.2.4 Migration of Groundwater Contaminants	5-3
5.3 Fate and Transport Summary	5-5
5.3.1 Volatile Organic Compounds	5-5
5.3.2 Polycyclic Aromatic Hydrocarbons	5-6
5.3.3 Pesticides/Polychlorinated Biphenyls	5-6
5.3.4 Inorganics	5-6
6.0 BASELINE RISK ASSESSMENT	6-1
6.1 Introduction	6-1
6.2 Contaminants of Potential Concern	6-1
6.2.1 Criteria for Selecting Contaminants of Potential Concern	6-2

TABLE OF CONTENTS
(Continued)

	<u>Page</u>
6.2.2 Selection of Contaminants of Potential Concern	6-7
6.3 Exposure Assessment	6-12
6.3.1 Site Conceptual Model of Potential Exposure	6-12
6.3.2 Exposure Pathways	6-13
6.3.3 Quantification of Exposure	6-14
6.3.4 Calculation of Chronic Daily Intakes (CDI)	6-15
6.4 Toxicity Assessment	6-22
6.4.1 Toxicological Evaluation	6-22
6.4.2 Dose-Response Evaluation	6-23
6.5 Risk Characterization	6-25
6.5.1 Human Health Risks	6-26
6.6 Sources of Uncertainty	6-27
6.6.1 Analytical Data	6-27
6.6.2 Exposure Assessment	6-28
6.6.3 Sampling Strategy	6-29
6.6.4 Toxicity Assessment	6-29
6.6.5 Compounds Not Quantitatively Evaluated	6-30
6.7 Conclusions of the BRA for OU No. 4	6-30
6.7.1 Site 41	6-31
6.7.2 Site 74	6-31
7.0 ECOLOGICAL RISK ASSESSMENT	7-1
7.1 Introduction	7-1
7.1.1 Objectives of the Ecological Risk Assessment	7-1
7.1.2 Scope of the Ecological Risk Assessment	7-1
7.1.3 Organization of The Ecological Risk Assessment	7-2
7.2 Problem Formulation	7-2
7.2.1 Stressor Characteristics	7-3
7.2.2 Ecosystems Potentially at Risk	7-7
7.2.3 Ecological Effects	7-7
7.2.4 Ecological Endpoints	7-8
7.2.5 The Conceptual Model	7-10
7.3 Analysis Phase	7-10
7.3.1 Characterization of Exposure	7-10
7.3.2 Ecological Effects Characterization	7-23
7.4 Risk Characterization	7-25
7.4.1 Surface Water Quality	7-26
7.4.2 Sediment Quality	7-27
7.4.3 Surface Soils	7-28
7.4.4 Terrestrial Chronic Daily Intake Model	7-29
7.4.5 Threatened and/or Endangered Species	7-33
7.4.6 Flora/Wetlands	7-33
7.4.7 Other Sensitive Environments	7-33

TABLE OF CONTENTS
(Continued)

	<u>Page</u>
7.5 Ecological Significance	7-33
7.5.1 Aquatic Endpoints	7-33
7.5.2 Terrestrial Endpoints	7-34
7.5.3 Threatened and Endangered Species	7-34
7.5.4 Wetlands	7-35
7.5.5 Other Sensitive Environments	7-35
7.6 Uncertainty Analysis	7-35
7.7 Conclusions	7-36
7.7.1 Site 41	7-36
7.7.2 Site 74	7-37
8.0 CONCLUSIONS	8-1
8.1 Site 41	8-1
8.2 Site 74	8-2
9.0 REFERENCES	9-1

LIST OF TABLES

Number

- 1-1 Confirmation Study, Detected Target Contaminants for Groundwater Samples (1984/1987), Site 41
- 1-2 Confirmation Study, Detected Target Contaminants for Surface Water Samples (1987) Site 41
- 1-3 Confirmation Study, Detected Target Contaminants for Sediment Samples (1987), Site 41
- 1-4 Confirmation Study, Detected Target Contaminants in the Soil, Site 74
- 1-5 Confirmation Study, Detected Target Contaminants in the Groundwater (1984/1987), Site 74
- 1-6 Pre-Investigation, Detected Contaminants in the Groundwater (1992), Site 74

- 2-1 Summary of Remedial Investigation Objectives, Site 41
- 2-2 Summary of Remedial Investigation Objectives, Site 74
- 2-3 Soil Sampling Summary, Site 41
- 2-4 Summary of Field Quality Assurance and Quality Control Sampling Program for the Soil Investigation, Site 41
- 2-5 Summary of Well Construction Details, Site 41
- 2-6 Summary of Field QA/QC Sampling Program for the Groundwater Sampling, Site 41
- 2-7 Sediment Sampling Summary, Site 41
- 2-8 Summary of Field QA/QC Sampling Program for the Surface Water and Sediment Investigation, Site 41
- 2-9 Soil Sampling Summary, Site 74
- 2-10 Summary of Field Quality Assurance and Quality Control Sampling Program for the Soil Investigation, Site 74
- 2-11 Summary of Well Construction Details, Site 74
- 2-12 Summary of Field QA/QC Sampling Program for the Groundwater Investigation, Site 74
- 2-13 Sediment Sampling Summary, Site 74
- 2-14 Summary of Field QA/QC Sampling Program for the Surface Water and Sediment Investigation, Site 74

- 3-1 Geologic and Hydrogeologic Units in the Coastal Plain of North Carolina
- 3-2 Summary of Water Level Measurements from Shallow Monitoring Wells on February 14-19, 1994, February 22, 1994, March 1, 1994, and April 26-28, 1994 - Site 41
- 3-3 Aquifer Characteristics - Shallow Monitoring Wells Site 41
- 3-4 Summary of Water Level Measurements from Deep Monitoring Wells on February 14-19, 1994, February 22, 1994, March 1, 1994, and April 26-28, 1994 - Site 41
- 3-5 Aquifer Characteristics - Deep Monitoring Wells Site 41
- 3-6 Summary of Water Level Measurements from Shallow Monitoring Wells on February 22, 1994, March 1, 1994, March 2, 1994, and April 29, 1994 - Site 74
- 3-7 Aquifer Characteristics - Monitoring Wells Site 74
- 3-8 Land Utilization: Developed Areas Acres/Land Use (Percent)
- 3-9 Climatic Data Summary for MCAS New River
- 3-10 Tide Data for the New River in Jacksonville, North Carolina
- 3-11 Summary of Water Supply Wells Within a One-Mile Radius of Site 41
- 3-12 Summary of Water Supply Wells Within a One-Mile Radius of Site 74

LIST OF TABLES

(Continued)

Number

- 4-1 Site 41 Surface Soil Positive Detection Summary - Organics
- 4-2 Site 41 Surface Soil Positive Detection Summary - Inorganics
- 4-3 OU #4 (Sites 69, 74, and 41) Background Soils Positive Detection Summary - Organics
- 4-4 OU #4 (Sites 69, 74, and 41) Background Soils Positive Detection Summary - Inorganics
- 4-5 Comparison of Inorganic Levels in Surface Soils at Site 41 to Background Levels
- 4-6 Site 41 Subsurface Soil Positive Detection Summary - Organics
- 4-7 Site 41 Subsurface Soil Positive Detection Summary - Inorganics
- 4-8 Comparison of Inorganic Levels in Subsurface Soils at Site 41 to Background Levels
- 4-9 Site 41 Round One Groundwater Positive Detection Summary - Organics
- 4-10 Site 41 Round One Groundwater Positive Detection Summary - Total Metals
- 4-11 Site 41 Round One Groundwater Positive Detection Summary - Dissolved Metals
- 4-12 Summary of Round One Groundwater Field Parameters - Site 41
- 4-13 Site 41 Round Two Groundwater Positive Detection Summary - Organics
- 4-14 Site 41 Round Two Groundwater Positive Detection Summary - Total Metals
- 4-15 Site 41 Round Two Groundwater Positive Detection Summary - Dissolved Metals
- 4-16 Summary of Round Two Groundwater Field Parameters - Site 41
- 4-17 Comparison of Round One and Round Two Organic Results - Site 41
- 4-18 Comparison of Round One and Round Two Total Metal Results - Site 41
- 4-19 Comparison of Round One and Round Two Dissolved Metal Results - Site 41
- 4-20 Comparison of Total Metal Levels in Shallow Groundwater at Site 41 for Wells Sampled with Low-Flow Purging Techniques
- 4-21 Comparison of Dissolved Metal Levels in Shallow Groundwater at Site 41 for Wells Sampled with Low-Flow Purging Techniques
- 4-22 Site 41 Surface Water Positive Detection Summary - Organics
- 4-23 Site 41 Surface Water Positive Detection Summary - Total Metals
- 4-24 Site 41 Surface Water Positive Detection Summary - Dissolved Metals
- 4-25 Comparison of Inorganic Levels in Surface Water at Site 41 during First Sampling Event to Base Upgradient Levels
- 4-26 Comparison of Total Metal Levels in Surface Water at Site 41 during Second Sampling Event to Base Upgradient Levels
- 4-27 Site 41 Sediment Positive Detection Summary - Organics
- 4-28 Site 41 Sediment Positive Detection Summary - TAL Metals
- 4-29 Site 74 Surface Soil Positive Detection Summary - Organics
- 4-30 Site 74 Surface Soil Positive Detection Summary - Inorganics
- 4-31 Site 74 Comparison of Inorganic Levels in Surface Soils to Background Levels
- 4-32 Site 74 Subsurface Soil Positive Detection Summary - Organics
- 4-33 Site 74 Subsurface Soil Positive Detection Summary - Inorganics
- 4-34 Site 74 Comparison of Inorganic Levels in Subsurface Soils to Base Background Levels
- 4-35 Site 74 Round One Groundwater Positive Detection Summary - Organics
- 4-36 Site 74 Round One Groundwater Positive Detection Summary - Total Metals
- 4-37 Site 74 Round One Groundwater Positive detection Summary - Dissolved Metals
- 4-38 Summary of Round One Groundwater Field Parameters - Site 74
- 4-39 Site 74 Surface Water Positive Detection Summary - Total Metals
- 4-40 Site 74 Comparison of Inorganic Levels in Surface Water to Base Upgradient Levels

LIST OF TABLES
(Continued)

Number

- 4-41 Site 74 Sediment Positive Detection Summary - Organics
- 4-42 Site 74 Sediment Positive Detection Summary - TAL Metals

- 5-1 Organic Physical and Chemical Properties
- 5-2 Processes Influencing Fate of Organic Pollutants
- 5-3 Relative Mobilities of Inorganics as a Function of Environmental Conditions (Eh, pH)

- 6-1 Organic Data Summary, Site 41 Downslope and On-Site Surface Soil
- 6-2 Inorganic Data Summary, Site 41 Downslope and On-Site Surface Soil
- 6-3 Organic Data Summary, Site 41 Downslope and On-Site Subsurface Soil
- 6-4 Inorganic Data Summary, Site 41 Downslope and On-Site Subsurface Soil
- 6-5 Site 41 Groundwater Data Summary
- 6-6 Site 41 Unnamed Tributary and Tank Creek Surface Water Data Summary
- 6-7 Site 41 Unnamed Tributary and Tank Creek Sediment Data Summary
- 6-8 Organic Data Summary, Site 74 - Pesticide Disposal Area Surface Soil
- 6-9 Inorganic Data Summary, Site 74 - Pesticide Disposal Area Surface Soil
- 6-10 Organic Data Summary, Site 74 - Pesticide Disposal Area Subsurface Soil
- 6-11 Inorganic Data Summary, Site 74 - Pesticide Disposal Area Subsurface Soil
- 6-12 Site 74 Groundwater Data Summary
- 6-13 Site 74 Pesticide Disposal Area Surface Water Data Summary
- 6-14 Site 74 Pesticide Disposal Area Sediment Data Summary
- 6-15 Summary of COPCs for Sites 41 and 74
- 6-16 Matrix of Potential Human Exposure, Site 41
- 6-17 Matrix of Potential Human Exposure, Site 74
- 6-18 Exposure Assessment Summary, Incidental Ingestion of Soil Contaminants
- 6-19 Exposure Assessment Summary, Dermal Contact with Soil Contaminants
- 6-20 Exposure Assessment Summary, Inhalation of Fugitive Particulates
- 6-21 Exposure Assessment Summary, Ingestion of Groundwater Contaminants
- 6-22 Exposure Assessment Summary, Dermal Contact with Groundwater Contaminants
- 6-23 Exposure Assessment Summary, Inhalation of Groundwater Volatile Organics
- 6-24 Toxicity Factors
- 6-25 Incremental Lifetime Cancer Risks and Hazard Indices, Site 41 Soil
- 6-26 Incremental Lifetime Cancer Risks and Hazard Indices, Site 41 Groundwater
- 6-27 Incremental Lifetime Cancer Risks and Hazard Indices, Site 74 Soil
- 6-28 Incremental Lifetime Cancer Risks and Hazard Indices, Site 74 Groundwater
- 6-29 Total Site Risk, Site 41
- 6-30 Total Site Risk, Site 74

- 7-1 List of Contaminants Detected in Surface Water, Sediment, Surface Soil, and Biota Samples
- 7-2 Physical/Chemical Characteristics of the COPCs
- 7-3 Summary of Habitat Types, Sites 41, 69, and 74
- 7-4 Protected Species Within MCB Camp Lejeune
- 7-5 Site 41, Unnamed Tributary, and Tank Creek, Frequency and Range of Detection Compared to Freshwater North Carolina WQSS, USEPA WQSVs, and USEPA AWQC

LIST OF TABLES
(Continued)

Number

- 7-6 Site 69 - Unnamed Tributary, Frequency and Range of Detection Compared to Saltwater North Carolina WQSs, USEPA WQSVs, and USEPA AWQC
- 7-7 Site 69 - Everett Creek, Frequency and Range of Detection Compared to Saltwater North Carolina WQSs, USEPA WQSVs, and USEPA AWQC
- 7-8 Site 69 - New River, Frequency and Range of Detection Compared to Saltwater North Carolina WQSs, USEPA WQSVs, and USEPA AWQC
- 7-9 Site 74 - Pesticide Disposal Area, Frequency and Range of Detection Compared to Freshwater North Carolina WQSs, USEPA WQSVs, and USEPA AWQC
- 7-10 Field Chemistry From Biological Samples
- 7-11 Site 41 - Unnamed Tributary and Tank Creek, Frequency and Range of Detection Compared to Sediment Screening Values
- 7-12 Site 69 - Unnamed Tributary, Frequency and Range of Detection Compared to Sediment Screening Values
- 7-13 Site 69 - Everett Creek, Frequency and Range of Detection Compared to Sediment Screening Values
- 7-14 Site 69 - New River, Frequency and Range of Detection Compared to Sediment Screening Values
- 7-15 Site 74 - Pesticide Disposal Area, Frequency and Range of Detection Compared to Sediment Screening Values
- 7-16 Summary of Biota Samples Sent to Ceimic for Tissue Analysis
- 7-17 Terrestrial Reference Values and Soil to Plant Transfer Coefficients
- 7-18 Surface Water Quotient Index for Sites 41, 69, and 74
- 7-19 Sediment Screening Values Quotient Index for Sites 41, 69, and 74
- 7-20 Total Number and Percent of Aquatic Species Identified - Site 69
- 7-21 Total Number of Species and Individuals for Fish at Site 69
- 7-22 Fish Distribution and Characterization - Site 69
- 7-23 Summary Statistics of Benthic Macroinvertebrate Species at Site 69 and Reference Stations
- 7-24 Biotic Index and USEPA Tolerance to Organic Waste and Sensitivity to Metals for Benthic Macroinvertebrate Species at Site 69
- 7-25 Systematic List of Benthic Macroinvertebrate Species at Site 69
- 7-26 Results of the Jaccard Coefficient (Sj) and Sorenson Index (Ss) of Community Similarity Between Benthic Macroinvertebrate Stations at Site 69 - Unnamed Tributary, Hadnot Creek and Holland Mill Creek
- 7-27 Results of the Jaccard Coefficient (Sj) and Sorenson Index (Ss) of Community Similarity Between Benthic Macroinvertebrate Stations, Site 69 - Everett Creek, Hadnot Creek and Holland Mill Creek
- 7-28 Results of the Jaccard Coefficient (Sj) and Sorenson Index (Ss) of Community Similarity Between Benthic Macroinvertebrate Stations, Site 69 - New River, Hadnot Creek and Holland Mill Creek
- 7-29 Terrestrial Chronic Daily Intake Model Exposure Parameters
- 7-30 Quotient Index Ratios - Site 41
- 7-31 Quotient Index Ratios - Site 74

LIST OF FIGURES

Number

- 1-1 Location Map Operable Unit No. 4 Sites 41 and 74
- 1-2 Operable Units and Site Locations at Marine Corps Base Camp Lejeune NC
- 1-3 Site Map Site 41 Camp Geiger Dump Near Former Trailer Park
- 1-4 Site Map Site 74 Mess Hall Grease Pit Disposal Area and Former Pest Control Area
- 1-5 Confirmation Study, Shallow Monitoring Wells and Surface Water and Sediment Locations, Site 41
- 1-6 Confirmation Study, Shallow Monitoring Well Locations Site 74

- 2-1 Geophysical Grid Results Site 41
- 2-2 Surface and Subsurface Soil Sampling Locations Site 41
- 2-3 Shallow and Deep Monitoring Well Locations Site 41
- 2-4 Typical Type II Groundwater Monitoring Well Construction Diagram
- 2-5 Surface Water and Sediment Sampling Locations Site 41
- 2-6 Surface Water and Sediment Sampling Locations for Second Sampling Event Site 41
- 2-7 Geophysical Grid Results Site 74
- 2-8 EM Conductivity Profile Printouts Site 74
- 2-9 Proposed Soil Sampling Locations Site 74
- 2-10 Proposed Shallow Well Locations Site 74
- 2-11 Surface and Subsurface Soil Sampling Locations Site 74
- 2-12 Shallow Monitoring Well Locations Site 74
- 2-13 Surface Water and Sediment Sampling Locations Site 74

- 3-1 Topography and Surface Features - Site 41
- 3-2 Surface Features - Site 74
- 3-3 Location of Hydrogeologic Cross-Sections of MCB Camp Lejeune Area
- 3-4 Hydrogeologic Cross-Section of MCB Camp Lejeune Area
- 3-5 Cross-Section Location Map - Site 41
- 3-6 Geologic Cross-Section A-A' Depicting Surficial Soil Conditions Site 41
- 3-7 Geologic Cross-Section B-B' Depicting Surficial Soil Conditions Site 41
- 3-8 Geologic Cross-Section C-C' Depicting Surficial Soil Conditions Site 41
- 3-9 Cross-Section Location Map - Site 74
- 3-10 Geologic Cross-Section A-A' Depicting Surficial Soil Conditions Site 74
- 3-11 Geologic Cross-Section B-B' Depicting Surficial Soil Conditions Site 74
- 3-12 Shallow Groundwater Elevation Contour Map - Site 41 - February 22, 1994
- 3-13 Shallow Groundwater Elevation Contour Map - Site 41 - April 26-28, 1994
- 3-14 Deep Groundwater Elevation Contour Map - Site 41 - February 22, 1994
- 3-15 Deep Groundwater Elevation Contour Map - Site 41 - April 26-28, 1994
- 3-16 Shallow Groundwater Elevation Contour Map - Site 74 - February 22, 1994
- 3-17 Shallow Groundwater Elevation Contour Map - Site 74 - March 1, 1994
- 3-18 Shallow Groundwater Elevation Contour Map - Site 74 - April 29, 1994
- 3-19 Location of Water Supply Wells Within One-Mile Radius of Sites 41 and 74

LIST OF FIGURES

(Continued)

Number

- 4-1 Positive Detections of Volatiles in Surface Soils at Site 41
- 4-2 Positive Detections of Semivolatiles in Surface Soils at Site 41
- 4-3 Positive Detections of Pesticides Above 1 $\mu\text{g}/\text{Kg}$ in Surface Soils at Site 41
- 4-4 Positive Detections of PCBs in Surface Soils at Site 41
- 4-5 Positive Detections of Ordnance in Surface Soils at Site 41
- 4-6 Positive Detections of Volatiles in Subsurface Soils at Site 41
- 4-7 Positive Detections of Semivolatiles in Subsurface Soils at Site 41
- 4-8 Positive Detections of Pesticides in Subsurface Soils at Site 41
- 4-9 Positive Detections of PCBs in Subsurface Soils at Site 41
- 4-10 Positive Detections of Chemical Surety Materials in Subsurface Soils at Site 41
- 4-11 Positive Detections of Volatiles for Round One Above Federal MCLs and/or NCWQS in Shallow Wells at Site 41
- 4-12 Positive Detections of Volatiles for Round Two Above Federal MCLs and/or NCWQS in Shallow Wells at Site 41
- 4-13 Positive Detections of Volatiles for Round One Above Federal MCLs and/or NCWQS in Deep Wells at Site 41
- 4-14 Positive Detections of Pesticides for Round One Above Federal MCLs and/or NCWQS in Shallow Wells at Site 41
- 4-15 Positive Detections of Total TAL Metals for Round One Above Federal MCLs and/or NCWQS in Shallow Wells at Site 41
- 4-16 Positive Detections of Total TAL Metals for Round Two Above Federal MCLs and/or NCWQS in Shallow Wells at Site 41
- 4-17 Positive Detections of Total TAL Metals for Round One Above Federal MCLs and/or NCWQS in Deep Wells at Site 41
- 4-18 Positive detections of Total TAL Metals for Round Two Above Federal MCLs and/or NCWQS in Deep Wells at Site 41
- 4-19 Positive Detections of Volatiles and Pesticides in Surface Water at Site 41
- 4-20 Positive Detections of Pesticides for Second Sampling Event in Surface Water at Site 41
- 4-21 Positive Detections of TAL Metals in Surface Water at Site 41
- 4-22 Positive Detections of TAL Metals for Second Sampling Event in Surface Water at Site 41
- 4-23 Positive Detections of Volatiles in Sediment at Site 41
- 4-24 Positive Detections of Semivolatiles in Sediment at Site 41
- 4-25 Positive Detections of Pesticides/PCBs in Sediment at Site 41
- 4-26 Positive Detections of Pesticides for Second Sampling Event in Sediment at Site 41
- 4-27 Positive Detections of Ordnance in Sediment at Site 41
- 4-28 Positive Detections of TAL Metals in Sediment at Site 41
- 4-29 Positive Detections of TAL Metals for Second Sampling Event in Sediment at Site 41
- 4-30 Positive Detections of Volatiles in Surface Soils at Site 74
- 4-31 Positive Detections of Semivolatiles in Surface Soils at Site 74
- 4-32 Positive Detections of Pesticides Above $\mu\text{g}/\text{Kg}$ in Surface Soils at Site 74
- 4-33 Positive Detections of Chemical Surety Materials in Surface Soils at Site 74
- 4-34 Positive Detections of Pesticides in Subsurface Soils at Site 74

LIST OF FIGURES
(Continued)

Number

- 4-35 Positive Detections of Total TAL Metals Above Federal MCLs and/or NCWQS in Shallow Wells at Site 74
- 4-36 Positive Detections of TAL Metals in Surface Water at Site 74
- 4-37 Positive Detections of Volatiles and Semivolatiles in Sediment at Site 74
- 4-38 Positive Detections of Pesticides in Sediment at Site 74
- 4-39 Positive Detections of TAL Metals in Sediment at Site 74

- 6-1 Conceptual Site Model, Sites 41 and 74

- 7-1 Biohabitat Map - Site 41
- 7-2 Biohabitat Map - Site 69
- 7-3 Biohabitat Map - Site 74
- 7-4.1 Fish and Benthic Macroinvertebrate Sampling Locations in Hadnot Creek
- 7-4.2 Fish and Benthic Macroinvertebrate Sampling Locations in Holland Mill Creek
- 7-5 Ecological and Aquatic Sampling Locations - Site 69
- 7-6 Quotient Index Ratio Exceedances in Surface Water and Sediment - Site 41
- 7-7 Quotient Index Ratio Exceedances in Surface Water and Sediment - Site 41 (additional samples)
- 7-8 Quotient Index Ratio Exceedances in Surface Water and Sediment - Site 69
- 7-9 Quotient Index Ratio Exceedances in Surface Water and Sediment - Site 74

LIST OF APPENDICES

- A GEOPHYSICAL INVESTIGATION
- B TEST BORINGS
- C TEST BORING AND WELL LOGS
- D CHAIN-OF-CUSTODY FORMS
- E WELL DEVELOPMENT LOGS
- F INVESTIGATIVE DERIVED WASTE
- G SITE 41 AQUIFER CHARACTERIZATION DATA
- H SITE 74 AQUIFER CHARACTERIZATION DATA
- I FIELD DUPLICATE SUMMARIES
- J TCLP SUMMARIES
- K ENGINEERING PARAMETERS SUMMARY REVIEW
- L QA/QC SUMMARY REVIEW
- M SAMPLING SUMMARY
- N COPC WORKSHEETS
- O DATA AND FREQUENCY SUMMARIES
- P STATISTICAL SUMMARIES
- Q CHRONIC DAILY INTAKE ESTIMATIONS
- R HABITAT SURVEY RESULTS
- S THREATENED AND/OR ENDANGERED SPECIES LIST
- T BAKER'S EVALUATION OF METALS IN GROUNDWATER MCB CAMP
LEJEUNE
- U BASE BACKGROUND SURFACE WATER AND SEDIMENTS

LIST OF ACRONYMS AND ABBREVIATIONS

AOC	Area of concern
AQUIRE	Aquatic Information Retrieval Database
ARARs	Applicable or Relevant and Appropriate Requirements
ASTM	American Society for Testing and Materials
AT	averaging time
ATV	all terrain vehicle
AWQC	Federal Ambient Water Quality Criteria
Baker	Baker Environmental, Inc.
BCF	bioconcentration factor
bgs	below ground surface
BI	biotoxic index
BOD	biological oxygen demand
BRA	baseline risk assessment
CaCO ₃	calcium carbonate
CAMA	Coastal Area Management Act
CDI	chronic daily intake
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CH	high plasticity clay
CL	low plasticity clay
CLEAN	Comprehensive Long-Term Environmental Action Navy
CLP	Contract Laboratory Program
CN	chloroacetophene
COE	Corps of Engineers
COPC	contaminant of potential concern
COD	chemical oxygen demand
CRAVE	Carcinogen Risk Assessment Verification Endeavor
CRQL	Contract Required Quantitation Limit
CSA	Chemical Storage Area
CSF	Cancer Slope Factor
CSM	chemical surety material
DON	Department of the Navy
DQOs	data quality objectives
1,2-DCE	1,2-dichloroethene
DEM	Division of Environmental Management
DDE	dichlorodiphenyldichloroethylene
DDT	diphenyltrichloroethane
DS	downslope
ECD	electron capture detector
ED	exposure duration
EF	exposure frequency

Eh	oxidation reduction potential
EM	electromagnetic
EMD	Environmental Management Department
EPIC	Environmental Photographic Interpretation Center
ERA	ecological risk assessment
ER-L	Effects Range - Low
ER-M	Effects Range-Median
ESE	Environmental Science and Engineering, Inc.
ETC	electromagnetic terrain conductivity
FAWQC	Federal Ambient Water Quality Criteria
FDA	Former Disposal Area
FFA	Federal Facilities Agreement
FID	flame ionization detector
FPA	Former Pesticide Control Area
FSAP	Field Sampling and Analysis Plan
FWS	Fish and Wildlife Service
FWQSV	Freshwater Water Quality Screening Values
gpd/ft	gallons per day per foot
gpm	gallons per minute
GP	GP Environmental Services
GPR	ground penetrating radar
GW	groundwater well
H'	Diversity Index
HA	health advisory
HEAST	Health Effects Assessment Summary Tables
HHAG	Human Health Assessment Group
HHI	Hardin and Huber, Inc.
HHRA	Human Health Risk Assessment
HI	hazard index
Hoggard-Eure	Hoggard-Eure Associates
HCl	hydrochloric acid
HNO ₃	nitric acid
HQ	hazard quotient
HQW	high quality water
HTH	high-test hypochlorite
i	hydraulic gradient
IAS	Initial Assessment Study
ICR	incremental cancer risk
ID	inside diameter
IDW	investigative derived wastes
IR	ingestion rate
IRA	interim remedial action
IRIS	Integrated Risk Information System
IRP	Installation Restoration Program

K	hydraulic conductivity
K_d	soil sorption coefficient
K_{oc}	organic carbon partition coefficient
K_{ow}	octanol-water partition coefficient
LANTDIV	Naval Facilities Engineering Command, Atlantic Division
LANTNAVFACENGCOM	Naval Facilities Engineering Command, Atlantic Division
LEL	lower explosive limit
LOAEL	lowest observed adverse effect level
MBI	Macroinvertebrate Biotic Index
MCAS	Marine Corps Air Station
MCB	Marine Corps Base
MCL	maximum contaminant level
MEK	methylethyl ketone
MIBK	methyl isobutyl ketone
mg/kg	milligram per kilogram
mg/L	milligram per liter
MF	modifying factor
MH	plastic silt
MI	mobility index
ml	milliliter
ML	low plasticity silt
mL/g	milliliters per gram
mmhos/m	millimhos/meter
msl	mean sea level
MW	monitoring well
NACIP	Navy Assessment and Control of Installation Pollutants Program
NC DEHNR	North Carolina Department of Environment, Health and Natural Resources
NCMFC	North Carolina Marine Fisheries Commission
NCSPCS	North Carolina State Plane Coordinate System
NCWP	Near Coastal Waters Program
NCWQS	North Carolina Water Quality Standards
NCWRC	North Carolina Wildlife Resources Commission
N_e	effective porosity
NEESA	Naval Energy and Environmental Support Activity
NEP	National Estuary Program
NOAA	National Oceanic and Atmospheric Administration
NOAEL or NOEL	No observed adverse effect level
NPL	National Priorities List
NPS	National Park Service
NSW	nutrient sensitive waters
NWI	national wetlands inventory

OD	outside diameter
OS	on-site
OU	Operable Unit
PAH	polycyclic aromatic hydrocarbon
PA/SI	preliminary assessments/site investigations
PC	permeability constant
PCBs	polychlorinated biphenyls
PCE	tetrachloroethene
PDA	Potential Disposal Area
PEF	particulate emissions factor
PHA	public health assessment
PID	photoionization detector
POL	petroleum, oil, lubricants
ppb	parts per billion
ppm	parts per million
psi	pounds per square inch
PVC	polyvinyl chloride
QA/QC	quality assurance/quality control
QI	quotient index
RA	risk assessment
RBC	risk based concentrations
RCRA	Resource Conservation and Recovery Act
RfD	reference dose
RI/FS	remedial investigation/feasibility study
ROD	record of decision
S, S	storativity, water solubility
SA	site assessment or surface area
SARA	Superfund Amendments and Reauthorization Act
Sj	Jaccard Coefficient
Ss	Sorenson Index
SB	soil boring
SCS	Soil Conservation Service
SD	sediment
SMCL	Secondary Drinking Water Regulations
SQC	sediment quality criteria
SOPs	standard operating procedures
SSV	sediment screening value
STP	sewage treatment plant
SVOCs	semivolatile organic compounds
SW	surface water
SWQSVs	surface water quality screening values
T	transmissivity
TAL	target analyte list
TBC	to be considered

TCE	trichloroethene
TCL	target compound list
TCLP	toxicity characteristic leaching procedure
TDS	total dissolved solids
TEF	toxicity equivalency factor
TEU	Technical Escort Unit
TICs	tentatively identified compounds
TOC	total organic carbon or top of casing
trans-1,2-DCE	trans-1,2-dichloroethene
TRC	Technical Review Committee
TRVs	terrestrial reference values
TSS	total suspended solids
TVS	total volatile solids
UCL	upper confidence limit
UF	uncertainty factor
$\mu\text{g/g}$	micrograms per gram
$\mu\text{g/L}$	micrograms per liter
USAEC	United States Army Environmental Center
USATHAMA	United States Army Toxic and Hazardous Materials Agency
USDA	United States Department of Agriculture
USDI	United States Department of the Interior
USEPA	United States Environmental Protection Agency
USCS	Unified Soil Classification System
USGS	United States Geological Survey
USMC	United States Marine Corps
UST	underground storage tank
VOCs	volatile organic compounds
VP	vapor pressure
V_x	average seepage velocity
WAR	Water and Air Research, Inc.
Weston	Weston Geophysical Corporation
WOE	weight of evidence
WQS	water quality standards
WQSV	water quality screening values
WS	Wilderness Society

PEF	particulate emissions factor
PHA	public health assessment
PID	photoionization detector
POL	petroleum, oil, lubricants
ppb	parts per billion
ppm	parts per million
psi	pounds per square inch
PVC	polyvinyl chloride
QA/QC	quality assurance/quality control
QI	quotient index
RA	risk assessment
RBC	risk based concentrations
RCRA	Resource Conservation and Recovery Act
RfD	reference dose
RI/FS	remedial investigation/feasibility study
ROD	record of decision
S, S	storativity, water solubility
SA	site assessment or surface area
SARA	Superfund Amendments and Reauthorization Act
Sj	Jaccard Coefficient
Ss	Sorenson Index
SB	soil boring
SCS	Soil Conservation Service
SD	sediment
SMCL	Secondary Drinking Water Regulations
SQC	sediment quality criteria
SOPs	standard operating procedures
SSV	sediment screening value
STP	sewage treatment plant
SVOCs	semivolatile organic compounds
SW	surface water
SWQSVs	surface water quality screening values
T	transmissivity
TAL	target analyte list
TBC	to be considered
TCE	trichloroethene
TCL	target compound list
TCLP	toxicity characteristic leaching procedure
TDS	total dissolved solids
TEF	toxicity equivalency factor
TEU	Technical Escort Unit
TICs	tentatively identified compounds
TOC	total organic carbon or top of casing
trans-1,2-DCE	trans-1,2-dichloroethene
TRC	Technical Review Committee

TRVs	terrestrial reference values
TSS	total suspended solids
TVS	total volatile solids
UCL	upper confidence limit
UF	uncertainty factor
$\mu\text{g/g}$	micrograms per gram
$\mu\text{g/L}$	micrograms per liter
USAEC	United States Army Environmental Center
USATHAMA	United States Army Toxic and Hazardous Materials Agency
USDA	United States Department of Agriculture
USDI	United States Department of the Interior
USEPA	United States Environmental Protection Agency
USCS	Unified Soil Classification System
USGS	United States Geological Survey
USMC	United States Marine Corps
UST	underground storage tank
VOCs	volatile organic compounds
VP	vapor pressure
V_x	average seepage velocity
WAR	Water and Air Research, Inc.
Weston	Weston Geophysical Corporation
WOE	weight of evidence
WQS	water quality standards
WQSV	water quality screening values
WS	Wilderness Society

APPENDIX P
STATISTICAL SUMMARIES

APPENDIX P.1
SITE 41 DOWNSLOPE AND ON-SITE SURFACE SOIL ORGANICS

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-DS-SB01-00	41-DS-SB02-00	41-DS-SB03-00	41-DS-SB04-00	41-DS-SB05-00	41-DS-SB06-00
Laboratory Sample ID:	9402042-10A	9402043-09	9402043-10	9402042-11A	9402042-12A	9402042-13A
Date Sampled:						
Percent Solids	87.1	85.5	77.2	89.9	88.3	86.9
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U
1,2,4-Trichlorobenzene	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U
1,3-Dichlorobenzene	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U
1,4-Dichlorobenzene	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U
2-Chloronaphthalene	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U
2-Chlorophenol	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U
2-Methylnaphthalene	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U
2-Methylphenol	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U
2-Nitroaniline	UG/KG	460 U	472 U	520 U	444.5 U	456 U
2-Nitrophenol	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U
2,2'-oxybis-(1-chloropropane)	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U
2,4-Dichlorophenol	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U
2,4-Dimethylphenol	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U
2,4-Dinitrophenol	UG/KG	460 U	472 U	520 U	444.5 U	456 U
2,4-Dinitrotoluene	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U
2,4,5-Trichlorophenol	UG/KG	460 U	472 U	520 U	444.5 U	456 U
2,4,6-Trichlorophenol	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U
2,6-Dinitrotoluene	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U
3-Nitroaniline	UG/KG	460 U	472 U	520 U	444.5 U	456 U
3,3'-Dichlorobenzidine	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U
4-Bromophenyl-phenylether	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U
4-Chloro-3-methylphenol	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U
4-Chloroaniline	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U
4-Chlorophenyl phenyl ether	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U
4-Methylphenol	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U
4-Nitroaniline	UG/KG	460 U	472 U	520 U	444.5 U	456 U
4-Nitrophenol	UG/KG	460 U	472 U	520 U	444.5 U	456 U
4,6-Dinitro-2-methylphenol	UG/KG	460 U	472 U	520 U	444.5 U	456 U
Acenaphthene	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U
Acenaphthylene	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U
Anthracene	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U
Benzo[a]anthracene	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U
Benzo[a]pyrene	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-DS-SB01-00	41-DS-SB02-00	41-DS-SB03-00	41-DS-SB04-00	41-DS-SB05-00	41-DS-SB06-00
Laboratory Sample ID:	9402042-10A	9402043-09	9402043-10	9402042-11A	9402042-12A	9402042-13A
Date Sampled:						
Percent Solids	87.1	85.5	77.2	89.9	88.3	86.9

SEMIVOLATILES Cont.

	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
Benzo[b]fluoranthene	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
Benzo[g,h,i]perylene	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
Benzo[k]fluoranthene	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
bis(2-Chloroethoxy) methane	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
bis(2-Chloroethyl) ether	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
bis(2-Ethylhexyl)phthalate	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
Butyl benzyl phthalate	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
Carbazole	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
Chrysene	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
Dibenzofuran	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
Dibenz[a,h]anthracene	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
Diethylphthalate	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
Dimethyl phthalate	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
di-n-Butylphthalate	190 U	195 U	215 U	185 U	190 U	190 U
di-n-Octylphthalate	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
Fluoranthene	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
Fluorene	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
Hexachlorobenzene	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
Hexachlorobutadiene	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
Hexachlorocyclopentadiene	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
Hexachloroethane	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
Indeno[1,2,3-cd]pyrene	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
Isophorone	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
Naphthalene	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
Nitrobenzene	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
N-Nitroso-di-n-propylamine	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
N-nitrosodiphenylamine	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
Pentachlorophenol	460 U	472 U	520 U	444.5 U	456 U	460 U
Phenanthrene	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
Phenol	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
Pyrene	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-DS-SB01-00	41-DS-SB02-00	41-DS-SB03-00	41-DS-SB04-00	41-DS-SB05-00	41-DS-SB06-00	
Laboratory Sample ID:	9402042-10A	9402043-09	9402043-10	9402042-11A	9402042-12A	9402042-13A	
Date Sampled:							
Percent Solids	87.1	85.5	77.2	89.9	88.3	86.9	
<u>VOLATILES</u>							
Chloromethane	UG/KG	5.75 U	5.8 UJ	6.5 U	5.55 U	5.7 U	5.75 U
Bromomethane	UG/KG	5.75 U	5.8 UJ	6.5 U	5.55 U	5.7 U	5.75 U
Vinyl chloride	UG/KG	5.75 U	5.8 UJ	6.5 U	5.55 U	5.7 U	5.75 U
Chloroethane	UG/KG	5.75 U	5.8 UJ	6.5 U	5.55 U	5.7 U	5.75 U
Methylene chloride	UG/KG	10.5 U	8.5 UJ	20.5 U	3 J	9 U	9 U
Acetone	UG/KG	5.75 U	28.5 UJ	44 U	5.55 UJ	5.5 UJ	3 J
Carbon Disulfide	UG/KG	5.75 U	5.8 UJ	6.5 U	5.55 U	5.7 U	5.75 U
1,1-Dichloroethene	UG/KG	5.75 U	5.8 UJ	6.5 U	5.55 U	5.7 U	5.75 U
1,1-Dichloroethane	UG/KG	5.75 U	5.8 UJ	6.5 U	5.55 U	5.7 U	5.75 U
1,2-Dichloroethene(total)	UG/KG	5.75 U	5.8 UJ	6.5 U	5.55 U	5.7 U	5.75 U
Chloroform	UG/KG	5.75 U	5.8 UJ	6.5 U	5.55 U	5.7 U	5.75 U
1,2-Dichloroethane	UG/KG	5.75 U	5.8 UJ	6.5 U	5.55 U	5.7 U	5.75 U
2-Butanone	UG/KG	5.75 U			5.55 U	5.7 U	5.75 U
1,1,1-Trichloroethane	UG/KG	5.75 U	5.8 U	6.5 U	5.55 U	5.7 U	5.75 U
Carbon tetrachloride	UG/KG	5.75 U	5.8 U	6.5 U	5.55 U	5.7 U	5.75 U
Bromodichloromethane	UG/KG	5.75 U	5.8 U	6.5 U	5.55 U	5.7 U	5.75 U
1,2-Dichloropropane	UG/KG	5.75 U	5.8 U	6.5 U	5.55 U	5.7 U	5.75 U
cis-1,3-Dichloropropene	UG/KG	5.75 U	5.8 U	6.5 U	5.55 U	5.7 U	5.75 U
Trichloroethene	UG/KG	5.75 U	5.8 U	6.5 U	5.55 U	5.7 U	5.75 U
Dibromochloromethane	UG/KG	5.75 U	5.8 U	6.5 U	5.55 U	5.7 U	5.75 U
1,1,2-Trichloroethane	UG/KG	5.75 U	5.8 U	6.5 U	5.55 U	5.7 U	5.75 U
Benzene	UG/KG	5.75 U	5.8 U	6.5 U	5.55 U	5.7 U	5.75 U
trans-1,3-Dichloropropene	UG/KG	5.75 U	5.8 U	6.5 U	5.55 U	5.7 U	5.75 U
Bromoform	UG/KG	5.75 U	5.8 U	6.5 U	5.55 U	5.7 U	5.75 U
4-Methyl-2-pentanone	UG/KG	5.75 U	5.8 UJ	6.5 U	5.55 U	5.7 U	5.75 U
2-Hexanone	UG/KG	5.75 U	5.8 UJ	6.5 U	5.55 U	5.7 U	5.75 U
Tetrachloroethene	UG/KG	5.75 U	5.8 UJ	6.5 U	5.55 U	5.7 U	5.75 U
1,1,2,2-Tetrachloroethane	UG/KG	5.75 U	5.8 UJ	6.5 U	5.55 U	5.7 U	5.75 U
Toluene	UG/KG	5.75 U	5.8 UJ	6.5 U	5.55 U	5.7 U	5.75 U
Chlorobenzene	UG/KG	5.75 U	5.8 UJ	6.5 U	5.55 U	5.7 U	5.75 U
Ethylbenzene	UG/KG	5.75 U	5.8 UJ	6.5 U	5.55 U	5.7 U	5.75 U
Styrene	UG/KG	5.75 U	5.8 UJ	6.5 U	5.55 U	5.7 U	5.75 U
Xylenes (total)	UG/KG	5.75 U	5.8 UJ	6.5 U	5.55 U	5.7 U	5.75 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-DS-SB01-00	41-DS-SB02-00	41-DS-SB03-00	41-DS-SB04-00	41-DS-SB05-00	41-DS-SB06-00
Laboratory Sample ID:	9402042-10A	9402043-09	9402043-10	9402042-11A	9402042-12A	9402042-13A
Date Sampled:						
Percent Solids	87.1	85.5	77.2	89.9	88.3	86.9
<u>PESTICIDE/PCBS</u>						
alpha-BHC	UG/KG	0.975 UJ	1 UJ	1.105 UJ	0.945 UJ	0.975 UJ
beta-BHC	UG/KG		1 UJ	4.72 NJ		
delta-BHC	UG/KG	0.975 UJ	1 UJ	1.105 UJ	0.945 UJ	0.975 UJ
Lindane (gamma-BHC)	UG/KG	0.975 U	1 UJ	1.105 UJ	0.945 U	0.975 UJ
Heptachlor	UG/KG	0.975 U	1 UJ	1.105 UJ	0.945 U	0.975 UJ
Aldrin	UG/KG	0.975 U	1 UJ	1.105 UJ	0.945 U	0.975 UJ
Heptachlor epoxide	UG/KG	0.975 U	1 UJ	1.105 UJ	0.945 U	0.975 UJ
Endosulfan I	UG/KG	0.975 U	1 UJ	1.105 UJ	0.945 U	0.975 UJ
Dieldrin	UG/KG	1.895 U	1.94 UJ	2.14 UJ	1.835 U	1.895 UJ
4,4'-DDE	UG/KG	1.895 UJ	0.96 J	2.14 UJ	1.835 UJ	1.4 J
Endrin	UG/KG	1.895 UJ	1.94 UJ	2.14 UJ	1.835 UJ	1.895 UJ
Endosulfan II	UG/KG	1.895 UJ	1.94 UJ	2.14 UJ	1.835 UJ	1.895 UJ
4,4'-DDD	UG/KG	1.895 UJ	0.56 J	2.14 UJ	1.835 UJ	1.895 UJ
Endosulfan sulfate	UG/KG	1.895 UJ	1.94 UJ	2.14 UJ	1.835 UJ	1.895 UJ
4,4'-DDT	UG/KG	1.895 UJ	1.26 J	2.14 UJ	1.835 UJ	1.895 UJ
Methoxychlor	UG/KG	9.75 UJ	10 UJ	11.01 UJ	9.45 UJ	9.75 UJ
Endrin ketone	UG/KG	1.895 UJ	1.94 UJ	2.14 UJ	1.835 UJ	1.895 UJ
Endrin aldehyde	UG/KG	1.895 U	1.94 UJ	2.14 UJ	1.835 U	1.895 UJ
alpha-Chlordane	UG/KG	0.975 U	1 UJ	1.105 UJ	0.945 U	0.975 UJ
gamma-Chlordane	UG/KG	0.975 U	1 UJ	1.69 J	0.945 U	0.975 UJ
Toxaphene	UG/KG	97.5 U	100 UJ	110.5 UJ	94.5 U	97.5 UJ
Aroclor 1016	UG/KG	18.95 U	19.4 UJ	21.4 UJ	18.35 U	18.95 UJ
Aroclor 1221	UG/KG	38.5 U	39.4 UJ	43.5 UJ	37.2 U	38.5 UJ
Aroclor 1232	UG/KG	18.95 U	19.4 UJ	21.4 UJ	18.35 U	18.95 UJ
Aroclor 1242	UG/KG	18.95 U	19.4 UJ	21.4 UJ	18.35 U	18.95 UJ
Aroclor 1248	UG/KG	18.95 U	19.4 UJ	21.4 UJ	18.35 U	18.95 UJ
Aroclor 1254	UG/KG	18.95 U	19.4 UJ	21.4 UJ	18.35 U	18.95 UJ
Aroclor 1260	UG/KG	18.95 U	19.4 UJ	21.4 UJ	18.35 U	18.95 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-DS-SB01-00	41-DS-SB02-00	41-DS-SB03-00	41-DS-SB04-00	41-DS-SB05-00	41-DS-SB06-00	
Laboratory Sample ID:	9402042-10A	9402043-09	9402043-10	9402042-11A	9402042-12A	9402042-13A	
Date Sampled:							
Percent Solids	87.1	85.5	77.2	89.9	88.3	86.9	
CHEMICAL SURETY							
Acetophenone	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
Chloroacetophenone	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
Hydroxyacetophenone	UG/KG	950 U	975 U	1070 U	915 U	940 U	950 U
Bis(2'-chloroethyl)disulfide	UG/KG	950 U	975 U	1070 U	915 U	940 U	950 U
Bis(2'-chloroethyl)trisulfide	UG/KG	950 U	975 U	1070 U	915 U	940 U	950 U
1,4-Dithiane	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
1,4-Oxathiane	UG/KG	190 U	194.5 U	214.5 U	183.5 U	188 U	190 U
THIODIGLYCOL							
Thiodiglycol	MG/KG	3.595 U	3.655 U	4.06 U	3.47 U	3.53 U	3.595 U
ORDNANCE							
1,3,5-Trinitrobenzene	UG/KG	20.1 UJ	20.1 U	20.1 U	20.1 U	20.1 U	20.1 U
1,3-Dinitrobenzene	UG/KG	18.6 UJ	18.6 U	824 NJ	18.6 U	18.6 U	18.6 U
2,4,6-Trinitrotoluene	UG/KG	17.8 UJ	17.8 U	17.8 U	17.8 U	17.8 U	17.8 U
2,4-Dinitrotoluene	UG/KG	25.8 UJ	25.8 U	25.8 U	25.8 U	25.8 U	25.8 U
2,6-Dinitrotoluene	UG/KG	23.8 UJ	23.8 U	23.8 U	23.8 U	23.8 U	23.8 U
2-Amino-4,6-dinitrotoluene	UG/KG	23.35 UJ	23.35 U	23.35 U	23.35 U	23.35 U	23.35 U
2-Nitrotoluene	UG/KG	40.7 UJ	40.7 U	40.7 U	40.7 U	40.7 U	40.7 U
3-Nitrotoluene	UG/KG	40.85 UJ	40.85 U	40.85 U	40.85 U	40.85 U	40.85 U
4-Amino-2,6-dinitrotoluene	UG/KG	20.4 UJ	20.4 U	20.4 U	20.4 U	20.4 U	20.4 U
4-Nitrotoluene	UG/KG	43.6 UJ	43.6 U	43.6 U	43.6 U	43.6 U	43.6 U
HMX	UG/KG	35.25 UJ	35.25 U	35.25 U	35.25 U	35.25 U	35.25 U
Nitrobenzene	UG/KG	17.6 UJ	17.6 U	17.6 U	17.6 U	17.6 U	17.6 U
RDX	UG/KG	25.45 UJ	25.45 U	25.45 U	25.45 U	25.45 U	25.45 U
Tetryl	UG/KG	81.5 UJ	81.5 U	81.5 U	81.5 U	81.5 U	81.5 U
MIREX							
Mirex	UG/KG	950 U	975 UJ	1070 UJ	915 U	940 U	950 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-DS-SB07-00	41-DS-SB08-00	41-DS-SB09-00	41-DS-SB10-00	41-DS-SB11-00	41-DS-SB12-00
Laboratory Sample ID:	9402042-14A	9402043-07	9402042-15A	9402042-16A	9402042-17A	9402042-18A
Date Sampled:						
Percent Solids	83	83.5	87.5	75.7	87.5	86.8
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	198 U	198 U	190 U	214.5 U	190 U
1,2,4-Trichlorobenzene	UG/KG	198 U	198 U	190 U	214.5 U	190 U
1,3-Dichlorobenzene	UG/KG	198 U	198 U	190 U	214.5 U	190 U
1,4-Dichlorobenzene	UG/KG	198 U	198 U	190 U	214.5 U	190 U
2-Chloronaphthalene	UG/KG	198 U	198 U	190 U	214.5 U	190 U
2-Chlorophenol	UG/KG	198 U	198 U	190 U	214.5 U	190 U
2-Methylnaphthalene	UG/KG	198 U	198 U	190 U	214.5 U	190 U
2-Methylphenol	UG/KG	198 U	198 U	190 U	214.5 U	190 U
2-Nitroaniline	UG/KG	480 U	480 U	460 U	520 U	460 U
2-Nitrophenol	UG/KG	198 U	198 U	190 U	214.5 U	190 U
2,2'-oxybis-(1-chloropropane)	UG/KG	198 U	198 U	190 U	214.5 U	190 U
2,4-Dichlorophenol	UG/KG	198 U	198 U	190 U	214.5 U	190 U
2,4-Dimethylphenol	UG/KG	198 U	198 U	190 U	214.5 U	190 U
2,4-Dinitrophenol	UG/KG	480 U	480 U	460 U	520 U	460 U
2,4-Dinitrotoluene	UG/KG	198 U	198 U	190 U	214.5 U	190 U
2,4,5-Trichlorophenol	UG/KG	480 U	480 U	460 U	520 U	460 U
2,4,6-Trichlorophenol	UG/KG	198 U	198 U	190 U	214.5 U	190 U
2,6-Dinitrotoluene	UG/KG	198 U	198 U	190 U	214.5 U	190 U
3-Nitroaniline	UG/KG	480 U	480 U	460 U	520 U	460 U
3,3'-Dichlorobenzidine	UG/KG	198 U	198 U	190 U	214.5 U	190 U
4-Bromophenyl-phenylether	UG/KG	198 U	198 U	190 U	214.5 U	190 U
4-Chloro-3-methylphenol	UG/KG	198 U	198 U	190 U	214.5 U	190 U
4-Chloroaniline	UG/KG	198 U	198 U	190 U	214.5 U	190 U
4-Chlorophenyl phenyl ether	UG/KG	198 U	198 U	190 U	214.5 U	190 U
4-Methylphenol	UG/KG	198 U	198 U	190 U	214.5 U	190 U
4-Nitroaniline	UG/KG	480 U	480 U	460 U	520 U	460 U
4-Nitrophenol	UG/KG	480 U	480 U	460 U	520 U	460 U
4,6-Dinitro-2-methylphenol	UG/KG	480 U	480 U	460 U	520 U	460 U
Acenaphthene	UG/KG	198 U	198 U	190 U	214.5 U	190 U
Acenaphthylene	UG/KG	198 U	198 U	190 U	214.5 U	190 U
Anthracene	UG/KG	198 U	198 U	190 U	214.5 U	190 U
Benzo[a]anthracene	UG/KG	198 U	198 U	190 U	214.5 U	190 U
Benzo[a]pyrene	UG/KG	198 U	198 U	190 U	214.5 U	190 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-DS-SB07-00	41-DS-SB08-00	41-DS-SB09-00	41-DS-SB10-00	41-DS-SB11-00	41-DS-SB12-00
Laboratory Sample ID:	9402042-14A	9402043-07	9402042-15A	9402042-16A	9402042-17A	9402042-18A
Date Sampled:						
Percent Solids	83	83.5	87.5	75.7	87.5	86.8

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
Benzo[g,h,i]perylene	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
Benzo[k]fluoranthene	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
bis(2-Chloroethoxy) methane	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
bis(2-Chloroethyl) ether	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
bis(2-Ethylhexyl)phthalate	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
Butyl benzyl phthalate	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
Carbazole	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
Chrysene	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
Dibenzofuran	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
Dibenz[a,h]anthracene	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
Diethylphthalate	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
Dimethyl phthalate	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
di-n-Butylphthalate	UG/KG	200 U	198 U	190 U	215 U	190 U	190 U
di-n-Octylphthalate	UG/KG	198 U	198 U	55 J	214.5 U	190 U	190 U
Fluoranthene	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
Fluorene	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
Hexachlorobenzene	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
Hexachlorobutadiene	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
Hexachlorocyclopentadiene	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
Hexachloroethane	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
Indeno[1,2,3-cd]pyrene	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
Isophorone	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
Naphthalene	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
Nitrobenzene	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
N-Nitroso-di-n-propylamine	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
N-nitrosodiphenylamine	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
Pentachlorophenol	UG/KG	480 U	480 U	460 U	520 U	460 U	460 U
Phenanthrene	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
Phenol	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U
Pyrene	UG/KG	198 U	198 U	190 U	214.5 U	190 U	190 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-DS-SB07-00	41-DS-SB08-00	41-DS-SB09-00	41-DS-SB10-00	41-DS-SB11-00	41-DS-SB12-00	
Laboratory Sample ID:	9402042-14A	9402043-07	9402042-15A	9402042-16A	9402042-17A	9402042-18A	
Date Sampled:							
Percent Solids	83	83.5	87.5	75.7	87.5	86.8	
VOLATILES							
Chloromethane	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
Bromomethane	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
Vinyl chloride	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
Chloroethane	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
Methylene chloride	UG/KG	7.5 U	27 U	8 U	5 J	8 U	11.5 U
Acetone	UG/KG	3 J	5.95 U	5.5 UJ	6.6 UJ	5.7 U	5.75 U
Carbon Disulfide	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
1,1-Dichloroethene	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
1,1-Dichloroethane	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
1,2-Dichloroethene(total)	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
Chloroform	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
1,2-Dichloroethane	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
2-Butanone	UG/KG	6 U		5.7 U	6.6 U	5.7 U	5.75 U
1,1,1-Trichloroethane	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
Carbon tetrachloride	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
Bromodichloromethane	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
1,2-Dichloropropane	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
cis-1,3-Dichloropropene	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
Trichloroethene	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
Dibromochloromethane	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
1,1,2-Trichloroethane	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
Benzene	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
trans-1,3-Dichloropropene	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
Bromoform	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
4-Methyl-2-pentanone	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
2-Hexanone	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
Tetrachloroethene	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
1,1,2,2-Tetrachloroethane	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
Toluene	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
Chlorobenzene	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
Ethylbenzene	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
Styrene	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U
Xylenes (total)	UG/KG	6 U	5.95 U	5.7 U	6.6 U	5.7 U	5.75 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-DS-SB07-00	41-DS-SB08-00	41-DS-SB09-00	41-DS-SB10-00	41-DS-SB11-00	41-DS-SB12-00
Laboratory Sample ID:	9402042-14A	9402043-07	9402042-15A	9402042-16A	9402042-17A	9402042-18A
Date Sampled:						
Percent Solids	83	83.5	87.5	75.7	87.5	86.8
PESTICIDE/PCBS						
alpha-BHC	UG/KG	1.025 UJ	1.025 UJ	0.975 UJ	1.12 UJ	0.975 UJ
beta-BHC	UG/KG		1.025 UJ			
delta-BHC	UG/KG	1.025 UJ	1.025 UJ	0.975 UJ	1.12 UJ	0.975 UJ
Lindane (gamma-BHC)	UG/KG	1.025 UJ	1.025 UJ	0.975 UJ	1.12 U	0.975 UJ
Heptachlor	UG/KG	1.025 UJ	1.025 UJ	0.975 UJ	1.12 U	1.51 J
Aldrin	UG/KG	1.025 UJ	1.025 UJ	0.975 UJ	1.12 U	0.975 UJ
Heptachlor epoxide	UG/KG	1.025 UJ	1.025 UJ	0.975 UJ	1.12 U	0.975 UJ
Endosulfan I	UG/KG	1.025 UJ	1.025 UJ	0.975 UJ	1.12 U	0.975 UJ
Dieldrin	UG/KG	1.99 UJ	1.99 UJ	1.895 UJ	2.17 U	1.895 UJ
4,4'-DDE	UG/KG	0.45 J	1.99 UJ	1.81 J	1.75 NJ	1.895 UJ
Endrin	UG/KG	1.99 UJ	1.99 UJ	1.895 UJ	2.17 UJ	1.895 UJ
Endosulfan II	UG/KG	1.99 UJ	1.99 UJ	1.895 UJ	2.17 UJ	1.895 UJ
4,4'-DDD	UG/KG	1.99 UJ	1.99 UJ	1.895 UJ	2.17 UJ	1.895 UJ
Endosulfan sulfate	UG/KG	1.99 UJ	1.99 UJ	1.895 UJ	2.17 U	1.895 UJ
4,4'-DDT	UG/KG	1.99 UJ	1.99 UJ	0.37 J	2.28 J	1.895 UJ
Methoxychlor	UG/KG	10.25 UJ	10.25 UJ	9.75 UJ	11.2 U	9.75 UJ
Endrin ketone	UG/KG	1.99 UJ	1.99 UJ	1.895 UJ	2.17 U	1.895 UJ
Endrin aldehyde	UG/KG	1.99 UJ	1.99 UJ	1.895 UJ	2.17 U	1.895 UJ
alpha-Chlordane	UG/KG	1.025 UJ	1.025 UJ	0.975 UJ	1.12 U	0.975 UJ
gamma-Chlordane	UG/KG	1.025 UJ	1.025 UJ	0.975 UJ	1.12 U	0.975 UJ
Toxaphene	UG/KG	102.5 UJ	102.5 UJ	97.5 UJ	112 U	97.5 UJ
Aroclor 1016	UG/KG	19.9 UJ	19.9 UJ	18.95 UJ	21.7 U	18.95 UJ
Aroclor 1221	UG/KG	40.35 UJ	40.35 UJ	38.5 UJ	44.1 U	38.5 UJ
Aroclor 1232	UG/KG	19.9 UJ	19.9 UJ	18.95 UJ	21.7 U	18.95 UJ
Aroclor 1242	UG/KG	19.9 UJ	19.9 UJ	18.95 UJ	21.7 U	18.95 UJ
Aroclor 1248	UG/KG	19.9 UJ	19.9 UJ	18.95 UJ	21.7 U	18.95 UJ
Aroclor 1254	UG/KG	19.9 UJ	19.9 UJ	18.95 UJ	21.7 U	18.95 UJ
Aroclor 1260	UG/KG	19.9 UJ	19.9 UJ	18.95 UJ	21.7 U	18.95 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-DS-SB07-00	41-DS-SB08-00	41-DS-SB09-00	41-DS-SB10-00	41-DS-SB11-00	41-DS-SB12-00
Laboratory Sample ID:	9402042-14A	9402043-07	9402042-15A	9402042-16A	9402042-17A	9402042-18A
Date Sampled:						
Percent Solids	83	83.5	87.5	75.7	87.5	86.8
CHEMICAL SURETY						
Acetophenone	UG/KG	198 U	198 U	190 U	214.5 U	190 U
Chloroacetophenone	UG/KG	198 U	198 U	190 U	214.5 U	190 U
Hydroxyacetophenone	UG/KG	990 U	990 U	950 U	1070 U	950 U
Bis(2'-chloroethyl)disulfide	UG/KG	990 U	990 U	950 U	1070 U	950 U
Bis(2'-chloroethyl)trisulfide	UG/KG	990 U	990 U	950 U	1070 U	950 U
1,4-Dithiane	UG/KG	198 U	198 U	190 U	214.5 U	190 U
1,4-Oxathiane	UG/KG	198 U	198 U	190 U	214.5 U	190 U
THIODIGLYCOL						
Thiodiglycol	MG/KG	3.75 U	3.75 U	3.56 U	4.125 U	3.56 U
ORDNANCE						
1,3,5-Trinitrobenzene	UG/KG	20.1 U	20.1 U	20.1 U	20.1 U	20.1 U
1,3-Dinitrobenzene	UG/KG	18.6 U	18.6 U	18.6 U	18.6 U	18.6 U
2,4,6-Trinitrotoluene	UG/KG	17.8 U	17.8 U	17.8 U	17.8 U	17.8 U
2,4-Dinitrotoluene	UG/KG	25.8 U	25.8 U	25.8 U	25.8 U	25.8 U
2,6-Dinitrotoluene	UG/KG	23.8 U	23.8 U	23.8 U	23.8 U	23.8 U
2-Amino-4,6-dinitrotoluene	UG/KG	23.35 U	23.35 U	23.35 U	23.35 U	23.35 U
2-Nitrotoluene	UG/KG	40.7 U	40.7 U	40.7 U	40.7 U	40.7 U
3-Nitrotoluene	UG/KG	40.85 U	40.85 U	40.85 U	40.85 U	40.85 U
4-Amino-2,6-dinitrotoluene	UG/KG	20.4 U	20.4 U	20.4 U	20.4 U	20.4 U
4-Nitrotoluene	UG/KG	43.6 U	43.6 U	43.6 U	43.6 U	43.6 U
HMX	UG/KG	35.25 U	35.25 U	35.25 U	35.25 U	35.25 U
Nitrobenzene	UG/KG	17.6 U	17.6 U	17.6 U	17.6 U	17.6 U
RDX	UG/KG	25.45 U	25.45 U	25.45 U	25.45 U	25.45 U
Tetryl	UG/KG	81.5 U	81.5 U	81.5 U	81.5 U	81.5 U
MIREX						
Mirex	UG/KG	990 U	990 U	950 U	1070 U	950 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB01-00	41-OS-SB02-00	41-OS-SB03-00	41-OS-SB04-00	41-OS-SB05-00	41-OS-SB06-00
Laboratory Sample ID:	9402021-01	9402021-06	9402021-10	9402086-04	9402042-01A	9402086-01
Date Sampled:						
Percent Solids	84.7	86.8	82.6	90.3	91.6	88.1
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
1,2,4-Trichlorobenzene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
1,3-Dichlorobenzene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
1,4-Dichlorobenzene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
2-Chloronaphthalene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
2-Chlorophenol	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
2-Methylnaphthalene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
2-Methylphenol	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
2-Nitroaniline	UG/KG	472 U	460 U	480 U	444.5 U	440 U
2-Nitrophenol	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
2,2'-oxybis-(1-chloropropane)	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
2,4-Dichlorophenol	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
2,4-Dimethylphenol	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
2,4-Dinitrophenol	UG/KG	472 U	460 U	480 U	444.5 U	440 U
2,4-Dinitrotoluene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
2,4,5-Trichlorophenol	UG/KG	472 U	460 U	480 U	444.5 U	440 U
2,4,6-Trichlorophenol	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
2,6-Dinitrotoluene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
3-Nitroaniline	UG/KG	472 U	460 U	480 U	444.5 U	440 U
3,3'-Dichlorobenzidine	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
4-Bromophenyl-phenylether	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
4-Chloro-3-methylphenol	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
4-Chloroaniline	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
4-Chlorophenyl phenyl ether	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
4-Methylphenol	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
4-Nitroaniline	UG/KG	472 U			444.5 U	440 U
4-Nitrophenol	UG/KG	472 U	460 U	480 U	444.5 U	440 U
4,6-Dinitro-2-methylphenol	UG/KG	472 U	460 U	480 U	444.5 U	440 U
Acenaphthene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
Acenaphthylene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
Anthracene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
Benzo[a]anthracene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
Benzo[a]pyrene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB01-00	41-OS-SB02-00	41-OS-SB03-00	41-OS-SB04-00	41-OS-SB05-00	41-OS-SB06-00
Laboratory Sample ID:	9402021-01	9402021-06	9402021-10	9402086-04	9402042-01A	9402086-01
Date Sampled:						
Percent Solids	84.7	86.8	82.6	90.3	91.6	88.1

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	39 J
Benzo[g,h,i]perylene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	188 U
Benzo[k]fluoranthene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	54 J
bis(2-Chloroethoxy) methane	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	188 U
bis(2-Chloroethyl) ether	UG/KG	194.5 U	190 U	71 J	183.5 U	65 J	188 U
bis(2-Ethylhexyl)phthalate	UG/KG	194.5 U	190 U	198 U	43 J	181.5 U	42 J
Butyl benzyl phthalate	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	188 U
Carbazole	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	188 U
Chrysene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	50 J
Dibenzofuran	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	188 U
Dibenz[a,h]anthracene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	188 U
Diethylphthalate	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	188 U
Dimethyl phthalate	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	188 U
di-n-Butylphthalate	UG/KG	194.5 U	230 J	150 J	69 J	180 U	110 J
di-n-Octylphthalate	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	188 U
Fluoranthene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	108 J
Fluorene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	188 U
Hexachlorobenzene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	188 U
Hexachlorobutadiene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	188 U
Hexachlorocyclopentadiene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	188 U
Hexachloroethane	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	188 U
Indeno[1,2,3-cd]pyrene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	188 U
Isophorone	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	188 U
Naphthalene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	188 U
Nitrobenzene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	188 U
N-Nitroso-di-n-propylamine	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	188 U
N-nitrosodiphenylamine	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	188 U
Pentachlorophenol	UG/KG	472 U	460 U	480 U	444.5 U	440 U	456 U
Phenanthrene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	72 J
Phenol	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	188 U
Pyrene	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U	73 J

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB01-00	41-OS-SB02-00	41-OS-SB03-00	41-OS-SB04-00	41-OS-SB05-00	41-OS-SB06-00
Laboratory Sample ID:	9402021-01	9402021-06	9402021-10	9402086-04	9402042-01A	9402086-01
Date Sampled:						
Percent Solids	84.7	86.8	82.6	90.3	91.6	88.1
<u>VOLATILES</u>						
Chloromethane	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.5 U
Bromomethane	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.5 U
Vinyl chloride	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.5 U
Chloroethane	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.5 U
Methylene chloride	UG/KG	6 U	5.5 U	6 U	3 J	4 J
Acetone	UG/KG	5.9 UJ	5.75 U	5 J	5.5 U	5.45 UJ
Carbon Disulfide	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U
1,1-Dichloroethene	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U
1,1-Dichloroethane	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U
1,2-Dichloroethene(total)	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U
Chloroform	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U
1,2-Dichloroethane	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U
2-Butanone	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U
1,1,1-Trichloroethane	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U
Carbon tetrachloride	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U
Bromodichloromethane	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U
1,2-Dichloropropane	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U
cis-1,3-Dichloropropene	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U
Trichloroethene	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U
Dibromochloromethane	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U
1,1,2-Trichloroethane	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U
Benzene	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U
trans-1,3-Dichloropropene	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U
Bromoform	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U
4-Methyl-2-pentanone	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U
2-Hexanone	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U
Tetrachloroethene	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U
1,1,2,2-Tetrachloroethane	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U
Toluene	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U
Chlorobenzene	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U
Ethylbenzene	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U
Styrene	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U
Xylenes (total)	UG/KG	5.9 U	5.75 U	6 U	5.5 U	5.45 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB01-00	41-OS-SB02-00	41-OS-SB03-00	41-OS-SB04-00	41-OS-SB05-00	41-OS-SB06-00	
Laboratory Sample ID:	9402021-01	9402021-06	9402021-10	9402086-04	9402042-01A	9402086-01	
Date Sampled:							
Percent Solids	84.7	86.8	82.6	90.3	91.6	88.1	
<u>PESTICIDE/PCBS</u>							
alpha-BHC	UG/KG	1 UJ	0.975 UJ		0.945 UJ	0.93 UJ	0.965 UJ
beta-BHC	UG/KG	1 U	0.975 UJ		0.945 UJ		0.965 UJ
delta-BHC	UG/KG	1 UJ	0.975 UJ		0.945 UJ	0.93 UJ	0.965 UJ
Lindane (gamma-BHC)	UG/KG	1 U	0.975 UJ		0.945 UJ	0.93 U	0.965 UJ
Heptachlor	UG/KG	1 U	0.975 UJ	7.16 J	0.945 UJ	0.93 U	0.13 UJ
Aldrin	UG/KG	1 U	0.975 UJ		0.945 UJ	0.93 U	0.965 UJ
Heptachlor epoxide	UG/KG	1 U	0.975 UJ	9.6 NJ	0.945 UJ	0.93 U	0.965 UJ
Endosulfan I	UG/KG	1 U	0.975 UJ		0.945 UJ	0.93 U	0.965 UJ
Dieldrin	UG/KG	1.94 U	1.895 UJ		1.835 UJ	1.81 U	0.83 J
4,4'-DDE	UG/KG	1.94 U	0.43 J	61 J	1.07 J	1.81 UJ	0.84 J
Endrin	UG/KG	1.94 U	1.895 UJ	2.93 J	1.835 UJ	1.81 UJ	1.875 UJ
Endosulfan II	UG/KG	1.94 U	1.895 UJ	3.59 J	1.835 UJ	1.81 UJ	2.61 J
4,4'-DDD	UG/KG	1.94 U	1.895 UJ		0.8 J	1.81 UJ	2.88 J
Endosulfan sulfate	UG/KG	1.94 U	1.895 UJ		1.835 UJ	1.81 UJ	1.875 UJ
4,4'-DDT	UG/KG	1.94 U	0.58 NJ	44 J	1.835 UJ	1.81 UJ	1.03 NJ
Methoxychlor	UG/KG	10 U	9.75 UJ	3.28 NJ	9.45 UJ	9.3 UJ	9.65 UJ
Endrin ketone	UG/KG	1.94 U	1.895 UJ		1.835 UJ	1.81 UJ	1.875 UJ
Endrin aldehyde	UG/KG	1.94 U	1.895 UJ		1.835 UJ	1.81 U	0.68 NJ
alpha-Chlordane	UG/KG	1 U	0.5 J	92.7 J	0.945 UJ	0.93 U	0.965 UJ
gamma-Chlordane	UG/KG	1 U	0.4 J	93.5 J	0.945 UJ	0.93 U	0.965 UJ
Toxaphene	UG/KG	100 U	97.5 UJ		94.5 UJ	93 U	96.5 UJ
Aroclor 1016	UG/KG	19.4 U	18.95 UJ		18.35 UJ	18.1 U	18.75 UJ
Aroclor 1221	UG/KG	39.4 U	38.5 UJ		37.2 UJ	36.75 U	38.05 UJ
Aroclor 1232	UG/KG	19.4 U	18.95 UJ		18.35 UJ	18.1 U	18.75 UJ
Aroclor 1242	UG/KG	19.4 U	18.95 UJ		18.35 UJ	18.1 U	18.75 UJ
Aroclor 1248	UG/KG	19.4 U	18.95 UJ		18.35 UJ	18.1 U	18.75 UJ
Aroclor 1254	UG/KG	19.4 U	18.95 UJ		18.35 UJ	18.1 U	18.75 UJ
Aroclor 1260	UG/KG	19.4 U	18.95 UJ		18.35 UJ	18.1 U	18.75 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB01-00	41-OS-SB02-00	41-OS-SB03-00	41-OS-SB04-00	41-OS-SB05-00	41-OS-SB06-00
Laboratory Sample ID:	9402021-01	9402021-06	9402021-10	9402086-04	9402042-01A	9402086-01
Date Sampled:						
Percent Solids	84.7	86.8	82.6	90.3	91.6	88.1
CHEMICAL SURETY						
Acetophenone	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
Chloroacetophenone	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
Hydroxyacetophenone	UG/KG	975 U	950 U	990 U	915 U	910 U
Bis(2'-chloroethyl)disulfide	UG/KG	975 U	950 U	990 U	915 U	910 U
Bis(2'-chloroethyl)trisulfide	UG/KG	975 U	950 U	990 U	915 U	910 U
1,4-Dithiane	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
1,4-Oxathiane	UG/KG	194.5 U	190 U	198 U	183.5 U	181.5 U
THIODIGLYCOL						
Thiodiglycol	MG/KG	3.69 U	3.595 U	3.78 U	3.47 U	3.405 U
ORDNANCE						
1,3,5-Trinitrobenzene	UG/KG	20.1 U	20.1 U	20.1 U		20.1 U
1,3-Dinitrobenzene	UG/KG	18.6 U	18.6 U	18.6 U		18.6 U
2,4,6-Trinitrotoluene	UG/KG	17.8 U	17.8 U	17.8 U		17.8 U
2,4-Dinitrotoluene	UG/KG	25.8 U	25.8 U	25.8 U		25.8 U
2,6-Dinitrotoluene	UG/KG	23.8 U	23.8 U	23.8 U		23.8 U
2-Amino-4,6-dinitrotoluene	UG/KG	23.35 U	23.35 U	23.35 U		23.35 U
2-Nitrotoluene	UG/KG	40.7 U	40.7 U	40.7 U		40.7 U
3-Nitrotoluene	UG/KG	40.85 U	40.85 U	40.85 U		40.85 U
4-Amino-2,6-dinitrotoluene	UG/KG	20.4 U	20.4 U	20.4 U		20.4 U
4-Nitrotoluene	UG/KG	43.6 U	43.6 U	43.6 U		43.6 U
HMX	UG/KG	35.25 U	35.25 U	35.25 U		35.25 U
Nitrobenzene	UG/KG	17.6 U	17.6 U	17.6 U		17.6 U
RDX	UG/KG	25.45 U	25.45 U	25.45 U		25.45 U
Tetryl	UG/KG	81.5 U	81.5 U	81.5 U		81.5 U
MIREX						
Mirex	UG/KG	975 U	950 U	990 U	915 U	910 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB07-00	41-OS-SB08-00	41-OS-SB09-00	41-OS-SB10-00	41-OS-SB11-00	41-OS-SB12-00
Laboratory Sample ID:	9402042-05A	9402086-09	9402042-03A	9402064-04	9402086-07	9402042-08A
Date Sampled:						
Percent Solids	86.2	86.3	89	84.3	84.8	76.8
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	194.5 U	191.5 U	185 U	196.5 U	214.5 U
1,2,4-Trichlorobenzene	UG/KG	194.5 U	191.5 U	185 U	196.5 U	214.5 U
1,3-Dichlorobenzene	UG/KG	194.5 U	191.5 U	185 U	196.5 U	214.5 U
1,4-Dichlorobenzene	UG/KG	194.5 U	191.5 U	185 U	196.5 U	180 J
2-Chloronaphthalene	UG/KG	194.5 U	191.5 U	185 U	196.5 U	214.5 U
2-Chlorophenol	UG/KG	194.5 U	191.5 U	185 U	196.5 U	214.5 U
2-Methylnaphthalene	UG/KG	194.5 U	191.5 U	185 U	196.5 U	55 J
2-Methylphenol	UG/KG	194.5 U	191.5 U	185 U	196.5 U	214.5 U
2-Nitroaniline	UG/KG	472 U	464 U	448 U	476 U	520 U
2-Nitrophenol	UG/KG	194.5 U	191.5 U	185 U	196.5 U	214.5 U
2,2'-oxybis-(1-chloropropane)	UG/KG	194.5 U	191.5 U	185 U	196.5 U	214.5 U
2,4-Dichlorophenol	UG/KG	194.5 U	191.5 U	185 U	196.5 U	214.5 U
2,4-Dimethylphenol	UG/KG	194.5 U	191.5 U	185 U	196.5 U	214.5 U
2,4-Dinitrophenol	UG/KG	472 U	464 U	448 U	476 U	520 U
2,4-Dinitrotoluene	UG/KG	194.5 U	191.5 U	185 U	196.5 U	214.5 U
2,4,5-Trichlorophenol	UG/KG	472 U	464 U	448 U	476 U	520 U
2,4,6-Trichlorophenol	UG/KG	194.5 U	191.5 U	185 U	196.5 U	214.5 U
2,6-Dinitrotoluene	UG/KG	194.5 U	191.5 U	185 U	196.5 U	214.5 U
3-Nitroaniline	UG/KG	472 U	464 U	448 U	476 U	520 U
3,3'-Dichlorobenzidine	UG/KG	194.5 U	191.5 U	185 U	196.5 U	214.5 U
4-Bromophenyl-phenylether	UG/KG	194.5 U	191.5 U	185 U	196.5 U	214.5 U
4-Chloro-3-methylphenol	UG/KG	194.5 U	191.5 U	185 U	196.5 U	214.5 U
4-Chloroaniline	UG/KG	194.5 U	191.5 U	185 U	196.5 U	214.5 U
4-Chlorophenyl phenyl ether	UG/KG	194.5 U	191.5 U	185 U	196.5 U	214.5 U
4-Methylphenol	UG/KG	194.5 U	191.5 U	185 U	196.5 U	214.5 U
4-Nitroaniline	UG/KG	472 U	464 U	448 U	476 U	520 U
4-Nitrophenol	UG/KG	472 U	464 U	448 U	476 U	520 U
4,6-Dinitro-2-methylphenol	UG/KG	472 U	464 U	448 U	476 U	520 U
Acenaphthene	UG/KG	194.5 U	191.5 U	185 U	380 J	194.5 U
Acenaphthylene	UG/KG	194.5 U	191.5 U	185 U	196.5 U	214.5 U
Anthracene	UG/KG	194.5 U	191.5 U	185 U	510	110 J
Benzo[a]anthracene	UG/KG	194.5 U	191.5 U	185 U	2400	360 J
Benzo[a]pyrene	UG/KG	194.5 U	191.5 U	40 J	2000	300 J

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB07-00	41-OS-SB08-00	41-OS-SB09-00	41-OS-SB10-00	41-OS-SB11-00	41-OS-SB12-00
Laboratory Sample ID:	9402042-05A	9402086-09	9402042-03A	9402064-04	9402086-07	9402042-08A
Date Sampled:						
Percent Solids	86.2	86.3	89	84.3	84.8	76.8

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/KG	194.5 U	191.5 U	38 J	2500	194.5 U	270 J
Benzo[g,h,i]perylene	UG/KG	194.5 U	191.5 U	185 U	1600	194.5 U	240 J
Benzo[k]fluoranthene	UG/KG	194.5 U	191.5 U	50 J	1700	194.5 U	320 J
bis(2-Chloroethoxy) methane	UG/KG	194.5 U	191.5 U	185 U	196.5 U	194.5 U	214.5 U
bis(2-Chloroethyl) ether	UG/KG	194.5 U	191.5 U	185 U	57 J	194.5 U	214.5 U
bis(2-Ethylhexyl)phthalate	UG/KG	194.5 U	240 J	185 U	170 J	46 J	580 J
Butyl benzyl phthalate	UG/KG	194.5 U	191.5 U	185 U	196.5 U	194.5 U	214.5 U
Carbazole	UG/KG	194.5 U	191.5 U	185 U	330 J	194.5 U	44 J
Chrysene	UG/KG	194.5 U	191.5 U	49 J	2300	194.5 U	420 J
Dibenzofuran	UG/KG	194.5 U	191.5 U	185 U	130 J	194.5 U	214.5 U
Dibenz[a,h]anthracene	UG/KG	194.5 U	191.5 U	185 U	196.5 U	194.5 U	57 J
Diethylphthalate	UG/KG	194.5 U	191.5 U	185 U	196.5 U	194.5 U	214.5 U
Dimethyl phthalate	UG/KG	194.5 U	191.5 U	185 U	196.5 U	194.5 U	214.5 U
di-n-Butylphthalate	UG/KG	195 U	55 J	185 U	196.5 U	42 J	420 U
di-n-Octylphthalate	UG/KG	194.5 U	191.5 U	185 U	196.5 U	194.5 U	214.5 U
Fluoranthene	UG/KG	194.5 U	53 J	79 J		194.5 U	820
Fluorene	UG/KG	194.5 U	191.5 U	185 U	280 J	194.5 U	79 J
Hexachlorobenzene	UG/KG	194.5 U	191.5 U	185 U	196.5 U	194.5 U	214.5 U
Hexachlorobutadiene	UG/KG	194.5 U	191.5 U	185 U	196.5 U	194.5 U	214.5 U
Hexachlorocyclopentadiene	UG/KG	194.5 U	191.5 U	185 U	196.5 U	194.5 U	214.5 U
Hexachloroethane	UG/KG	194.5 U	191.5 U	185 U	196.5 U	194.5 U	214.5 U
Indeno[1,2,3-cd]pyrene	UG/KG	194.5 U	191.5 U	185 U	196.5 U	194.5 U	214.5 U
Isophorone	UG/KG	194.5 U	191.5 U	185 U	196.5 U	194.5 U	214.5 U
Naphthalene	UG/KG	194.5 U	191.5 U	185 U	196.5 U	194.5 U	70 J
Nitrobenzene	UG/KG	194.5 U	191.5 U	185 U	196.5 U	194.5 U	214.5 U
N-Nitroso-di-n-propylamine	UG/KG	194.5 U	191.5 U	185 U	196.5 U	194.5 U	214.5 U
N-nitrosodiphenylamine	UG/KG	194.5 U	191.5 U	185 U	196.5 U	194.5 U	214.5 U
Pentachlorophenol	UG/KG	472 U	464 U	448 U	476 U	472 U	520 U
Phenanthrene	UG/KG	194.5 U	191.5 U	185 U	2600	194.5 U	540
Phenol	UG/KG	194.5 U	191.5 U	185 U	196.5 U	194.5 U	214.5 U
Pyrene	UG/KG	194.5 U	50 J	71 J		194.5 U	600 J

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB07-00	41-OS-SB08-00	41-OS-SB09-00	41-OS-SB10-00	41-OS-SB11-00	41-OS-SB12-00
Laboratory Sample ID:	9402042-05A	9402086-09	9402042-03A	9402064-04	9402086-07	9402042-08A
Date Sampled:						
Percent Solids	86.2	86.3	89	84.3	84.8	76.8
VOLATILES						
Chloromethane	UG/KG	5.8 U	6 U	5.6 U	6 U	6.5 U
Bromomethane	UG/KG	5.8 U	6 U	5.6 U	6 U	6.5 U
Vinyl chloride	UG/KG	5.8 U	6 U	5.6 U	6 U	6.5 U
Chloroethane	UG/KG	5.8 U	6 U	5.6 U	6 U	6.5 U
Methylene chloride	UG/KG	3 J	6 U	5 J	6 U	3 J
Acetone	UG/KG	6 J	6 U	18 J	20	6.5 UJ
Carbon Disulfide	UG/KG	5.8 U	6 U	5.6 U	6 U	6.5 U
1,1-Dichloroethene	UG/KG	5.8 U	6 U	5.6 U	6 U	6.5 U
1,1-Dichloroethane	UG/KG	5.8 U	6 U	5.6 U	6 U	6.5 U
1,2-Dichloroethene(total)	UG/KG	5.8 U	6 U	5.6 U	6 U	6.5 U
Chloroform	UG/KG	5.8 U	6 U	5.6 U	6 U	6.5 U
1,2-Dichloroethane	UG/KG	5.8 U	6 U	5.6 U	6 U	6.5 U
2-Butanone	UG/KG	5.8 U	6 U	5.6 U	6 U	6.5 U
1,1,1-Trichloroethane	UG/KG	5.8 U	6 U	5.6 U	6 U	6.5 U
Carbon tetrachloride	UG/KG	5.8 U	6 U	5.6 U	6 U	6.5 U
Bromodichloromethane	UG/KG	5.8 U	6 U	5.6 U	6 U	6.5 U
1,2-Dichloropropane	UG/KG	5.8 U	6 U	5.6 U	6 U	6.5 U
cis-1,3-Dichloropropene	UG/KG	5.8 U	6 U	5.6 U	6 U	6.5 U
Trichloroethene	UG/KG	5.8 U	6 U	5.6 U	6 U	6.5 U
Dibromochloromethane	UG/KG	5.8 U	6 U	5.6 U	6 U	6.5 U
1,1,2-Trichloroethane	UG/KG	5.8 U	6 U	5.6 U	6 U	6.5 U
Benzene	UG/KG	5.8 U	6 U	5.6 U	6 U	6.5 U
trans-1,3-Dichloropropene	UG/KG	5.8 U	6 U	5.6 U	6 U	6.5 U
Bromoform	UG/KG	5.8 U	6 U	5.6 U	6 U	6.5 U
4-Methyl-2-pentanone	UG/KG	5.8 U	6 U	5.6 U	6 UJ	6.5 U
2-Hexanone	UG/KG	5.8 U	6 U	5.6 U	6 UJ	6.5 U
Tetrachloroethene	UG/KG	5.8 U	6 U	5.6 U	6 UJ	6.5 U
1,1,2,2-Tetrachloroethane	UG/KG	5.8 U	6 U	5.6 U	6 UJ	6.5 U
Toluene	UG/KG	5.8 U	6 U	5.6 U	6 UJ	6.5 U
Chlorobenzene	UG/KG	5.8 U	6 U	5.6 U	6 UJ	6.5 U
Ethylbenzene	UG/KG	5.8 U	6 U	5.6 U	6 UJ	6.5 U
Styrene	UG/KG	5.8 U	6 U	5.6 U	6 UJ	6.5 U
Xylenes (total)	UG/KG	5.8 U	6 U	5.6 U	6 UJ	6.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB07-00	41-OS-SB08-00	41-OS-SB09-00	41-OS-SB10-00	41-OS-SB11-00	41-OS-SB12-00
Laboratory Sample ID:	9402042-05A	9402086-09	9402042-03A	9402064-04	9402086-07	9402042-08A
Date Sampled:						
Percent Solids	86.2	86.3	89	84.3	84.8	76.8
PESTICIDE/PCBS						
alpha-BHC	UG/KG	0.99 UJ	4.925 UJ	0.955 UJ	1.01 UJ	1.105 UJ
beta-BHC	UG/KG	0.99 UJ	4.925 UJ		1.01 UJ	1 UJ
delta-BHC	UG/KG		4.925 UJ	0.955 UJ	1.01 UJ	1.105 UJ
Lindane (gamma-BHC)	UG/KG	0.99 UJ	4.925 UJ	0.955 U	1.01 U	1.105 UJ
Heptachlor	UG/KG	0.99 UJ	4.925 UJ	0.955 U	1.01 U	0.92 J
Aldrin	UG/KG	0.99 UJ	4.925 UJ	0.955 U	1.01 U	1 U
Heptachlor epoxide	UG/KG	0.99 UJ	4.925 UJ	0.955 U	1.01 U	1 U
Endosulfan I	UG/KG	0.99 UJ	4.925 UJ	0.955 U	1.01 U	1 U
Dieldrin	UG/KG	1.92 UJ	13.03 NJ	1.855 U	6.12 NJ	5.13 NJ
4,4'-DDE	UG/KG	0.4 J	87.6 J	4.02 J	38.9 J	25.1 J
Endrin	UG/KG	1.92 UJ	9.56 UJ	1.855 UJ	1.965 U	1.47 NJ
Endosulfan II	UG/KG	1.92 UJ	9.55 UJ	0.45 NJ	1.965 U	4.15 NJ
4,4'-DDD	UG/KG	1.92 UJ	9.55 UJ	4.18 J	43.2 J	48.2 J
Endosulfan sulfate	UG/KG	1.92 UJ	9.56 U	1.855 UJ	1.965 U	1.94 U
4,4'-DDT	UG/KG	0.57 J	10.4 NJ	1.27 J	41.3 J	14.8 J
Methoxychlor	UG/KG	9.9 UJ	49.25 U	9.55 UJ	10.1 UJ	10 UJ
Endrin ketone	UG/KG	1.92 UJ	9.56 U	1.855 UJ	1.965 U	1.94 U
Endrin aldehyde	UG/KG	1.92 UJ	9.56 U	1.855 U	1.965 U	1.94 U
alpha-Chlordane	UG/KG	0.99 UJ	4.925 UJ	0.25 J	1.66 J	1.7 J
gamma-Chlordane	UG/KG	0.99 UJ	4.925 UJ	0.955 U	1.33 J	1.17 J
Toxaphene	UG/KG	99 UJ	492.45 U	95.5 U	101 U	100 U
Aroclor 1016	UG/KG	19.2 UJ	95.595 U	18.55 U	19.65 U	19.4 U
Aroclor 1221	UG/KG	38.95 UJ	194.1 U	37.65 U	39.9 U	39.4 U
Aroclor 1232	UG/KG	19.2 UJ	95.6 U	18.55 U	19.65 U	19.4 U
Aroclor 1242	UG/KG	19.2 UJ	95.6 U	18.55 U	19.65 U	19.4 U
Aroclor 1248	UG/KG	19.2 UJ	95.6 U	18.55 U	19.65 U	19.4 U
Aroclor 1254	UG/KG	19.2 UJ	95.6 U	18.55 U	19.65 U	19.4 U
Aroclor 1260	UG/KG	19.2 UJ	95.6 U	18.55 U	19.65 U	19.4 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB07-00	41-OS-SB08-00	41-OS-SB09-00	41-OS-SB10-00	41-OS-SB11-00	41-OS-SB12-00
Laboratory Sample ID:	9402042-05A	9402086-09	9402042-03A	9402064-04	9402086-07	9402042-08A
Date Sampled:						
Percent Solids	86.2	86.3	89	84.3	84.8	76.8
CHEMICAL SURETY						
Acetophenone	UG/KG	194.5 U	191.5 U	185 U	196.5 U	194.5 U
Chloroacetophenone	UG/KG	194.5 U	191.5 U	185 U	196.5 U	194.5 U
Hydroxyacetophenone	UG/KG	975 U	955 U	925 U	980 U	975 U
Bis(2'-chloroethyl)disulfide	UG/KG	975 U	955 U	925 U	980 U	975 U
Bis(2'-chloroethyl)trisulfide	UG/KG	975 U	955 U	925 U	980 U	975 U
1,4-Dithiane	UG/KG	194.5 U	191.5 U	185 U	196.5 U	194.5 U
1,4-Oxathiane	UG/KG	194.5 U	191.5 U	185 U	196.5 U	194.5 U
THIODIGLYCOL						
Thiodiglycol	MG/KG	3.625 U	3.625 U	3.5 U	3.72 U	3.69 U
ORDNANCE						
1,3,5-Trinitrobenzene	UG/KG	20.1 U		20.1 U	20.1 UJ	20.1 U
1,3-Dinitrobenzene	UG/KG	18.6 U		18.6 U	18.6 UJ	18.6 U
2,4,6-Trinitrotoluene	UG/KG	17.8 U		17.8 U	17.8 UJ	17.8 U
2,4-Dinitrotoluene	UG/KG	25.8 U		25.8 U	25.8 UJ	25.8 U
2,6-Dinitrotoluene	UG/KG	23.8 U		23.8 U	23.8 UJ	23.8 U
2-Amino-4,6-dinitrotoluene	UG/KG	23.35 U		23.35 U	23.35 UJ	23.35 U
2-Nitrotoluene	UG/KG	40.7 U		40.7 U	40.7 UJ	40.7 U
3-Nitrotoluene	UG/KG	40.85 U		40.85 U	40.85 UJ	40.85 U
4-Amino-2,6-dinitrotoluene	UG/KG	20.4 U		20.4 U	20.4 UJ	20.4 U
4-Nitrotoluene	UG/KG	43.6 U		43.6 U	43.6 UJ	43.6 U
HMX	UG/KG	35.25 U		35.25 U	35.25 UJ	35.25 U
Nitrobenzene	UG/KG	17.6 U		17.6 U	17.6 UJ	17.6 U
RDX	UG/KG	25.45 U		25.45 U	25.45 UJ	25.45 U
Tetryl	UG/KG	81.5 U		81.5 U	81.5 UJ	81.5 U
MIREX						
Mirex	UG/KG	975 U	955 U	925 U	980 U	975 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB13-00	41-OS-SB14-00	41-OS-SB15-00	41-OS-SB16-00	41-OS-SB17-00	41-OS-SB18-00
Laboratory Sample ID:	9402052-08	9402064-01	9402070-01	9402043-05	9402052-03	9402061-01
Date Sampled:						
Percent Solids	87.1	81.9	83.8	83.6	83.9	88.2
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
1,2,4-Trichlorobenzene	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
1,3-Dichlorobenzene	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
1,4-Dichlorobenzene	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
2-Chloronaphthalene	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
2-Chlorophenol	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
2-Methylnaphthalene	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
2-Methylphenol	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
2-Nitroaniline	UG/KG	460 U	19600 U	476 U	480 U	454.5 U
2-Nitrophenol	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
2,2'-oxybis-(1-chloropropane)	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
2,4-Dichlorophenol	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
2,4-Dimethylphenol	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
2,4-Dinitrophenol	UG/KG	460 U	19600 U	476 U	480 U	454.5 U
2,4-Dinitrotoluene	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
2,4,5-Trichlorophenol	UG/KG	460 U	19600 U	476 U	480 U	454.5 U
2,4,6-Trichlorophenol	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
2,6-Dinitrotoluene	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
3-Nitroaniline	UG/KG	460 U	19600 U	476 U	480 U	454.5 U
3,3'-Dichlorobenzidine	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
4-Bromophenyl-phenylether	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
4-Chloro-3-methylphenol	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
4-Chloroaniline	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
4-Chlorophenyl phenyl ether	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
4-Methylphenol	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
4-Nitroaniline	UG/KG	460 U	19600 U	476 U	480 U	454.5 U
4-Nitrophenol	UG/KG	460 U	19600 U	476 U	480 U	454.5 U
4,6-Dinitro-2-methylphenol	UG/KG	460 U	19600 U	476 U	480 U	454.5 U
Acenaphthene	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
Acenaphthylene	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
Anthracene	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
Benzo[a]anthracene	UG/KG	189.5 U	8100 U	196.5 U	198 U	130 J
Benzo[a]pyrene	UG/KG	189.5 U	8100 U	196.5 U	198 U	120 J

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-0S-SB13-00	41-0S-SB14-00	41-0S-SB15-00	41-0S-SB16-00	41-0S-SB17-00	41-0S-SB18-00
Laboratory Sample ID:	9402052-08	9402064-01	9402070-01	9402043-05	9402052-03	9402061-01
Date Sampled:						
Percent Solids	87.1	81.9	83.8	83.6	83.9	88.2

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/KG	189.5 U	8100 U	196.5 U	198 U	196.5 U	120 J
Benzo[g,h,i]perylene	UG/KG	189.5 U	8100 U	196.5 U	198 U	196.5 U	71 J
Benzo[k]fluoranthene	UG/KG	189.5 U	8100 U	196.5 U	198 U	196.5 U	120 J
bis(2-Chloroethoxy) methane	UG/KG	189.5 U	8100 U	196.5 U	198 U	196.5 U	187.5 U
bis(2-Chloroethyl) ether	UG/KG	189.5 U	8100 U	196.5 U	198 U	196.5 U	187.5 U
bis(2-Ethylhexyl)phthalate	UG/KG	189.5 U	8100 U	240 J	51 J	196.5 U	187.5 U
Butyl benzyl phthalate	UG/KG	189.5 U	8100 U	196.5 U	198 U	196.5 U	187.5 U
Carbazole	UG/KG	189.5 U	8100 U	196.5 U	198 U	196.5 U	187.5 U
Chrysene	UG/KG	189.5 U	8100 U	196.5 U	198 U	196.5 U	160 J
Dibenzofuran	UG/KG	189.5 U	8100 U	196.5 U	198 U	196.5 U	187.5 U
Dibenz[a,h]anthracene	UG/KG	189.5 U	8100 U	196.5 U	198 U	196.5 U	187.5 U
Diethylphthalate	UG/KG	189.5 U	8100 U	196.5 U	198 U	196.5 U	187.5 U
Dimethyl phthalate	UG/KG	189.5 U	8100 U	196.5 U	198 U	196.5 U	187.5 U
di-n-Butylphthalate	UG/KG	190 U	8100 U	196.5 U	200 U	200 U	187.5 U
di-n-Octylphthalate	UG/KG	189.5 U	8100 U	196.5 U	198 U	110 J	200 J
Fluoranthene	UG/KG	189.5 U	2500 J	40 J	198 U	196.5 U	240 J
Fluorene	UG/KG	189.5 U	8100 U	196.5 U	198 U	196.5 U	187.5 U
Hexachlorobenzene	UG/KG	189.5 U	8100 U	196.5 U	198 U	196.5 U	187.5 U
Hexachlorobutadiene	UG/KG	189.5 U	8100 U	196.5 U	198 U	196.5 U	187.5 U
Hexachlorocyclopentadiene	UG/KG	189.5 U	8100 U	196.5 U	198 U	196.5 U	187.5 U
Hexachloroethane	UG/KG	189.5 U	8100 U	196.5 U	198 U	196.5 U	187.5 U
Indeno[1,2,3-cd]pyrene	UG/KG	189.5 U	8100 U	196.5 U	198 U	196.5 U	71 J
Isophorone	UG/KG	189.5 U	8100 U	196.5 U	198 U	196.5 U	187.5 U
Naphthalene	UG/KG	189.5 U	8100 U	196.5 U	198 U	196.5 U	187.5 U
Nitrobenzene	UG/KG	189.5 U	8100 U	196.5 U	198 U	196.5 U	187.5 U
N-Nitroso-di-n-propylamine	UG/KG	189.5 U	8100 U	196.5 U	198 U	196.5 U	187.5 U
N-nitrosodiphenylamine	UG/KG	189.5 U	8100 U	196.5 U	198 U	196.5 U	187.5 U
Pentachlorophenol	UG/KG	460 U	19600 U	476 U	480 U	476 U	454.5 U
Phenanthrene	UG/KG	189.5 U	1800 J	196.5 U	198 U	196.5 U	140 J
Phenol	UG/KG	189.5 U	8100 U	196.5 U	198 U	196.5 U	187.5 U
Pyrene	UG/KG	189.5 U	2300 J	196.5 U	198 U	196.5 U	240 J

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-0S-SB13-00	41-0S-SB14-00	41-0S-SB15-00	41-0S-SB16-00	41-0S-SB17-00	41-0S-SB18-00	
Laboratory Sample ID:	9402052-08	9402064-01	9402070-01	9402043-05	9402052-03	9402061-01	
Date Sampled:							
Percent Solids	87.1	81.9	83.8	83.6	83.9	88.2	
VOLATILES							
Chloromethane	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
Bromomethane	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
Vinyl chloride	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
Chloroethane	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
Methylene chloride	UG/KG	3 J	11 UJ	6 U	6 U	2 J	5.5 U
Acetone	UG/KG	11.5 J	33 J	14 J	5.95 U	5.95 U	5.7 UJ
Carbon Disulfide	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
1,1-Dichloroethene	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
1,1-Dichloroethane	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
1,2-Dichloroethene(total)	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
Chloroform	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
1,2-Dichloroethane	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
2-Butanone	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
1,1,1-Trichloroethane	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
Carbon tetrachloride	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
Bromodichloromethane	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
1,2-Dichloropropane	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
cis-1,3-Dichloropropene	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
Trichloroethene	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
Dibromochloromethane	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
1,1,2-Trichloroethane	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
Benzene	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
trans-1,3-Dichloropropene	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
Bromoform	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
4-Methyl-2-pentanone	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
2-Hexanone	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
Tetrachloroethene	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
1,1,2,2-Tetrachloroethane	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
Toluene	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
Chlorobenzene	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
Ethylbenzene	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
Styrene	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U
Xylenes (total)	UG/KG	5.75 U	6 UJ	6 U	5.95 U	5.95 U	5.7 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-0S-SB13-00	41-0S-SB14-00	41-0S-SB15-00	41-0S-SB16-00	41-0S-SB17-00	41-0S-SB18-00
Laboratory Sample ID:	9402052-08	9402064-01	9402070-01	9402043-05	9402052-03	9402061-01
Date Sampled:						
Percent Solids	87.1	81.9	83.8	83.6	83.9	88.2
PESTICIDE/PCBS						
alpha-BHC	UG/KG	0.975 UJ		1.01 UJ	1.01 UJ	0.965 UJ
beta-BHC	UG/KG	0.975 UJ		1.01 UJ	1.01 UJ	0.965 UJ
delta-BHC	UG/KG	0.975 UJ		1.01 UJ	1.01 UJ	0.965 UJ
Lindane (gamma-BHC)	UG/KG	0.975 UJ		1.01 UJ	1.01 UJ	0.965 UJ
Heptachlor	UG/KG	0.975 UJ		1.01 UJ	1.01 UJ	0.965 UJ
Aldrin	UG/KG	0.975 UJ		1.01 UJ	1.01 UJ	0.965 UJ
Heptachlor epoxide	UG/KG	0.975 UJ		1.01 UJ	1.01 UJ	2.39 J
Endosulfan I	UG/KG	0.975 UJ		1.01 UJ	1.01 UJ	0.965 UJ
Dieldrin	UG/KG	0.47 J		2.05 J	1.12 J	2.81 J
4,4'-DDE	UG/KG	0.46 NJ	32.4 J	1.14 J	4.07 J	1.48 J
Endrin	UG/KG	1.895 UJ		1.965 UJ		1.875 UJ
Endosulfan II	UG/KG	4.62 NJ		1.88 J	1 NJ	3.79 J
4,4'-DDD	UG/KG	0.77 NJ	79.1 J	2.35 NJ	3.07 NJ	2.76 J
Endosulfan sulfate	UG/KG	1.895 UJ		1.965 UJ		1.875 UJ
4,4'-DDT	UG/KG	1.86 J	277 J	1.73 J	1.01 NJ	1.875 UJ
Methoxychlor	UG/KG	9.75 UJ		10.1 UJ	10.1 UJ	1.51 J
Endrin ketone	UG/KG	1.895 UJ		1.965 UJ		1.875 UJ
Endrin aldehyde	UG/KG	1.895 UJ		1.965 UJ		0.61 J
alpha-Chlordane	UG/KG	0.975 UJ	0.44 J	0.85 J	1.01 UJ	0.87 J
gamma-Chlordane	UG/KG	0.975 UJ		0.74 J	1.01 UJ	0.57 J
Toxaphene	UG/KG	97.5 UJ		101 UJ	101 UJ	96.5 UJ
Aroclor 1016	UG/KG	18.95 UJ		19.65 UJ	19.65 UJ	18.75 UJ
Aroclor 1221	UG/KG	38.5 UJ		39.9 UJ	39.9 UJ	38.05 UJ
Aroclor 1232	UG/KG	18.95 UJ		19.65 UJ	19.65 UJ	18.75 UJ
Aroclor 1242	UG/KG	18.95 UJ		19.65 UJ	19.65 UJ	18.75 UJ
Aroclor 1248	UG/KG	18.95 UJ		19.65 UJ	19.65 UJ	18.75 UJ
Aroclor 1254	UG/KG	18.95 UJ		19.65 UJ	19.65 UJ	18.75 UJ
Aroclor 1260	UG/KG	18.95 UJ		19.65 UJ	19.65 UJ	18.75 UJ

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
DOWNSLOPE AND ONSITE SURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	41-OS-SB13-00	41-OS-SB14-00	41-OS-SB15-00	41-OS-SB16-00	41-OS-SB17-00	41-OS-SB18-00
Laboratory Sample ID:	9402052-08	9402064-01	9402070-01	9402043-05	9402052-03	9402061-01
Date Sampled:						
Percent Solids	87.1	81.9	83.8	83.6	83.9	86.2
CHEMICAL SURETY						
Acetophenone	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
Chloroacetophenone	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
Hydroxyacetophenone	UG/KG	950 U	40400 U	980 U	990 U	935 U
Bis(2'-chloroethyl)disulfide	UG/KG	950 U	40400 U	980 U	990 U	935 U
Bis(2'-chloroethyl)trisulfide	UG/KG	950 U	40400 U	980 U	990 U	935 U
1,4-Dithiane	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
1,4-Oxathiane	UG/KG	189.5 U	8100 U	196.5 U	198 U	187.5 U
THIODIGLYCOL						
Thiodiglycol	MG/KG	3.595 U	3.81 U	3.72 U	3.75 U	3.53 U
ORDNANCE						
1,3,5-Trinitrobenzene	UG/KG	20.1 U	20.1 UJ	20.1 U	20.1 U	20.1 U
1,3-Dinitrobenzene	UG/KG	18.6 U	18.6 UJ	18.6 U	18.6 U	18.6 U
2,4,6-Trinitrotoluene	UG/KG	17.8 U	17.8 UJ	17.8 U	17.8 U	17.8 U
2,4-Dinitrotoluene	UG/KG	25.8 U	25.8 UJ	25.8 U	25.8 U	25.8 U
2,6-Dinitrotoluene	UG/KG	23.8 U	23.8 UJ	23.8 U	23.8 U	23.8 U
2-Amino-4,6-dinitrotoluene	UG/KG	23.35 U	23.35 UJ	23.35 U	23.35 U	23.35 U
2-Nitrotoluene	UG/KG	40.7 U	40.7 UJ	40.7 U	40.7 U	40.7 U
3-Nitrotoluene	UG/KG	40.85 U	40.85 UJ	40.85 U	40.85 U	40.85 U
4-Amino-2,6-dinitrotoluene	UG/KG	20.4 U	20.4 UJ	20.4 U	20.4 U	20.4 U
4-Nitrotoluene	UG/KG	43.6 U	43.6 UJ	43.6 U	43.6 U	43.6 U
HMX	UG/KG	35.25 U	35.25 UJ	35.25 U	35.25 U	35.25 U
Nitrobenzene	UG/KG	17.6 U	17.6 UJ	17.6 U	17.6 U	17.6 U
RDX	UG/KG	25.45 U	25.45 UJ	25.45 U	25.45 U	25.45 U
Tetryl	UG/KG	81.5 U	81.5 UJ	81.5 U	81.5 U	81.5 U
MIREX						
Mirex	UG/KG	950 UJ	40400 U	980 U	990 U	935 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-0S-SB19-00	41-0S-SB20-00	41-0S-SB21-00	41-0S-SB22-00	41-0S-SB23-00	41-0S-SB24-00
Laboratory Sample ID:	9402043-03	9402052-04	9402052-05	9402061-04	9402043-01	9402061-07
Date Sampled:						
Percent Solids	84.2	82.7	89	84.5	85.8	83.8
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U
1,2,4-Trichlorobenzene	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U
1,3-Dichlorobenzene	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U
1,4-Dichlorobenzene	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U
2-Chloronaphthalene	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U
2-Chlorophenol	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U
2-Methylnaphthalene	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U
2-Methylphenol	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U
2-Nitroaniline	UG/KG	480 U	482 U	449.5 U	476 U	464 U
2-Nitrophenol	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U
2,2'-oxybis-(1-chloropropane)	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U
2,4-Dichlorophenol	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U
2,4-Dimethylphenol	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U
2,4-Dinitrophenol	UG/KG	480 U	482 U	449.5 U	476 U	464 U
2,4-Dinitrotoluene	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U
2,4,5-Trichlorophenol	UG/KG	480 U	482 U	449.5 U	476 U	464 U
2,4,6-Trichlorophenol	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U
2,6-Dinitrotoluene	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U
3-Nitroaniline	UG/KG	480 U	482 U	449.5 U	476 U	464 U
3,3'-Dichlorobenzidine	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U
4-Bromophenyl-phenylether	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U
4-Chloro-3-methylphenol	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U
4-Chloroaniline	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U
4-Chlorophenyl phenyl ether	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U
4-Methylphenol	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U
4-Nitroaniline	UG/KG		482 U	449.5 U	476 U	464 U
4-Nitrophenol	UG/KG		482 U	449.5 U	476 U	464 U
4,6-Dinitro-2-methylphenol	UG/KG	480 U	482 U	449.5 U	476 U	464 U
Acenaphthene	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U
Acenaphthylene	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U
Anthracene	UG/KG	198 U	41 J	185.5 U	196.5 U	191.5 U
Benzo[a]anthracene	UG/KG	198 U	140 J	185.5 U	196.5 U	191.5 U
Benzo[a]pyrene	UG/KG	198 U	120 J	185.5 U	196.5 U	191.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB19-00	41-OS-SB20-00	41-OS-SB21-00	41-OS-SB22-00	41-OS-SB23-00	41-OS-SB24-00
Laboratory Sample ID:	9402043-03	9402052-04	9402052-05	9402061-04	9402043-01	9402061-07
Date Sampled:						
Percent Solids	84.2	82.7	89	84.5	85.8	83.8

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/KG	198 U	140 J	185.5 U	196.5 U	191.5 U	196.5 U
Benzo[g,h,i]perylene	UG/KG	198 U	46 J	185.5 U	196.5 U	191.5 U	196.5 U
Benzo[k]fluoranthene	UG/KG	198 U	86 J	185.5 U	196.5 U	191.5 U	196.5 U
bis(2-Chloroethoxy) methane	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U	196.5 U
bis(2-Chloroethyl) ether	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U	196.5 U
bis(2-Ethylhexyl)phthalate	UG/KG	160 J	199 U	185.5 U	196.5 U	70 J	196.5 U
Butyl benzyl phthalate	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U	196.5 U
Carbazole	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U	196.5 U
Chrysene	UG/KG	198 U	150 J	185.5 U	196.5 U	191.5 U	196.5 U
Dibenzofuran	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U	196.5 U
Dibenz[a,h]anthracene	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U	196.5 U
Diethylphthalate	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U	196.5 U
Dimethyl phthalate	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U	196.5 U
di-n-Butylphthalate	UG/KG	62 J	200 U	185 U	196.5 U		196.5 U
di-n-Octylphthalate	UG/KG	198 U	86 J	185.5 U	52 J	191.5 U	40 J
Fluoranthene	UG/KG	198 U	240 J	185.5 U	196.5 U	191.5 U	196.5 U
Fluorene	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U	196.5 U
Hexachlorobenzene	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U	196.5 U
Hexachlorobutadiene	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U	196.5 U
Hexachlorocyclopentadiene	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U	196.5 U
Hexachloroethane	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U	196.5 U
Indeno[1,2,3-cd]pyrene	UG/KG	198 U	76 J	185.5 U	196.5 U	191.5 U	196.5 U
Isophorone	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U	196.5 U
Naphthalene	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U	196.5 U
Nitrobenzene	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U	196.5 U
N-Nitroso-di-n-propylamine	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U	196.5 U
N-nitrosodiphenylamine	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U	196.5 U
Pentachlorophenol	UG/KG	480 U	482 U	449.5 U	476 U	464 U	476 U
Phenanthrene	UG/KG	198 U	200 J	185.5 U	196.5 U	191.5 U	196.5 U
Phenol	UG/KG	198 U	199 U	185.5 U	196.5 U	191.5 U	196.5 U
Pyrene	UG/KG	198 U	230 J	185.5 U	196.5 U	191.5 U	196.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-0S-SB19-00	41-0S-SB20-00	41-0S-SB21-00	41-0S-SB22-00	41-0S-SB23-00	41-0S-SB24-00	
Laboratory Sample ID:	9402043-03	9402052-04	9402052-05	9402061-04	9402043-01	9402061-07	
Date Sampled:							
Percent Solids	84.2	82.7	89	84.5	85.8	83.8	
<u>VOLATILES</u>							
Chloromethane	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 U	5.95 U
Bromomethane	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 U	5.95 U
Vinyl chloride	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 U	5.95 U
Chloroethane	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 U	5.95 U
Methylene chloride	UG/KG	13.5 U	4 J	3 J	9.5 U	10 U	6 U
Acetone	UG/KG	2800	6 U	5.6 U	5.95 UJ	5.8 U	5.95 UJ
Carbon Disulfide	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 U	5.95 U
1,1-Dichloroethene	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 U	5.95 U
1,1-Dichloroethane	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 U	5.95 U
1,2-Dichloroethene(total)	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 U	5.95 U
Chloroform	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 U	5.95 U
1,2-Dichloroethane	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 U	5.95 U
2-Butanone	UG/KG	5.95 U	6 U	5.6 U	5.95 U		5.95 U
1,1,1-Trichloroethane	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 U	5.95 U
Carbon tetrachloride	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 U	5.95 U
Bromodichloromethane	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 U	5.95 U
1,2-Dichloropropane	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 U	5.95 U
cis-1,3-Dichloropropene	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 U	5.95 U
Trichloroethene	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 U	5.95 U
Dibromochloromethane	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 U	5.95 U
1,1,2-Trichloroethane	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 U	5.95 U
Benzene	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 U	5.95 U
trans-1,3-Dichloropropene	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 U	5.95 U
Bromoform	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 U	5.95 U
4-Methyl-2-pentanone	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 UJ	5.95 U
2-Hexanone	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 UJ	5.95 U
Tetrachloroethene	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 UJ	5.95 U
1,1,2,2-Tetrachloroethane	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 UJ	5.95 U
Toluene	UG/KG	5.95 U	6 U	5.6 U	2 J	5.8 UJ	1 J
Chlorobenzene	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 UJ	5.95 U
Ethylbenzene	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 UJ	5.95 U
Styrene	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 UJ	5.95 U
Xylenes (total)	UG/KG	5.95 U	6 U	5.6 U	5.95 U	5.8 UJ	5.95 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB19-00	41-OS-SB20-00	41-OS-SB21-00	41-OS-SB22-00	41-OS-SB23-00	41-OS-SB24-00	
Laboratory Sample ID:	9402043-03	9402052-04	9402052-05	9402061-04	9402043-01	9402061-07	
Date Sampled:							
Percent Solids	84.2	82.7	89	84.5	85.8	83.8	
PESTICIDE/PCBS							
alpha-BHC	UG/KG	1.01 UJ	1.025 UJ	0.955 UJ	1.01 UJ	0.99 UJ	1.01 UJ
beta-BHC	UG/KG		1.025 UJ	0.955 UJ	1.01 UJ		1.01 UJ
delta-BHC	UG/KG	1.01 UJ	1.025 UJ	0.955 UJ	1.01 UJ	0.99 UJ	1.01 UJ
Lindane (gamma-BHC)	UG/KG	1.01 UJ	1.025 U	0.955 U	1.01 UJ	0.99 UJ	1.01 U
Heptachlor	UG/KG	1.01 UJ	1.025 U	0.955 U	1.01 UJ	0.99 UJ	1.01 U
Aldrin	UG/KG	1.01 UJ	1.025 U	0.955 U	1.01 UJ	0.99 UJ	1.01 U
Heptachlor epoxide	UG/KG	1.01 UJ	1.025 U	0.955 U	0.56 NJ	0.99 UJ	0.81 NJ
Endosulfan I	UG/KG	1.01 UJ	1.025 U	0.955 U	1.01 UJ	0.99 UJ	1.01 U
Dieldrin	UG/KG	5.65 J	0.83 NJ	1.855 U	2.16 NJ	3.07 NJ	1.04 NJ
4,4'-DDE	UG/KG	6.36 J	2.29 J	1.855 U	1.58 NJ	69.3 J	3.22 J
Endrin	UG/KG		1.99 U	1.855 U	1.965 U		1.965 U
Endosulfan II	UG/KG	4.44 J	3.62 J	1.855 U	5.01 J	1.92 U	2.5 J
4,4'-DDD	UG/KG	6.92 J	1.99 U	1.855 U	8.46 J	45 J	4.68 J
Endosulfan sulfate	UG/KG		1.99 U	1.855 U	1.965 UJ		1.965 U
4,4'-DDT	UG/KG	2.7 J	25 J	1.855 UJ	7.41 J	66.3 J	1.66 J
Methoxychlor	UG/KG	10.1 UJ	10.25 UJ	9.55 UJ	10.1 UJ	9.9 UJ	10.1 UJ
Endrin ketone	UG/KG	0.44 NJ	1.99 U	1.855 U	1.965 UJ		1.965 U
Endrin aldehyde	UG/KG		1.99 U	1.855 U	1.965 UJ		1.965 U
alpha-Chlordane	UG/KG	2.25 J	0.27 NJ	0.955 U	3.88 J	1.47 J	0.84 J
gamma-Chlordane	UG/KG	0.8 J	0.3 J	0.955 U	3.68 J	1.25 J	0.82 J
Toxaphene	UG/KG	101 UJ	102.5 U	95.5 U	101 UJ	99 UJ	101 U
Aroclor 1016	UG/KG	19.65 UJ	19.9 U	18.55 U	19.65 UJ	19.2 UJ	19.65 U
Aroclor 1221	UG/KG	39.9 UJ	40.35 U	37.65 U	39.9 UJ	38.95 UJ	39.9 U
Aroclor 1232	UG/KG	19.65 UJ	19.9 U	18.55 U	19.65 UJ	19.2 UJ	19.65 U
Aroclor 1242	UG/KG	82.9 J	19.9 U	18.55 U	19.65 UJ	19.2 UJ	19.65 U
Aroclor 1248	UG/KG	19.65 UJ	19.9 U	18.55 U	19.65 UJ	19.2 UJ	19.65 U
Aroclor 1254	UG/KG	19.65 UJ	19.9 U	18.55 U	19.65 UJ	19.2 UJ	19.65 U
Aroclor 1260	UG/KG	19.65 UJ	19.9 U	18.55 U	19.65 UJ	58.4 J	19.65 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB19-00	41-OS-SB20-00	41-OS-SB21-00	41-OS-SB22-00	41-OS-SB23-00	41-OS-SB24-00
Laboratory Sample ID:	9402043-03	9402052-04	9402052-05	9402061-04	9402043-01	9402061-07
Date Sampled:						
Percent Solids	84.2	82.7	89	84.5	85.8	83.8
<u>CHEMICAL SURETY</u>						
Acetophenone	UG/KG	198 U	199 U	185.5 U	196.5 U	196.5 U
Chloroacetophenone	UG/KG	198 U	199 U	185.5 U	196.5 U	196.5 U
Hydroxyacetophenone	UG/KG	990 U	995 U	925 U	980 U	980 U
Bis(2'-chloroethyl)disulfide	UG/KG	990 U	995 U	925 U	980 U	980 U
Bis(2'-chloroethyl)trisulfide	UG/KG	990 U	995 U	925 U	980 U	980 U
1,4-Dithiane	UG/KG	198 U	199 U	185.5 U	196.5 U	196.5 U
1,4-Oxathiane	UG/KG	198 U	199 U	185.5 U	196.5 U	196.5 U
<u>THIODIGLYCOL</u>						
Thiodiglycol	MG/KG	3.72 U	3.78 U	3.5 U	3.69 U	3.72 U
<u>ORDNANCE</u>						
1,3,5-Trinitrobenzene	UG/KG	20.1 U	20.1 U	20.1 U	20.1 U	20.1 U
1,3-Dinitrobenzene	UG/KG	18.6 U	18.6 U	18.6 U	18.6 U	18.6 U
2,4,6-Trinitrotoluene	UG/KG	17.8 U	17.8 U	17.8 U	17.8 U	17.8 U
2,4-Dinitrotoluene	UG/KG	25.8 U	25.8 U	25.8 U	25.8 U	25.8 U
2,6-Dinitrotoluene	UG/KG	23.8 U	23.8 U	23.8 U	23.8 U	23.8 U
2-Amino-4,6-dinitrotoluene	UG/KG	23.35 U	23.35 U	23.35 U	23.35 U	23.35 U
2-Nitrotoluene	UG/KG	40.7 U	40.7 U	40.7 U	40.7 U	40.7 U
3-Nitrotoluene	UG/KG	40.85 U	40.85 U	40.85 U	40.85 U	40.85 U
4-Amino-2,6-dinitrotoluene	UG/KG	20.4 U	20.4 U	20.4 U	20.4 U	20.4 U
4-Nitrotoluene	UG/KG	43.6 U	43.6 U	43.6 U	43.6 U	43.6 U
HMX	UG/KG	35.25 U	35.25 U	35.25 U	35.25 U	35.25 U
Nitrobenzene	UG/KG	17.6 U	17.6 U	17.6 U	17.6 U	17.6 U
RDX	UG/KG	25.45 U	25.45 U	25.45 U	25.45 U	25.45 U
Tetryl	UG/KG	81.5 U	81.5 U	81.5 U	81.5 U	81.5 U
<u>MIREX</u>						
Mirex	UG/KG	990 U	995 UJ	925 UJ	980 U	955 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB25-00	41-OS-SB26-00	41-OS-SB27-00	41-OS-SB28-00	41-OS-SB29-00	41-OS-SB30-00	
Laboratory Sample ID:	9402088-01A	9402088-03A	9402088-05A	9402088-08A	9402071-03	9402071-05	
Date Sampled:					02/05/94	02/05/94	
Percent Solids	84.6	80.6	73	82.2	88.8	83.2	
SEMIVOLATILES							
1,2-Dichlorobenzene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
1,2,4-Trichlorobenzene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
1,3-Dichlorobenzene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
1,4-Dichlorobenzene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
2-Chloronaphthalene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
2-Chlorophenol	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
2-Methylnaphthalene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
2-Methylphenol	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
2-Nitroaniline	UG/KG	472 U	496 U	550 U	496 U	449.5 U	482.0 U
2-Nitrophenol	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
2,2'-oxybis-(1-chloropropane)	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
2,4-Dichlorophenol	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
2,4-Dimethylphenol	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
2,4-Dinitrophenol	UG/KG	472 U	496 U	550 U	496 U	449.5 U	482.0 U
2,4-Dinitrotoluene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
2,4,5-Trichlorophenol	UG/KG	472 U	496 U	550 U	496 U	449.5 U	482.0 U
2,4,6-Trichlorophenol	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
2,6-Dinitrotoluene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
3-Nitroaniline	UG/KG	472 U	496 U	550 U	496 U	449.5 U	482.0 U
3,3'-Dichlorobenzidine	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
4-Bromophenyl-phenylether	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
4-Chloro-3-methylphenol	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
4-Chloroaniline	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
4-Chlorophenyl phenyl ether	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
4-Methylphenol	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
4-Nitroaniline	UG/KG	472 U	496 U	550 U	496 U	449.5 U	482.0 U
4-Nitrophenol	UG/KG	472 U	496 U	550 U	496 U	449.5 U	482.0 U
4,6-Dinitro-2-methylphenol	UG/KG	472 U	496 U	550 U	496 U	449.5 U	482.0 U
Acenaphthene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
Acenaphthylene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
Anthracene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
Benzo[a]anthracene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
Benzo[a]pyrene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB25-00	41-OS-SB26-00	41-OS-SB27-00	41-OS-SB28-00	41-OS-SB29-00	41-OS-SB30-00
Laboratory Sample ID:	9402088-01A	9402088-03A	9402088-05A	9402088-08A	9402071-03	9402071-05
Date Sampled:					02/05/94	02/05/94
Percent Solids	84.6	80.6	73	82.2	88.8	83.2

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
Benzo[g,h,i]perylene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
Benzo[k]fluoranthene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
bis(2-Chloroethoxy) methane	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
bis(2-Chloroethyl) ether	UG/KG	194.5 U	204.5 U	226 U	94 J	185.5 U	199.0 U
bis(2-Ethylhexyl)phthalate	UG/KG	194.5 U	204.5 U	64 J	204.5 U	185.5 U	199.0 U
Butyl benzyl phthalate	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
Carbazole	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
Chrysene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
Dibenzofuran	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
Dibenz[a,h]anthracene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
Diethylphthalate	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
Dimethyl phthalate	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
di-n-Butylphthalate	UG/KG	86 J	99 J	86 J	58 J	185.5 U	92.0 J
di-n-Octylphthalate	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
Fluoranthene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
Fluorene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
Hexachlorobenzene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
Hexachlorobutadiene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
Hexachlorocyclopentadiene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
Hexachloroethane	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
Indeno[1,2,3-cd]pyrene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
Isophorone	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
Naphthalene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
Nitrobenzene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
N-Nitroso-di-n-propylamine	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
N-nitrosodiphenylamine	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
Pentachlorophenol	UG/KG	472 U	496 U	550 U	496 U	449.5 U	482.0 U
Phenanthrene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
Phenol	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U
Pyrene	UG/KG	194.5 U	204.5 U	226 U	204.5 U	185.5 U	199.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB25-00	41-OS-SB26-00	41-OS-SB27-00	41-OS-SB28-00	41-OS-SB29-00	41-OS-SB30-00	
Laboratory Sample ID:	9402088-01A	9402088-03A	9402088-05A	9402088-08A	9402071-03	9402071-05	
Date Sampled:					02/05/94	02/05/94	
Percent Solids	84.6	80.6	73	82.2	88.8	83.2	
VOLATILES							
Chloromethane	UG/KG	6 U	6 U	7 U	6 UJ	5.6 U	6.0 UJ
Bromomethane	UG/KG	6 U	6 U	7 U	6 UJ	5.6 U	6.0 UJ
Vinyl chloride	UG/KG	6 U	6 U	7 U	6 UJ	5.6 U	6.0 UJ
Chloroethane	UG/KG	6 U	6 U	7 U	6 UJ	5.6 U	6.0 UJ
Methylene chloride	UG/KG	6 U	3 U	7 U	6 UJ	5.50 U	6.0 UJ
Acetone	UG/KG	6 U	6 U	7 U	6 UJ	5.6 UJ	6.0 UJ
Carbon Disulfide	UG/KG	6 U	6 U	7 U	6 UJ	5.6 U	6.0 UJ
1,1-Dichloroethene	UG/KG	6 U	6 U	7 U	6 UJ	5.6 U	6.0 UJ
1,1-Dichloroethane	UG/KG	6 U	6 U	7 U	6 UJ	5.6 U	6.0 UJ
1,2-Dichloroethene(total)	UG/KG	6 U	6 U	7 U	6 UJ	5.6 U	6.0 UJ
Chloroform	UG/KG	6 U	6 U	7 U	6 UJ	5.6 U	6.0 UJ
1,2-Dichloroethane	UG/KG	6 U	6 U	7 U	6 UJ	5.6 U	6.0 UJ
2-Butanone	UG/KG	6 U	6 U	7 U	6 UJ	5.6 U	6.0 UJ
1,1,1-Trichloroethane	UG/KG	6 U	6 U	7 U	6 UJ	5.6 U	6.0 UJ
Carbon tetrachloride	UG/KG	6 U	6 U	7 U	6 UJ	5.6 U	6.0 UJ
Bromodichloromethane	UG/KG	6 U	6 U	7 U	6 UJ	5.6 U	6.0 UJ
1,2-Dichloropropane	UG/KG	6 U	6 U	7 U	6 UJ	5.6 U	6.0 UJ
cis-1,3-Dichloropropene	UG/KG	6 U	6 U	7 U	6 UJ	5.6 U	6.0 UJ
Trichloroethene	UG/KG	6 U	6 U	7 U	6 UJ	5.6 U	6.0 UJ
Dibromochloromethane	UG/KG	6 U	6 U	7 U	6 UJ	5.6 U	6.0 UJ
1,1,2-Trichloroethane	UG/KG	6 U	6 U	7 U	6 UJ	5.6 U	6.0 UJ
Benzene	UG/KG	6 U	6 U	7 U	6 UJ	5.6 U	6.0 UJ
trans-1,3-Dichloropropene	UG/KG	6 U	6 U	7 U	6 UJ	5.6 U	6.0 UJ
Bromoform	UG/KG	6 U	6 U	7 U	6 UJ	5.6 U	6.0 UJ
4-Methyl-2-pentanone	UG/KG	6 UJ	6 U	7 U	6 UJ	5.6 U	6.0 UJ
2-Hexanone	UG/KG	6 UJ	6 U	7 U	6 UJ	5.6 U	6.0 UJ
Tetrachloroethene	UG/KG	6 UJ	6 U	7 U	6 UJ	5.6 U	6.0 UJ
1,1,2,2-Tetrachloroethane	UG/KG	6 UJ	6 U	7 U	6 UJ	5.6 U	6.0 UJ
Toluene	UG/KG	4 J	6 U	7 U	6 UJ	5.6 U	6.0 UJ
Chlorobenzene	UG/KG	6 UJ	6 U	7 U	6 UJ	5.6 U	6.0 UJ
Ethylbenzene	UG/KG	6 UJ	6 U	7 U	6 UJ	5.6 U	6.0 UJ
Styrene	UG/KG	6 UJ	6 U	7 U	6 UJ	5.6 U	6.0 UJ
Xylenes (total)	UG/KG	6 UJ	6 U	7 U	6 UJ	5.6 U	6.0 UJ

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
DOWNSLOPE AND ONSITE SURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	41-OS-SB25-00	41-OS-SB26-00	41-OS-SB27-00	41-OS-SB28-00	41-OS-SB29-00	41-OS-SB30-00	
Laboratory Sample ID:	9402088-01A	9402088-03A	9402088-05A	9402088-08A	9402071-03	9402071-05	
Date Sampled:					02/05/94	02/05/94	
Percent Solids	84.6	80.6	73	82.2	88.8	83.2	
<u>PESTICIDE/PCBS</u>							
alpha-BHC	UG/KG	1 UJ	1.05 UJ	1.165 UJ	5.185 UJ	0.95 UJ	1.02 UJ
beta-BHC	UG/KG	1 UJ	1.05 UJ	1.165 UJ	5.185 UJ	0.95 UJ	1.02 UJ
delta-BHC	UG/KG	1 UJ	0.03 NJ	1.165 UJ	5.185 UJ	0.95 UJ	1.02 UJ
Lindane (gamma-BHC)	UG/KG	1 UJ	1.05 UJ	1.165 UJ	5.185 UJ	0.95 UJ	1.02 UJ
Heptachlor	UG/KG	0.3 NJ	1.05 UJ	1.165 UJ	5.185 UJ	0.95 UJ	1.02 UJ
Aldrin	UG/KG	1 UJ	1.05 UJ	1.165 UJ	5.185 UJ	0.95 UJ	1.02 UJ
Heptachlor epoxide	UG/KG	1 UJ	1.05 UJ	1.165 UJ	5.185 UJ	0.95 UJ	1.02 UJ
Endosulfan I	UG/KG	1 UJ	1.05 UJ	1.165 UJ	5.185 UJ	0.95 UJ	1.02 UJ
Dieldrin	UG/KG	1.94 UJ	2.035 UJ	2.26 UJ	10.06 UJ	1.85 UJ	1.98 UJ
4,4'-DDE	UG/KG	1.94 UJ	0.12 J	0.51 NJ	10.06 UJ	0.790 J	43.6 J
Endrin	UG/KG	1.94 UJ	2.035 UJ	2.26 UJ	10.06 UJ	1.85 UJ	1.98 UJ
Endosulfan II	UG/KG	1.94 UJ	2.035 UJ	2.26 UJ	10.06 UJ	1.85 UJ	1.98 UJ
4,4'-DDD	UG/KG	1.94 UJ	0.37 J	2.26 UJ	10.06 UJ	1.85 UJ	1.98 UJ
Endosulfan sulfate	UG/KG	1.94 UJ	2.035 UJ	2.26 UJ	10.06 UJ	1.85 UJ	1.98 UJ
4,4'-DDT	UG/KG	1.94 UJ	2.035 UJ	1.7 J	2 J	0.410 NJ	20.1 J
Methoxychlor	UG/KG	10 UJ	10.5 UJ	11.65 UJ	51.85 UJ	9.5 UJ	10.2 UJ
Endrin ketone	UG/KG	1.94 UJ	2.035 UJ	2.26 UJ	10.06 UJ	1.85 UJ	1.98 UJ
Endrin aldehyde	UG/KG	1.94 UJ	2.035 UJ	2.26 UJ	10.06 UJ	1.85 UJ	1.98 UJ
alpha-Chlordane	UG/KG	1 UJ	0.08 J	1.165 UJ	5.185 UJ	0.95 UJ	1.02 UJ
gamma-Chlordane	UG/KG	1 UJ	0.06 NJ	1.165 UJ	5.185 UJ	0.95 UJ	1.02 UJ
Toxaphene	UG/KG	100 UJ	105 UJ	116.5 UJ	518.3 UJ	95.0 UJ	102.0 UJ
Aroclor 1016	UG/KG	19.4 UJ	20.35 UJ	22.6 UJ	100.6 UJ	18.5 UJ	19.8 UJ
Aroclor 1221	UG/KG	39.4 UJ	41.35 UJ	45.9 UJ	204.25 UJ	37.5 UJ	40.2 UJ
Aroclor 1232	UG/KG	19.4 UJ	20.35 UJ	22.6 UJ	100.6 UJ	18.5 UJ	19.8 UJ
Aroclor 1242	UG/KG	19.4 UJ	20.35 UJ	22.6 UJ	100.6 UJ	18.5 UJ	19.8 UJ
Aroclor 1248	UG/KG	19.4 UJ	20.35 UJ	22.6 UJ	100.6 UJ	18.5 UJ	19.8 UJ
Aroclor 1254	UG/KG	19.4 UJ	20.35 UJ	22.6 UJ	100.6 UJ	18.5 UJ	19.8 UJ
Aroclor 1260	UG/KG	19.4 UJ	20.35 UJ	22.6 UJ	100.6 UJ	18.5 UJ	19.8 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB25-00	41-OS-SB26-00	41-OS-SB27-00	41-OS-SB28-00	41-OS-SB29-00	41-OS-SB30-00
Laboratory Sample ID:	9402088-01A	9402088-03A	9402088-05A	9402088-08A	9402071-03	9402071-05
Date Sampled:					02/05/94	02/05/94
Percent Solids	84.6	80.6	73	82.2	88.8	83.2
CHEMICAL SURETY						
Acetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Chloroacetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Hydroxyacetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Bis(2'-chloroethyl)disulfide	UG/KG	N/A	N/A	N/A	N/A	N/A
Bis(2'-chloroethyl)trisulfide	UG/KG	N/A	N/A	N/A	N/A	N/A
1,4-Dithiane	UG/KG	N/A	N/A	N/A	N/A	N/A
1,4-Oxathiane	UG/KG	N/A	N/A	N/A	N/A	N/A
THIODIGLYCOL						
Thiodiglycol	MG/KG	N/A	N/A	N/A	N/A	N/A
ORDNANCE						
1,3,5-Trinitrobenzene	UG/KG	N/A	N/A	N/A	N/A	N/A
1,3-Dinitrobenzene	UG/KG	N/A	N/A	N/A	N/A	N/A
2,4,6-Trinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
2,4-Dinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
2,6-Dinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
2-Amino-4,6-dinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
2-Nitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
3-Nitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
4-Amino-2,6-dinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
4-Nitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
HMX	UG/KG	N/A	N/A	N/A	N/A	N/A
Nitrobenzene	UG/KG	N/A	N/A	N/A	N/A	N/A
RDX	UG/KG	N/A	N/A	N/A	N/A	N/A
Tetryl	UG/KG	N/A	N/A	N/A	N/A	N/A
MIREX						
Mirex	UG/KG	N/A	N/A	N/A	185.5 U	199.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB31-00	41-OS-SB32-00	41-OS-SB33-00	41-OS-SB34-00	
Laboratory Sample ID:	9402088-10A	9402088-12A	9402071-08	9402088-15A	
Date Sampled:			02/05/94		
Percent Solids	69.5	85.5	78.1	77.7	
SEMIVOLATILES					
1,2-Dichlorobenzene	UG/KG	236 U	191.5 U	211.5 UJ	211 U
1,2,4-Trichlorobenzene	UG/KG	236 U	191.5 U	211.5 UJ	211 U
1,3-Dichlorobenzene	UG/KG	236 U	191.5 U	211.5 UJ	211 U
1,4-Dichlorobenzene	UG/KG	236 U	191.5 U	211.5 UJ	211 U
2-Chloronaphthalene	UG/KG	236 U	191.5 U	211.5 UJ	211 U
2-Chlorophenol	UG/KG	236 U	191.5 U	211.5 UJ	211 U
2-Methylnaphthalene	UG/KG	236 U	191.5 U	211.5 UJ	211 U
2-Methylphenol	UG/KG	236 U	191.5 U	211.5 UJ	211 U
2-Nitroaniline	UG/KG	570 U	464 U	510.0 UJ	510 U
2-Nitrophenol	UG/KG	236 U	191.5 U	211.5 UJ	211 U
2,2'-oxybis-(1-chloropropane)	UG/KG	236 U	191.5 UJ	211.5 UJ	211 UJ
2,4-Dichlorophenol	UG/KG	236 U	191.5 U	211.5 UJ	211 U
2,4-Dimethylphenol	UG/KG	236 U	191.5 U	211.5 UJ	211 U
2,4-Dinitrophenol	UG/KG	570 U	464 U	510.0 UJ	510 U
2,4-Dinitrotoluene	UG/KG	236 U	191.5 U	211.5 UJ	211 U
2,4,5-Trichlorophenol	UG/KG	570 U	464 U	510.0 UJ	510 U
2,4,6-Trichlorophenol	UG/KG	236 U	191.5 U	211.5 UJ	211 U
2,6-Dinitrotoluene	UG/KG	236 U	191.5 U	211.5 UJ	211 U
3-Nitroaniline	UG/KG	570 U	464 U	510.0 UJ	510 U
3,3'-Dichlorobenzidine	UG/KG	236 U	191.5 UJ	211.5 UJ	211 UJ
4-Bromophenyl-phenylether	UG/KG	236 U	191.5 U	211.5 UJ	211 U
4-Chloro-3-methylphenol	UG/KG	236 U	191.5 U	211.5 UJ	211 U
4-Chloroaniline	UG/KG	236 U	191.5 U	211.5 UJ	211 U
4-Chlorophenyl phenyl ether	UG/KG	236 U	191.5 U	211.5 UJ	211 U
4-Methylphenol	UG/KG	236 U	191.5 U	211.5 UJ	211 U
4-Nitroaniline	UG/KG	570 U	464 U	510.0 UJ	510 U
4-Nitrophenol	UG/KG	570 U	464 U	510.0 UJ	510 U
4,6-Dinitro-2-methylphenol	UG/KG	570 U	464 U	510.0 UJ	510 U
Acenaphthene	UG/KG	236 U	191.5 U	211.5 UJ	211 U
Acenaphthylene	UG/KG	236 U	191.5 U	211.5 UJ	211 U
Anthracene	UG/KG	236 U	191.5 U	211.5 UJ	211 U
Benzo[a]anthracene	UG/KG	236 U	191.5 U	211.5 UJ	211 U
Benzo[a]pyrene	UG/KG	236 U	191.5 U	211.5 UJ	211 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB31-00	41-OS-SB32-00	41-OS-SB33-00	41-OS-SB34-00
Laboratory Sample ID:	9402088-10A	9402088-12A	9402071-08	9402088-15A
Date Sampled:			02/05/94	
Percent Solids	69.5	85.5	78.1	77.7

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/KG	236 U	191.5 U	211.5 UJ	211 U
Benzo[g,h,i]perylene	UG/KG	236 U	191.5 U	211.5 UJ	211 U
Benzo[k]fluoranthene	UG/KG	236 U	191.5 U	211.5 UJ	211 U
bis(2-Chloroethoxy) methane	UG/KG	236 U	191.5 U	211.5 UJ	211 U
bis(2-Chloroethyl) ether	UG/KG	59 J	191.5 U	211.5 UJ	220 J
bis(2-Ethylhexyl)phthalate	UG/KG	236 U	47 J	211.5 UJ	211 U
Butyl benzyl phthalate	UG/KG	236 U	191.5 U	211.5 UJ	211 U
Carbazole	UG/KG	236 U	191.5 U	211.5 UJ	211 U
Chrysene	UG/KG	236 U	191.5 U	211.5 UJ	211 U
Dibenzofuran	UG/KG	236 U	191.5 U	211.5 UJ	211 U
Dibenz[a,h]anthracene	UG/KG	236 U	191.5 U	211.5 UJ	211 U
Diethylphthalate	UG/KG	236 U	191.5 U	211.5 UJ	211 U
Dimethyl phthalate	UG/KG	236 U	191.5 U	211.5 UJ	211 U
di-n-Butylphthalate	UG/KG	236 U	43 J	211.5 UJ	211 U
di-n-Octylphthalate	UG/KG	236 U	191.5 U	211.5 UJ	211 U
Fluoranthene	UG/KG	236 U	191.5 U	211.5 UJ	211 U
Fluorene	UG/KG	236 U	191.5 U	211.5 UJ	211 U
Hexachlorobenzene	UG/KG	236 U	191.5 U	211.5 UJ	211 U
Hexachlorobutadiene	UG/KG	236 U	191.5 U	211.5 UJ	211 U
Hexachlorocyclopentadiene	UG/KG	236 U	191.5 U	211.5 UJ	211 U
Hexachloroethane	UG/KG	236 U	191.5 U	211.5 UJ	211 U
Indeno[1,2,3-cd]pyrene	UG/KG	236 U	191.5 U	211.5 UJ	211 U
Isophorone	UG/KG	236 U	191.5 U	211.5 UJ	211 U
Naphthalene	UG/KG	236 U	191.5 U	211.5 UJ	211 U
Nitrobenzene	UG/KG	236 U	191.5 U	211.5 UJ	211 U
N-Nitroso-di-n-propylamine	UG/KG	236 U	191.5 U	211.5 UJ	211 U
N-nitrosodiphenylamine	UG/KG	236 U	191.5 U	211.5 UJ	211 U
Pentachlorophenol	UG/KG	570 U	464 U	510.0 UJ	510 U
Phenanthrene	UG/KG	236 U	191.5 U	211.5 UJ	211 U
Phenol	UG/KG	236 U	191.5 U	211.5 UJ	211 U
Pyrene	UG/KG	236 U	191.5 U	211.5 UJ	211 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB31-00	41-OS-SB32-00	41-OS-SB33-00	41-OS-SB34-00	
Laboratory Sample ID:	9402088-10A	9402088-12A	9402071-08	9402088-15A	
Date Sampled:			02/05/94		
Percent Solids	69.5	85.5	78.1	77.7	
<u>VOLATILES</u>					
Chloromethane	UG/KG	7 U	6 U	6.4 U	6.5 UJ
Bromomethane	UG/KG	7 U	6 U	6.4 U	6.5 UJ
Vinyl chloride	UG/KG	7 U	6 U	6.4 U	6.5 UJ
Chloroethane	UG/KG	7 U	6 U	6.4 U	6.5 UJ
Methylene chloride	UG/KG	7 U	6 U	6.50 U	6.5 UJ
Acetone	UG/KG	7 U	7 J	6.4 UJ	6.5 UJ
Carbon Disulfide	UG/KG	7 U	6 U	6.4 U	6.5 UJ
1,1-Dichloroethene	UG/KG	7 U	6 U	6.4 U	6.5 UJ
1,1-Dichloroethane	UG/KG	7 U	6 U	6.4 U	6.5 UJ
1,2-Dichloroethene(total)	UG/KG	7 U	6 U	6.4 U	6.5 UJ
Chloroform	UG/KG	7 U	6 U	6.4 U	6.5 UJ
1,2-Dichloroethane	UG/KG	7 U	6 U	6.4 U	6.5 UJ
2-Butanone	UG/KG	7 U	6 U	6.4 U	6.5 UJ
1,1,1-Trichloroethane	UG/KG	7 U	6 U	6.4 U	6.5 U
Carbon tetrachloride	UG/KG	7 U	6 U	6.4 U	6.5 U
Bromodichloromethane	UG/KG	7 U	6 U	6.4 U	6.5 U
1,2-Dichloropropane	UG/KG	7 U	6 U	6.4 U	6.5 U
cis-1,3-Dichloropropene	UG/KG	7 U	6 U	6.4 U	6.5 U
Trichloroethene	UG/KG	7 U	6 U	6.4 U	6.5 U
Dibromochloromethane	UG/KG	7 U	6 U	6.4 U	6.5 U
1,1,2-Trichloroethane	UG/KG	7 U	6 U	6.4 U	6.5 U
Benzene	UG/KG	7 U	6 U	6.4 U	6.5 U
trans-1,3-Dichloropropene	UG/KG	7 U	6 U	6.4 U	6.5 U
Bromoform	UG/KG	7 U	6 U	6.4 U	6.5 U
4-Methyl-2-pentanone	UG/KG	7 U	6 U	6.4 U	6.5 UJ
2-Hexanone	UG/KG	7 U	6 U	6.4 U	6.5 UJ
Tetrachloroethene	UG/KG	7 U	6 U	6.4 U	6.5 UJ
1,1,2,2-Tetrachloroethane	UG/KG	7 U	6 U	6.4 U	6.5 UJ
Toluene	UG/KG	7 U	6 U	6.4 U	6.5 UJ
Chlorobenzene	UG/KG	7 U	6 U	6.4 U	6.5 UJ
Ethylbenzene	UG/KG	7 U	6 U	6.4 U	6.5 UJ
Styrene	UG/KG	7 U	6 U	6.4 U	6.5 UJ
Xylenes (total)	UG/KG	7 U	6 U	6.4 U	6.5 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB31-00	41-OS-SB32-00	41-OS-SB33-00	41-OS-SB34-00	
Laboratory Sample ID:	9402088-10A	9402088-12A	9402071-08	9402088-15A	
Date Sampled:			02/05/94		
Percent Solids	69.5	85.5	78.1	77.7	
<u>PESTICIDE/PCBS</u>					
alpha-BHC	UG/KG	1.23 UJ	1 UJ	1.09 UJ	1.035 UJ
beta-BHC	UG/KG	1.23 UJ	1 UJ	1.09 UJ	1.035 UJ
delta-BHC	UG/KG	1.23 UJ	1 UJ	1.09 UJ	1.035 UJ
Lindane (gamma-BHC)	UG/KG	1.23 UJ	0.22 NJ	1.09 UJ	1.035 UJ
Heptachlor	UG/KG	1.23 UJ	1 UJ	1.090 UJ	1.035 UJ
Aldrin	UG/KG	1.23 UJ	1 UJ	1.09 UJ	1.035 UJ
Heptachlor epoxide	UG/KG	1.23 UJ	1 UJ	1.09 UJ	1.035 UJ
Endosulfan I	UG/KG	1.23 UJ	1 UJ	1.09 UJ	1.035 UJ
Dieldrin	UG/KG	2.39 UJ	0.2 NJ	2.11 UJ	2.01 UJ
4,4'-DDE	UG/KG	2.39 UJ	0.56 J	2.11 UJ	4.11 J
Endrin	UG/KG	2.39 UJ	1.94 UJ	2.11 UJ	2.01 UJ
Endosulfan II	UG/KG	2.39 UJ	1.94 UJ	2.11 UJ	2.01 UJ
4,4'-DDD	UG/KG	2.39 UJ	1.94 UJ	2.11 UJ	2.01 UJ
Endosulfan sulfate	UG/KG	2.39 UJ	0.32 J	2.11 UJ	2.01 UJ
4,4'-DDT	UG/KG	2.39 UJ	1.94 UJ	0.910 NJ	3.67 J
Methoxychlor	UG/KG	12.3 UJ	10 UJ	10.9 UJ	10.35 UJ
Endrin ketone	UG/KG	2.39 UJ	1.94 UJ	2.11 UJ	2.01 UJ
Endrin aldehyde	UG/KG	2.39 UJ	1.94 UJ	2.11 UJ	2.01 UJ
alpha-Chlordane	UG/KG	1.23 UJ	1 UJ	1.09 UJ	1.035 UJ
gamma-Chlordane	UG/KG	1.23 UJ	1 UJ	1.09 UJ	1.035 UJ
Toxaphene	UG/KG	123 UJ	100 UJ	109.0 UJ	103.5 UJ
Aroclor 1016	UG/KG	23.9 UJ	19.4 UJ	21.1 UJ	20.1 UJ
Aroclor 1221	UG/KG	48.55 UJ	39.4 UJ	42.9 UJ	40.85 UJ
Aroclor 1232	UG/KG	23.9 UJ	19.4 UJ	21.1 UJ	20.1 UJ
Aroclor 1242	UG/KG	23.9 UJ	19.4 UJ	21.1 UJ	20.1 UJ
Aroclor 1248	UG/KG	23.9 UJ	19.4 UJ	21.1 UJ	20.1 UJ
Aroclor 1254	UG/KG	23.9 UJ	19.4 UJ	21.1 UJ	20.1 UJ
Aroclor 1260	UG/KG	23.9 UJ	19.4 UJ	21.1 UJ	20.1 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB31-00	41-OS-SB32-00	41-OS-SB33-00	41-OS-SB34-00
Laboratory Sample ID:	9402088-10A	9402088-12A	9402071-08	9402088-15A
Date Sampled:			02/05/94	
Percent Solids	69.5	85.5	78.1	77.7
CHEMICAL SURETY				
Acetophenone	UG/KG	N/A	N/A	N/A
Chloroacetophenone	UG/KG	N/A	N/A	N/A
Hydroxyacetophenone	UG/KG	N/A	N/A	N/A
Bis(2'-chloroethyl)disulfide	UG/KG	N/A	N/A	N/A
Bis(2'-chloroethyl)trisulfide	UG/KG	N/A	N/A	N/A
1,4-Dithiane	UG/KG	N/A	N/A	N/A
1,4-Oxathiane	UG/KG	N/A	N/A	N/A
THIODIGLYCOL				
Thiodiglycol	MG/KG	N/A	N/A	N/A
ORDNANCE				
1,3,5-Trinitrobenzene	UG/KG	N/A	N/A	N/A
1,3-Dinitrobenzene	UG/KG	N/A	N/A	N/A
2,4,6-Trinitrotoluene	UG/KG	N/A	N/A	N/A
2,4-Dinitrotoluene	UG/KG	N/A	N/A	N/A
2,6-Dinitrotoluene	UG/KG	N/A	N/A	N/A
2-Amino-4,6-dinitrotoluene	UG/KG	N/A	N/A	N/A
2-Nitrotoluene	UG/KG	N/A	N/A	N/A
3-Nitrotoluene	UG/KG	N/A	N/A	N/A
4-Amino-2,6-dinitrotoluene	UG/KG	N/A	N/A	N/A
4-Nitrotoluene	UG/KG	N/A	N/A	N/A
HMX	UG/KG	N/A	N/A	N/A
Nitrobenzene	UG/KG	N/A	N/A	N/A
RDX	UG/KG	N/A	N/A	N/A
Tetryl	UG/KG	N/A	N/A	N/A
MIREX				
Mirex	UG/KG	N/A	N/A	211.5 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:						
Laboratory Sample ID:						
Date Sampled:						
Percent Solids		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	ND	NA	NA	NA	NA
1,2,4-Trichlorobenzene	UG/KG	ND	NA	NA	NA	NA
1,3-Dichlorobenzene	UG/KG	ND	NA	NA	NA	NA
1,4-Dichlorobenzene	UG/KG	180 J	367.8	1165.4	657.1	291.4
2-Chloronaphthalene	UG/KG	ND	NA	NA	NA	NA
2-Chlorophenol	UG/KG	ND	NA	NA	NA	NA
2-Methylnaphthalene	UG/KG	55 J	365.1	1166.0	654.6	292.6
2-Methylphenol	UG/KG	ND	NA	NA	NA	NA
2-Nitroaniline	UG/KG	ND	NA	NA	NA	NA
2-Nitrophenol	UG/KG	ND	NA	NA	NA	NA
2,2'-oxybis-(1-chloropropane)	UG/KG	ND	NA	NA	NA	NA
2,4-Dichlorophenol	UG/KG	ND	NA	NA	NA	NA
2,4-Dimethylphenol	UG/KG	ND	NA	NA	NA	NA
2,4-Dinitrophenol	UG/KG	ND	NA	NA	NA	NA
2,4-Dinitrotoluene	UG/KG	ND	NA	NA	NA	NA
2,4,5-Trichlorophenol	UG/KG	ND	NA	NA	NA	NA
2,4,6-Trichlorophenol	UG/KG	ND	NA	NA	NA	NA
2,6-Dinitrotoluene	UG/KG	ND	NA	NA	NA	NA
3-Nitroaniline	UG/KG	ND	NA	NA	NA	NA
3,3'-Dichlorobenzidine	UG/KG	ND	NA	NA	NA	NA
4-Bromophenyl-phenylether	UG/KG	ND	NA	NA	NA	NA
4-Chloro-3-methylphenol	UG/KG	ND	NA	NA	NA	NA
4-Chloroaniline	UG/KG	ND	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	UG/KG	ND	NA	NA	NA	NA
4-Methylphenol	UG/KG	ND	NA	NA	NA	NA
4-Nitroaniline	UG/KG	960 R	NA	NA	NA	NA
4-Nitrophenol	UG/KG	960 R	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	UG/KG	ND	NA	NA	NA	NA
Acenaphthene	UG/KG	380 J	369.8	1165.6	659.2	296.4
Acenaphthylene	UG/KG	ND	NA	NA	NA	NA
Anthracene	UG/KG	510	369.6	1166.4	659.2	305.9
Benzo[a]anthracene	UG/KG	2400	417.1	1203.0	715.7	345.0
Benzo[a]pyrene	UG/KG	2000	403.3	1190.7	698.9	344.5

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled: Percent Solids		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
SEMIVOLATILES Cont.						
	Benzo[b]fluoranthene	UG/KG 2500	410.6	1208.6	710.7	355.9
	Benzo[g,h,i]perylene	UG/KG 1600	393.7	1180.3	686.8	332.9
	Benzo[k]fluoranthene	UG/KG 1700	393.7	1183.4	687.6	339.1
	bis(2-Chloroethoxy) methane	UG/KG ND	NA	NA	NA	NA
	bis(2-Chloroethyl) ether	UG/KG 220 J	354.1	1168.2	644.2	289.7
	bis(2-Ethylhexyl)phthalate	UG/KG 580 J	355.1	1170.1	645.6	312.8
	Butyl benzyl phthalate	UG/KG ND	NA	NA	NA	NA
	Carbazole	UG/KG 330 J	367.7	1165.8	657.2	301.2
	Chrysene	UG/KG 2300	411.1	1200.7	709.2	354.7
	Dibenzofuran	UG/KG 130 J	367.1	1165.6	656.5	290.9
	Dibenz[a,h]anthracene	UG/KG 57 J	365.1	1166.0	654.6	292.4
	Diethylphthalate	UG/KG ND	NA	NA	NA	NA
	Dimethyl phthalate	UG/KG ND	NA	NA	NA	NA
	di-n-Butylphthalate	UG/KG 230 J	346.6	1184.0	643.8	293.1
	di-n-Octylphthalate	UG/KG 200 J	355.0	1168.1	645.0	294.7
	Fluoranthene	UG/KG 3500 R	252.7	357.6	342.5	274.1
	Fluorene	UG/KG 280 J	367.4	1165.7	656.8	293.5
	Hexachlorobenzene	UG/KG ND	NA	NA	NA	NA
	Hexachlorobutadiene	UG/KG ND	NA	NA	NA	NA
	Hexachlorocyclopentadiene	UG/KG ND	NA	NA	NA	NA
	Hexachloroethane	UG/KG ND	NA	NA	NA	NA
	Indeno[1,2,3-cd]pyrene	UG/KG 76 J	363.3	1166.4	652.9	290.8
	Isophorone	UG/KG ND	NA	NA	NA	NA
	Naphthalene	UG/KG 70 J	365.4	1165.9	654.9	291.3
	Nitrobenzene	UG/KG ND	NA	NA	NA	NA
	N-Nitroso-di-n-propylamine	UG/KG ND	NA	NA	NA	NA
	N-nitrosodiphenylamine	UG/KG ND	NA	NA	NA	NA
	Pentachlorophenol	UG/KG ND	NA	NA	NA	NA
	Phenanthrene	UG/KG 2600	287.4	424.5	392.8	295.9
	Phenol	UG/KG ND	NA	NA	NA	NA
	Pyrene	UG/KG 4400 R	245.6	321.2	326.3	264.4

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled: Percent Solids		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
<u>VOLATILES</u>						
Chloromethane	UG/KG	ND	NA	NA	NA	NA
Bromomethane	UG/KG	ND	NA	NA	NA	NA
Vinyl chloride	UG/KG	ND	NA	NA	NA	NA
Chloroethane	UG/KG	ND	NA	NA	NA	NA
Methylene chloride	UG/KG	5 J	7.0	4.5	8.1	8.1
Acetone	UG/KG	2800	69.3	411.6	171.5	20.9
Carbon Disulfide	UG/KG	ND	NA	NA	NA	NA
1,1-Dichloroethene	UG/KG	ND	NA	NA	NA	NA
1,1-Dichloroethane	UG/KG	ND	NA	NA	NA	NA
1,2-Dichloroethene(total)	UG/KG	ND	NA	NA	NA	NA
Chloroform	UG/KG	ND	NA	NA	NA	NA
1,2-Dichloroethane	UG/KG	ND	NA	NA	NA	NA
2-Butanone	UG/KG	13 R	NA	NA	NA	NA
1,1,1-Trichloroethane	UG/KG	ND	NA	NA	NA	NA
Carbon tetrachloride	UG/KG	ND	NA	NA	NA	NA
Bromodichloromethane	UG/KG	ND	NA	NA	NA	NA
1,2-Dichloropropane	UG/KG	ND	NA	NA	NA	NA
cis-1,3-Dichloropropene	UG/KG	ND	NA	NA	NA	NA
Trichloroethene	UG/KG	ND	NA	NA	NA	NA
Dibromochloromethane	UG/KG	ND	NA	NA	NA	NA
1,1,2-Trichloroethane	UG/KG	ND	NA	NA	NA	NA
Benzene	UG/KG	ND	NA	NA	NA	NA
trans-1,3-Dichloropropene	UG/KG	ND	NA	NA	NA	NA
Bromoform	UG/KG	ND	NA	NA	NA	NA
4-Methyl-2-pentanone	UG/KG	ND	NA	NA	NA	NA
2-Hexanone	UG/KG	ND	NA	NA	NA	NA
Tetrachloroethene	UG/KG	ND	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	UG/KG	ND	NA	NA	NA	NA
Toluene	UG/KG	4 J	5.7	1.0	6.0	6.3
Chlorobenzene	UG/KG	ND	NA	NA	NA	NA
Ethylbenzene	UG/KG	ND	NA	NA	NA	NA
Styrene	UG/KG	ND	NA	NA	NA	NA
Xylenes (total)	UG/KG	ND	NA	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:						
Laboratory Sample ID:						
Date Sampled:						
Percent Solids		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
PESTICIDE/PCBS						
alpha-BHC	UG/KG	2.07 R	NA	NA	NA	NA
beta-BHC	UG/KG	4.72 NJ	1.4	1.2	1.8	
delta-BHC	UG/KG	2.07 R	1.2	0.9	1.4	1.5
Lindane (gamma-BHC)	UG/KG	2.07 R	1.2	0.9	1.4	1.3
Heptachlor	UG/KG	7.16 J	1.3	1.2	1.6	1.5
Aldrin	UG/KG	2.07 R	NA	NA	NA	NA
Heptachlor epoxide	UG/KG	9.6 NJ	1.4	1.5	1.8	1.5
Endosulfan I	UG/KG	2.07 R	NA	NA	NA	NA
Dieldrin	UG/KG	13.03 NJ	2.5	2.3	3.1	3.1
4,4'-DDE	UG/KG	87.6 J	10.8	21.0	16.0	20.8
Endrin	UG/KG	4.02 R	2.3	1.7	2.8	2.5
Endosulfan II	UG/KG	5.01 J	2.6	1.8	3.1	3.0
4,4'-DDD	UG/KG	92 J	9.2	20.0	14.3	10.8
Endosulfan sulfate	UG/KG	4.02 R	2.3	1.7	2.8	2.6
4,4'-DDT	UG/KG	277 J	12.5	41.9	22.9	13.4
Methoxychlor	UG/KG	20.7 R	11.4	8.8	13.6	13.5
Endrin ketone	UG/KG	4.02 R	2.3	1.7	2.7	2.5
Endrin aldehyde	UG/KG	4.02 R	2.3	1.8	2.7	2.5
alpha-Chlordane	UG/KG	92.7 J	3.2	13.5	6.6	2.5
gamma-Chlordane	UG/KG	93.5 J	3.3	13.8	6.7	2.4
Toxaphene	UG/KG	207 R	NA	NA	NA	NA
Aroclor 1016	UG/KG	40.2 R	NA	NA	NA	NA
Aroclor 1221	UG/KG	81.7 R	NA	NA	NA	NA
Aroclor 1232	UG/KG	40.2 R	NA	NA	NA	NA
Aroclor 1242	UG/KG	82.9 J	24.6	18.9	29.4	26.6
Aroclor 1248	UG/KG	40.2 R	NA	NA	NA	NA
Aroclor 1254	UG/KG	40.2 R	NA	NA	NA	NA
Aroclor 1260	UG/KG	58.4 J	24.1	17.4	28.5	25.8

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
DOWNSLOPE AND ONSITE SURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:						LOG NORMAL
Laboratory Sample ID:					UPPER 95%	UPPER 95%
Date Sampled:		MAXIMUM	ARITHMETIC	STANDARD	CONFIDENCE	CONFIDENCE
Percent Solids		DETECTED	MEAN	DEVIATION	INTERVAL	INTERVAL
CHEMICAL SURETY						
Acetophenone	UG/KG	ND	NA	NA	NA	NA
Chloroacetophenone	UG/KG	ND	NA	NA	NA	NA
Hydroxyacetophenone	UG/KG	ND	NA	NA	NA	NA
Bis(2'-chloroethyl)disulfide	UG/KG	ND	NA	NA	NA	NA
Bis(2'-chloroethyl)trisulfide	UG/KG	ND	NA	NA	NA	NA
1,4-Dithiane	UG/KG	ND	NA	NA	NA	NA
1,4-Oxathiane	UG/KG	ND	NA	NA	NA	NA
THIODIGLYCOL						
Thiodiglycol	MG/KG	ND	NA	NA	NA	NA
ORDNANCE						
1,3,5-Trinitrobenzene	UG/KG	40.2 R	20.1	0.0	20.1	NA
1,3-Dinitrobenzene	UG/KG	824 NJ	43.8	142.4	86.5	34.1
2,4,6-Trinitrotoluene	UG/KG	35.6 R	17.8	0.0	17.8	NA
2,4-Dinitrotoluene	UG/KG	51.6 R	25.8	0.0	25.8	NA
2,6-Dinitrotoluene	UG/KG	47.6 R	23.8	0.0	23.8	NA
2-Amino-4,6-dinitrotoluene	UG/KG	46.7 R	23.3	0.0	23.3	NA
2-Nitrotoluene	UG/KG	81.4 R	40.7	0.0	40.7	NA
3-Nitrotoluene	UG/KG	81.7 R	40.8	0.0	40.8	NA
4-Amino-2,6-dinitrotoluene	UG/KG	40.8 R	20.4	0.0	20.4	NA
4-Nitrotoluene	UG/KG	87.2 R	43.6	0.0	43.6	NA
HMX	UG/KG	70.5 R	35.3	0.0	35.3	NA
Nitrobenzene	UG/KG	35.2 R	17.6	0.0	17.6	NA
RDX	UG/KG	50.9 R	25.5	0.0	25.5	NA
Tetryl	UG/KG	163 R	81.5	0.0	81.5	NA
MIREX						
Mirex	UG/KG	ND	NA	NA	NA	NA

APPENDIX P.2
SITE 41 DOWNSLOPE AND ON-SITE SURFACE SOIL INORGANICS

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL INORGANICS

Client Sample ID:	41-DS-SB01-00	41-DS-SB02-00	41-DS-SB03-00	41-DS-SB04-00	41-DS-SB05-00	41-DS-SB06-00	
Laboratory Sample ID:	9402042-10A	9402043-09	9402043-10	9402042-11A	9402042-12A	9402042-13A	
Date Sampled:							
Percent Solids	87.1	85.5	77.2	89.9	88.3	86.9	
	UNITS						
Aluminum	MG/KG	4080 J	2650	3140	1430 J	3390 J	4190 J
Antimony	MG/KG	0.905 UJ	0.925 UJ	2.18 J	0.88 UJ	0.895 UJ	0.91 UJ
Arsenic	MG/KG	0.998	0.339 UJ	0.3755 U	0.3225 U	0.3285 U	0.3335 U
Barium	MG/KG	4.32	6.53	7.47	3.78	13.6	11.9
Beryllium	MG/KG	0.087 U	0.095 U	0.105 U	0.0845 U	0.086 U	0.0875 U
Cadmium	MG/KG	0.366 U	0.373 U	0.413 U	0.355 U	0.361 U	0.367 U
Calcium	MG/KG	165	135	162	37.2	16.2 U	16.45 U
Chromium	MG/KG	5.44	0.97 U	2.85	0.925 U	2.25	2.68
Cobalt	MG/KG	1.835 U	1.87 U	2.07 U	1.78 U	1.81 U	1.84 U
Copper	MG/KG	1.87 U	1.905 U	2.11 U	1.815 U	1.845 U	1.875 U
Iron	MG/KG	3540 J	1600	722	849 J	2080 J	1720 J
Lead	MG/KG	3.67 J	4.67 J	9.66 J	2.57 J	6.61 J	6.79 J
Magnesium	MG/KG	93	96.3	75.6	32.5	64.2	85
Manganese	MG/KG	1.67 J	6.27	3.63	0.79 UJ	4.89 J	10.5 J
Mercury	MG/KG	0.045 U	0.077	0.108	0.0575 U	0.051 U	0.057 U
Nickel	MG/KG	3.3 U	3.35 U	3.75 U	3.2 U	3.25 U	3.3 U
Potassium	MG/KG	85.5 U	201	96.5 U	83 U	84.5 U	85.5 U
Selenium	MG/KG	0.2905 UJ	0.296 U	0.3275 UJ	0.2815 U	0.2865 U	0.291 U
Silver	MG/KG	0.1835 UJ	0.187 U	0.207 U	0.178 UJ	0.181 UJ	0.184 UJ
Sodium	MG/KG	41.2 U	42 U	46.5 U	39.95 U	40.65 U	41.3 U
Thallium	MG/KG	0.53 U	0.54 U	0.595 U	0.51 U	0.52 U	0.53 U
Vanadium	MG/KG	10.8	2.385 U	2.64 U	2.27 U	4.62	6.32
Zinc	MG/KG	6.16	6.21	5.19	4.21	6.81	6.65
Total Cyanide	MG/KG	1.15	1.17	1.3	1.11	1.13	1.15

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL INORGANICS

	41-DS-SB07-00	41-DS-SB08-00	41-DS-SB09-00	41-DS-SB10-00	41-DS-SB11-00	41-DS-SB12-00	
Client Sample ID:	41-DS-SB07-00	41-DS-SB08-00	41-DS-SB09-00	41-DS-SB10-00	41-DS-SB11-00	41-DS-SB12-00	
Laboratory Sample ID:	9402042-14A	9402043-07	9402042-15A	9402042-16A	9402042-17A	9402042-18A	
Date Sampled:							
Percent Solids	83	83.5	87.5	75.7	87.5	86.8	
	<u>UNITS</u>						
Aluminum	MG/KG	5850 J	5690	2580 J	2670 J	4640	4430 J
Antimony	MG/KG	0.95 UJ	0.945 UJ	0.9 UJ	1.045 UJ	0.9 U	0.91 UJ
Arsenic	MG/KG	0.3495 U	0.3475 U	0.3315 U	0.383 U	0.3315 U	1.26
Barium	MG/KG	14.2	13.2	7.28	17.9	8.12	15.9
Beryllium	MG/KG	0.215	0.095 U	0.087 U	0.1005 U	0.087 U	0.0875 U
Cadmium	MG/KG	0.3845 U	0.382 U	0.3645 U	0.4215 U	0.3645 U	0.3675 U
Calcium	MG/KG	66	104	42.2	830	806	16.45 U
Chromium	MG/KG	6.28	5.09	0.95 U	2.63	3.76	3.86
Cobalt	MG/KG	1.93 U	1.915 U	1.83 U	2.115 U	1.83 U	1.845 U
Copper	MG/KG	1.965 U	1.95 U	1.86 U	2.155 U	1.86 U	1.88 U
Iron	MG/KG	4060 J	2790	1330 J	1820 J	2040	1840 J
Lead	MG/KG	6.42 J	9.09 J	5.43 J	10 J	6.19	10.7 J
Magnesium	MG/KG	155	181	45.4	79.7	75	102
Manganese	MG/KG	7.46 J	11.3	6.06 J	6.4	10.1	9.32
Mercury	MG/KG	0.0555 U	0.074	0.0465 U	0.089 U	0.106	0.115
Nickel	MG/KG	3.45 U	3.45 U	3.3 U	3.8 U	3.3 U	3.3 U
Potassium	MG/KG	90 U	206	85 U	98.5 U	85 U	86 U
Selenium	MG/KG	0.305 UJ	0.303 U	0.289 U	0.334 UJ	0.289 U	0.2915 U
Silver	MG/KG	0.193 UJ	0.1915 U	0.183 UJ	18.3 J	0.183 U	0.1845 UJ
Sodium	MG/KG	43.25 U	43 U	41 U	47.4 U	41 U	41.35 U
Thallium	MG/KG	0.555 U	0.55 U	0.525 U	0.61 U	0.525 U	0.53 U
Vanadium	MG/KG	9.38	6.2	2.33 U	5.9	6.67	5.78
Zinc	MG/KG	8.65	9.11	5.41	8.35	5.26	6.76
Total Cyanide	MG/KG	1.57	1.2	1.14	1.32	1.49	1.15

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL INORGANICS

	Client Sample ID:	41-OS-SB01-00	41-OS-SB02-00	41-OS-SB03-00	41-OS-SB04-00	41-OS-SB05-00	41-OS-SB06-00
	Laboratory Sample ID:	9402021-01	9402021-06	9402021-10	9402086-04	9402042-01A	9402086-01
	Date Sampled:						
	Percent Solids	84.7	86.8	82.6	90.3	91.6	88.1
	UNITS						
Aluminum	MG/KG	14200	7890	6770	981	1440 J	2710
Antimony	MG/KG	0.93 U	0.91 U	0.955 U	0.82 U	0.86 UJ	0.84 U
Arsenic	MG/KG	2.22	1.79	1.73	0.2325 U	0.3165 U	0.2385 U
Barium	MG/KG	19.1	12.1	21.7	3.14	5.42	8.49
Beryllium	MG/KG	0.2	0.092 U	0.0965 U	0.221	0.083 U	0.086 U
Cadmium	MG/KG	0.38 U	0.37 U	0.385 U	0.353 U	0.348 U	0.362 U
Calcium	MG/KG	1700	547	16600	297	251	4700
Chromium	MG/KG	17.3	9.72	9.21	2.39 J	2.19	4.05 J
Cobalt	MG/KG	1.9 U	1.85 U	1.95 U	1.77 U	1.745 U	1.815 U
Copper	MG/KG	1.9 U	1.9 U	1.95 U	1.805 U	1.78 U	6.4
Iron	MG/KG	12200	4900	5040	451	1060 J	2050
Lead	MG/KG	7.31	6.57	37.1	3.37	4.43 J	12.7
Magnesium	MG/KG	358	236	468	39.3	43.6	130
Manganese	MG/KG	8.84	4.68	18.9	2.17	1.85 J	6.65
Mercury	MG/KG	0.0295 U	0.029 U	0.084	0.0275 U	0.027 U	0.0285 U
Nickel	MG/KG	3.4 U	3.3 U	3.5 U	3.19 U	3.15 U	3.27 U
Potassium	MG/KG	391	298	227	82.5 U	81.5 U	84.5 U
Selenium	MG/KG	0.295 U	0.29 U	0.305 U	0.166 U	0.276 U	0.357
Silver	MG/KG	0.096	0.046 U	0.0485 U	0.177 UJ	0.1745 UJ	0.1815 UJ
Sodium	MG/KG	21.95 U	21.4 U	22.5 U	84.7	39.2 U	86.8
Thallium	MG/KG	0.55 U	0.55 U	0.55 U	0.321 U	0.5 U	0.329 U
Vanadium	MG/KG	26.3	14.1	11.7	2.26 U	2.225 U	5.91
Zinc	MG/KG	9.02	7.92	50	1.9 U	4.89	11.4
Total Cyanide	MG/KG	1.18	1.15	1.21	1.11	1.09	1.14

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL INORGANICS

Client Sample ID:	41-OS-SB07-00	41-OS-SB08-00	41-OS-SB09-00	41-OS-SB10-00	41-OS-SB11-00	41-OS-SB12-00	
Laboratory Sample ID:	9402042-05A	9402086-09	9402042-03A	9402064-04	9402086-07	9402042-08A	
Date Sampled:							
Percent Solids	86.2	86.3	89	84.3	84.8	76.8	
	UNITS						
Aluminum	MG/KG	4710 J	4070	3970 J	3320	3260	17400 J
Antimony	MG/KG	0.915 UJ	0.855 U	0.89 UJ	0.88 U	2.57	1.03 UJ
Arsenic	MG/KG	0.721	0.2435 U	0.326 U	1.02	0.2475 U	3.54
Barium	MG/KG	12.9	24.8	13.3	29.3	27.2	82.2
Beryllium	MG/KG	0.208	0.188	0.0855 U	0.295	0.0895 U	0.238
Cadmium	MG/KG	0.37 U	1.23	0.3585 U	0.3785 U	1.84	7.44
Calcium	MG/KG	1170	1590	2060	4750	1190	8970
Chromium	MG/KG	8.77	7.32 J	5.42	7.47 J	8.34 J	41.4
Cobalt	MG/KG	1.855 U	1.855 U	1.8 U	1.9 U	1.885 U	6.46
Copper	MG/KG	4.17	12.9	7.42	44.5	30.7	132
Iron	MG/KG	5970 J	6590	3040 J	4660	4800	91600 J
Lead	MG/KG	9.56 J	52.3	66.7 J	212	101	341 J
Magnesium	MG/KG	157	144	156	221	104	426
Manganese	MG/KG	7.11 J	37.3	12.5 J	30.6	55.8	6000 J
Mercury	MG/KG	0.0425 U	0.205	0.0655 U	0.073	0.316	0.768
Nickel	MG/KG	3.35 U	3.335 U	3.25 U	3.415 U	3.395 U	35.3
Potassium	MG/KG	86.5 U	86.5 U	83.5 U	88.5 U	88 U	196
Selenium	MG/KG	0.2935 U	0.174 U	0.284 U	0.467	0.177 U	0.3295 U
Silver	MG/KG	0.1855 UJ	0.1855 UJ	0.18 UJ	0.19 UJ	0.1885 UJ	0.903 J
Sodium	MG/KG	41.65 U	88.6	40.35 U	142	192	230
Thallium	MG/KG	0.535 U	0.336 U	0.515 U	0.344 U	0.342 U	0.6 U
Vanadium	MG/KG	17.9	7.69	8.01	9.16	9.4	27
Zinc	MG/KG	8.58	163	34.8	158	196	14600
Total Cyanide	MG/KG	1.16	1.16	1.12	1.19	1.18	1.32

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL INORGANICS

	Client Sample ID:	41-OS-SB13-00	41-OS-SB14-00	41-OS-SB15-00	41-OS-SB16-00	41-OS-SB17-00	41-OS-SB18-00
	Laboratory Sample ID:	9402052-08	9402064-01	9402070-01	9402043-05	9402052-03	9402061-01
	Date Sampled:						
	Percent Solids	87.1	81.9	83.8	83.6	83.9	86.2
	<u>UNITS</u>						
Aluminum	MG/KG	1510	2830	2860	4250	12800	3060
Antimony	MG/KG	0.905 UJ	0.905 U	0.885 U	0.945 UJ	0.94 UJ	0.895 UJ
Arsenic	MG/KG	0.333 U	1.14 J	1.16	0.347 U	4.42	0.819
Barium	MG/KG	5.71	17.3	14.1	9.84	25.5	13.3
Beryllium	MG/KG	0.087 U	0.344	0.322	0.095 U	0.191	0.086 U
Cadmium	MG/KG	0.366 U	0.3895 U	0.3805 U	0.3815 U	0.854	0.3615 U
Calcium	MG/KG	117	612	1240	685	40300	306
Chromium	MG/KG	2.68	9.95 J	7.08 J	5.22	20.3	4.67
Cobalt	MG/KG	1.835 U	1.955 U	1.91 U	1.915 U	1.905 U	1.815 U
Copper	MG/KG	1.87 U	10.2	7.42	1.95 U	13.6 J	14 J
Iron	MG/KG	397	4520	3980	2580	12100	2700
Lead	MG/KG	6.38	59.7	52.8	14.3 J	116	17.3
Magnesium	MG/KG	53.1	502	99.2	158	1100	106
Manganese	MG/KG	1.69	43.4	12.4	5.19	41.9	7.67
Mercury	MG/KG	0.086	0.129	0.03 U	0.081	0.187	0.098 U
Nickel	MG/KG	3.305 U	7.48	3.435 U	3.45 U	7.36	3.265 U
Potassium	MG/KG	57.5 U	91 U	89 U	89 U	547	56.5 U
Selenium	MG/KG	0.2905 U	0.183 U	0.596	0.3025 U	0.3015 U	0.287 U
Silver	MG/KG	0.1835 UJ	0.1955 UJ	0.191 UJ	0.1915 U	0.1905 UJ	0.1815 UJ
Sodium	MG/KG	21.35 UJ	43.85 U	42.85 U	174	22.15 UJ	21.1 UJ
Thallium	MG/KG	0.53 U	0.354 U	0.346 U	0.55 U	0.55 U	0.52 U
Vanadium	MG/KG	2.34 U	39.8	7.93	9.68	24.8	7.35
Zinc	MG/KG	13.1 J	62.6	31.6	15.2	94.6 J	33.3 J
Total Cyanide	MG/KG	1.15	1.22	1.19	1.2	1.19	1.13

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL INORGANICS

Client Sample ID:	41-OS-SB19-00	41-OS-SB20-00	41-OS-SB21-00	41-OS-SB22-00	41-OS-SB23-00	41-OS-SB24-00	
Laboratory Sample ID:	9402043-03	9402052-04	9402052-05	9402061-04	9402043-01	9402061-07	
Date Sampled:							
Percent Solids	84.2	82.7	89	84.5	85.8	83.8	
	UNITS						
Aluminum	MG/KG	4980	5140	2990	5640	4500	4160
Antimony	MG/KG	0.94 UJ	0.955 UJ	0.89 UJ	0.935 UJ	0.92 UJ	0.94 UJ
Arsenic	MG/KG	1.92	1.51	0.326 U	0.909	0.68	2.52
Barium	MG/KG	16.4	14.1	9.9	16.3	13.8	13.9
Beryllium	MG/KG	0.095 U	0.092 U	0.0855 U	0.187	0.095 U	0.0905 U
Cadmium	MG/KG	0.379 U	1.48	0.3585 U	0.3775 U	0.372 U	0.3805 U
Calcium	MG/KG	5020	1250	32.9	715	8380	2930
Chromium	MG/KG	18.2	8.51	3.68	6.67	7.71	7.24
Cobalt	MG/KG	1.9 U	1.935 U	1.8 U	1.895 U	1.865 U	1.91 U
Copper	MG/KG	20.6	9.08 J	1.83 U	1.93 U	1.9 U	4.63 J
Iron	MG/KG	12400	4080	584	3030	4570	4510
Lead	MG/KG	23.1 J	30.1	2.71	157	22.9 J	23.1
Magnesium	MG/KG	202	211	94.4	215	276	268
Manganese	MG/KG	53.8	22.8	0.795 U	11.4	13.7	15.3
Mercury	MG/KG	0.105	0.0815 U	0.098	0.0755 U	0.1	0.055 U
Nickel	MG/KG	7.41	3.48 U	3.235 U	3.41 U	3.35 U	3.435 U
Potassium	MG/KG	259	245	56 U	184	254	186
Selenium	MG/KG	0.3005 U	0.306 UJ	0.284 U	0.2995 U	0.295 U	0.302 U
Silver	MG/KG	0.19 U	0.1935 UJ	0.18 UJ	0.1895 UJ	0.1865 U	0.191 UJ
Sodium	MG/KG	42.65 U	22.5 UJ	20.9 UJ	22 UJ	120	22.2 UJ
Thallium	MG/KG	0.545 U	0.555 U	0.515 U	0.545 U	0.535 U	0.55 U
Vanadium	MG/KG	8.26	10.7	2.29 U	6.8	8.62	9.95
Zinc	MG/KG	121	47.6 J	3.77 J	28.5 J	26.4	21.7 J
Total Cyanide	MG/KG	1.19	1.21	1.12	1.18	1.16	1.19

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL INORGANICS

Client Sample ID:	41-OS-SB25-00	41-OS-SB26-00	41-OS-SB27-00	41-OS-SB28-00	41-OS-SB29-00	41-OS-SB30-00	
Laboratory Sample ID:	9402088-01A	9402088-03A	9402088-05A	9402088-08A	9402071-03	9402071-05	
Date Sampled:					02/05/94	02/05/94	
Percent Solids	84.6	80.6	73	82.2	88.8	83.2	
	UNITS						
Aluminum	MG/KG	6280	878	6300	1190	2760.0 J	6090.0 J
Antimony	MG/KG	0.875 U	0.92 U	1.015 U	0.9 U	0.89 UJ	0.95 UJ
Arsenic	MG/KG	0.797	0.273 U	0.671	0.2675 U	0.237 U	0.253 U
Barium	MG/KG	10.5	3.22	21.7	19.8	7.52	9.04
Beryllium	MG/KG	0.09 U	0.094 U	0.104 U	0.0925 U	0.086 U	0.206
Cadmium	MG/KG	0.377 U	0.396 U	0.437 U	0.388 U	0.359 U	0.384 U
Calcium	MG/KG	56.7	174	2990	894	16.8 U	158.0
Chromium	MG/KG	8.93 J	2.79 J	7.96 J	3.21 J	0.94 U	7.84
Cobalt	MG/KG	1.89 U	1.985 U	2.19 U	1.945 U	1.80 U	1.93 U
Copper	MG/KG	1.925 U	2.02 U	2.23 U	1.98 U	1.84 U	1.96 U
Iron	MG/KG	4950 J	676 J	3190 J	481 J	1350.0 J	4810.0 J
Lead	MG/KG	9.26 J	7.06 J	27.5 J	9.31 J	3.05	3.48
Magnesium	MG/KG	162	28.1	277	88.3	51.0	167.0
Manganese	MG/KG	2.46	1.97	30.6	8.52	4.08 J	3.50 J
Mercury	MG/KG	0.0295 U	0.031 U	0.105	0.074		
Nickel	MG/KG	3.4 U	3.55 U	3.95 U	3.5 U	3.25 U	3.45 U
Potassium	MG/KG	299	94.5 U	317	93 U	86.0 U	91.5 U
Selenium	MG/KG	0.1775 U	0.186 U	0.2055 U	0.1825 U	0.285 U	0.304 UJ
Silver	MG/KG	0.189 U	0.1985 U	0.219 U	0.71 U	0.180 U	0.193 U
Sodium	MG/KG	43.5 U	45.65 U	50.5 U	44.75 U	41.5 U	44.3 U
Thallium	MG/KG	0.343 U	0.36 U	0.397 U	0.353 U	0.52 U	0.55 U
Vanadium	MG/KG	13.9	2.53 U	9.96	2.48 U	2.30 U	13.6
Zinc	MG/KG	3 U	3.13 U	39.5	4.8 U	3.98	7.62
Total Cyanide	MG/KG	1.18	1.24	1.37	1.22	1.13	1.20

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DOWNSLOPE AND ONSITE SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL INORGANICS

Client Sample ID:	41-OS-SB31-00	41-OS-SB32-00	41-OS-SB33-00	41-OS-SB34-00
Laboratory Sample ID:	9402088-10A	9402088-12A	9402071-08	9402088-15A
Date Sampled:			02/05/94	
Percent Solids	69.5	85.5	78.1	77.7

	UNITS				
Aluminum	MG/KG	3620	930	3150.0 J	2900
Antimony	MG/KG	1.065 U	0.865 U	1.01 UJ	0.95 U
Arsenic	MG/KG	0.3165 U	0.2575 U	0.269 U	0.283 U
Barium	MG/KG	27.8	5.69	11.2	9.12
Beryllium	MG/KG	0.1095 U	0.089 U	0.098 U	0.098 U
Cadmium	MG/KG	0.459 U	0.373 U	0.409 U	0.4105 U
Calcium	MG/KG	3190	329	179.0	745
Chromium	MG/KG	4.09 J	0.97 UJ	3.80	3.53 J
Cobalt	MG/KG	2.3 U	1.87 U	2.05 U	2.06 U
Copper	MG/KG	5.38	1.905 U	2.09 U	2.1 U
Iron	MG/KG	1230 J	874 J	1980.0 J	1150 J
Lead	MG/KG	12.7 J	15.3 J	7.73	15.8 J
Magnesium	MG/KG	203	51.4	133.0	55.7
Manganese	MG/KG	56.4	4.76	4.54 J	9.46
Mercury	MG/KG	0.097	0.029 U		0.032 U
Nickel	MG/KG	4.15 U	3.35 U	3.70 U	3.7 U
Potassium	MG/KG	110 U	89 U	97.5 U	98 U
Selenium	MG/KG	0.216 U	0.1755 U	0.324 U	0.193 U
Silver	MG/KG	0.23 U	0.4645 U	0.205 U	0.2385 U
Sodium	MG/KG	53 U	43.05 U	47.1 U	47.35 U
Thallium	MG/KG	0.417 U	0.339 U	0.59 U	0.373 U
Vanadium	MG/KG	2.935 U	2.385 U	2.61 U	2.625 U
Zinc	MG/KG	28.5	13.1	26.4	49.5
Total Cyanide	MG/KG	1.44	1.17	1.28	1.29

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
DOWNSLOPE AND ONSITE SURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL INORGANICS

Client Sample ID:						LOG NORMAL
Laboratory Sample ID:					UPPER 95%	UPPER 95%
Date Sampled:		MAXIMUM	ARITHMETIC	STANDARD	CONFIDENCE	CONFIDENCE
Percent Solids		DETECTED	MEAN	DEVIATION	INTERVAL	INTERVAL
	UNITS					
Aluminum	MG/KG	17400 J	4440.8	3251.0	5248.0	5475.2
Antimony	MG/KG	2.57	1.0	0.3	1.1	1.0
Arsenic	MG/KG	4.42	0.83	0.90	1.05	1.05
Barium	MG/KG	82.2	14.8	12.2	17.8	17.9
Beryllium	MG/KG	0.344	0.13	0.07	0.15	0.14
Cadmium	MG/KG	7.44	0.62	1.07	0.88	0.62
Calcium	MG/KG	40300	2533.5	6451.7	4135.4	9842.5
Chromium	MG/KG	41.4	6.7	6.8	8.4	9.0
Cobalt	MG/KG	6.46	2.0	0.7	2.2	2.1
Copper	MG/KG	132	8.3	20.4	13.4	9.2
Iron	MG/KG	91600 J	5280.3	13326.0	8589.0	6581.8
Lead	MG/KG	341 J	34.2	62.6	49.7	48.3
Magnesium	MG/KG	1100	175.4	179.0	219.9	223.0
Manganese	MG/KG	6000 J	143.9	882.7	363.1	51.7
Mercury	MG/KG	0.768	0.10	0.12	0.13	0.11
Nickel	MG/KG	35.3	4.4	4.8	5.6	4.5
Potassium	MG/KG	547	142.8	101.9	168.1	165.1
Selenium	MG/KG	0.596	0.28	0.08	0.30	0.30
Silver	MG/KG	18.3 J	0.6	2.7	1.3	0.4
Sodium	MG/KG	230	55.6	45.5	66.9	64.3
Thallium	MG/KG	ND	NA	NA	NA	NA
Vanadium	MG/KG	39.8	8.7	7.8	10.6	11.3
Zinc	MG/KG	14600	347.9	2148.5	881.4	127.5
Total Cyanide	MG/KG	1.57	1.2	0.1	1.2	1.2

APPENDIX P.3
SITE 41 ON-SITE SUBSURFACE SOIL ORGANICS

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB01-02	41-OS-SB01-05	41-OS-SB02-02	41-OS-SB02-03	41-OS-SB03-01	41-OS-SB04-02
Laboratory Sample ID:	9402021-02	9402021-03	9402021-08	9402021-09	9402021-11	9402086-05
Date Sampled:						
Percent Solids	83.4	88.8	88	93.5	82.8	87.6
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U
1,2,4-Trichlorobenzene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U
1,3-Dichlorobenzene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U
1,4-Dichlorobenzene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U
2-Chloronaphthalene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U
2-Chlorophenol	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U
2-Methylnaphthalene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U
2-Methylphenol	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U
2-Nitroaniline	UG/KG	480 U	444.5 U	456 U	432 U	484 U
2-Nitrophenol	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U
2,2'-oxybis-(1-chloropropane)	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U
2,4-Dichlorophenol	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U
2,4-Dimethylphenol	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U
2,4-Dinitrophenol	UG/KG	480 U	444.5 U	456 U	432 U	484 U
2,4-Dinitrotoluene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U
2,4,5-Trichlorophenol	UG/KG	480 U	444.5 U	456 U	432 U	484 U
2,4,6-Trichlorophenol	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U
2,6-Dinitrotoluene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U
3-Nitroaniline	UG/KG	480 U	444.5 U	456 U	432 U	484 U
3,3'-Dichlorobenzidine	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U
4-Bromophenyl-phenylether	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U
4-Chloro-3-methylphenol	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U
4-Chloroaniline	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U
4-Chlorophenyl phenyl ether	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U
4-Methylphenol	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U
4-Nitroaniline	UG/KG	480 U	444.5 U	456 U		456 U
4-Nitrophenol	UG/KG	480 U	444.5 U	456 U	432 U	484 U
4,6-Dinitro-2-methylphenol	UG/KG	480 U	444.5 U	456 U	432 U	484 U
Acenaphthene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U
Acenaphthylene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U
Anthracene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U
Benzo[a]anthracene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U
Benzo[a]pyrene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB01-02	41-OS-SB01-05	41-OS-SB02-02	41-OS-SB02-03	41-OS-SB03-01	41-OS-SB04-02
Laboratory Sample ID:	9402021-02	9402021-03	9402021-08	9402021-09	9402021-11	9402086-05
Date Sampled:						
Percent Solids	83.4	88.8	88	93.5	82.8	87.6

<u>SEMIVOLATILES Cont.</u>							
Benzo[b]fluoranthene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
Benzo[g,h,i]perylene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
Benzo[k]fluoranthene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
bis(2-Chloroethoxy) methane	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
bis(2-Chloroethyl) ether	UG/KG	198 U	183.5 U	188 U	178 U	800	188 U
bis(2-Ethylhexyl)phthalate	UG/KG	230 J	183.5 U	40 J	39 J	199.5 U	188 U
Butyl benzyl phthalate	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
Carbazole	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
Chrysene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
Dibenzofuran	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
Dibenz[a,h]anthracene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
Diethylphthalate	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
Dimethyl phthalate	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
di-n-Butylphthalate	UG/KG	200 J	180 J	230 J	87 J	110 J	43 J
di-n-Octylphthalate	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
Fluoranthene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
Fluorene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
Hexachlorobenzene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
Hexachlorobutadiene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
Hexachlorocyclopentadiene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
Hexachloroethane	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
Indeno[1,2,3-cd]pyrene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
Isophorone	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
Naphthalene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
Nitrobenzene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
N-Nitroso-di-n-propylamine	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
N-nitrosodiphenylamine	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
Pentachlorophenol	UG/KG	480 U	444.5 U	456 U	432 U	484 U	456 U
Phenanthrene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
Phenol	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
Pyrene	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB01-02	41-OS-SB01-05	41-OS-SB02-02	41-OS-SB02-03	41-OS-SB03-01	41-OS-SB04-02	
Laboratory Sample ID:	9402021-02	9402021-03	9402021-08	9402021-09	9402021-11	9402086-05	
Date Sampled:							
Percent Solids	83.4	88.8	88	93.5	82.8	87.6	
VOLATILES							
Chloromethane	UG/KG	3 J	2 J	5.7 U	5.3 U	6 U	5.5 U
Bromomethane	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
Vinyl chloride	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
Chloroethane	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
Methylene chloride	UG/KG	8 U	5.5 U	5.5 U	5.5 U	6 U	5 J
Acetone	UG/KG	6 U	5.6 U	9 J	11 J	6 UJ	54 J
Carbon Disulfide	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
1,1-Dichloroethene	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
1,1-Dichloroethane	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
1,2-Dichloroethene(total)	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
Chloroform	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
1,2-Dichloroethane	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
2-Butanone	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
1,1,1-Trichloroethane	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
Carbon tetrachloride	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
Bromodichloromethane	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
1,2-Dichloropropane	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
cis-1,3-Dichloropropene	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
Trichloroethene	UG/KG	6 U	5.6 U	1 J	5.3 U	6 U	5.5 U
Dibromochloromethane	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
1,1,2-Trichloroethane	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
Benzene	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
trans-1,3-Dichloropropene	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
Bromoform	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
4-Methyl-2-pentanone	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
2-Hexanone	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
Tetrachloroethene	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
1,1,2,2-Tetrachloroethane	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
Toluene	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
Chlorobenzene	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
Ethylbenzene	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
Styrene	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U
Xylenes (total)	UG/KG	6 U	5.6 U	5.7 U	5.3 U	6 U	5.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB01-02	41-OS-SB01-05	41-OS-SB02-02	41-OS-SB02-03	41-OS-SB03-01	41-OS-SB04-02
Laboratory Sample ID:	9402021-02	9402021-03	9402021-08	9402021-09	9402021-11	9402086-05
Date Sampled:						
Percent Solids	83.4	88.8	88	93.5	82.8	87.6
PESTICIDE/PCBS						
alpha-BHC	UG/KG	1.025 UJ	0.955 UJ	0.965 UJ	0.915 UJ	1.025 UJ
beta-BHC	UG/KG	1.025 U	0.955 U	0.965 U	0.915 U	1.025 U
delta-BHC	UG/KG	1.025 UJ	0.955 UJ	0.965 UJ	0.915 UJ	1.025 UJ
Lindane (gamma-BHC)	UG/KG	1.025 U	0.955 U	0.965 U	0.915 U	1.025 U
Heptachlor	UG/KG	1.025 U	0.955 U	0.965 U	0.915 U	18
Aldrin	UG/KG	1.025 U	0.955 U	0.965 U	0.915 U	1.025 U
Heptachlor epoxide	UG/KG	1.025 U	0.955 U	0.965 U	0.915 U	11.5 J
Endosulfan I	UG/KG	1.025 U	0.955 U	0.965 U	0.915 U	1.025 U
Dieldrin	UG/KG	1.99 U	1.855 U	1.875 U	1.775 U	1.99 U
4,4'-DDE	UG/KG	1.99 U	1.855 U	1.875 U	1.775 U	38 J
Endrin	UG/KG	1.99 U	1.855 U	1.875 U	1.775 U	4.25 NJ
Endosulfan II	UG/KG	1.99 U	1.855 U	1.875 U	1.775 U	1.99 U
4,4'-DDD	UG/KG	1.99 U	1.855 U	1.875 U	1.775 U	1.99 U
Endosulfan sulfate	UG/KG	1.99 U	1.855 U	1.875 U	1.775 U	1.99 U
4,4'-DDT	UG/KG	1.99 U	1.855 U	1.875 U	1.775 U	46 J
Methoxychlor	UG/KG	10.25 U	0.45 UJ	9.65 U	9.15 U	10.25 U
Endrin ketone	UG/KG	1.99 U	1.855 U	1.875 U	1.775 U	1.99 U
Endrin aldehyde	UG/KG	1.99 U	1.855 U	1.875 U	1.775 U	1.99 U
alpha-Chlordane	UG/KG	1.025 U	0.955 U	0.965 U	0.915 U	160 J
gamma-Chlordane	UG/KG	1.025 U	0.955 U	0.965 U	0.915 U	170 J
Toxaphene	UG/KG	102.5 U	95.5 U	96.5 U	91.5 U	102.5 U
Aroclor 1016	UG/KG	19.9 U	18.55 U	18.75 U	17.75 U	19.9 U
Aroclor 1221	UG/KG	40.35 U	37.65 U	38.05 U	36 U	40.35 U
Aroclor 1232	UG/KG	19.9 U	18.55 U	18.75 U	17.75 U	19.9 U
Aroclor 1242	UG/KG	19.9 U	18.55 U	18.75 U	17.75 U	19.9 U
Aroclor 1248	UG/KG	19.9 U	18.55 U	18.75 U	17.75 U	19.9 U
Aroclor 1254	UG/KG	19.9 U	18.55 U	18.75 U	17.75 U	19.9 U
Aroclor 1260	UG/KG	19.9 U	18.55 U	18.75 U	17.75 U	19.9 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB01-02	41-OS-SB01-05	41-OS-SB02-02	41-OS-SB02-03	41-OS-SB03-01	41-OS-SB04-02	
Laboratory Sample ID:	9402021-02	9402021-03	9402021-08	9402021-09	9402021-11	9402086-05	
Date Sampled:							
Percent Solids	83.4	88.8	88	93.5	82.8	87.6	
CHEMICAL SURETY							
Acetophenone	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
Chloroacetophenone	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
Hydroxyacetophenone	UG/KG	990 U	915 U	940 U	890 U	1000 U	940 U
Bis(2'-chloroethyl)disulfide	UG/KG	990 U	915 U	940 U	890 U	1000 U	940 U
Bis(2'-chloroethyl)trisulfide	UG/KG	990 U	915 U	940 U	890 U	1000 U	940 U
1,4-Dithiane	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
1,4-Oxathiane	UG/KG	198 U	183.5 U	188 U	178 U	199.5 U	188 U
THIODIGLYCOL							
Thiodiglycol	MG/KG	3.75 U	3.53 U	3.56 U	3.345 U	3.78 U	3.56 U
ORDNANCE							
1,3,5-Trinitrobenzene	UG/KG	20.1 U	20.1 U	20.1 U	20.1 U	20.1 U	20.1 U
1,3-Dinitrobenzene	UG/KG	18.6 U	18.6 U	18.6 U	18.6 U	18.6 U	18.6 U
2,4,6-Trinitrotoluene	UG/KG	17.8 U	17.8 U	17.8 U	17.8 U	17.8 U	17.8 U
2,4-Dinitrotoluene	UG/KG	25.8 U	25.8 U	25.8 U	25.8 U	25.8 U	25.8 U
2,6-Dinitrotoluene	UG/KG	23.8 U	23.8 U	23.8 U	23.8 U	23.8 U	23.8 U
2-Amino-4,6-dinitrotoluene	UG/KG	23.35 U	23.35 U	23.35 U	23.35 U	23.35 U	23.35 U
2-Nitrotoluene	UG/KG	40.7 U	40.7 U	40.7 U	40.7 U	40.7 U	40.7 U
3-Nitrotoluene	UG/KG	40.85 U	40.85 U	40.85 U	40.85 U	40.85 U	40.85 U
4-Amino-2,6-dinitrotoluene	UG/KG	20.4 U	20.4 U	20.4 U	20.4 U	20.4 U	20.4 U
4-Nitrotoluene	UG/KG	43.6 U	43.6 U	43.6 U	43.6 U	43.6 U	43.6 U
HMX	UG/KG	35.25 U	35.25 U	35.25 U	35.25 U	35.25 U	35.25 U
Nitrobenzene	UG/KG	17.6 U	17.6 U	17.6 U	17.6 U	17.6 U	17.6 U
RDX	UG/KG	25.45 U	25.45 U	25.45 U	25.45 U	25.45 U	25.45 U
Tetryl	UG/KG	81.5 U	81.5 U	81.5 U	81.5 U	81.5 U	81.5 U
MIREX							
Mirex	UG/KG	990 U	915 U	940 U	890 U	1000 U	940 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-0S-SB04-03	41-0S-SB05-01	41-0S-SB06-01	41-0S-SB06-03	41-0S-SB07-01	41-0S-SB07-02	
Laboratory Sample ID:	9402086-06	9402042-02A	9402086-02	9402086-03	9402042-06A	9402042-07A	
Date Sampled:							
Percent Solids	78.1	87.4	89.3	87.1	89.9	81	
SEMIVOLATILES							
1,2-Dichlorobenzene	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
1,2,4-Trichlorobenzene	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
1,3-Dichlorobenzene	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
1,4-Dichlorobenzene	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
2-Chloronaphthalene	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
2-Chlorophenol	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
2-Methylnaphthalene	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
2-Methylphenol	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
2-Nitroaniline	UG/KG	510 U	460 U	448 U	460 U	444.5 U	496 U
2-Nitrophenol	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
2,2'-oxybis-(1-chloropropane)	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
2,4-Dichlorophenol	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
2,4-Dimethylphenol	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
2,4-Dinitrophenol	UG/KG	510 U	460 U	448 U	460 U	444.5 U	496 U
2,4-Dinitrotoluene	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
2,4,5-Trichlorophenol	UG/KG	510 U	460 U	448 U	460 U	444.5 U	496 U
2,4,6-Trichlorophenol	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
2,6-Dinitrotoluene	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
3-Nitroaniline	UG/KG	510 U	460 U	448 U	460 U	444.5 U	496 U
3,3'-Dichlorobenzidine	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
4-Bromophenyl-phenylether	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
4-Chloro-3-methylphenol	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
4-Chloroaniline	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
4-Chlorophenyl phenyl ether	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
4-Methylphenol	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
4-Nitroaniline	UG/KG	510 U	460 U	448 U	460 U	444.5 U	496 U
4-Nitrophenol	UG/KG	510 U	460 U	448 U	460 U	444.5 U	496 U
4,6-Dinitro-2-methylphenol	UG/KG	510 U	460 U	448 U	460 U	444.5 U	496 U
Acenaphthene	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
Acenaphthylene	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
Anthracene	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
Benzo[<i>a</i>]anthracene	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
Benzo[<i>a</i>]pyrene	UG/KG	211 U	190 U	185 U	190 U	240 J	1060

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-0S-SB04-03	41-0S-SB05-01	41-0S-SB06-01	41-0S-SB06-03	41-0S-SB07-01	41-0S-SB07-02
Laboratory Sample ID:	9402086-06	9402042-02A	9402086-02	9402086-03	9402042-06A	9402042-07A
Date Sampled:						
Percent Solids	78.1	87.4	89.3	87.1	89.9	81
SEMIVOLATILES Cont.						
Benzo[b]fluoranthene	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
Benzo[g,h,i]perylene	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
Benzo[k]fluoranthene	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
bis(2-Chloroethoxy) methane	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
bis(2-Chloroethyl) ether	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
bis(2-Ethylhexyl)phthalate	UG/KG 61 J	190 U	55 J	49 J	183.5 U	204.5 U
Butyl benzyl phthalate	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
Carbazole	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
Chrysene	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
Dibenzofuran	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
Dibenz[a,h]anthracene	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
Diethylphthalate	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
Dimethyl phthalate	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
di-n-Butylphthalate	UG/KG 69 J	190 U	52 J	46 J	185 U	205 U
di-n-Octylphthalate	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
Fluoranthene	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
Fluorene	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
Hexachlorobenzene	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
Hexachlorobutadiene	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
Hexachlorocyclopentadiene	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
Hexachloroethane	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
Indeno[1,2,3-cd]pyrene	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
Isophorone	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
Naphthalene	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
Nitrobenzene	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
N-Nitroso-di-n-propylamine	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
N-nitrosodiphenylamine	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
Pentachlorophenol	UG/KG 510 U	460 U	448 U	460 U	444.5 U	496 U
Phenanthrene	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
Phenol	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U
Pyrene	UG/KG 211 U	190 U	185 U	190 U	183.5 U	204.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB04-03	41-OS-SB05-01	41-OS-SB06-01	41-OS-SB06-03	41-OS-SB07-01	41-OS-SB07-02	
Laboratory Sample ID:	9402086-06	9402042-02A	9402086-02	9402086-03	9402042-06A	9402042-07A	
Date Sampled:							
Percent Solids	78.1	87.4	89.3	87.1	89.9	81	
VOLATILES							
Chloromethane	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 U
Bromomethane	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 U
Vinyl chloride	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 U
Chloroethane	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 U
Methylene chloride	UG/KG	7 J	7.5 U	5.5 U	3 J	3 J	6.2 U
Acetone	UG/KG	62 J	12 UJ	74 J	1500 J	51 J	54 J
Carbon Disulfide	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 U
1,1-Dichloroethene	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 U
1,1-Dichloroethane	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 U
1,2-Dichloroethene(total)	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 U
Chloroform	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 U
1,2-Dichloroethane	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 U
2-Butanone	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 U
1,1,1-Trichloroethane	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 U
Carbon tetrachloride	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 U
Bromodichloromethane	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 U
1,2-Dichloropropane	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 U
cis-1,3-Dichloropropene	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 U
Trichloroethene	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 U
Dibromochloromethane	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 U
1,1,2-Trichloroethane	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 U
Benzene	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	1 J
trans-1,3-Dichloropropene	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 U
Bromoform	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 U
4-Methyl-2-pentanone	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 UJ
2-Hexanone	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 UJ
Tetrachloroethene	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 UJ
1,1,2,2-Tetrachloroethane	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 UJ
Toluene	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 UJ
Chlorobenzene	UG/KG	6.5 U	5.75 U	5.5 U	7 J	5.55 U	39 J
Ethylbenzene	UG/KG	6.5 U	5.75 U	5.5 U	7 J	5.55 U	6.2 UJ
Styrene	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 UJ
Xylenes (total)	UG/KG	6.5 U	5.75 U	5.5 U	5.5 U	5.55 U	6.2 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB04-03	41-OS-SB05-01	41-OS-SB06-01	41-OS-SB06-03	41-OS-SB07-01	41-OS-SB07-02
Laboratory Sample ID:	9402086-06	9402042-02A	9402086-02	9402086-03	9402042-06A	9402042-07A
Date Sampled:						
Percent Solids	78.1	87.4	89.3	87.1	89.9	81
PESTICIDE/PCBS						
alpha-BHC	UG/KG	1.09 UJ	0.975 UJ	0.955 UJ	0.975 UJ	1.05 UJ
beta-BHC	UG/KG	1.09 UJ		0.955 UJ	0.975 UJ	
delta-BHC	UG/KG	1.09 UJ	0.975 UJ	0.955 UJ	0.975 UJ	1.05 UJ
Lindane (gamma-BHC)	UG/KG	1.09 UJ	0.975 U	0.955 UJ	11.9 J	1.05 U
Heptachlor	UG/KG	1.09 UJ	0.975 U	0.955 UJ	13.1 J	1.05 U
Aldrin	UG/KG	1.09 UJ	0.975 U	0.955 UJ	12.8 J	1.05 U
Heptachlor epoxide	UG/KG	1.09 UJ	0.975 U	0.955 UJ	0.975 UJ	1.05 U
Endosulfan I	UG/KG	1.09 UJ	0.975 U	0.955 UJ	0.975 UJ	1.05 U
Dieldrin	UG/KG	7.57 J	1.895 U	0.32 J	27.6 J	2.035 U
4,4'-DDE	UG/KG	4.78 NJ	1.895 UJ	0.39 J	1.895 UJ	2.035 UJ
Endrin	UG/KG	2.115 UJ	1.895 UJ	1.855 UJ	28.3 J	2.035 UJ
Endosulfan II	UG/KG	10 J	1.895 UJ	1.855 UJ	1.895 UJ	2.035 UJ
4,4'-DDD	UG/KG	11.5 J	1.895 UJ	1.52 J	0.82 J	2.035 UJ
Endosulfan sulfate	UG/KG	2.115 UJ	1.895 UJ	1.855 UJ	1.895 UJ	2.035 UJ
4,4'-DDT	UG/KG	2.115 UJ	1.895 UJ	1.855 UJ	29.7 J	2.035 UJ
Methoxychlor	UG/KG	10.9 UJ	9.75 UJ	9.55 UJ	9.75 UJ	10.5 UJ
Endrin ketone	UG/KG	2.115 UJ	1.895 UJ	1.855 UJ	0.86 J	2.035 UJ
Endrin aldehyde	UG/KG	2.115 UJ	1.895 U	1.855 UJ	0.86 J	2.035 U
alpha-Chlordane	UG/KG	2.94 NJ	0.975 U	0.29 J	0.975 UJ	1.05 U
gamma-Chlordane	UG/KG	1.09 UJ	0.975 U	0.31 J	0.975 UJ	1.05 U
Toxaphene	UG/KG	109 UJ	97.5 U	95.5 UJ	97.5 UJ	105 U
Aroclor 1016	UG/KG	21.15 UJ	18.95 U	18.55 UJ	18.95 UJ	20.35 U
Aroclor 1221	UG/KG	42.95 UJ	38.5 U	37.65 UJ	38.5 UJ	41.35 U
Aroclor 1232	UG/KG	21.15 UJ	18.95 U	18.55 UJ	18.95 UJ	20.35 U
Aroclor 1242	UG/KG	21.15 UJ	18.95 U	18.55 UJ	18.95 UJ	20.35 U
Aroclor 1248	UG/KG	21.15 UJ	18.95 U	18.55 UJ	18.95 UJ	20.35 U
Aroclor 1254	UG/KG	21.15 UJ	18.95 U	18.55 UJ	18.95 UJ	20.35 U
Aroclor 1260	UG/KG	21.15 UJ	18.95 U	18.55 UJ	18.95 UJ	20.35 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB04-03	41-OS-SB05-01	41-OS-SB06-01	41-OS-SB06-03	41-OS-SB07-01	41-OS-SB07-02	
Laboratory Sample ID:	9402086-06	9402042-02A	9402086-02	9402086-03	9402042-06A	9402042-07A	
Date Sampled:							
Percent Solids	78.1	87.4	89.3	87.1	89.9	81	
CHEMICAL SURETY							
Acetophenone	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
Chloroacetophenone	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
Hydroxyacetophenone	UG/KG	1055 U	950 U	925 U	950 U	915 U	1025 U
Bis(2'-chloroethyl)disulfide	UG/KG	1055 U	950 U	925 U	950 U	915 U	1025 U
Bis(2'-chloroethyl)trisulfide	UG/KG	1055 U	950 U	925 U	950 U	915 U	1025 U
1,4-Dithiane	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
1,4-Oxathiane	UG/KG	211 U	190 U	185 U	190 U	183.5 U	204.5 U
THIODIGLYCOL							
Thiodiglycol	MG/KG	4 U	3.56 U	3.5 U	3.595 U	3.47 U	3.845 U
ORDNANCE							
1,3,5-Trinitrobenzene	UG/KG		20.1 U			20.1 U	20.1 U
1,3-Dinitrobenzene	UG/KG		18.6 U			18.6 U	18.6 U
2,4,6-Trinitrotoluene	UG/KG		17.8 U			17.8 U	17.8 U
2,4-Dinitrotoluene	UG/KG		25.8 U			25.8 U	25.8 U
2,6-Dinitrotoluene	UG/KG		23.8 U			23.8 U	23.8 U
2-Amino-4,6-dinitrotoluene	UG/KG		23.35 U			23.35 U	23.35 U
2-Nitrotoluene	UG/KG		40.7 U			40.7 U	40.7 U
3-Nitrotoluene	UG/KG		40.85 U			40.85 U	40.85 U
4-Amino-2,6-dinitrotoluene	UG/KG		20.4 U			20.4 U	20.4 U
4-Nitrotoluene	UG/KG		43.6 U			43.6 U	43.6 U
HMX	UG/KG		35.25 U			35.25 U	35.25 U
Nitrobenzene	UG/KG		17.6 U			17.6 U	17.6 U
RDX	UG/KG		25.45 U			25.45 U	25.45 U
Tetryl	UG/KG		81.5 U			81.5 U	81.5 U
MIREX							
Mirex	UG/KG	1055 U	950 U	925 U	950 U	915 U	1025 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB08-01	41-OS-SB09-01	41-OS-SB10-01	41-OS-SB11-01	41-OS-SB12-02	41-OS-SB14-01
Laboratory Sample ID:	9402086-10	9402042-04A	9402064-06	9402086-08	9402042-09A	9402064-02
Date Sampled:						
Percent Solids	88.7	88.5	87.8	82.4	82.7	88.6
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
1,2,4-Trichlorobenzene	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
1,3-Dichlorobenzene	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
1,4-Dichlorobenzene	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
2-Chloronaphthalene	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
2-Chlorophenol	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
2-Methylnaphthalene	UG/KG	185 U	188 U	201.5 U	41 J	22100 U
2-Methylphenol	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
2-Nitroaniline	UG/KG	448 U	456 U	488 U	480 U	53500 U
2-Nitrophenol	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
2,2'-oxybis-(1-chloropropane)	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
2,4-Dichlorophenol	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
2,4-Dimethylphenol	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
2,4-Dinitrophenol	UG/KG	448 U	456 U	488 U	480 U	53500 U
2,4-Dinitrotoluene	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
2,4,5-Trichlorophenol	UG/KG	448 U	456 U	488 U	480 U	53500 U
2,4,6-Trichlorophenol	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
2,6-Dinitrotoluene	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
3-Nitroaniline	UG/KG	448 U	456 U	488 U	480 U	53500 U
3,3'-Dichlorobenzidine	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
4-Bromophenyl-phenylether	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
4-Chloro-3-methylphenol	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
4-Chloroaniline	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
4-Chlorophenyl phenyl ether	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
4-Methylphenol	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
4-Nitroaniline	UG/KG	448 U	456 U	488 U	480 U	53500 U
4-Nitrophenol	UG/KG	448 U	456 U	488 U	480 U	53500 U
4,6-Dinitro-2-methylphenol	UG/KG	448 U	456 U	488 U	480 U	53500 U
Acenaphthene	UG/KG	185 U	188 U	201.5 U	130 J	22100 U
Acenaphthylene	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
Anthracene	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
Benzo[a]anthracene	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
Benzo[a]pyrene	UG/KG	185 U	188 U	201.5 U	198 U	4700 J

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB08-01	41-OS-SB09-01	41-OS-SB10-01	41-OS-SB11-01	41-OS-SB12-02	41-OS-SB14-01
Laboratory Sample ID:	9402086-10	9402042-04A	9402064-06	9402086-08	9402042-09A	9402064-02
Date Sampled:						
Percent Solids	88.7	88.5	87.8	82.4	82.7	88.6

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
Benzo[g,h,i]perylene	UG/KG	185 U	188 U	201.5 U	198 U	4600 J
Benzo[k]fluoranthene	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
bis(2-Chloroethoxy) methane	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
bis(2-Chloroethyl) ether	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
bis(2-Ethylhexyl)phthalate	UG/KG	150 J	67 J	105 J	198 U	7200 J
Butyl benzyl phthalate	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
Carbazole	UG/KG	185 U	188 U	201.5 U	66 J	22100 U
Chrysene	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
Dibenzofuran	UG/KG	185 U	188 U	201.5 U	48 J	22100 U
Dibenz[a,h]anthracene	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
Diethylphthalate	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
Dimethyl phthalate	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
di-n-Butylphthalate	UG/KG	73 J	51 J	201.5 U	200 U	22100 U
di-n-Octylphthalate	UG/KG	185 U	188 U	201.5 U	67 J	22100 U
Fluoranthene	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
Fluorene	UG/KG	185 U	188 U	201.5 U	120 J	22100 U
Hexachlorobenzene	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
Hexachlorobutadiene	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
Hexachlorocyclopentadiene	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
Hexachloroethane	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
Indeno[1,2,3-cd]pyrene	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
Isophorone	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
Naphthalene	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
Nitrobenzene	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
N-Nitroso-di-n-propylamine	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
N-nitrosodiphenylamine	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
Pentachlorophenol	UG/KG	448 U	456 U	488 U	480 U	53500 U
Phenanthrene	UG/KG	40 J	188 U	201.5 U	198 U	22100 U
Phenol	UG/KG	185 U	188 U	201.5 U	198 U	22100 U
Pyrene	UG/KG	185 U	188 U	201.5 U	198 U	22100 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB08-01	41-OS-SB09-01	41-OS-SB10-01	41-OS-SB11-01	41-OS-SB12-02	41-OS-SB14-01	
Laboratory Sample ID:	9402086-10	9402042-04A	9402064-06	9402086-08	9402042-09A	9402064-02	
Date Sampled:							
Percent Solids	88.7	88.5	87.8	82.4	82.7	88.6	
YOLATILES							
Chloromethane	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
Bromomethane	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
Vinyl chloride	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
Chloroethane	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
Methylene chloride	UG/KG	5.5 U	4 J	5.5 U	6 UJ	4 J	26 J
Acetone	UG/KG	44	67 J	5.5 U	160 J	24 J	3800 J
Carbon Disulfide	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
1,1-Dichloroethene	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
1,1-Dichloroethane	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
1,2-Dichloroethene(total)	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
Chloroform	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
1,2-Dichloroethane	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
2-Butanone	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	
1,1,1-Trichloroethane	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
Carbon tetrachloride	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
Bromodichloromethane	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
1,2-Dichloropropane	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
cis-1,3-Dichloropropene	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
Trichloroethene	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
Dibromochloromethane	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
1,1,2-Trichloroethane	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
Benzene	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
trans-1,3-Dichloropropene	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
Bromoform	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
4-Methyl-2-pentanone	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
2-Hexanone	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
Tetrachloroethene	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
1,1,2,2-Tetrachloroethane	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
Toluene	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
Chlorobenzene	UG/KG	5.5 U	4 J	5.5 U	6 UJ	6 U	5.5 UJ
Ethylbenzene	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
Styrene	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ
Xylenes (total)	UG/KG	5.5 U	5.6 U	5.5 U	6 UJ	6 U	5.5 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB08-01	41-OS-SB09-01	41-OS-SB10-01	41-OS-SB11-01	41-OS-SB12-02	41-OS-SB14-01
Laboratory Sample ID:	9402086-10	9402042-04A	9402064-06	9402086-08	9402042-09A	9402064-02
Date Sampled:						
Percent Solids	88.7	88.5	87.8	82.4	82.7	88.6
PESTICIDE/PCBS						
alpha-BHC	UG/KG	0.955 UJ	0.965 UJ	0.965 UJ	1.035 UJ	1.025 UJ
beta-BHC	UG/KG	0.955 UJ		0.965 UJ	1.035 UJ	2.17 J
delta-BHC	UG/KG	0.955 UJ	0.965 UJ	0.965 UJ	1.035 UJ	
Lindane (gamma-BHC)	UG/KG	0.955 UJ	0.965 U	0.965 UJ	1.035 U	1.025 U
Heptachlor	UG/KG	0.955 UJ	0.965 U	0.965 UJ	1.035 U	1.61 J
Aldrin	UG/KG	0.955 UJ	0.965 U	0.965 UJ	1.035 U	1.025 U
Heptachlor epoxide	UG/KG	0.955 UJ	0.965 U	0.965 UJ	1.035 U	1.025 U
Endosulfan I	UG/KG	0.955 UJ	0.965 U	0.965 UJ	1.035 U	1.025 U
Dieldrin	UG/KG	3.27 NJ	0.42 NJ	1.875 UJ	27.1 J	1.99 U
4,4'-DDE	UG/KG	10.3 J	0.32 NJ	5.95 J	17.4 J	2.96 J
Endrin	UG/KG	1.14 NJ	1.875 UJ	1.875 UJ	5.96 NJ	1.99 UJ
Endosulfan II	UG/KG	4.22 J	0.87 J	1.875 UJ	25.2 NJ	1.99 UJ
4,4'-DDD	UG/KG	5.58 NJ	1.23 J	1.875 UJ	25.4 NJ	0.85 NJ
Endosulfan sulfate	UG/KG	1.855 UJ	1.875 UJ	1.875 UJ	2.01 U	1.99 UJ
4,4'-DDT	UG/KG	1.855 UJ	1.875 UJ	1.875 UJ	2.01 UJ	1.99 UJ
Methoxychlor	UG/KG	9.55 UJ	9.65 UJ	9.65 UJ	10.35 UJ	10.25 UJ
Endrin ketone	UG/KG	1.855 UJ	1.875 UJ	1.875 UJ	2.01 U	1.99 UJ
Endrin aldehyde	UG/KG	1.855 UJ	1.875 U	1.875 UJ	2.01 U	1.99 U
alpha-Chlordane	UG/KG	0.74 J	0.53 J	0.965 UJ	6.81 J	1.025 U
gamma-Chlordane	UG/KG	0.54 J	0.965 U	0.965 UJ	1.03 J	1.025 U
Toxaphene	UG/KG	95.5 UJ	96.5 U	96.5 UJ	103.5 U	102.5 U
Aroclor 1016	UG/KG	18.55 UJ	18.75 U	18.75 UJ	20.1 U	19.9 U
Aroclor 1221	UG/KG	37.65 UJ	38.05 U	38.05 UJ	40.85 U	40.35 U
Aroclor 1232	UG/KG	18.55 UJ	18.75 U	18.75 UJ	20.1 U	19.9 U
Aroclor 1242	UG/KG	18.55 UJ	18.75 U	18.75 UJ	20.1 U	19.9 U
Aroclor 1248	UG/KG	18.55 UJ	18.75 U	18.75 UJ	20.1 U	19.9 U
Aroclor 1254	UG/KG	18.55 UJ	18.75 U	18.75 UJ	20.1 U	19.9 U
Aroclor 1260	UG/KG	18.55 UJ	18.75 U	18.75 UJ	20.1 U	19.9 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB08-01	41-OS-SB09-01	41-OS-SB10-01	41-OS-SB11-01	41-OS-SB12-02	41-OS-SB14-01
Laboratory Sample ID:	9402086-10	9402042-04A	9402064-06	9402086-08	9402042-09A	9402064-02
Date Sampled:						
Percent Solids	88.7	88.5	87.8	82.4	82.7	88.6
CHEMICAL SURETY						
Acetophenone	UG/KG	185 U		188 U	201.5 U	198 U
Chloroacetophenone	UG/KG	185 U		188 U	201.5 U	198 U
Hydroxyacetophenone	UG/KG	925 U		940 U	1005 U	990 U
Bis(2'-chloroethyl)disulfide	UG/KG	925 U	940 U	940 U	1005 U	990 U
Bis(2'-chloroethyl)trisulfide	UG/KG	925 U	940 U	940 U	1005 U	990 U
1,4-Dithiane	UG/KG	185 U		188 U	201.5 U	198 U
1,4-Oxathiane	UG/KG	185 U		188 U	201.5 U	198 U
THIODIGLYCOL						
Thiodiglycol	MG/KG	3.53 U	3.53 U	3.56 U	3.78 U	3.78 U
ORDNANCE						
1,3,5-Trinitrobenzene	UG/KG		20.1 U	20.1 U		20.1 U
1,3-Dinitrobenzene	UG/KG		18.6 U	18.6 U		18.6 U
2,4,6-Trinitrotoluene	UG/KG		17.8 U	17.8 U		17.8 U
2,4-Dinitrotoluene	UG/KG		25.8 U	25.8 U		25.8 U
2,6-Dinitrotoluene	UG/KG		23.8 U	23.8 U		23.8 U
2-Amino-4,6-dinitrotoluene	UG/KG		23.35 U	23.35 U		23.35 U
2-Nitrotoluene	UG/KG		40.7 U	40.7 U		40.7 U
3-Nitrotoluene	UG/KG		40.85 U	40.85 U		40.85 U
4-Amino-2,6-dinitrotoluene	UG/KG		20.4 U	20.4 U		20.4 U
4-Nitrotoluene	UG/KG		43.6 U	43.6 U		43.6 U
HMX	UG/KG		35.25 U	35.25 U		35.25 U
Nitrobenzene	UG/KG		17.6 U	17.6 U		17.6 U
RDX	UG/KG		25.45 U	25.45 U		25.45 U
Tetryl	UG/KG		81.5 U	81.5 U		81.5 U
MIREX						
Mirex	UG/KG	925 U		940 U	1005 U	990 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB14-02	41-OS-SB15-01	41-OS-SB15-02	41-OS-SB16-01	41-OS-SB17-01	41-OS-SB17-02
Laboratory Sample ID:	9402064-03	9402070-02	9402070-03	9402043-06	9402052-01	9402052-02
Date Sampled:						
Percent Solids	92.8	86.6	87	84.9	88.9	87.1
<u>SEMIVOLATILES</u>						
1,2-Dichlorobenzene	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
1,2,4-Trichlorobenzene	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
1,3-Dichlorobenzene	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
1,4-Dichlorobenzene	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
2-Chloronaphthalene	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
2-Chlorophenol	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
2-Methylnaphthalene	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
2-Methylphenol	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
2-Nitroaniline	UG/KG	432 U	460 U	460 U	472 U	449.5 U
2-Nitrophenol	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
2,2'-oxybis-(1-chloropropane)	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
2,4-Dichlorophenol	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
2,4-Dimethylphenol	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
2,4-Dinitrophenol	UG/KG	432 U	460 U	460 U	472 U	449.5 U
2,4-Dinitrotoluene	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
2,4,5-Trichlorophenol	UG/KG	432 U	460 U	460 U	472 U	449.5 U
2,4,6-Trichlorophenol	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
2,6-Dinitrotoluene	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
3-Nitroaniline	UG/KG	432 U	460 U	460 U	472 U	449.5 U
3,3'-Dichlorobenzidine	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
4-Bromophenyl-phenylether	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
4-Chloro-3-methylphenol	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
4-Chloroaniline	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
4-Chlorophenyl phenyl ether	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
4-Methylphenol	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
4-Nitroaniline	UG/KG	432 U	460 U	460 U	472 U	449.5 U
4-Nitrophenol	UG/KG	432 U	460 U	460 U	472 U	449.5 U
4,6-Dinitro-2-methylphenol	UG/KG	432 U	460 U	460 U	472 U	449.5 U
Acenaphthene	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
Acenaphthylene	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
Anthracene	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
Benzo[a]anthracene	UG/KG	178 U	190 U	190 U	71 J	185.5 U
Benzo[a]pyrene	UG/KG	178 U	190 U	190 U	74 J	185.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-0S-SB14-02	41-0S-SB15-01	41-0S-SB15-02	41-0S-SB16-01	41-0S-SB17-01	41-0S-SB17-02	
Laboratory Sample ID:	9402064-03	9402070-02	9402070-03	9402043-06	9402052-01	9402052-02	
Date Sampled:							
Percent Solids	92.8	86.6	87	84.9	88.9	87.1	
SEMIVOLATILES Cont.							
Benzo[b]fluoranthene	UG/KG	178 U	190 U	190 U	75 J	185.5 U	189.5 U
Benzo[g,h,i]perylene	UG/KG	178 U	41 J	190 U	60 J	185.5 U	189.5 U
Benzo[k]fluoranthene	UG/KG	178 U	190 U	190 U	80 J	185.5 U	189.5 U
bis(2-Chloroethoxy) methane	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U	189.5 U
bis(2-Chloroethyl) ether	UG/KG	178 U	79 J	190 U	194.5 U	185.5 U	189.5 U
bis(2-Ethylhexyl)phthalate	UG/KG	178 U	490	74 J	63 J	185.5 U	189.5 U
Butyl benzyl phthalate	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U	189.5 U
Carbazole	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U	189.5 U
Chrysene	UG/KG	178 U	190 U	190 U	89 J	185.5 U	189.5 U
Dibenzofuran	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U	189.5 U
Dibenz[a,h]anthracene	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U	189.5 U
Diethylphthalate	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U	110 J
Dimethyl phthalate	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U	189.5 U
di-n-Butylphthalate	UG/KG	178 U	190 U	190 U	195 U	185 U	190 U
di-n-Octylphthalate	UG/KG	178 U	190 U	190 U	194.5 U	44 J	1600
Fluoranthene	UG/KG	178 U	190 U	190 U	130 J	185.5 U	189.5 U
Fluorene	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U	189.5 U
Hexachlorobenzene	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U	189.5 U
Hexachlorobutadiene	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U	189.5 U
Hexachlorocyclopentadiene	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U	189.5 U
Hexachloroethane	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U	189.5 U
Indeno[1,2,3-cd]pyrene	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U	189.5 U
Isophorone	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U	189.5 U
Naphthalene	UG/KG	178 U	190 U	190 U	194.5 U	71 J	260 J
Nitrobenzene	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U	189.5 U
N-Nitroso-di-n-propylamine	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U	189.5 U
N-nitrosodiphenylamine	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U	189.5 U
Pentachlorophenol	UG/KG	432 U	460 U	460 U	472 U	449.5 U	460 U
Phenanthrene	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U	189.5 U
Phenol	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U	189.5 U
Pyrene	UG/KG	178 U	190 U	63 J	120 J	185.5 U	189.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-0S-SB14-02	41-0S-SB15-01	41-0S-SB15-02	41-0S-SB16-01	41-0S-SB17-01	41-0S-SB17-02
Laboratory Sample ID:	9402064-03	9402070-02	9402070-03	9402043-06	9402052-01	9402052-02
Date Sampled:						
Percent Solids	92.8	86.6	87	84.9	88.9	87.1
VOLATILES						
Chloromethane	UG/KG	5.5 U	5.5 U	5.5 U	5.9 U	5.75 U
Bromomethane	UG/KG	5.5 U	5.5 U	5.5 U	5.9 U	5.75 U
Vinyl chloride	UG/KG	5.5 U	5.5 U	5.5 U	5.9 U	5.75 U
Chloroethane	UG/KG	5.5 U	5.5 U	5.5 U	5.9 U	5.75 U
Methylene chloride	UG/KG	21 J	3 J	5.5 U	9 U	3 J
Acetone	UG/KG	960	5.5 U	72	5.9 U	210 J
Carbon Disulfide	UG/KG	5.5 U	5.5 U	5.5 U	5.9 U	5.75 U
1,1-Dichloroethene	UG/KG	5.5 U	5.5 U	5.5 U	5.9 U	5.75 U
1,1-Dichloroethane	UG/KG	5.5 U	5.5 U	5.5 U	5.9 U	5.75 U
1,2-Dichloroethene(total)	UG/KG	5.5 U	5.5 U	5.5 U	5.9 U	5.75 U
Chloroform	UG/KG	5.5 U	5.5 U	5.5 U	5.9 U	5.75 U
1,2-Dichloroethane	UG/KG	5.5 U	5.5 U	5.5 U	5.9 U	5.75 U
2-Butanone	UG/KG		5.5 U	5.5 U	5.6 U	15 J
1,1,1-Trichloroethane	UG/KG	5.5 U	5.5 U	5.5 U	5.9 U	5.75 U
Carbon tetrachloride	UG/KG	5.5 U	5.5 U	5.5 U	5.9 U	5.75 U
Bromodichloromethane	UG/KG	5.5 U	5.5 U	5.5 U	5.9 U	5.75 U
1,2-Dichloropropane	UG/KG	5.5 U	5.5 U	5.5 U	5.9 U	5.75 U
cis-1,3-Dichloropropene	UG/KG	5.5 U	5.5 U	5.5 U	5.9 U	5.75 U
Trichloroethene	UG/KG	5.5 U	5.5 U	5.5 U	5.9 U	5.75 U
Dibromochloromethane	UG/KG	5.5 U	5.5 U	5.5 U	5.9 U	5.75 U
1,1,2-Trichloroethane	UG/KG	5.5 U	5.5 U	5.5 U	5.9 U	5.75 U
Benzene	UG/KG	5.5 U	5.5 U	5.5 U	5.9 U	5.75 U
trans-1,3-Dichloropropene	UG/KG	5.5 U	5.5 U	5.5 U	5.9 U	5.75 U
Bromoform	UG/KG	5.5 U	5.5 U	5.5 U	5.9 U	5.75 U
4-Methyl-2-pentanone	UG/KG	5.5 U	5.5 UJ	5.5 U	5.9 U	5.75 U
2-Hexanone	UG/KG	5.5 U	5.5 UJ	5.5 U	5.9 U	5.75 U
Tetrachloroethene	UG/KG	5.5 U	5.5 UJ	5.5 U	5.9 U	5.75 U
1,1,2,2-Tetrachloroethane	UG/KG	5.5 U	5.5 UJ	5.5 U	5.9 U	5.75 U
Toluene	UG/KG	5.5 U	5.5 UJ	5.5 U	5.9 U	5.75 U
Chlorobenzene	UG/KG	5.5 U	5.5 UJ	4 J	5.9 U	5.75 U
Ethylbenzene	UG/KG	5.5 U	5.5 UJ	5.5 U	5.9 U	5.75 U
Styrene	UG/KG	5.5 U	5.5 UJ	5.5 U	5.9 U	5.75 U
Xylenes (total)	UG/KG	5.5 U	5.5 UJ	5.5 U	5.9 U	5.75 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB14-02	41-OS-SB15-01	41-OS-SB15-02	41-OS-SB16-01	41-OS-SB17-01	41-OS-SB17-02
Laboratory Sample ID:	9402064-03	9402070-02	9402070-03	9402043-06	9402052-01	9402052-02
Date Sampled:						
Percent Solids	92.8	86.6	87	84.9	88.9	87.1
PESTICIDE/PCBS						
alpha-BHC	UG/KG	0.915 UJ	0.975 UJ	0.975 UJ	5.005 UJ	0.975 UJ
beta-BHC	UG/KG	0.915 UJ	0.975 UJ	0.975 UJ		0.975 UJ
delta-BHC	UG/KG	0.915 UJ	0.975 UJ	0.975 UJ	5.005 UJ	0.975 UJ
Lindane (gamma-BHC)	UG/KG	0.915 U	0.975 UJ	0.975 UJ	5.005 UJ	0.975 UJ
Heptachlor	UG/KG	0.915 U	0.975 UJ	0.975 UJ	5.005 UJ	0.975 UJ
Aldrin	UG/KG	0.915 U	0.975 UJ	0.975 UJ	5.005 UJ	0.975 UJ
Heptachlor epoxide	UG/KG	0.915 U	0.4 J	0.975 UJ	5.005 UJ	0.975 UJ
Endosulfan I	UG/KG	0.915 U	0.975 UJ	0.975 UJ	5.005 UJ	0.975 UJ
Dieldrin	UG/KG	0.48 NJ	1.895 UJ	1.895 UJ	5.6 J	1.895 UJ
4,4'-DDE	UG/KG	2.48 J	1.895 UJ	12.6 J	9.715 UJ	13.8 J
Endrin	UG/KG	1.775 U	1.895 UJ	1.895 UJ	4.61 J	1.895 UJ
Endosulfan II	UG/KG	0.92 NJ	1.895 UJ	1.895 UJ	13.74 J	1.895 UJ
4,4'-DDD	UG/KG	2.12 J	1.895 UJ	10.8 J	16.14 J	30.6 J
Endosulfan sulfate	UG/KG	1.775 U	1.895 UJ	1.895 UJ	9.715 UJ	1.895 UJ
4,4'-DDT	UG/KG	4.96 J	1.895 UJ	1.895 UJ	9.715 UJ	1.895 UJ
Methoxychlor	UG/KG	5.47 NJ	9.75 UJ	9.75 UJ	50.05 UJ	9.75 UJ
Endrin ketone	UG/KG	1.775 U	1.895 UJ	1.895 UJ	9.715 UJ	1.895 UJ
Endrin aldehyde	UG/KG	1.775 U	1.895 UJ	1.895 UJ	9.715 U	1.895 UJ
alpha-Chlordane	UG/KG	0.915 U	0.975 UJ	0.975 UJ	4.77 J	1.21 J
gamma-Chlordane	UG/KG	0.915 U	0.62 J	0.975 UJ	3.64 J	1.43 J
Toxaphene	UG/KG	91.5 U	97.5 UJ	97.5 UJ	500.6 UJ	97.5 UJ
Aroclor 1016	UG/KG	17.75 U	18.95 UJ	18.95 UJ	97.2 UJ	18.95 UJ
Aroclor 1221	UG/KG	36 U	38.5 UJ	38.5 UJ	197 UJ	38.5 UJ
Aroclor 1232	UG/KG	17.75 U	18.95 UJ	18.95 UJ	97.2 UJ	18.95 UJ
Aroclor 1242	UG/KG	17.75 U	18.95 UJ	18.95 UJ	97.2 UJ	18.95 UJ
Aroclor 1248	UG/KG	17.75 U	18.95 UJ	18.95 UJ	97.2 UJ	18.95 UJ
Aroclor 1254	UG/KG	17.75 U	18.95 UJ	18.95 UJ	97.2 UJ	18.95 UJ
Aroclor 1260	UG/KG	17.75 U	18.95 UJ	18.95 UJ	317 J	18.95 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB14-02	41-OS-SB15-01	41-OS-SB15-02	41-OS-SB16-01	41-OS-SB17-01	41-OS-SB17-02
Laboratory Sample ID:	9402064-03	9402070-02	9402070-03	9402043-06	9402052-01	9402052-02
Date Sampled:						
Percent Solids	92.8	86.6	87	84.9	88.9	87.1
CHEMICAL SURETY						
Acetophenone	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
Chloroacetophenone	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
Hydroxyacetophenone	UG/KG	890 U	950 U	950 U	975 U	925 U
Bis(2'-chloroethyl)disulfide	UG/KG	890 U	950 U	950 U	975 U	925 U
Bis(2'-chloroethyl)trisulfide	UG/KG	890 U	950 U	950 U	975 U	925 U
1,4-Dithiane	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
1,4-Oxathiane	UG/KG	178 U	190 U	190 U	194.5 U	185.5 U
THIODIGLYCOL						
Thiodiglycol	MG/KG	3.375 U	3.595 U	3.595 U	3.69 U	3.5 U
ORDNANCE						
1,3,5-Trinitrobenzene	UG/KG	20.1 U	20.1 UJ	20.1 U	20.1 U	20.1 U
1,3-Dinitrobenzene	UG/KG	18.6 U	18.6 UJ	18.6 U	18.6 U	18.6 U
2,4,6-Trinitrotoluene	UG/KG	17.8 U	17.8 UJ	17.8 U	17.8 U	17.8 U
2,4-Dinitrotoluene	UG/KG	25.8 U	25.8 UJ	25.8 U	25.8 U	25.8 U
2,6-Dinitrotoluene	UG/KG	23.8 U	23.8 UJ	23.8 U	23.8 U	23.8 U
2-Amino-4,6-dinitrotoluene	UG/KG	23.35 U	23.35 UJ	23.35 U	23.35 U	23.35 U
2-Nitrotoluene	UG/KG	40.7 U	40.7 UJ	40.7 U	40.7 U	40.7 U
3-Nitrotoluene	UG/KG	40.85 U	40.85 UJ	40.85 U	40.85 U	40.85 U
4-Amino-2,6-dinitrotoluene	UG/KG	20.4 U	20.4 UJ	20.4 U	20.4 U	20.4 U
4-Nitrotoluene	UG/KG	43.6 U	43.6 UJ	43.6 U	43.6 U	43.6 U
HMX	UG/KG	35.25 U	35.25 UJ	35.25 U	35.25 U	35.25 U
Nitrobenzene	UG/KG	17.6 U	17.6 UJ	17.6 U	17.6 U	17.6 U
RDX	UG/KG	25.45 U	25.45 UJ	25.45 U	25.45 U	25.45 U
Tetryl	UG/KG	81.5 UJ	81.5 UJ	81.5 UJ	81.5 U	81.5 U
MIREX						
Mirex	UG/KG	890 U	950 U	950 U	975 U	925 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-0S-SB18-01	41-0S-SB19-01	41-0S-SB21-01	41-0S-SB21-02	41-0S-SB22-01	41-0S-SB22-03	
Laboratory Sample ID:	9402061-03	9402043-04	9402052-06	9402052-07	9402061-05	9402061-06	
Date Sampled:							
Percent Solids	87.7	87.9	69.7	82	89.3	76.9	
SEMIVOLATILES							
1,2-Dichlorobenzene	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
1,2,4-Trichlorobenzene	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
1,3-Dichlorobenzene	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
1,4-Dichlorobenzene	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
2-Chloronaphthalene	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
2-Chlorophenol	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
2-Methylnaphthalene	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	550
2-Methylphenol	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
2-Nitroaniline	UG/KG	454.5 U	456 U	570 U	488 U	449.5 U	520 U
2-Nitrophenol	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
2,2'-oxybis-(1-chloropropane)	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
2,4-Dichlorophenol	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
2,4-Dimethylphenol	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
2,4-Dinitrophenol	UG/KG	454.5 U	456 U	570 U	488 U	449.5 U	520 U
2,4-Dinitrotoluene	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
2,4,5-Trichlorophenol	UG/KG	454.5 U	456 U	570 U	488 U	449.5 U	520 U
2,4,6-Trichlorophenol	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
2,6-Dinitrotoluene	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
3-Nitroaniline	UG/KG	454.5 U	456 U	570 U	488 U	449.5 U	520 U
3,3'-Dichlorobenzidine	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
4-Bromophenyl-phenylether	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
4-Chloro-3-methylphenol	UG/KG	187.5 U	188 U	235.5 U	61 J	185.5 U	214 U
4-Chloroaniline	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
4-Chlorophenyl phenyl ether	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
4-Methylphenol	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	53 J
4-Nitroaniline	UG/KG	454.5 U	456 U	570 U	488 U	449.5 U	520 U
4-Nitrophenol	UG/KG	454.5 U	456 U	570 U	488 U	449.5 U	520 U
4,6-Dinitro-2-methylphenol	UG/KG	454.5 U	456 U	570 U	488 U	449.5 U	520 U
Acenaphthene	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
Acenaphthylene	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
Anthracene	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
Benzo[a]anthracene	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
Benzo[a]pyrene	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB18-01	41-OS-SB19-01	41-OS-SB21-01	41-OS-SB21-02	41-OS-SB22-01	41-OS-SB22-03
Laboratory Sample ID:	9402061-03	9402043-04	9402052-06	9402052-07	9402061-05	9402061-06
Date Sampled:						
Percent Solids	87.7	87.9	69.7	82	89.3	76.9

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
Benzo[g,h,i]perylene	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
Benzo[k]fluoranthene	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
bis(2-Chloroethoxy) methane	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
bis(2-Chloroethyl) ether	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
bis(2-Ethylhexyl)phthalate	UG/KG	88 J	57 J	235.5 U	201 U	185.5 U	214 U
Butyl benzyl phthalate	UG/KG	88 J	188 U	235.5 U	201 U	185.5 U	214 U
Carbazole	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
Chrysene	UG/KG	43 J	188 U	235.5 U	201 U	185.5 U	214 U
Dibenzofuran	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
Dibenz[a,h]anthracene	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
Diethylphthalate	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
Dimethyl phthalate	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
di-n-Butylphthalate	UG/KG	187.5 U		240 U	205 U	185.5 U	214 U
di-n-Octylphthalate	UG/KG	180 J	188 U	235.5 U	201 U	180 J	640
Fluoranthene	UG/KG	69 J	188 U	235.5 U	201 U	185.5 U	214 U
Fluorene	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	44 J
Hexachlorobenzene	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
Hexachlorobutadiene	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
Hexachlorocyclopentadiene	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
Hexachloroethane	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
Indeno[1,2,3-cd]pyrene	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
Isophorone	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
Naphthalene	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	290 J
Nitrobenzene	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
N-Nitroso-di-n-propylamine	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
N-nitrosodiphenylamine	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
Pentachlorophenol	UG/KG	454.5 U	456 U	570 U	488 U	449.5 U	520 U
Phenanthrene	UG/KG	39 J	188 U	235.5 U	201 U	185.5 U	103 J
Phenol	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
Pyrene	UG/KG	63 J	188 U	235.5 U	201 U	185.5 U	214 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-0S-SB18-01	41-0S-SB19-01	41-0S-SB21-01	41-0S-SB21-02	41-0S-SB22-01	41-0S-SB22-03	
Laboratory Sample ID:	9402061-03	9402043-04	9402052-06	9402052-07	9402061-05	9402061-06	
Date Sampled:							
Percent Solids	87.7	87.9	69.7	82	89.3	76.9	
VOLATILES							
Chloromethane	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
Bromomethane	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
Vinyl chloride	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
Chloroethane	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
Methylene chloride	UG/KG	5.5 U	5.5 U	2 J	9 J	5.5 U	6.5 U
Acetone	UG/KG	5.7 UJ	5.7 U	160 J	26.5 U	5.6 UJ	40 J
Carbon Disulfide	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
1,1-Dichloroethene	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
1,1-Dichloroethane	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
1,2-Dichloroethene(total)	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
Chloroform	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
1,2-Dichloroethane	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
2-Butanone	UG/KG	5.7 U	5.7 U	7.15 U		5.6 U	1 J
1,1,1-Trichloroethane	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
Carbon tetrachloride	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
Bromodichloromethane	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
1,2-Dichloropropane	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
cis-1,3-Dichloropropene	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
Trichloroethene	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
Dibromochloromethane	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
1,1,2-Trichloroethane	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
Benzene	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
trans-1,3-Dichloropropene	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
Bromoform	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
4-Methyl-2-pentanone	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
2-Hexanone	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
Tetrachloroethene	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
1,1,2,2-Tetrachloroethane	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
Toluene	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
Chlorobenzene	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	100
Ethylbenzene	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	58
Styrene	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U
Xylenes (total)	UG/KG	5.7 U	5.7 U	7.15 U	6.1 U	5.6 U	6.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-0S-SB18-01	41-0S-SB19-01	41-0S-SB21-01	41-0S-SB21-02	41-0S-SB22-01	41-0S-SB22-03	
Laboratory Sample ID:	9402061-03	9402043-04	9402052-06	9402052-07	9402061-05	9402061-06	
Date Sampled:							
Percent Solids	87.7	87.9	69.7	82	89.3	76.9	
PESTICIDE/PCBS							
alpha-BHC	UG/KG	0.965 UJ	0.965 UJ	1.215 UJ	1.035 UJ	0.955 UJ	1.105 UJ
beta-BHC	UG/KG	0.965 UJ		1.215 UJ	1.035 UJ	0.955 UJ	1.105 UJ
delta-BHC	UG/KG	0.965 UJ	0.91 J	1.215 UJ	1.035 UJ	0.955 UJ	1.105 UJ
Lindane (gamma-BHC)	UG/KG	0.965 UJ	0.965 UJ	1.215 U	1.035 UJ	0.955 UJ	1.105 UJ
Heptachlor	UG/KG	0.965 UJ	0.965 U	1.215 U	1.035 UJ	0.955 UJ	0.68 J
Aldrin	UG/KG	0.965 UJ	0.965 UJ	1.215 U	1.035 UJ	0.955 UJ	1.105 UJ
Heptachlor epoxide	UG/KG	0.965 UJ	0.965 UJ	1.215 U	1.035 UJ	0.955 UJ	1.105 UJ
Endosulfan I	UG/KG	2.92 NJ	0.965 UJ	1.215 U	1.035 UJ	0.78 NJ	1.105 UJ
Dieldrin	UG/KG	60 NJ	1.875 UJ	2.355 U	2.01 UJ	4.78 J	4.3 J
4,4'-DDE	UG/KG	8.77 NJ		2.355 U	2.01 UJ	1.84 J	5.3 J
Endrin	UG/KG	1.875 UJ		2.355 U	2.01 UJ	1.855 UJ	2.14 UJ
Endosulfan II	UG/KG	19.4 J	1.875 UJ	2.355 U	2.01 UJ	3.67 J	2.14 UJ
4,4'-DDD	UG/KG	12.4 J		2.355 U	2.01 UJ	1.87 NJ	1060 J
Endosulfan sulfate	UG/KG	1.875 UJ		2.355 U	2.01 UJ	1.855 UJ	2.14 UJ
4,4'-DDT	UG/KG	5.95 J	1.875 UJ	2.355 UJ	2.01 UJ	2.85 NJ	56.8 J
Methoxychlor	UG/KG	9.65 UJ	9.65 UJ	12.15 UJ	10.35 UJ	9.55 UJ	11.05 UJ
Endrin ketone	UG/KG	1.875 UJ		2.355 U	2.01 UJ	1.855 UJ	2.14 UJ
Endrin aldehyde	UG/KG	4.38 J		2.355 U	2.01 UJ	1.855 UJ	2.14 UJ
alpha-Chlordane	UG/KG	3.39 NJ	0.965 UJ	1.215 U	1.035 UJ	1.69 J	1.105 UJ
gamma-Chlordane	UG/KG	0.965 UJ	0.965 UJ	1.215 U	1.035 UJ	0.9 J	1.105 UJ
Toxaphene	UG/KG	96.5 UJ	96.5 UJ	121.5 U	103.5 UJ	95.5 UJ	110.5 UJ
Aroclor 1016	UG/KG	18.75 UJ	18.75 UJ	23.55 U	20.1 UJ	18.55 UJ	21.4 UJ
Aroclor 1221	UG/KG	38.05 UJ	38.05 UJ	47.85 U	40.85 UJ	37.65 UJ	43.5 UJ
Aroclor 1232	UG/KG	18.75 UJ	18.75 UJ	23.55 U	20.1 UJ	18.55 UJ	21.4 UJ
Aroclor 1242	UG/KG	18.75 UJ	18.75 UJ	23.55 U	20.1 UJ	18.55 UJ	21.4 UJ
Aroclor 1248	UG/KG	18.75 UJ	18.75 UJ	23.55 U	20.1 UJ	18.55 UJ	21.4 UJ
Aroclor 1254	UG/KG	18.75 UJ	36.7 J	23.55 U	20.1 UJ	18.55 UJ	21.4 UJ
Aroclor 1260	UG/KG	18.75 UJ	18.75 UJ	23.55 U	20.1 UJ	18.55 UJ	21.4 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB18-01	41-OS-SB19-01	41-OS-SB21-01	41-OS-SB21-02	41-OS-SB22-01	41-OS-SB22-03	
Laboratory Sample ID:	9402061-03	9402043-04	9402052-06	9402052-07	9402061-05	9402061-06	
Date Sampled:							
Percent Solids	87.7	87.9	69.7	82	89.3	76.9	
CHEMICAL SURETY							
Acetophenone	UG/KG	187.5 U	188 U	235.5 U	120 J	185.5 U	214 U
Chloroacetophenone	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
Hydroxyacetophenone	UG/KG	935 U	940 U	1180 U	1005 U	925 U	1070 U
Bis(2'-chloroethyl)disulfide	UG/KG	935 U	940 U	1180 U	1005 U	925 U	1070 U
Bis(2'-chloroethyl)trisulfide	UG/KG	935 U	940 U	1180 U	1005 U	925 U	1070 U
1,4-Dithiane	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
1,4-Oxathiane	UG/KG	187.5 U	188 U	235.5 U	201 U	185.5 U	214 U
THIODIGLYCOL							
Thiodiglycol	MG/KG	3.56 U	3.56 U	4.47 U	3.81 U	3.5 U	4.06 U
ORDNANCE							
1,3,5-Trinitrobenzene	UG/KG	20.1 U	20.1 U	20.1 U	20.1 U	20.1 U	20.1 U
1,3-Dinitrobenzene	UG/KG	18.6 U	18.6 U	18.6 U	18.6 U	18.6 U	18.6 U
2,4,6-Trinitrotoluene	UG/KG	17.8 U	17.8 U	17.8 U	17.8 U	17.8 U	17.8 U
2,4-Dinitrotoluene	UG/KG	25.8 U	25.8 U	25.8 U	25.8 U	25.8 U	25.8 U
2,6-Dinitrotoluene	UG/KG	23.8 U	23.8 U	23.8 U	23.8 U	23.8 U	23.8 U
2-Amino-4,6-dinitrotoluene	UG/KG	23.35 U	23.35 U	23.35 U	23.35 U	23.35 U	23.35 U
2-Nitrotoluene	UG/KG	40.7 U	40.7 U	40.7 U	40.7 U	40.7 U	40.7 U
3-Nitrotoluene	UG/KG	40.85 U	40.85 U	40.85 U	40.85 U	40.85 U	40.85 U
4-Amino-2,6-dinitrotoluene	UG/KG	20.4 U	20.4 U	20.4 U	20.4 U	20.4 U	20.4 U
4-Nitrotoluene	UG/KG	43.6 U	43.6 U	43.6 U	43.6 U	43.6 U	43.6 U
HMX	UG/KG	35.25 U	35.25 U	35.25 U	35.25 U	35.25 U	35.25 U
Nitrobenzene	UG/KG	17.6 U	17.6 U	17.6 U	17.6 U	17.6 U	17.6 U
RDX	UG/KG	25.45 U	25.45 U	25.45 U	25.45 U	25.45 U	25.45 U
Tetryl	UG/KG	81.5 U	81.5 U	81.5 U	81.5 U	81.5 U	81.5 U
MIREX							
Mirex	UG/KG	935 U	940 U	1180 UJ	1005 UJ	925 U	1070 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB23-01	41-OS-SB24-01	41-OS-SB24-02	41-OS-SB25-01	41-OS-SB26-01	41-OS-SB27-01	
Laboratory Sample ID:	9402043-02	9402061-08	9402061-09	9402088-02A	9402088-04A	9402088-07A	
Date Sampled:							
Percent Solids	84.2	84.3	86	83.7	81.8	85	
SEMIVOLATILES							
1,2-Dichlorobenzene	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U	194.5 U
1,2,4-Trichlorobenzene	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U	194.5 U
1,3-Dichlorobenzene	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U	194.5 U
1,4-Dichlorobenzene	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U	194.5 U
2-Chloronaphthalene	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U	194.5 U
2-Chlorophenol	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U	194.5 U
2-Methylnaphthalene	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U	194.5 U
2-Methylphenol	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U	194.5 U
2-Nitroaniline	UG/KG	480 U	476 U	465 U	476 U	496 U	472 U
2-Nitrophenol	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U	194.5 U
2,2'-oxybis-(1-chloropropane)	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U	194.5 U
2,4-Dichlorophenol	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U	194.5 U
2,4-Dimethylphenol	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U	194.5 U
2,4-Dinitrophenol	UG/KG	480 U	476 U	465 U	476 U	496 U	472 U
2,4-Dinitrotoluene	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U	194.5 U
2,4,5-Trichlorophenol	UG/KG	480 U	476 U	465 U	476 U	496 U	472 U
2,4,6-Trichlorophenol	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U	194.5 U
2,6-Dinitrotoluene	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U	194.5 U
3-Nitroaniline	UG/KG	480 U	476 U	465 U	476 U	496 U	472 U
3,3'-Dichlorobenzidine	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U	194.5 U
4-Bromophenyl-phenylether	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U	194.5 U
4-Chloro-3-methylphenol	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U	194.5 U
4-Chloroaniline	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U	194.5 U
4-Chlorophenyl phenyl ether	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U	194.5 U
4-Methylphenol	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U	194.5 U
4-Nitroaniline	UG/KG	480 U	476 U	465 U	476 U	496 U	472 U
4-Nitrophenol	UG/KG	480 U	476 U	465 U	476 U	496 U	472 U
4,6-Dinitro-2-methylphenol	UG/KG	480 U	476 U	465 U	476 U	496 U	472 U
Acenaphthene	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U	194.5 U
Acenaphthylene	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U	194.5 U
Anthracene	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U	194.5 U
Benzo[a]anthracene	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U	194.5 U
Benzo[a]pyrene	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U	194.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB23-01	41-OS-SB24-01	41-OS-SB24-02	41-OS-SB25-01	41-OS-SB26-01	41-OS-SB27-01
Laboratory Sample ID:	9402043-02	9402061-08	9402061-09	9402088-02A	9402088-04A	9402088-07A
Date Sampled:						
Percent Solids	84.2	84.3	86	83.7	81.8	85
SEMIVOLATILES Cont.						
Benzo[b]fluoranthene	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U
Benzo[g,h,i]perylene	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U
Benzo[k]fluoranthene	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U
bis(2-Chloroethoxy) methane	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U
bis(2-Chloroethyl) ether	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U
bis(2-Ethylhexyl)phthalate	UG/KG	98 J	196.5 U	192 U	196.5 U	204.5 U
Butyl benzyl phthalate	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U
Carbazole	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U
Chrysene	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U
Dibenzofuran	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U
Dibenz[a,h]anthracene	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U
Diethylphthalate	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U
Dimethyl phthalate	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U
di-n-Butylphthalate	UG/KG		196.5 U	192 U	130 J	88 J
di-n-Octylphthalate	UG/KG	198 U	140 J	40 J	196.5 U	204.5 U
Fluoranthene	UG/KG	198 U	46 J	192 U	196.5 U	204.5 U
Fluorene	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U
Hexachlorobenzene	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U
Hexachlorobutadiene	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U
Hexachlorocyclopentadiene	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U
Hexachloroethane	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U
Indeno[1,2,3-cd]pyrene	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U
Isophorone	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U
Naphthalene	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U
Nitrobenzene	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U
N-Nitroso-di-n-propylamine	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U
N-nitrosodiphenylamine	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U
Pentachlorophenol	UG/KG	480 U	476 U	465 U	476 U	496 U
Phenanthrene	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U
Phenol	UG/KG	198 U	196.5 U	192 U	196.5 U	204.5 U
Pyrene	UG/KG	198 U	63 J	192 U	196.5 U	204.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB23-01	41-OS-SB24-01	41-OS-SB24-02	41-OS-SB25-01	41-OS-SB26-01	41-OS-SB27-01
Laboratory Sample ID:	9402043-02	9402061-08	9402061-09	9402088-02A	9402088-04A	9402088-07A
Date Sampled:						
Percent Solids	84.2	84.3	86	83.7	81.8	85
VOLATILES						
Chloromethane	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
Bromomethane	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
Vinyl chloride	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
Chloroethane	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
Methylene chloride	UG/KG	8.5 U	6 U	6 U	6 UJ	6 U
Acetone	UG/KG	33.5 U	17 J	39 J	6 UJ	22
Carbon Disulfide	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
1,1-Dichloroethene	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
1,1-Dichloroethane	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
1,2-Dichloroethene(total)	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
Chloroform	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
1,2-Dichloroethane	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
2-Butanone	UG/KG		5.95 U	4 J	6 UJ	6 U
1,1,1-Trichloroethane	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
Carbon tetrachloride	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
Bromodichloromethane	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
1,2-Dichloropropane	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
cis-1,3-Dichloropropene	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
Trichloroethene	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
Dibromochloromethane	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
1,1,2-Trichloroethane	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
Benzene	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
trans-1,3-Dichloropropene	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
Bromoform	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
4-Methyl-2-pentanone	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
2-Hexanone	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
Tetrachloroethene	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
1,1,2,2-Tetrachloroethane	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
Toluene	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
Chlorobenzene	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
Ethylbenzene	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
Styrene	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U
Xylenes (total)	UG/KG	5.95 U	5.95 U	5.8 U	6 UJ	6 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB23-01	41-OS-SB24-01	41-OS-SB24-02	41-OS-SB25-01	41-OS-SB26-01	41-OS-SB27-01
Laboratory Sample ID:	9402043-02	9402061-08	9402061-09	9402088-02A	9402088-04A	9402088-07A
Date Sampled:						
Percent Solids	84.2	84.3	86	83.7	81.8	85
<u>PESTICIDE/PCBS</u>						
alpha-BHC	UG/KG	1.01 UJ	1.01 UJ		1.01 UJ	1.035 UJ
beta-BHC	UG/KG		1.01 UJ		1.01 UJ	1.035 UJ
delta-BHC	UG/KG	1.01 UJ	1.01 UJ		1.01 UJ	1.035 UJ
Lindane (gamma-BHC)	UG/KG	1.01 UJ	1.01 UJ		1.01 UJ	1.035 UJ
Heptachlor	UG/KG	1.01 UJ	1.01 UJ		1.01 UJ	1.035 UJ
Aldrin	UG/KG	1.01 UJ	1.01 UJ		1.01 UJ	1.035 UJ
Heptachlor epoxide	UG/KG	1.01 UJ	1.01 UJ		1.01 UJ	1.035 UJ
Endosulfan I	UG/KG	1.01 UJ	1.01 UJ		1.01 UJ	1.035 UJ
Dieldrin	UG/KG	4.51 J	0.87 NJ	0.69 NJ	1.965 UJ	2.01 UJ
4,4'-DDE	UG/KG	5.3 J	2.31 J	1.32 J	1.965 UJ	2.01 UJ
Endrin	UG/KG		1.965 UJ		1.965 UJ	2.01 UJ
Endosulfan II	UG/KG	1.965 UJ	1.11 J	0.5 NJ	1.965 UJ	2.01 UJ
4,4'-DDD	UG/KG		2.4 J	3.32 J	1.965 UJ	2.01 UJ
Endosulfan sulfate	UG/KG		1.965 UJ		1.965 UJ	2.01 UJ
4,4'-DDT	UG/KG	1.965 UJ	0.68 NJ		1.965 UJ	2.01 UJ
Methoxychlor	UG/KG	10.1 UJ	10.1 UJ		10.1 UJ	10.35 UJ
Endrin ketone	UG/KG		1.965 UJ		1.965 UJ	2.01 UJ
Endrin aldehyde	UG/KG		1.965 UJ		1.965 UJ	2.01 UJ
alpha-Chlordane	UG/KG	1.4 J	0.28 NJ	0.85 J	1.01 UJ	1.035 UJ
gamma-Chlordane	UG/KG	0.85 J	1.01 UJ	0.85 J	1.01 UJ	1.035 UJ
Toxaphene	UG/KG	101 UJ	101 UJ		101 UJ	103.5 UJ
Aroclor 1016	UG/KG	19.65 UJ	19.65 UJ		19.65 UJ	20.1 UJ
Aroclor 1221	UG/KG	39.9 UJ	39.9 UJ		39.9 UJ	40.85 UJ
Aroclor 1232	UG/KG	19.65 UJ	19.65 UJ		19.65 UJ	20.1 UJ
Aroclor 1242	UG/KG	19.65 UJ	19.65 UJ		19.65 UJ	20.1 UJ
Aroclor 1248	UG/KG	19.65 UJ	19.65 UJ		19.65 UJ	20.1 UJ
Aroclor 1254	UG/KG	19.65 UJ	19.65 UJ		19.65 UJ	20.1 UJ
Aroclor 1260	UG/KG	34.6 J	19.65 UJ		19.65 UJ	20.1 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB23-01	41-OS-SB24-01	41-OS-SB24-02	41-OS-SB25-01	41-OS-SB26-01	41-OS-SB27-01
Laboratory Sample ID:	9402043-02	9402061-08	9402061-09	9402088-02A	9402088-04A	9402088-07A
Date Sampled:						
Percent Solids	84.2	84.3	86	83.7	81.8	85
CHEMICAL SURETY						
Acetophenone	UG/KG	198 U	196.5 U	192 U	N/A	N/A
Chloracetophenone	UG/KG	198 U	196.5 U	192 U	N/A	N/A
Hydroxyacetophenone	UG/KG	990 U	980 U	960 U	N/A	N/A
Bis(2'-chloroethyl)disulfide	UG/KG	990 U	980 U	960 U	N/A	N/A
Bis(2'-chloroethyl)trisulfide	UG/KG	990 U	980 U	960 U	N/A	N/A
1,4-Dithiane	UG/KG	198 U	196.5 U	192 U	N/A	N/A
1,4-Oxathiane	UG/KG	198 U	196.5 U	192 U	N/A	N/A
THIODIGLYCOL						
Thiodiglycol	MG/KG	3.72 U	3.72 U	3.625 U	N/A	N/A
ORDNANCE						
1,3,5-Trinitrobenzene	UG/KG	20.1 U	20.1 U	20.1 U	N/A	N/A
1,3-Dinitrobenzene	UG/KG	18.6 U	18.6 U	18.6 U	N/A	N/A
2,4,6-Trinitrotoluene	UG/KG	17.8 U	17.8 U	17.8 U	N/A	N/A
2,4-Dinitrotoluene	UG/KG	25.8 U	25.8 U	25.8 U	N/A	N/A
2,6-Dinitrotoluene	UG/KG	23.8 U	23.8 U	23.8 U	N/A	N/A
2-Amino-4,6-dinitrotoluene	UG/KG	23.35 U	23.35 U	23.35 U	N/A	N/A
2-Nitrotoluene	UG/KG	40.7 U	40.7 U	40.7 U	N/A	N/A
3-Nitrotoluene	UG/KG	40.85 U	40.85 U	40.85 U	N/A	N/A
4-Amino-2,6-dinitrotoluene	UG/KG	20.4 U	20.4 U	20.4 U	N/A	N/A
4-Nitrotoluene	UG/KG	43.6 U	43.6 U	43.6 U	N/A	N/A
HMX	UG/KG	35.25 U	35.25 U	35.25 U	N/A	N/A
Nitrobenzene	UG/KG	17.6 U	17.6 U	17.6 U	N/A	N/A
RDX	UG/KG	25.45 U	25.45 U	25.45 U	N/A	N/A
Tetryl	UG/KG	81.5 U	81.5 U	81.5 U	N/A	N/A
MIREX						
Mirex	UG/KG	990 UJ	980 U	960 U	N/A	N/A

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB28-01	41-OS-SB29-01	41-OS-SB30-01	41-OS-SB31-01	41-OS-SB32-01	41-OS-SB33-01
Laboratory Sample ID:	9402088-09A	9402071-04	9402071-06	9402088-11A	9402088-13A	9402071-09
Date Sampled:		02/05/94	02/05/94			02/05/94
Percent Solids	83.2	86.0	61.5	77.5	72.8	79.8
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	206.0 U
1,2,4-Trichlorobenzene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	206.0 U
1,3-Dichlorobenzene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	206.0 U
1,4-Dichlorobenzene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	206.0 U
2-Chloronaphthalene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	206.0 U
2-Chlorophenol	UG/KG	198 U	192.0 U	266.0 U	214.5 U	206.0 U
2-Methylnaphthalene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	206.0 U
2-Methylphenol	UG/KG	198 U	192.0 U	266.0 U	214.5 U	206.0 U
2-Nitroaniline	UG/KG	480 U	465.0 U	645.0 U	520 U	500.0 U
2-Nitrophenol	UG/KG	198 U	192.0 U	266.0 U	214.5 U	206.0 U
2,2'-oxybis-(1-chloropropane)	UG/KG	198 U	192.0 U	266.0 U	214.5 U	206.0 U
2,4-Dichlorophenol	UG/KG	198 U	192.0 U	266.0 U	214.5 U	206.0 U
2,4-Dimethylphenol	UG/KG	198 U	192.0 U	266.0 U	214.5 U	206.0 U
2,4-Dinitrophenol	UG/KG	480 U	465.0 U	645.0 U	520 U	500.0 U
2,4-Dinitrotoluene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	206.0 U
2,4,5-Trichlorophenol	UG/KG	480 U	465.0 U	645.0 U	520 U	500.0 U
2,4,6-Trichlorophenol	UG/KG	198 U	192.0 U	266.0 U	214.5 U	206.0 U
2,6-Dinitrotoluene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	206.0 U
3-Nitroaniline	UG/KG	480 U	465.0 U	645.0 U	520 U	500.0 U
3,3'-Dichlorobenzidine	UG/KG	198 U	192.0 U	266.0 U	214.5 U	206.0 U
4-Bromophenyl-phenylether	UG/KG	198 U	192.0 U	266.0 U	214.5 U	206.0 U
4-Chloro-3-methylphenol	UG/KG	198 U	192.0 U	266.0 U	214.5 U	206.0 U
4-Chloroaniline	UG/KG	198 U	192.0 U	266.0 U	214.5 U	206.0 U
4-Chlorophenyl phenyl ether	UG/KG	198 U	192.0 U	266.0 U	214.5 U	206.0 U
4-Methylphenol	UG/KG	198 U	192.0 U	266.0 U	214.5 U	206.0 U
4-Nitroaniline	UG/KG	480 U	465.0 U	645.0 U	520 U	500.0 U
4-Nitrophenol	UG/KG	480 U	465.0 U	645.0 U	520 U	500.0 U
4,6-Dinitro-2-methylphenol	UG/KG	480 U	465.0 U	645.0 U	520 U	500.0 U
Acenaphthene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	206.0 U
Acenaphthylene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	206.0 U
Anthracene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	206.0 U
Benzo[a]anthracene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	206.0 U
Benzo[a]pyrene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	206.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB28-01	41-OS-SB29-01	41-OS-SB30-01	41-OS-SB31-01	41-OS-SB32-01	41-OS-SB33-01	
Laboratory Sample ID:	9402088-09A	9402071-04	9402071-06	9402088-11A	9402088-13A	9402071-09	
Date Sampled:		02/05/94	02/05/94			02/05/94	
Percent Solids	83.2	86.0	61.5	77.5	72.8	79.8	
SEMIVOLATILES Cont.							
Benzo[b]fluoranthene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
Benzo[g,h,i]perylene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
Benzo[k]fluoranthene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
bis(2-Chloroethoxy) methane	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
bis(2-Chloroethyl) ether	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
bis(2-Ethylhexyl)phthalate	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
Butyl benzyl phthalate	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
Carbazole	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
Chrysene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
Dibenzofuran	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
Dibenz[a,h]anthracene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
Diethylphthalate	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
Dimethyl phthalate	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
di-n-Butylphthalate	UG/KG	198 U	192.0 U	266.0 U	214.5 U	55 J	206.0 U
di-n-Octylphthalate	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
Fluoranthene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
Fluorene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
Hexachlorobenzene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
Hexachlorobutadiene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
Hexachlorocyclopentadiene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
Hexachloroethane	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
Indeno[1,2,3-cd]pyrene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
Isophorone	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
Naphthalene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
Nitrobenzene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
N-Nitroso-di-n-propylamine	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
N-nitrosodiphenylamine	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
Pentachlorophenol	UG/KG	480 U	465.0 U	645.0 U	520 U	550 U	500.0 U
Phenanthrene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
Phenol	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U
Pyrene	UG/KG	198 U	192.0 U	266.0 U	214.5 U	226 U	206.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB28-01	41-OS-SB29-01	41-OS-SB30-01	41-OS-SB31-01	41-OS-SB32-01	41-OS-SB33-01	
Laboratory Sample ID:	9402088-09A	9402071-04	9402071-06	9402088-11A	9402088-13A	9402071-09	
Date Sampled:		02/05/94	02/05/94			02/05/94	
Percent Solids	83.2	86.0	61.5	77.5	72.8	79.8	
VOLATILES							
Chloromethane	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
Bromomethane	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
Vinyl chloride	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
Chloroethane	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
Methylene chloride	UG/KG	11.5 U	6.00 U	8.0 U	6.5 U	7 U	6.00 U
Acetone	UG/KG	6 U	5.8 UJ	8.00 UJ	6.5 U	4 J	6.3 UJ
Carbon Disulfide	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
1,1-Dichloroethene	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
1,1-Dichloroethane	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
1,2-Dichloroethene(total)	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
Chloroform	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
1,2-Dichloroethane	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
2-Butanone	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
1,1,1-Trichloroethane	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
Carbon tetrachloride	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
Bromodichloromethane	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
1,2-Dichloropropane	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
cis-1,3-Dichloropropene	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
Trichloroethene	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
Dibromochloromethane	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
1,1,2-Trichloroethane	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
Benzene	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
trans-1,3-Dichloropropene	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
Bromoform	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
4-Methyl-2-pentanone	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
2-Hexanone	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
Tetrachloroethene	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
1,1,2,2-Tetrachloroethane	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
Toluene	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
Chlorobenzene	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
Ethylbenzene	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
Styrene	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U
Xylenes (total)	UG/KG	6 U	5.8 U	8.1 U	6.5 U	7 U	6.3 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB28-01	41-OS-SB29-01	41-OS-SB30-01	41-OS-SB31-01	41-OS-SB32-01	41-OS-SB33-01
Laboratory Sample ID:	9402088-09A	9402071-04	9402071-06	9402088-11A	9402088-13A	9402071-09
Date Sampled:		02/05/94	02/05/94			02/05/94
Percent Solids	83.2	86.0	61.5	77.5	72.8	79.8
PESTICIDE/PCBS						
alpha-BHC	UG/KG	5.12 UJ	0.99 UJ	1.40 UJ	1.105 UJ	1.165 UJ
beta-BHC	UG/KG	5.12 UJ	0.99 U	1.40 UJ	1.105 UJ	1.165 UJ
delta-BHC	UG/KG	5.12 UJ	0.99 UJ	1.40 UJ	1.105 UJ	1.165 UJ
Lindane (gamma-BHC)	UG/KG	5.12 UJ	0.99 U	1.40 UJ	1.105 UJ	1.165 UJ
Heptachlor	UG/KG	5.12 UJ	0.99 U	1.40 UJ	0.93 J	1.01 J
Aldrin	UG/KG	5.12 UJ	0.99 U	1.40 UJ	1.105 UJ	0.7 J
Heptachlor epoxide	UG/KG	5.12 UJ	0.99 U	1.40 UJ	1.105 UJ	1.165 UJ
Endosulfan I	UG/KG	5.12 UJ	0.99 U	1.40 UJ	1.105 UJ	1.165 UJ
Dieldrin	UG/KG	9.94 UJ	1.92 U	2.71 UJ	2.14 UJ	2.26 UJ
4,4'-DDE	UG/KG	9.94 UJ	1.92 U	2.71 UJ	0.73 J	2.26 UJ
Endrin	UG/KG	9.94 UJ	1.92 U	2.71 UJ	2.14 UJ	2.26 UJ
Endosulfan II	UG/KG	9.94 UJ	1.92 U	2.71 UJ	2.14 UJ	2.26 UJ
4,4'-DDD	UG/KG	9.94 UJ	1.92 U	2.71 UJ	0.82 J	0.34 NJ
Endosulfan sulfate	UG/KG	9.94 UJ	1.92 U	2.71 UJ	2.14 UJ	2.26 UJ
4,4'-DDT	UG/KG	9.94 UJ	1.92 U	2.71 UJ	2.14 UJ	2.26 UJ
Methoxychlor	UG/KG	51.205 UJ	9.9 U	14.0 UJ	11.05 UJ	11.65 UJ
Endrin ketone	UG/KG	9.94 UJ	1.92 U	2.71 UJ	2.14 UJ	2.26 UJ
Endrin aldehyde	UG/KG	9.94 UJ	1.92 U	2.71 UJ	2.14 UJ	2.26 UJ
alpha-Chlordane	UG/KG	5.12 UJ	0.99 U	1.40 UJ	1.105 UJ	1.165 UJ
gamma-Chlordane	UG/KG	5.12 UJ	0.99 U	1.40 UJ	1.105 UJ	1.165 UJ
Toxaphene	UG/KG	512.05 UJ	99.0 U	139.5 UJ	110.5 UJ	116.5 UJ
Aroclor 1016	UG/KG	99.4 UJ	19.2 U	27.1 UJ	21.4 UJ	22.6 UJ
Aroclor 1221	UG/KG	201.8 UJ	39.0 U	55.0 UJ	43.5 UJ	45.9 UJ
Aroclor 1232	UG/KG	99.4 UJ	19.2 U	27.1 UJ	21.4 UJ	22.6 UJ
Aroclor 1242	UG/KG	99.4 UJ	19.2 U	27.1 UJ	21.4 UJ	22.6 UJ
Aroclor 1248	UG/KG	99.4 UJ	19.2 U	27.1 UJ	21.4 UJ	22.6 UJ
Aroclor 1254	UG/KG	99.4 UJ	19.2 U	27.1 UJ	21.4 UJ	22.6 UJ
Aroclor 1260	UG/KG	99.4 UJ	19.2 U	27.1 UJ	21.4 UJ	22.6 UJ

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
ONSITE SUBSURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	41-OS-SB28-01	41-OS-SB29-01	41-OS-SB30-01	41-OS-SB31-01	41-OS-SB32-01	41-OS-SB33-01
Laboratory Sample ID:	9402088-09A	9402071-04	9402071-06	9402088-11A	9402088-13A	9402071-09
Date Sampled:		02/05/94	02/05/94			02/05/94
Percent Solids	83.2	86.0	61.5	77.5	72.8	79.8
CHEMICAL SURETY						
Acetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Chloroacetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Hydroxyacetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Bis(2'-chloroethyl)disulfide	UG/KG	N/A	N/A	N/A	N/A	N/A
Bis(2'-chloroethyl)trisulfide	UG/KG	N/A	N/A	N/A	N/A	N/A
1,4-Dithiane	UG/KG	N/A	N/A	N/A	N/A	N/A
1,4-Oxathiane	UG/KG	N/A	N/A	N/A	N/A	N/A
THIODIGLYCOL						
Thiodiglycol	MG/KG	N/A	N/A	N/A	N/A	N/A
ORDNANCE						
1,3,5-Trinitrobenzene	UG/KG	N/A	N/A	N/A	N/A	N/A
1,3-Dinitrobenzene	UG/KG	N/A	N/A	N/A	N/A	N/A
2,4,6-Trinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
2,4-Dinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
2,6-Dinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
2-Amino-4,6-dinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
2-Nitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
3-Nitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
4-Amino-2,6-dinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
4-Nitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
HMX	UG/KG	N/A	N/A	N/A	N/A	N/A
Nitrobenzene	UG/KG	N/A	N/A	N/A	N/A	N/A
RDX	UG/KG	N/A	N/A	N/A	N/A	N/A
Tetryl	UG/KG	N/A	N/A	N/A	N/A	N/A
MIREX						
Mirex	UG/KG	N/A	192.0 U	266.0 U	N/A	206.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB34-01	41-GW07-01	41-GW07-04	41-GW08-01	41-GW08-02	41-GW10-01
Laboratory Sample ID:	9402088-16A	9402087-03	9402087-05	9402078-05	9402078-06	9402071-01
Date Sampled:						
Percent Solids	82.3	78.6	71.5	91.9	90.9	89.5
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
1,2,4-Trichlorobenzene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
1,3-Dichlorobenzene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
1,4-Dichlorobenzene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
2-Chloronaphthalene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
2-Chlorophenol	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
2-Methylnaphthalene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
2-Methylphenol	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
2-Nitroaniline	UG/KG	496 U	510 U	555 U	440 U	444.5 U
2-Nitrophenol	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
2,2'-oxybis-(1-chloropropane)	UG/KG	204.5 UJ	209.5 UJ	229.5 UJ	181.5 U	183.5 U
2,4-Dichlorophenol	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
2,4-Dimethylphenol	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
2,4-Dinitrophenol	UG/KG	496 U	510 U	555 U	440 U	444.5 U
2,4-Dinitrotoluene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
2,4,5-Trichlorophenol	UG/KG	496 U	510 U	555 U	440 U	444.5 U
2,4,6-Trichlorophenol	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
2,6-Dinitrotoluene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
3-Nitroaniline	UG/KG	496 U	510 U	555 U	440 U	444.5 U
3,3'-Dichlorobenzidine	UG/KG	204.5 UJ	209.5 U	229.5 U	181.5 U	183.5 U
4-Bromophenyl-phenylether	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
4-Chloro-3-methylphenol	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
4-Chloroaniline	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
4-Chlorophenyl phenyl ether	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
4-Methylphenol	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
4-Nitroaniline	UG/KG	496 U	510 U	555 U	440 U	444.5 U
4-Nitrophenol	UG/KG	496 U	510 U	555 U	440 U	444.5 U
4,6-Dinitro-2-methylphenol	UG/KG	496 U	510 U	555 U	440 U	444.5 U
Acenaphthene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
Acenaphthylene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
Anthracene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
Benzo[a]anthracene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
Benzo[a]pyrene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB34-01	41-GW07-01	41-GW07-04	41-GW08-01	41-GW08-02	41-GW10-01
Laboratory Sample ID:	9402088-16A	9402087-03	9402087-05	9402078-05	9402078-06	9402071-01
Date Sampled:						
Percent Solids	82.3	78.6	71.5	91.9	90.9	89.5
SEMIVOLATILES Cont.						
Benzo[b]fluoranthene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
Benzo[g,h,i]perylene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
Benzo[k]fluoranthene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
bis(2-Chloroethoxy) methane	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
bis(2-Chloroethyl) ether	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
bis(2-Ethylhexyl)phthalate	UG/KG	204.5 U	51 J	83 J	180 J	181.5 U
Butyl benzyl phthalate	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
Carbazole	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
Chrysene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
Dibenzofuran	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
Dibenz[a,h]anthracene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
Diethylphthalate	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
Dimethyl phthalate	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
di-n-Butylphthalate	UG/KG	204.5 U	89 J	47 J	181.5 U	183.5 U
di-n-Octylphthalate	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
Fluoranthene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
Fluorene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
Hexachlorobenzene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
Hexachlorobutadiene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
Hexachlorocyclopentadiene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
Hexachloroethane	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
Indeno[1,2,3-cd]pyrene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
Isophorone	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
Naphthalene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
Nitrobenzene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
N-Nitroso-di-n-propylamine	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
N-nitrosodiphenylamine	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
Pentachlorophenol	UG/KG	496 U	510 U	555 U	440 U	444.5 U
Phenanthrene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
Phenol	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U
Pyrene	UG/KG	204.5 U	209.5 U	229.5 U	181.5 U	183.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB34-01	41-GW07-01	41-GW07-04	41-GW08-01	41-GW08-02	41-GW10-01
Laboratory Sample ID:	9402088-16A	9402087-03	9402087-05	9402078-05	9402078-06	9402071-01
Date Sampled:						
Percent Solids	82.3	78.6	71.5	91.9	90.9	89.5
VOLATILES						
Chloromethane	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.55 U
Bromomethane	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.55 U
Vinyl chloride	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.55 U
Chloroethane	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.55 U
Methylene chloride	UG/KG	6 U	6.5 UJ	7 U	3 J	3 J 6.5 U
Acetone	UG/KG	30	6000 J	41 J	940 J	20 U 5.55 UJ
Carbon Disulfide	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U
1,1-Dichloroethene	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U
1,1-Dichloroethane	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U
1,2-Dichloroethene(total)	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U
Chloroform	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U
1,2-Dichloroethane	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U
2-Butanone	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U
1,1,1-Trichloroethane	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U
Carbon tetrachloride	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U
Bromodichloromethane	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U
1,2-Dichloropropane	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U
cis-1,3-Dichloropropene	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U
Trichloroethene	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U
Dibromochloromethane	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U
1,1,2-Trichloroethane	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U
Benzene	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U
trans-1,3-Dichloropropene	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U
Bromoform	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U
4-Methyl-2-pentanone	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U
2-Hexanone	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U
Tetrachloroethene	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U
1,1,2,2-Tetrachloroethane	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U
Toluene	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U
Chlorobenzene	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U
Ethylbenzene	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U
Styrene	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U
Xylenes (total)	UG/KG	6 U	6.5 UJ	7 U	5.5 U	5.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB34-01	41-GW07-01	41-GW07-04	41-GW08-01	41-GW08-02	41-GW10-01	
Laboratory Sample ID:	9402088-16A	9402087-03	9402087-05	9402078-05	9402078-06	9402071-01	
Date Sampled:							
Percent Solids	82.3	78.6	71.5	91.9	90.9	89.5	
<u>PESTICIDE/PCBS</u>							
alpha-BHC	UG/KG	1.035 UJ	1.075 UJ	1.195 UJ	0.925 UJ	0.935 UJ	0.95 UJ
beta-BHC	UG/KG	1.035 UJ	1.075 UJ	1.195 UJ	0.925 UJ	0.935 UJ	0.95 U
delta-BHC	UG/KG	1.035 UJ	1.075 UJ	1.195 UJ	0.925 UJ	0.935 UJ	0.95 UJ
Lindane (gamma-BHC)	UG/KG	1.035 UJ	1.075 UJ	1.195 UJ	0.925 UJ	0.935 UJ	0.95 U
Heptachlor	UG/KG	1.035 UJ	1.075 UJ	1.195 UJ	0.925 UJ	0.935 UJ	0.95 U
Aldrin	UG/KG	1.035 UJ	1.075 UJ	1.195 UJ	0.925 UJ	0.935 UJ	0.95 U
Heptachlor epoxide	UG/KG	1.035 UJ	1.075 UJ	1.195 UJ	0.925 UJ	0.935 UJ	0.95 U
Endosulfan I	UG/KG	1.035 UJ	1.075 UJ	1.195 UJ	0.925 UJ	0.935 UJ	0.95 U
Dieldrin	UG/KG	2.01 UJ	2.09 UJ	2.325 UJ	1.795 UJ	1.815 UJ	1.85 U
4,4'-DDE	UG/KG	2.01 UJ	1.1 J	2.325 UJ	1.795 UJ	1.815 UJ	0.8 NJ
Endrin	UG/KG	2.01 UJ	2.09 UJ	2.325 UJ	1.795 UJ	1.815 UJ	1.85 U
Endosulfan II	UG/KG	2.01 UJ	2.09 UJ	2.325 UJ	1.795 UJ	1.815 UJ	1.85 U
4,4'-DDD	UG/KG	2.01 UJ	2.09 UJ	2.325 UJ	1.795 UJ	1.815 UJ	1.85 U
Endosulfan sulfate	UG/KG	2.01 UJ	2.09 UJ	2.325 UJ	1.795 UJ	1.815 UJ	1.85 U
4,4'-DDT	UG/KG	2.01 UJ	2.09 UJ	2.325 UJ	1.795 UJ	1.815 UJ	1.85 U
Methoxychlor	UG/KG	10.35 UJ	10.75 UJ	11.95 UJ	9.25 UJ	9.35 UJ	9.5 U
Endrin ketone	UG/KG	2.01 UJ	2.09 UJ	2.325 UJ	1.795 UJ	1.815 UJ	1.85 U
Endrin aldehyde	UG/KG	2.01 UJ	2.09 UJ	2.325 UJ	1.795 UJ	1.815 UJ	1.85 U
alpha-Chlordane	UG/KG	1.035 UJ	1.075 UJ	1.195 UJ	0.925 UJ	0.935 UJ	0.95 U
gamma-Chlordane	UG/KG	1.035 UJ	1.075 UJ	1.195 UJ	0.925 UJ	0.935 UJ	0.95 U
Toxaphene	UG/KG	103.5 UJ	107.5 UJ	119.5 UJ	92.5 UJ	93.5 UJ	95 U
Aroclor 1016	UG/KG	20.1 UJ	20.9 UJ	23.25 UJ	17.95 UJ	18.15 UJ	18.5 U
Aroclor 1221	UG/KG	40.85 UJ	42.4 UJ	47.2 UJ	36.4 UJ	36.8 UJ	37.5 U
Aroclor 1232	UG/KG	20.1 UJ	20.9 UJ	23.25 UJ	17.95 UJ	18.15 UJ	18.5 U
Aroclor 1242	UG/KG	20.1 UJ	20.9 UJ	23.25 UJ	17.95 UJ	18.15 UJ	18.5 U
Aroclor 1248	UG/KG	20.1 UJ	20.9 UJ	23.25 UJ	17.95 UJ	18.15 UJ	18.5 U
Aroclor 1254	UG/KG	20.1 UJ	20.9 UJ	23.25 UJ	17.95 UJ	18.15 UJ	18.5 U
Aroclor 1260	UG/KG	20.1 UJ	20.9 UJ	23.25 UJ	17.95 UJ	18.15 UJ	18.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-OS-SB34-01	41-GW07-01	41-GW07-04	41-GW08-01	41-GW08-02	41-GW10-01
Laboratory Sample ID:	9402088-16A	9402087-03	9402087-05	9402078-05	9402078-06	9402071-01
Date Sampled:						
Percent Solids	82.3	78.6	71.5	91.9	90.9	89.5
CHEMICAL SURETY						
Acetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Chloroacetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Hydroxyacetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Bis(2'-chloroethyl)disulfide	UG/KG	N/A	N/A	N/A	N/A	N/A
Bis(2'-chloroethyl)trisulfide	UG/KG	N/A	N/A	N/A	N/A	N/A
1,4-Dithiane	UG/KG	N/A	N/A	N/A	N/A	N/A
1,4-Oxathiane	UG/KG	N/A	N/A	N/A	N/A	N/A
THIODIGLYCOL						
Thiodiglycol	MG/KG	N/A	N/A	N/A	N/A	N/A
ORDNANCE						
1,3,5-Trinitrobenzene	UG/KG	N/A	N/A	N/A	N/A	N/A
1,3-Dinitrobenzene	UG/KG	N/A	N/A	N/A	N/A	N/A
2,4,6-Trinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
2,4-Dinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
2,6-Dinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
2-Amino-4,6-dinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
2-Nitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
3-Nitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
4-Amino-2,6-dinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
4-Nitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
HMX	UG/KG	N/A	N/A	N/A	N/A	N/A
Nitrobenzene	UG/KG	N/A	N/A	N/A	N/A	N/A
RDX	UG/KG	N/A	N/A	N/A	N/A	N/A
Tetryl	UG/KG	N/A	N/A	N/A	N/A	N/A
MIREX						
Mirex	UG/KG	N/A	N/A	N/A	N/A	183.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW11-01	41-GW11-03	41-GW12-01	41-GW12-02	41-GW13-01	41-GW13-03
Laboratory Sample ID:	9402087-01	9402087-02	9402092-03	9402092-04	9402092-01	9402092-02
Date Sampled:						
Percent Solids	87.4	94.7	85	83.1	85.5	87.8
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	198 U	173 U	194.5 U	198 U	188 U
1,2,4-Trichlorobenzene	UG/KG	198 U	173 U	194.5 U	198 U	188 U
1,3-Dichlorobenzene	UG/KG	198 U	173 U	194.5 U	198 U	188 U
1,4-Dichlorobenzene	UG/KG	198 U	173 U	194.5 U	198 U	188 U
2-Chloronaphthalene	UG/KG	198 U	173 U	194.5 U	198 U	188 U
2-Chlorophenol	UG/KG	198 U	173 U	194.5 U	198 U	188 U
2-Methylnaphthalene	UG/KG	198 U	173 U	194.5 U	198 U	188 U
2-Methylphenol	UG/KG	198 U	173 U	194.5 U	198 U	188 U
2-Nitroaniline	UG/KG	480 U	420 U	472 U	480 U	456 U
2-Nitrophenol	UG/KG	198 U	173 U	194.5 U	198 U	188 U
2,2'-oxybis-(1-chloropropane)	UG/KG	198 UJ	173 UJ	194.5 UJ	198 UJ	188 UJ
2,4-Dichlorophenol	UG/KG	198 U	173 U	194.5 U	198 U	188 U
2,4-Dimethylphenol	UG/KG	198 U	173 U	194.5 U	198 U	188 U
2,4-Dinitrophenol	UG/KG	480 U	420 U	472 U	480 U	456 U
2,4-Dinitrotoluene	UG/KG	198 U	173 U	194.5 U	198 U	188 U
2,4,5-Trichlorophenol	UG/KG	480 U	420 U	472 U	480 U	456 U
2,4,6-Trichlorophenol	UG/KG	198 U	173 U	194.5 U	198 U	188 U
2,6-Dinitrotoluene	UG/KG	198 U	173 U	194.5 U	198 U	188 U
3-Nitroaniline	UG/KG	480 U	420 U	472 U	480 U	456 U
3,3'-Dichlorobenzidine	UG/KG	198 U	173 U	194.5 U	198 U	188 U
4-Bromophenyl-phenylether	UG/KG	198 U	173 U	194.5 U	198 U	188 U
4-Chloro-3-methylphenol	UG/KG	198 U	173 U	194.5 U	198 U	188 U
4-Chloroaniline	UG/KG	198 U	173 U	194.5 U	198 U	188 U
4-Chlorophenyl phenyl ether	UG/KG	198 U	173 U	194.5 U	198 U	188 U
4-Methylphenol	UG/KG	198 U	173 U	194.5 U	198 U	188 U
4-Nitroaniline	UG/KG	480 U	420 U	472 U	480 U	456 U
4-Nitrophenol	UG/KG	480 U	420 U	472 U	480 U	456 U
4,6-Dinitro-2-methylphenol	UG/KG	480 U	420 U	472 U	480 U	456 U
Acenaphthene	UG/KG	198 U	173 U	194.5 U	198 U	188 U
Acenaphthylene	UG/KG	198 U	173 U	194.5 U	198 U	188 U
Anthracene	UG/KG	198 U	173 U	194.5 U	198 U	188 U
Benzo[a]anthracene	UG/KG	198 U	173 U	194.5 U	198 U	188 U
Benzo[a]pyrene	UG/KG	198 U	173 U	194.5 U	198 U	188 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW11-01	41-GW11-03	41-GW12-01	41-GW12-02	41-GW13-01	41-GW13-03
Laboratory Sample ID:	9402087-01	9402087-02	9402092-03	9402092-04	9402092-01	9402092-02
Date Sampled:						
Percent Solids	87.4	94.7	85	83.1	85.5	87.8

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/KG	198 U	173 U	194.5 U	198 U	191.5 U	188 U
Benzo[g,h,i]perylene	UG/KG	198 U	173 U	194.5 U	198 U	191.5 U	188 U
Benzo[k]fluoranthene	UG/KG	198 U	173 U	194.5 U	198 U	191.5 U	188 U
bis(2-Chloroethoxy) methane	UG/KG	198 U	173 U	194.5 U	198 U	191.5 U	188 U
bis(2-Chloroethyl) ether	UG/KG	198 U	173 U	194.5 U	198 U	191.5 U	188 U
bis(2-Ethylhexyl)phthalate	UG/KG	130 J	95 J	55 J	69 J	49 J	75 J
Butyl benzyl phthalate	UG/KG	198 U	173 U	194.5 U	198 U	191.5 U	188 U
Carbazole	UG/KG	198 U	173 U	194.5 U	198 U	191.5 U	188 U
Chrysene	UG/KG	43 J	173 U	194.5 U	198 U	191.5 U	188 U
Dibenzofuran	UG/KG	198 U	173 U	194.5 U	198 U	191.5 U	188 U
Dibenz[a,h]anthracene	UG/KG	198 U	173 U	194.5 U	198 U	191.5 U	188 U
Diethylphthalate	UG/KG	198 U	173 U	194.5 U	198 U	191.5 U	188 U
Dimethyl phthalate	UG/KG	198 U	173 U	194.5 U	198 U	191.5 U	188 U
di-n-Butylphthalate	UG/KG	48 J	49 J	51 J	100 J	51 J	84 J
di-n-Octylphthalate	UG/KG	198 U	173 U	194.5 U	198 U	191.5 U	188 U
Fluoranthene	UG/KG	64 J	173 U	194.5 U	198 U	191.5 U	188 U
Fluorene	UG/KG	198 U	173 U	194.5 U	198 U	191.5 U	188 U
Hexachlorobenzene	UG/KG	198 U	173 U	194.5 U	198 U	191.5 U	188 U
Hexachlorobutadiene	UG/KG	198 U	173 U	194.5 U	198 U	191.5 U	188 U
Hexachlorocyclopentadiene	UG/KG	198 U	173 U	194.5 U	198 U	191.5 U	188 U
Hexachloroethane	UG/KG	198 U	173 U	194.5 U	198 U	191.5 U	188 U
Indeno[1,2,3-cd]pyrene	UG/KG	198 U	173 U	194.5 U	198 U	191.5 U	188 U
Isophorone	UG/KG	198 U	173 U	194.5 U	198 U	191.5 U	188 U
Naphthalene	UG/KG	198 U	173 U	194.5 U	198 U	191.5 U	188 U
Nitrobenzene	UG/KG	198 U	173 U	194.5 U	198 U	191.5 U	188 U
N-Nitroso-di-n-propylamine	UG/KG	198 U	173 U	194.5 U	198 U	191.5 U	188 U
N-nitrosodiphenylamine	UG/KG	198 U	173 U	194.5 U	198 U	191.5 U	188 U
Pentachlorophenol	UG/KG	480 U	420 U	472 U	480 U	464 U	456 U
Phenanthrene	UG/KG	198 U	173 U	194.5 U	198 U	191.5 U	188 U
Phenol	UG/KG	198 U	173 U	194.5 U	198 U	191.5 U	188 U
Pyrene	UG/KG	52 J	173 U	194.5 U	198 U	191.5 U	188 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW11-01	41-GW11-03	41-GW12-01	41-GW12-02	41-GW13-01	41-GW13-03	
Laboratory Sample ID:	9402087-01	9402087-02	9402092-03	9402092-04	9402092-01	9402092-02	
Date Sampled:							
Percent Solids	87.4	94.7	85	83.1	85.5	87.8	
VOLATILES							
Chloromethane	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
Bromomethane	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
Vinyl chloride	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
Chloroethane	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
Methylene chloride	UG/KG	5.5 U	6 U	6 UJ	6 UJ	6 U	8 J
Acetone	UG/KG	5.5 UJ	28 J	6 UJ	89 J	6 U	210 J
Carbon Disulfide	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
1,1-Dichloroethene	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
1,1-Dichloroethane	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
1,2-Dichloroethene(total)	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
Chloroform	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
1,2-Dichloroethane	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
2-Butanone	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
1,1,1-Trichloroethane	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
Carbon tetrachloride	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
Bromodichloromethane	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
1,2-Dichloropropane	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
cis-1,3-Dichloropropene	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
Trichloroethene	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
Dibromochloromethane	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
1,1,2-Trichloroethane	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
Benzene	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
trans-1,3-Dichloropropene	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
Bromoform	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
4-Methyl-2-pentanone	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
2-Hexanone	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
Tetrachloroethene	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
1,1,2,2-Tetrachloroethane	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
Toluene	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
Chlorobenzene	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
Ethylbenzene	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
Styrene	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U
Xylenes (total)	UG/KG	5.5 U	5.5 U	6 UJ	6 UJ	6 U	5.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW11-01	41-GW11-03	41-GW12-01	41-GW12-02	41-GW13-01	41-GW13-03
Laboratory Sample ID:	9402087-01	9402087-02	9402092-03	9402092-04	9402092-01	9402092-02
Date Sampled:						
Percent Solids	87.4	94.7	85	83.1	85.5	87.8
<u>PESTICIDE/PCBS</u>						
alpha-BHC	UG/KG	0.975 UJ	0.895 UJ	1 UJ	1.025 UJ	0.965 UJ
beta-BHC	UG/KG	0.975 UJ	0.895 UJ	1 UJ	1.025 UJ	0.965 UJ
delta-BHC	UG/KG	0.975 UJ	0.895 UJ	1 UJ	1.025 UJ	0.965 UJ
Lindane (gamma-BHC)	UG/KG	0.975 UJ	0.895 UJ	1 UJ	1.025 UJ	0.965 UJ
Heptachlor	UG/KG	0.975 UJ	0.895 UJ	1 UJ	1.025 UJ	0.965 UJ
Aldrin	UG/KG	0.975 UJ	0.895 UJ	1 UJ	1.025 UJ	0.965 UJ
Heptachlor epoxide	UG/KG	0.975 UJ	0.895 UJ	1 UJ	1.025 UJ	0.965 UJ
Endosulfan I	UG/KG	0.975 UJ	0.895 UJ	1 UJ	1.025 UJ	0.965 UJ
Dieldrin	UG/KG	1.895 UJ	1.735 UJ	1.94 UJ	1.99 UJ	1.875 UJ
4,4'-DDE	UG/KG	5.85 J	1.735 UJ	1.94 UJ	1.99 UJ	1.875 UJ
Endrin	UG/KG	0.35 J	1.735 UJ	1.94 UJ	1.99 UJ	1.875 UJ
Endosulfan II	UG/KG	1.18 NJ	1.735 UJ	1.94 UJ	1.99 UJ	1.875 UJ
4,4'-DDD	UG/KG	5.42 J	1.735 UJ	1.94 UJ	1.99 UJ	1.875 UJ
Endosulfan sulfate	UG/KG	1.895 U	1.735 UJ	1.94 UJ	1.99 UJ	1.875 UJ
4,4'-DDT	UG/KG	1.89 UJ	1.735 UJ	1.94 UJ	1.99 UJ	1.875 UJ
Methoxychlor	UG/KG	9.75 UJ	8.95 UJ	10 UJ	10.25 UJ	9.65 UJ
Endrin ketone	UG/KG	1.895 UJ	1.735 UJ	1.94 UJ	1.99 UJ	1.875 UJ
Endrin aldehyde	UG/KG	1.895 UJ	1.735 UJ	1.94 UJ	1.99 UJ	1.875 UJ
alpha-Chlordane	UG/KG	0.29 J	0.895 UJ	1 UJ	1.025 UJ	0.965 UJ
gamma-Chlordane	UG/KG	0.975 UJ	0.895 UJ	1 UJ	1.025 UJ	0.965 UJ
Toxaphene	UG/KG	97.5 UJ	89.5 UJ	100 UJ	102.5 UJ	96.5 UJ
Aroclor 1016	UG/KG	18.95 UJ	17.35 UJ	19.4 UJ	19.9 UJ	18.75 UJ
Aroclor 1221	UG/KG	38.5 UJ	35.25 UJ	39.4 UJ	40.35 UJ	38.05 UJ
Aroclor 1232	UG/KG	18.95 UJ	17.35 UJ	19.4 UJ	19.9 UJ	18.75 UJ
Aroclor 1242	UG/KG	18.95 UJ	17.35 UJ	19.4 UJ	19.9 UJ	18.75 UJ
Aroclor 1248	UG/KG	18.95 UJ	17.35 UJ	19.4 UJ	19.9 UJ	18.75 UJ
Aroclor 1254	UG/KG	18.95 UJ	214 J	19.4 UJ	19.9 UJ	18.75 UJ
Aroclor 1260	UG/KG	18.95 UJ	17.35 UJ	19.4 UJ	19.9 UJ	18.75 UJ

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
ONSITE SUBSURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	41-GW11-01	41-GW11-03	41-GW12-01	41-GW12-02	41-GW13-01	41-GW13-03
Laboratory Sample ID:	9402087-01	9402087-02	9402092-03	9402092-04	9402092-01	9402092-02
Date Sampled:						
Percent Solids	87.4	94.7	85	83.1	85.5	87.8
CHEMICAL SURETY						
Acetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Chloroacetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Hydroxyacetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Bis(2'-chloroethyl)disulfide	UG/KG	N/A	N/A	N/A	N/A	N/A
Bis(2'-chloroethyl)trisulfide	UG/KG	N/A	N/A	N/A	N/A	N/A
1,4-Dithiane	UG/KG	N/A	N/A	N/A	N/A	N/A
1,4-Oxathiane	UG/KG	N/A	N/A	N/A	N/A	N/A
THIODIGLYCOL						
Thiodiglycol	MG/KG	N/A	N/A	N/A	N/A	N/A
ORDNANCE						
1,3,5-Trinitrobenzene	UG/KG	N/A	N/A	N/A	N/A	N/A
1,3-Dinitrobenzene	UG/KG	N/A	N/A	N/A	N/A	N/A
2,4,6-Trinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
2,4-Dinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
2,6-Dinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
2-Amino-4,6-dinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
2-Nitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
3-Nitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
4-Amino-2,6-dinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
4-Nitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
HMX	UG/KG	N/A	N/A	N/A	N/A	N/A
Nitrobenzene	UG/KG	N/A	N/A	N/A	N/A	N/A
RDX	UG/KG	N/A	N/A	N/A	N/A	N/A
Tetryl	UG/KG	N/A	N/A	N/A	N/A	N/A
MIREX						
Mirex	UG/KG	N/A	N/A	N/A	N/A	N/A

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW04DW-01	41-GW04DW-02	41-GW06DW-02	41-GW06DW-03	41-GW07DW-02	41-GW07DW-06
Laboratory Sample ID:	9402078-01	9402078-02	9402131-01A	9402131-02A	9402087-07	9402087-09
Date Sampled:						
Percent Solids	87.1	85.1	89.6	83.5	83.3	63.5
SEMIVOLATILES						
1,2-Dichlorobenzène	UG/KG	190 U	194 U	183 U	198 U	257.5 U
1,2,4-Trichlorobenzene	UG/KG	190 U	194 U	183 U	198 U	257.5 U
1,3-Dichlorobenzene	UG/KG	190 U	194 U	183 U	198 U	257.5 U
1,4-Dichlorobenzene	UG/KG	190 U	194 U	183 U	198 U	257.5 U
2-Chloronaphthalene	UG/KG	190 U	194 U	183 U	198 U	257.5 U
2-Chlorophenol	UG/KG	190 U	194 U	183 U	198 U	257.5 U
2-Methylnaphthalene	UG/KG	190 U	194 U	183 U	198 U	257.5 U
2-Methylphenol	UG/KG	190 U	194 U	183 U	198 U	257.5 U
2-Nitroaniline	UG/KG	460 U	470.5 U	444 U	480 U	625 U
2-Nitrophenol	UG/KG	190 U	194 U	183 U	198 U	257.5 U
2,2'-oxybis-(1-chloropropane)	UG/KG	190 U	194 U		198 U	257.5 U
2,4-Dichlorophenol	UG/KG	190 U	194 U	183 U	198 U	257.5 U
2,4-Dimethylphenol	UG/KG	190 U	194 U	183 U	198 U	257.5 U
2,4-Dinitrophenol	UG/KG	460 U	470.5 U	444 U	480 U	625 U
2,4-Dinitrotoluene	UG/KG	190 U	194 U	183 U	198 U	257.5 U
2,4,5-Trichlorophenol	UG/KG	460 U	470.5 U	444 U	480 U	625 U
2,4,6-Trichlorophenol	UG/KG	190 U	194 U	183 U	198 U	257.5 U
2,6-Dinitrotoluene	UG/KG	190 U	194 U	183 U	198 U	257.5 U
3-Nitroaniline	UG/KG	460 U	470.5 U	444 U	480 U	625 U
3,3'-Dichlorobenzidine	UG/KG	190 U	194 U	183 U	198 U	257.5 U
4-Bromophenyl-phenylether	UG/KG	190 U	194 U	183 U	198 U	257.5 U
4-Chloro-3-methylphenol	UG/KG	190 U	194 U	183 U	198 U	257.5 U
4-Chloroaniline	UG/KG	190 U	194 U	183 U	198 U	257.5 U
4-Chlorophenyl phenyl ether	UG/KG	190 U	194 U	183 U	198 U	257.5 U
4-Methylphenol	UG/KG	190 U	194 U	183 U	198 U	257.5 U
4-Nitroaniline	UG/KG	460 U	470.5 U	444 U	480 U	625 U
4-Nitrophenol	UG/KG	460 U	470.5 U	444 U	480 U	625 U
4,6-Dinitro-2-methylphenol	UG/KG	460 U	470.5 U	444 U	480 U	625 U
Acenaphthene	UG/KG	190 U	194 U	183 U	198 U	257.5 U
Acenaphthylene	UG/KG	190 U	194 U	183 U	198 U	257.5 U
Anthracene	UG/KG	190 U	194 U	183 U	198 U	257.5 U
Benzo[a]anthracene	UG/KG	190 U	194 U	183 U	198 U	257.5 U
Benzo[a]pyrene	UG/KG	190 U	194 U	183 U	198 U	257.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW04DW-01	41-GW04DW-02	41-GW06DW-02	41-GW06DW-03	41-GW07DW-02	41-GW07DW-06
Laboratory Sample ID:	9402078-01	9402078-02	9402131-01A	9402131-02A	9402087-07	9402087-09
Date Sampled:						
Percent Solids	87.1	85.1	89.6	83.5	83.3	63.5

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
Benzo[g,h,i]perylene	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
Benzo[k]fluoranthene	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
bis(2-Chloroethoxy) methane	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
bis(2-Chloroethyl) ether	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
bis(2-Ethylhexyl)phthalate	UG/KG	190 U	194 U	45 J	46 J	89 J	140 J
Butyl benzyl phthalate	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
Carbazole	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
Chrysene	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
Dibenzofuran	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
Dibenz[a,h]anthracene	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
Diethylphthalate	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
Dimethyl phthalate	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
di-n-Butylphthalate	UG/KG	190 U	194 U	40 J	198 U	79 J	62 J
di-n-Octylphthalate	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
Fluoranthene	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
Fluorene	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
Hexachlorobenzene	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
Hexachlorobutadiene	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
Hexachlorocyclopentadiene	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
Hexachloroethane	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
Indeno[1,2,3-cd]pyrene	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
Isophorone	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
Naphthalene	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
Nitrobenzene	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
N-Nitroso-di-n-propylamine	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
N-nitrosodiphenylamine	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
Pentachlorophenol	UG/KG	460 U	470.5 U	444 U	480 U	480 U	625 U
Phenanthrene	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
Phenol	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U
Pyrene	UG/KG	190 U	194 U	183 U	198 U	198 U	257.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW04DW-01	41-GW04DW-02	41-GW06DW-02	41-GW06DW-03	41-GW07DW-02	41-GW07DW-06
Laboratory Sample ID:	9402078-01	9402078-02	9402131-01A	9402131-02A	9402087-07	9402087-09
Date Sampled:						
Percent Solids	87.1	85.1	89.6	83.5	83.3	63.5
VOLATILES						
Chloromethane	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
Bromomethane	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
Vinyl chloride	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
Chloroethane	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
Methylene chloride	UG/KG	5.5 U	6 U	5.5 U	5.5 U	8 U
Acetone	UG/KG	95 J	9 U	6.5 U	11.5 U	27 J
Carbon Disulfide	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
1,1-Dichloroethene	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
1,1-Dichloroethane	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
1,2-Dichloroethene(total)	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
Chloroform	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
1,2-Dichloroethane	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
2-Butanone	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
1,1,1-Trichloroethane	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
Carbon tetrachloride	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
Bromodichloromethane	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
1,2-Dichloropropane	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
cis-1,3-Dichloropropene	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
Trichloroethene	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
Dibromochloromethane	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
1,1,2-Trichloroethane	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
Benzene	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
trans-1,3-Dichloropropene	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
Bromoform	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
4-Methyl-2-pentanone	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
2-Hexanone	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
Tetrachloroethene	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
1,1,2,2-Tetrachloroethane	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
Toluene	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
Chlorobenzene	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
Ethylbenzene	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
Styrene	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U
Xylenes (total)	UG/KG	5.5 U	6 U	5.5 U	6 U	8 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW04DW-01	41-GW04DW-02	41-GW06DW-02	41-GW06DW-03	41-GW07DW-02	41-GW07DW-06
Laboratory Sample ID:	9402078-01	9402078-02	9402131-01A	9402131-02A	9402087-07	9402087-09
Date Sampled:						
Percent Solids	87.1	85.1	89.6	83.5	83.3	63.5
<u>PESTICIDE/PCBS</u>						
alpha-BHC	UG/KG	0.975 UJ	1 UJ	0.945 UJ	1.025 UJ	1.35 UJ
beta-BHC	UG/KG	0.975 UJ	1 UJ	0.945 UJ	1.025 UJ	1.35 UJ
delta-BHC	UG/KG	0.975 UJ	1 UJ	0.945 UJ	1.025 UJ	1.35 UJ
Lindane (gamma-BHC)	UG/KG	0.975 UJ	1 UJ	0.945 UJ	1.025 UJ	1.35 UJ
Heptachlor	UG/KG	0.975 UJ	1 UJ	0.945 UJ	1.025 UJ	1.35 UJ
Aldrin	UG/KG	0.975 UJ	1 UJ	0.945 UJ	1.025 UJ	1.35 UJ
Heptachlor epoxide	UG/KG	0.975 UJ	1 UJ	0.945 UJ	1.025 UJ	1.35 UJ
Endosulfan I	UG/KG	0.975 UJ	1 UJ	0.945 UJ	1.025 UJ	1.35 UJ
Dieldrin	UG/KG	1.895 UJ	1.94 UJ	1.835 UJ	1.99 UJ	2.62 UJ
4,4'-DDE	UG/KG	1.895 UJ	1.94 UJ	1.835 UJ	1.99 UJ	2.62 UJ
Endrin	UG/KG	1.895 UJ	1.94 UJ	1.835 UJ	1.99 UJ	2.62 UJ
Endosulfan II	UG/KG	1.895 UJ	1.94 UJ	1.835 UJ	1.99 UJ	2.62 UJ
4,4'-DDD	UG/KG	1.895 UJ	1.94 UJ	1.835 UJ	1.99 UJ	2.62 UJ
Endosulfan sulfate	UG/KG	1.895 UJ	1.94 UJ	1.835 UJ	1.99 UJ	2.62 UJ
4,4'-DDT	UG/KG	1.895 UJ	1.94 UJ	1.835 UJ	1.99 UJ	2.62 UJ
Methoxychlor	UG/KG	9.75 UJ	10 UJ	9.45 UJ	10.25 UJ	13.5 UJ
Endrin ketone	UG/KG	1.895 UJ	1.94 UJ	1.835 UJ	1.99 UJ	2.62 UJ
Endrin aldehyde	UG/KG	1.895 UJ	1.94 UJ	1.835 UJ	1.99 UJ	2.62 UJ
alpha-Chlordane	UG/KG	0.975 UJ	1 UJ	0.945 UJ	1.025 UJ	1.35 UJ
gamma-Chlordane	UG/KG	0.975 UJ	1 UJ	0.945 UJ	1.025 UJ	1.35 UJ
Toxaphene	UG/KG	97.5 UJ	100 UJ	94.5 UJ	102.5 UJ	135 UJ
Aroclor 1016	UG/KG	18.95 UJ	19.4 UJ	18.35 UJ	19.9 UJ	26.2 UJ
Aroclor 1221	UG/KG	38.5 UJ	39.4 UJ	37.2 UJ	40.35 UJ	53 UJ
Aroclor 1232	UG/KG	18.95 UJ	19.4 UJ	18.35 UJ	19.9 UJ	26.2 UJ
Aroclor 1242	UG/KG	18.95 UJ	19.4 UJ	18.35 UJ	19.9 UJ	26.2 UJ
Aroclor 1248	UG/KG	18.95 UJ	19.4 UJ	18.35 UJ	19.9 UJ	26.2 UJ
Aroclor 1254	UG/KG	18.95 UJ	19.4 UJ	18.35 UJ	19.9 UJ	26.2 UJ
Aroclor 1260	UG/KG	18.95 UJ	19.4 UJ	18.35 UJ	19.9 UJ	26.2 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW04DW-01	41-GW04DW-02	41-GW06DW-02	41-GW06DW-03	41-GW07DW-02	41-GW07DW-06
Laboratory Sample ID:	9402078-01	9402078-02	9402131-01A	9402131-02A	9402087-07	9402087-09
Date Sampled:						
Percent Solids	87.1	85.1	89.6	83.5	83.3	63.5
CHEMICAL SURETY						
Acetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Chloroacetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Hydroxyacetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Bis(2'-chloroethyl)disulfide	UG/KG	N/A	N/A	N/A	N/A	N/A
Bis(2'-chloroethyl)trisulfide	UG/KG	N/A	N/A	N/A	N/A	N/A
1,4-Dithiane	UG/KG	N/A	N/A	N/A	N/A	N/A
1,4-Oxathiane	UG/KG	N/A	N/A	N/A	N/A	N/A
THIODIGLYCOL						
Thiodiglycol	MG/KG	N/A	N/A	N/A	N/A	N/A
ORDNANCE						
1,3,5-Trinitrobenzene	UG/KG	N/A	N/A	N/A	N/A	N/A
1,3-Dinitrobenzene	UG/KG	N/A	N/A	N/A	N/A	N/A
2,4,6-Trinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
2,4-Dinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
2,6-Dinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
2-Amino-4,6-dinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
2-Nitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
3-Nitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
4-Amino-2,6-dinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
4-Nitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
HMX	UG/KG	N/A	N/A	N/A	N/A	N/A
Nitrobenzene	UG/KG	N/A	N/A	N/A	N/A	N/A
RDX	UG/KG	N/A	N/A	N/A	N/A	N/A
Tetryl	UG/KG	N/A	N/A	N/A	N/A	N/A
MIREX						
Mirex	UG/KG	N/A	N/A	N/A	N/A	N/A

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW09DW-02	41-GW09DW-05	41-GW11DW-01	41-GW11DW-06	41-GW12DW-02	41-GW12WD-03	
Laboratory Sample ID:	9402065-01	9402065-02	9402078-03	9402078-04	9402120-01A	9402120-02A	
Date Sampled:							
Percent Solids	80.6	78.5	89.5	81.8	80.1	82.2	
SEMIVOLATILES							
1,2-Dichlorobenzene	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
1,2,4-Trichlorobenzene	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
1,3-Dichlorobenzene	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
1,4-Dichlorobenzene	UG/KG	203.5 U	204 U	49 J	201.5 U	206 U	201.5 U
2-Chloronaphthalene	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
2-Chlorophenol	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
2-Methylnaphthalene	UG/KG	203.5 U	204 U	183.5 U	120 J	206 U	201.5 U
2-Methylphenol	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
2-Nitroaniline	UG/KG	494 U	494.5 U	444.5 U	488 U	500 U	488 U
2-Nitrophenol	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
2,2'-oxybis-(1-chloropropane)	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 UJ	
2,4-Dichlorophenol	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
2,4-Dimethylphenol	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
2,4-Dinitrophenol	UG/KG	494 U	494.5 U	444.5 U	488 U	500 U	488 U
2,4-Dinitrotoluene	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
2,4,5-Trichlorophenol	UG/KG	494 U	494.5 U	444.5 U	488 U	500 U	488 U
2,4,6-Trichlorophenol	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
2,6-Dinitrotoluene	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
3-Nitroaniline	UG/KG	494 U	494.5 U	444.5 U	488 U	500 U	488 U
3,3'-Dichlorobenzidine	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 UJ	201.5 U
4-Bromophenyl-phenylether	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
4-Chloro-3-methylphenol	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
4-Chloroaniline	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
4-Chlorophenyl phenyl ether	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
4-Methylphenol	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
4-Nitroaniline	UG/KG	494 U	494.5 U	444.5 U	488 U	500 U	488 U
4-Nitrophenol	UG/KG	494 U	494.5 U	444.5 U	488 U	500 U	488 U
4,6-Dinitro-2-methylphenol	UG/KG	494 U	494.5 U	444.5 U	488 U	500 U	488 U
Acenaphthene	UG/KG	203.5 U	204 U	62 J	52 J	206 U	201.5 U
Acenaphthylene	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
Anthracene	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
Benzo[a]anthracene	UG/KG	203.5 U	204 U	160 J	201.5 U	206 U	201.5 U
Benzo[a]pyrene	UG/KG	203.5 U	204 U	130 J	201.5 U	206 U	201.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW09DW-02	41-GW09DW-05	41-GW11DW-01	41-GW11DW-06	41-GW12DW-02	41-GW12WD-03	
Laboratory Sample ID:	9402065-01	9402065-02	9402078-03	9402078-04	9402120-01A	9402120-02A	
Date Sampled:							
Percent Solids	80.6	78.5	89.5	81.8	80.1	82.2	
SEMIVOLATILES Cont.							
Benzo[b]fluoranthene	UG/KG	203.5 U	204 U	150 J	201.5 U	206 U	201.5 U
Benzo[g,h,i]perylene	UG/KG	203.5 U	204 U	110 J	201.5 U	206 U	201.5 U
Benzo[k]fluoranthene	UG/KG	203.5 U	204 U	109 J	201.5 U	206 U	201.5 U
bis(2-Chloroethoxy) methane	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
bis(2-Chloroethyl) ether	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
bis(2-Ethylhexyl)phthalate	UG/KG	203.5 U	204 U	220 J	180 J	46 J	201.5 U
Butyl benzyl phthalate	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
Carbazole	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
Chrysene	UG/KG	203.5 U	204 U	170 J	201.5 U	206 U	201.5 U
Dibenzofuran	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
Dibenz[a,h]anthracene	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
Diethylphthalate	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
Dimethyl phthalate	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
di-n-Butylphthalate	UG/KG	203.5 U	204 U	183.5 U	201.5 U	47 J	201.5 U
di-n-Octylphthalate	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
Fluoranthene	UG/KG	203.5 U	204 U	260 J	201.5 U	206 U	201.5 U
Fluorene	UG/KG	203.5 U	204 U	49 J	56 J	206 U	201.5 U
Hexachlorobenzene	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
Hexachlorobutadiene	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
Hexachlorocyclopentadiene	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
Hexachloroethane	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
Indeno[1,2,3-cd]pyrene	UG/KG	203.5 U	204 U	105 J	201.5 U	206 U	201.5 U
Isophorone	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
Naphthalene	UG/KG	203.5 U	204 U	45 J	130 J	206 U	201.5 U
Nitrobenzene	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
N-Nitroso-di-n-propylamine	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
N-nitrosodiphenylamine	UG/KG	203.5 U	204 U	183.5 U	240 J	206 U	201.5 U
Pentachlorophenol	UG/KG	494 U	494.5 U	444.5 U	488 U	500 U	488 U
Phenanthrene	UG/KG	203.5 U	204 U	260 J	83 J	206 U	201.5 U
Phenol	UG/KG	203.5 U	204 U	183.5 U	201.5 U	206 U	201.5 U
Pyrene	UG/KG	203.5 U	204 U	290 J	201.5 U	206 U	201.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW09DW-02	41-GW09DW-05	41-GW11DW-01	41-GW11DW-06	41-GW12DW-02	41-GW12WD-03
Laboratory Sample ID:	9402065-01	9402065-02	9402078-03	9402078-04	9402120-01A	9402120-02A
Date Sampled:						
Percent Solids	80.6	78.5	89.5	81.8	80.1	82.2
VOLATILES						
Chloromethane	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
Bromomethane	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
Vinyl chloride	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
Chloroethane	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
Methylene chloride	UG/KG	8 U	7.5 U	6 J	7 J	6 U
Acetone	UG/KG	12 UJ	38.5 UJ	19.5 U	230 J	36 U
Carbon Disulfide	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
1,1-Dichloroethene	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
1,1-Dichloroethane	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
1,2-Dichloroethene(total)	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
Chloroform	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
1,2-Dichloroethane	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
2-Butanone	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
1,1,1-Trichloroethane	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
Carbon tetrachloride	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
Bromodichloromethane	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
1,2-Dichloropropane	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
cis-1,3-Dichloropropene	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
Trichloroethene	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
Dibromochloromethane	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
1,1,2-Trichloroethane	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
Benzene	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
trans-1,3-Dichloropropene	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
Bromoform	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
4-Methyl-2-pentanone	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
2-Hexanone	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
Tetrachloroethene	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
1,1,2,2-Tetrachloroethane	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
Toluene	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
Chlorobenzene	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
Ethylbenzene	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
Styrene	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U
Xylenes (total)	UG/KG	6.15 U	6.3 U	5.5 U	6 U	6 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW09DW-02	41-GW09DW-05	41-GW11DW-01	41-GW11DW-06	41-GW12DW-02	41-GW12WD-03	
Laboratory Sample ID:	9402065-01	9402065-02	9402078-03	9402078-04	9402120-01A	9402120-02A	
Date Sampled:							
Percent Solids	80.6	78.5	89.5	81.8	80.1	82.2	
<u>PESTICIDE/PCBS</u>							
alpha-BHC	UG/KG	1.045 UJ	1.08 UJ	0.955 UJ	1.035 UJ	1.06 UJ	1.035 UJ
beta-BHC	UG/KG	1.045 U	1.08 U	0.955 UJ	1.035 UJ	1.06 UJ	1.035 UJ
delta-BHC	UG/KG	1.045 UJ	1.08 UJ	0.955 UJ	1.035 UJ	1.06 UJ	1.035 UJ
Lindane (gamma-BHC)	UG/KG	1.045 U	1.08 U	0.955 UJ	1.035 UJ	1.06 UJ	1.035 UJ
Heptachlor	UG/KG	1.045 U	1.08 U	0.955 UJ	1.035 UJ	1.06 UJ	1.035 UJ
Aldrin	UG/KG	1.045 U	1.08 U	0.955 UJ	1.035 UJ	1.06 UJ	1.035 UJ
Heptachlor epoxide	UG/KG	1.045 U	1.08 U	0.955 UJ	1.035 UJ	1.06 UJ	1.035 UJ
Endosulfan I	UG/KG	1.045 U	1.08 U	0.955 UJ	1.035 UJ	1.06 UJ	1.035 UJ
Dieldrin	UG/KG	2.03 U	2.095 U	1.855 UJ	2.01 UJ	2.06 UJ	2.01 UJ
4,4'-DDE	UG/KG	2.03 U	2.095 U	10.2 J	10.8 J	2.06 UJ	2.01 UJ
Endrin	UG/KG	2.03 U	2.095 U	1.855 UJ	2.01 UJ	2.06 UJ	2.01 UJ
Endosulfan II	UG/KG	2.03 U	2.095 U	1.855 UJ	2.01 UJ	2.06 UJ	2.01 UJ
4,4'-DDD	UG/KG	2.03 U	2.095 U	25.6 J	2.15 J	2.06 UJ	2.01 UJ
Endosulfan sulfate	UG/KG	2.03 U	2.095 U	1.855 UJ	2.01 UJ	2.06 UJ	2.01 UJ
4,4'-DDT	UG/KG	2.03 U	2.095 U	1.855 UJ	2.01 UJ	2.06 UJ	2.01 UJ
Methoxychlor	UG/KG	10.45 U	10.8 U	9.55 UJ	10.35 UJ	10.6 UJ	10.35 UJ
Endrin ketone	UG/KG	2.03 U	2.095 U	1.855 UJ	2.01 UJ	2.06 UJ	2.01 UJ
Endrin aldehyde	UG/KG	2.03 U	2.095 U	0.85 NJ	2.01 UJ	2.06 UJ	2.01 UJ
alpha-Chlordane	UG/KG	1.045 U	1.08 U	0.955 UJ	1.035 UJ	1.06 UJ	1.035 UJ
gamma-Chlordane	UG/KG	1.045 U	1.08 U	0.955 UJ	1.035 UJ	1.06 UJ	1.035 UJ
Toxaphene	UG/KG	104.5 U	108 U	95.5 UJ	103.5 UJ	106 UJ	103.5 UJ
Aroclor 1016	UG/KG	20.3 U	20.95 U	18.55 UJ	20.1 UJ	20.6 UJ	20.1 UJ
Aroclor 1221	UG/KG	41.2 U	42.55 U	37.65 UJ	40.85 UJ	41.9 UJ	40.85 UJ
Aroclor 1232	UG/KG	20.3 U	20.95 U	18.55 UJ	20.1 UJ	20.6 UJ	20.1 UJ
Aroclor 1242	UG/KG	20.3 U	20.95 U	18.55 UJ	20.1 UJ	20.6 UJ	20.1 UJ
Aroclor 1248	UG/KG	20.3 U	20.95 U	18.55 UJ	20.1 UJ	20.6 UJ	20.1 UJ
Aroclor 1254	UG/KG	20.3 U	20.95 U	18.55 UJ	20.1 UJ	20.6 UJ	20.1 UJ
Aroclor 1260	UG/KG	20.3 U	20.95 U	18.55 UJ	20.1 UJ	20.6 UJ	20.1 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW09DW-02	41-GW09DW-05	41-GW11DW-01	41-GW11DW-06	41-GW12DW-02	41-GW12WD-03
Laboratory Sample ID:	9402065-01	9402065-02	9402078-03	9402078-04	9402120-01A	9402120-02A
Date Sampled:						
Percent Solids	80.6	78.5	89.5	81.8	80.1	82.2
CHEMICAL SURETY						
Acetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Chloroacetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Hydroxyacetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Bis(2'-chloroethyl)disulfide	UG/KG	N/A	N/A	N/A	N/A	N/A
Bis(2'-chloroethyl)trisulfide	UG/KG	N/A	N/A	N/A	N/A	N/A
1,4-Dithiane	UG/KG	N/A	N/A	N/A	N/A	N/A
1,4-Oxathiane	UG/KG	N/A	N/A	N/A	N/A	N/A
THIODIGLYCOL						
Thiodiglycol	MG/KG	N/A	N/A	N/A	N/A	N/A
ORDNANCE						
1,3,5-Trinitrobenzene	UG/KG	N/A	N/A	N/A	N/A	N/A
1,3-Dinitrobenzene	UG/KG	N/A	N/A	N/A	N/A	N/A
2,4,6-Trinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
2,4-Dinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
2,6-Dinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
2-Amino-4,6-dinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
2-Nitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
3-Nitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
4-Amino-2,6-dinitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
4-Nitrotoluene	UG/KG	N/A	N/A	N/A	N/A	N/A
HMX	UG/KG	N/A	N/A	N/A	N/A	N/A
Nitrobenzene	UG/KG	N/A	N/A	N/A	N/A	N/A
RDX	UG/KG	N/A	N/A	N/A	N/A	N/A
Tetryl	UG/KG	N/A	N/A	N/A	N/A	N/A
MIREX						
Mirex	UG/KG	203.5 U	204 U	N/A	N/A	N/A

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
ONSITE SUBSURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled: Percent Solids		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	376 R	NA	NA	NA	NA
1,2,4-Trichlorobenzene	UG/KG	376 R	NA	NA	NA	NA
1,3-Dichlorobenzene	UG/KG	376 R	NA	NA	NA	NA
1,4-Dichlorobenzene	UG/KG	376 R	532.5	2717.0	1095.7	293.7
2-Chloronaphthalene	UG/KG	376 R	NA	NA	NA	NA
2-Chlorophenol	UG/KG	376 R	NA	NA	NA	NA
2-Methylnaphthalene	UG/KG	550	536.1	2717.0	1099.2	300.4
2-Methylphenol	UG/KG	376 R	NA	NA	NA	NA
2-Nitroaniline	UG/KG	912 R	NA	NA	NA	NA
2-Nitrophenol	UG/KG	376 R	NA	NA	NA	NA
2,2'-oxybis-(1-chloropropane)	UG/KG	403 R	NA	NA	NA	NA
2,4-Dichlorophenol	UG/KG	376 R	NA	NA	NA	NA
2,4-Dimethylphenol	UG/KG	376 R	NA	NA	NA	NA
2,4-Dinitrophenol	UG/KG	912 R	NA	NA	NA	NA
2,4-Dinitrotoluene	UG/KG	376 R	NA	NA	NA	NA
2,4,5-Trichlorophenol	UG/KG	912 R	NA	NA	NA	NA
2,4,6-Trichlorophenol	UG/KG	376 R	NA	NA	NA	NA
2,6-Dinitrotoluene	UG/KG	376 R	NA	NA	NA	NA
3-Nitroaniline	UG/KG	912 R	NA	NA	NA	NA
3,3'-Dichlorobenzidine	UG/KG	376 R	NA	NA	NA	NA
4-Bromophenyl-phenylether	UG/KG	376 R	NA	NA	NA	NA
4-Chloro-3-methylphenol	UG/KG	376 R	532.4	2717.0	1095.6	292.5
4-Chloroaniline	UG/KG	376 R	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	UG/KG	376 R	NA	NA	NA	NA
4-Methylphenol	UG/KG	376 R	532.1	2717.1	1095.3	292.7
4-Nitroaniline	UG/KG	968 R	NA	NA	NA	NA
4-Nitrophenol	UG/KG	912 R	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	UG/KG	912 R	NA	NA	NA	NA
Acenaphthene	UG/KG	376 R	529.4	2717.5	1092.6	291.5
Acenaphthylene	UG/KG	376 R	NA	NA	NA	NA
Anthracene	UG/KG	376 R	NA	NA	NA	NA
Benzo[a]anthracene	UG/KG	376 R	532.3	2717.0	1095.5	291.7
Benzo[a]pyrene	UG/KG	4700 J	278.3	567.8	395.9	260.6

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled: Percent Solids		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
SEMIVOLATILES Cont.						
	Benzofluoranthene	UG/KG 376 R	532.2	2717.0	1095.4	291.4
	Benzofluoranthene	UG/KG 4600 J	259.9	547.7	373.4	246.5
	Benzofluoranthene	UG/KG 376 R	531.7	2717.1	1094.8	290.9
	bis(2-Chloroethoxy) methane	UG/KG 376 R	NA	NA	NA	NA
	bis(2-Chloroethyl) ether	UG/KG 800	542.1	2716.8	1105.2	304.2
	bis(2-Ethylhexyl)phthalate	UG/KG 7200 J	261.6	877.6	443.5	231.9
	Butyl benzyl phthalate	UG/KG 376 R	533.1	2716.9	1096.2	291.9
	Carbazole	UG/KG 376 R	532.6	2717.0	1095.7	292.3
	Chrysene	UG/KG 376 R	528.2	2717.7	1091.4	293.5
	Dibenzofuran	UG/KG 376 R	532.3	2717.1	1095.4	293.5
	Dibenz[a,h]anthracene	UG/KG 376 R	NA	NA	NA	NA
	Diethylphthalate	UG/KG 376 R	533.4	2716.9	1096.5	290.1
	Dimethyl phthalate	UG/KG 376 R	NA	NA	NA	NA
	di-n-Butylphthalate	UG/KG 376 R	498.2	2766.3	1080.6	263.5
	di-n-Octylphthalate	UG/KG 1600	555.2	2720.4	1119.1	329.6
	Fluoranthene	UG/KG 376 R	528.6	2717.6	1091.8	292.7
	Fluorene	UG/KG 376 R	526.5	2717.9	1089.8	292.1
	Hexachlorobenzene	UG/KG 376 R	NA	NA	NA	NA
	Hexachlorobutadiene	UG/KG 376 R	NA	NA	NA	NA
	Hexachlorocyclopentadiene	UG/KG 376 R	NA	NA	NA	NA
	Hexachloroethane	UG/KG 376 R	NA	NA	NA	NA
	Indeno[1,2,3-cd]pyrene	UG/KG 376 R	533.4	2716.9	1096.5	290.2
	Isophorone	UG/KG 376 R	NA	NA	NA	NA
	Naphthalene	UG/KG 376 R	531.9	2717.2	1095.0	295.5
	Nitrobenzene	UG/KG 376 R	NA	NA	NA	NA
	N-Nitroso-di-n-propylamine	UG/KG 376 R	NA	NA	NA	NA
	N-nitrosodiphenylamine	UG/KG 376 R	535.2	2716.6	1098.2	292.0
	Pentachlorophenol	UG/KG 912 R	NA	NA	NA	NA
	Phenanthrene	UG/KG 376 R	527.7	2717.8	1091.0	294.8
	Phenol	UG/KG 376 R	NA	NA	NA	NA
	Pyrene	UG/KG 376 R	526.9	2717.9	1090.2	292.3

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled: Percent Solids		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
VOLATILES						
Chloromethane	UG/KG	3 J	5.8	0.8	6.0	6.1
Bromomethane	UG/KG	ND	NA	NA	NA	NA
Vinyl chloride	UG/KG	ND	NA	NA	NA	NA
Chloroethane	UG/KG	ND	NA	NA	NA	NA
Methylene chloride	UG/KG	26 J	6.5	3.5	7.2	7.1
Acetone	UG/KG	6000 J	238.9	886.1	421.1	234.8
Carbon Disulfide	UG/KG	ND	NA	NA	NA	NA
1,1-Dichloroethene	UG/KG	ND	NA	NA	NA	NA
1,1-Dichloroethane	UG/KG	ND	NA	NA	NA	NA
1,2-Dichloroethene(total)	UG/KG	ND	NA	NA	NA	NA
Chloroform	UG/KG	ND	NA	NA	NA	NA
1,2-Dichloroethane	UG/KG	ND	NA	NA	NA	NA
2-Butanone	UG/KG	15 J	6.0	1.5	6.3	6.4
1,1,1-Trichloroethane	UG/KG	ND	NA	NA	NA	NA
Carbon tetrachloride	UG/KG	ND	NA	NA	NA	NA
Bromodichloromethane	UG/KG	ND	NA	NA	NA	NA
1,2-Dichloropropane	UG/KG	ND	NA	NA	NA	NA
cis-1,3-Dichloropropene	UG/KG	ND	NA	NA	NA	NA
Trichloroethene	UG/KG	1 J	5.9	0.8	6.0	6.2
Dibromochloromethane	UG/KG	ND	NA	NA	NA	NA
1,1,2-Trichloroethane	UG/KG	ND	NA	NA	NA	NA
Benzene	UG/KG	1 J	5.9	0.8	6.0	6.2
trans-1,3-Dichloropropene	UG/KG	ND	NA	NA	NA	NA
Bromoform	UG/KG	ND	NA	NA	NA	NA
4-Methyl-2-pentanone	UG/KG	ND	NA	NA	NA	NA
2-Hexanone	UG/KG	ND	NA	NA	NA	NA
Tetrachloroethene	UG/KG	ND	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	UG/KG	ND	NA	NA	NA	NA
Toluene	UG/KG	ND	NA	NA	NA	NA
Chlorobenzene	UG/KG	100	7.8	12.2	10.4	7.7
Ethylbenzene	UG/KG	58	6.8	6.4	8.1	6.8
Styrene	UG/KG	ND	NA	NA	NA	NA
Xylenes (total)	UG/KG	ND	NA	NA	NA	NA

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
ONSITE SUBSURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled: Percent Solids		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
PESTICIDE/PCBS						
alpha-BHC	UG/KG	1.98 R	NA	NA	NA	NA
beta-BHC	UG/KG	10.01 R	1.1	0.6	1.3	1.2
delta-BHC	UG/KG	1.98 R	1.2	0.7	1.3	1.2
Lindane (gamma-BHC)	UG/KG	11.9 J	1.3	1.5	1.7	1.4
Heptachlor	UG/KG	18	1.6	2.7	2.2	1.6
Aldrin	UG/KG	12.8 J	1.3	1.6	1.7	1.4
Heptachlor epoxide	UG/KG	11.5 J	1.3	1.5	1.6	1.4
Endosulfan I	UG/KG	2.92 NJ	1.2	0.8	1.4	1.2
Dieldrin	UG/KG	60 NJ	4.0	8.4	5.7	4.0
4,4'-DDE	UG/KG	39.6 J	4.7	7.1	6.2	5.6
Endrin	UG/KG	28.3 J	2.7	3.6	3.4	2.8
Endosulfan II	UG/KG	25.2 NJ	3.1	4.1	3.9	3.2
4,4'-DDD	UG/KG	1060 J	23.3	134.1	51.5	9.8
Endosulfan sulfate	UG/KG	3.93 R	NA	NA	NA	NA
4,4'-DDT	UG/KG	302 J	9.0	38.4	17.0	5.6
Methoxychlor	UG/KG	19.8 R	11.4	7.4	13.0	13.2
Endrin ketone	UG/KG	3.93 R	2.3	1.4	2.6	2.4
Endrin aldehyde	UG/KG	4.38 J	2.3	1.5	2.6	2.4
alpha-Chlordane	UG/KG	160 J	3.8	19.9	7.9	2.1
gamma-Chlordane	UG/KG	170 J	3.8	21.1	8.2	1.8
Toxaphene	UG/KG	198 R	NA	NA	NA	NA
Aroclor 1016	UG/KG	38.4 R	NA	NA	NA	NA
Aroclor 1221	UG/KG	77.9 R	NA	NA	NA	NA
Aroclor 1232	UG/KG	38.4 R	NA	NA	NA	NA
Aroclor 1242	UG/KG	38.4 R	NA	NA	NA	NA
Aroclor 1248	UG/KG	38.4 R	NA	NA	NA	NA
Aroclor 1254	UG/KG	214 J	26.0	28.0	31.9	26.7
Aroclor 1260	UG/KG	317 J	26.3	38.7	34.5	26.1

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled: Percent Solids		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
CHEMICAL SURETY						
Acetophenone	UG/KG	376 R	875.5	3873.1	2037.4	456.6
Chloroacetophenone	UG/KG	376 R	878.0	3872.6	2039.8	NA
Hydroxyacetophenone	UG/KG	1880 R	4390.0	19363.0	10198.7	NA
Bis(2'-chloroethyl)disulfide	UG/KG	ND	NA	NA	NA	NA
Bis(2'-chloroethyl)trisulfide	UG/KG	ND	NA	NA	NA	NA
1,4-Dithiane	UG/KG	376 R	878.0	3872.6	2039.8	NA
1,4-Oxathiane	UG/KG	376 R	878.0	3872.6	2039.8	NA
THIODIGLYCOL						
Thiodiglycol	MG/KG	ND	NA	NA	NA	NA
ORDNANCE						
1,3,5-Trinitrobenzene	UG/KG	40.2 R	20.1	0.0	20.1	NA
1,3-Dinitrobenzene	UG/KG	37.2 R	18.6	0.0	18.6	NA
2,4,6-Trinitrotoluene	UG/KG	35.6 R	17.8	0.0	17.8	NA
2,4-Dinitrotoluene	UG/KG	51.6 R	25.8	0.0	25.8	NA
2,6-Dinitrotoluene	UG/KG	47.6 R	23.8	0.0	23.8	NA
2-Amino-4,6-dinitrotoluene	UG/KG	46.7 R	23.4	0.0	23.4	NA
2-Nitrotoluene	UG/KG	81.4 R	40.7	0.0	40.7	NA
3-Nitrotoluene	UG/KG	81.7 R	40.8	0.0	40.8	NA
4-Amino-2,6-dinitrotoluene	UG/KG	40.8 R	20.4	0.0	20.4	NA
4-Nitrotoluene	UG/KG	87.2 R	43.6	0.0	43.6	NA
HMX	UG/KG	70.5 R	35.3	0.0	35.3	NA
Nitrobenzene	UG/KG	35.2 R	17.6	0.0	17.6	NA
RDX	UG/KG	50.9 R	25.5	0.0	25.5	NA
Tetryl	UG/KG	163 R	81.5	0.0	81.5	NA
MIREX						
Mirex	UG/KG	1880 R	3729.9	17790.8	8627.5	NA

APPENDIX P.4
SITE 41 ON-SITE SUBSURFACE SOIL INORGANICS

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
ONSITE SUBSURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL INORGANICS

	41-OS-SB01-02	41-OS-SB01-05	41-OS-SB02-02	41-OS-SB02-03	41-OS-SB03-01	41-OS-SB04-02
Client Sample ID:	41-OS-SB01-02	41-OS-SB01-05	41-OS-SB02-02	41-OS-SB02-03	41-OS-SB03-01	41-OS-SB04-02
Laboratory Sample ID:	9402021-02	9402021-03	9402021-08	9402021-09	9402021-11	9402086-05
Date Sampled:						
Percent Solids	83.4	86.8	88	93.5	82.8	87.6
	UNITS					
Aluminum	MG/KG	6890	1470	3580	1290	8100
Antimony	MG/KG	0.945 U	0.89 U	0.9 U	0.845 U	0.955 U
Arsenic	MG/KG	0.3475 U	1.17	2.65	1.53	3.02
Barium	MG/KG	11.9	1.4 U	6.79	3.68	21.5
Beryllium	MG/KG	0.0955 U	0.09 U	0.091 U	0.0855 U	0.0965 U
Cadmium	MG/KG	0.385 U	0.36 U	0.365 U	0.34 U	0.385 U
Calcium	MG/KG	208	16.8 U	106	86.2	8750
Chromium	MG/KG	8.38	4.1	5.82	3.83	10.8
Cobalt	MG/KG	1.9 U	1.8 U	1.8 U	1.7 U	1.95 U
Copper	MG/KG	1.9 U	1.85 U	1.85 U	1.75 U	1.95 U
Iron	MG/KG	2670	3920	2390	2260	6470
Lead	MG/KG	4.83	2	3.89	1.87	829
Magnesium	MG/KG	169	32.2	110	49.8	323
Manganese	MG/KG	3.06	0.795 U	2.5	0.755 U	12.7
Mercury	MG/KG	0.03 U	0.057	0.0285 U	0.0265 U	0.082
Nickel	MG/KG	3.45 U	3.25 U	3.295 U	3.1 U	3.5 U
Potassium	MG/KG	224	86 U	86.5 U	81.5 U	269
Selenium	MG/KG	0.3 U	0.28 U	0.285 U	0.265 U	0.3 U
Silver	MG/KG	0.048 U	0.045 U	0.0455 U	0.202	0.0485 U
Sodium	MG/KG	22.3 U	20.95 U	21.15 U	19.9 U	59.3
Thallium	MG/KG	0.55 U	0.5 U	0.5 U	0.49 U	0.55 U
Vanadium	MG/KG	11.6	2.3 U	10.3	4.79	16.4
Zinc	MG/KG	5.48	3.75	3.97	3.08	57.5
Total Cyanide	MG/KG	1.2	1.13	1.14	1.07	1.21

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL INORGANICS

Client Sample ID:	41-OS-SB04-03	41-OS-SB05-01	41-OS-SB06-01	41-OS-SB06-03	41-OS-SB07-01	41-OS-SB07-02	
Laboratory Sample ID:	9402086-06	9402042-02A	9402086-02	9402086-03	9402042-06A	9402042-07A	
Date Sampled:							
Percent Solids	78.1	87.4	89.3	87.1	89.9	81	
	<u>UNITS</u>						
Aluminum	MG/KG	2760	1280 J	6330	4440	3110 J	6650 J
Antimony	MG/KG	0.95 U	0.905 UJ	2.94	0.85 U	0.88 UJ	0.975 UJ
Arsenic	MG/KG	0.269 U	0.332 U	0.798	0.241 U	0.3225 U	0.358 U
Barium	MG/KG	8.29	3.97	22.8	12.6	9.46	18.8
Beryllium	MG/KG	0.23	0.087 U	0.085 U	0.087 U	0.0845 U	0.284
Cadmium	MG/KG	0.4085 U	0.365 U	0.357 U	0.366 U	0.355 U	0.394 U
Calcium	MG/KG	1190	126	1220	689	516	1430
Chromium	MG/KG	3.94 J	2.27	9.89 J	4.87 J	4	9.22
Cobalt	MG/KG	2.05 U	1.83 U	1.79 U	1.835 U	1.78 U	1.975 U
Copper	MG/KG	2.085 U	1.865 U	6.97	1.87 U	1.815 U	2.01 U
Iron	MG/KG	1720	672 J	8930	3940	1310 J	3920 J
Lead	MG/KG	16.6	2.64 J	40.3	11.3	2.39 J	6.93 J
Magnesium	MG/KG	78.2	47.2	160	96	100	338
Manganese	MG/KG	5.36	1.86 J	33	14.8	3.19 J	18.1 J
Mercury	MG/KG	0.032 U	0.0285 U	0.028 U	0.0285 U	0.032 U	0.057 U
Nickel	MG/KG	3.69 U	3.3 U	3.225 U	3.305 U	3.2 U	3.55 U
Potassium	MG/KG	95.5 U	85 U	83.5 U	85.5 U	167	535
Selenium	MG/KG	0.192 U	0.2895 UJ	0.168 U	0.172 U	0.2815 U	0.3125 U
Silver	MG/KG	0.205 UJ	0.183 UJ	0.179 UJ	0.1835 UJ	0.178 UJ	0.1975 UJ
Sodium	MG/KG	181	41.1 U	110	113	39.95 U	44.3 U
Thallium	MG/KG	0.3715 U	0.525 U	0.3245 U	0.333 U	0.51 U	0.57 U
Vanadium	MG/KG	2.61 U	2.335 U	9.73	6.25	6.82	13.6
Zinc	MG/KG	3.505 U	4.87	48.3	4.61 U	6.5	19
Total Cyanide	MG/KG	1.28	1.14	1.12	1.15	1.11	1.23

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
ONSITE SUBSURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL INORGANICS

	Client Sample ID:	41-OS-SB08-01	41-OS-SB09-01	41-OS-SB10-01	41-OS-SB11-01	41-OS-SB12-02	41-OS-SB14-01
	Laboratory Sample ID:	9402086-10	9402042-04A	9402064-06	9402086-08	9402042-09A	9402064-02
	Date Sampled:						
	Percent Solids	88.7	88.5	87.8	82.4	82.7	88.6
	UNITS						
Aluminum	MG/KG	5610	1080 J	2280	8670	2660 J	2400
Antimony	MG/KG	0.835 U	0.89 UJ	0.84 U	0.9 U	0.955 UJ	0.835 U
Arsenic	MG/KG	1.16	0.3275 U	0.239 U	0.797	0.3505 U	1.16
Barium	MG/KG	105	3.22	18.3	186	17.6	16.6
Beryllium	MG/KG	0.0855 U	0.086 U	0.0865 U	0.092 U	0.187	0.086 U
Cadmium	MG/KG	2.75	0.3605 U	0.3635 U	4.73	0.3855 U	0.36 U
Calcium	MG/KG	18900	209	2290	4650	612	8100
Chromium	MG/KG	27.5 J	3.58	5.01 J	40.5 J	4.13	9 J
Cobalt	MG/KG	1.805 U	1.81 U	1.82 U	1.94 U	1.935 U	1.805 U
Copper	MG/KG	32.3	1.84 U	15.3	39.8	1.97 U	8.82
Iron	MG/KG	7550	3410 J	1610	8000	1660 J	3080
Lead	MG/KG	108	8.6 J	45.7	104	10.4 J	157
Magnesium	MG/KG	416	34.9	148	340	65	431
Manganese	MG/KG	84.1	16.2 J	17.2	62.4	6.12	29.5
Mercury	MG/KG	0.086	0.061 U	0.0285 U	0.279	0.0485 U	0.164
Nickel	MG/KG	3.245 U	3.25 U	3.28 U	7.56	3.5 U	3.25 U
Potassium	MG/KG	221	84 U	85 U	265	90 U	84 U
Selenium	MG/KG	0.169 U	0.286 U	0.171 U	0.182 U	0.306 U	0.474
Silver	MG/KG	0.1805 UJ	0.181 UJ	0.182 UJ	0.403 J	0.1935 UJ	0.1805 UJ
Sodium	MG/KG	208	40.55 U	40.9 U	486	136	40.5 U
Thallium	MG/KG	0.327 U	0.52 U	0.33 U	0.352 U	0.555 U	0.3275 U
Vanadium	MG/KG	10.1	2.305 U	2.325 U	16.2	5.34	22.1
Zinc	MG/KG	229	6.03	110	407	11.5	55.5
Total Cyanide	MG/KG	1.13	1.13	1.14	1.21	1.21	1.13

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
ONSITE SUBSURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL INORGANICS

Client Sample ID:	41-OS-SB14-02	41-OS-SB15-01	41-OS-SB15-02	41-OS-SB16-01	41-OS-SB17-01	41-OS-SB17-02	
Laboratory Sample ID:	9402064-03	9402070-02	9402070-03	9402043-06	9402052-01	9402052-02	
Date Sampled:							
Percent Solids	92.8	86.6	87	84.9	88.9	87.1	
	<u>UNITS</u>						
Aluminum	MG/KG	1250	2670	3220	5910	2870	3690
Antimony	MG/KG	0.795 U	0.855 U	0.85 U	0.93 UJ	0.89 UJ	0.905 UJ
Arsenic	MG/KG	0.226 U	0.2425 U	0.2415 U	1.63	0.71 J	0.934
Barium	MG/KG	5.27	10.6	12	25	12	16
Beryllium	MG/KG	0.082 U	0.197	0.0875 U	0.095 U	0.0855 U	0.087 U
Cadmium	MG/KG	0.344 U	0.3685 U	0.3665 U	0.3755 U	0.359 U	0.366 U
Calcium	MG/KG	238	637	636	893	764	5460
Chromium	MG/KG	2.37 J	6.5 J	4.91 J	7.81	4.35	8.88
Cobalt	MG/KG	1.725 U	1.85 U	1.84 U	1.885 U	1.8 U	1.835 U
Copper	MG/KG	1.755 U	3.77	7.7	1.92 U	1.835 U	4.12 J
Iron	MG/KG	814	1930	1950	5100	4210	3160
Lead	MG/KG	10.2	124	54	21 J	16.1	28.6
Magnesium	MG/KG	43.2	69.6	109	217	137	208
Manganese	MG/KG	3.52	9.11	10	10.7	16.7	13.7
Mercury	MG/KG	0.027 U	0.029 U	0.0285 U	0.09	0.123	0.11
Nickel	MG/KG	3.105 U	3.325 U	3.31 U	3.4 U	3.24 U	3.305 U
Potassium	MG/KG	80 U	86 U	85.5 U	256	123	152
Selenium	MG/KG	0.539	0.173 U	0.422	0.298 U	0.948	0.663
Silver	MG/KG	0.1725 UJ	0.185 UJ	0.184 UJ	0.1885 U	0.18 UJ	0.1835 UJ
Sodium	MG/KG	38.7 U	41.45 U	41.25 U	42.3 U	20.9 UJ	21.35 UJ
Thallium	MG/KG	0.3125 U	0.335 U	0.3335 U	0.54 U	0.515 U	0.53 U
Vanadium	MG/KG	2.2 U	2.355 U	5.91	16.6	2.295 U	5.74
Zinc	MG/KG	12.4	40.5	43.2	33.2	22.7 J	48.2 J
Total Cyanide	MG/KG	1.08	1.15	1.15	1.18	1.12	1.15

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL INORGANICS

Client Sample ID:	41-OS-SB18-01	41-OS-SB19-01	41-OS-SB21-01	41-OS-SB21-02	41-OS-SB22-01	41-OS-SB22-03	
Laboratory Sample ID:	9402061-03	9402043-04	9402052-06	9402052-07	9402061-05	9402061-06	
Date Sampled:							
Percent Solids	87.7	87.9	69.7	82	89.3	76.9	
	<u>UNITS</u>						
Aluminum	MG/KG	2450	8480	4480	3350	3790	3400
Antimony	MG/KG	0.9 UJ	0.9 UJ	1.135 UJ	0.965 UJ	0.885 UJ	1.025 UJ
Arsenic	MG/KG	1.24	0.989	1.66	0.3535 U	0.783	0.377 U
Barium	MG/KG	11.8	15.9	25.3	24.2	11.5	11.6
Beryllium	MG/KG	0.0865 U	0.09 U	0.109 U	0.0925 U	0.085 U	0.099 U
Cadmium	MG/KG	0.3635 U	0.363 U	0.4575 U	0.389 U	0.357 U	0.415 U
Calcium	MG/KG	689	870	101	735	354	1270
Chromium	MG/KG	22.6	11	6.67	3.25	4.9	4.57
Cobalt	MG/KG	4.53	1.82 U	2.295 U	1.95 U	1.79 U	2.08 U
Copper	MG/KG	37 J	1,855 U	2.34 U	1.99 U	1,825 U	8.38 J
Iron	MG/KG	41100	8560	3820	1910	5050	8780
Lead	MG/KG	35.1	12.1 J	6.74	11.4	61.2	36.3
Magnesium	MG/KG	42.9	309	98.8	205	128	146
Manganese	MG/KG	244	24.7	3.06	7.12	5.85 U	52.1
Mercury	MG/KG	0.152	0.078	0.061 U	0.0605 U	0.119	0.0655 U
Nickel	MG/KG	12.9	3.3 U	4.13 U	3.51 U	3.225 U	3.745 U
Potassium	MG/KG	57 U	430	257	247	56 U	65 U
Selenium	MG/KG	0.2885 U	0.288 U	0.363 U	0.3085 U	0.2835 U	0.329 U
Silver	MG/KG	0.1825 UJ	0.182 U	0.2295 UJ	0.195 UJ	0.179 UJ	0.208 UJ
Sodium	MG/KG	21.2 UJ	40.85 U	26.7 UJ	22.7 UJ	20.8 UJ	24.2 UJ
Thallium	MG/KG	0.525 U	0.525 U	0.66 U	0.56 U	0.515 U	0.6 U
Vanadium	MG/KG	5.83	12.7	12.1	2.49 U	5.56	2.65 U
Zinc	MG/KG	40.8 J	30.7	6.25 J	5.17 J	21.7 J	37.7 J
Total Cyanide	MG/KG	1.14	1.29	1.43	1.22	1.12	1.3

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
ONSITE SUBSURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL INORGANICS

Client Sample ID:	41-OS-SB23-01	41-OS-SB24-01	41-OS-SB24-02	41-OS-SB25-01	41-OS-SB26-01	41-OS-SB27-01	
Laboratory Sample ID:	9402043-02	9402061-08	9402061-09	9402088-02A	9402088-04A	9402088-07A	
Date Sampled:							
Percent Solids	84.2	84.3	86	83.7	81.8	85	
	<u>UNITS</u>						
Aluminum	MG/KG	7980	3960	4390	2990	3590	9030
Antimony	MG/KG	0.94 UJ	0.935 UJ	0.92 UJ	0.885 U	0.905 U	0.87 U
Arsenic	MG/KG	0.3445 U	0.721	1.4	0.263 U	0.269 U	0.259 U
Barium	MG/KG	18.8	9.95	10.4	8.61	10.6	16.8
Beryllium	MG/KG	0.267	0.09 U	0.0885 U	0.091 U	0.093 U	0.0895 U
Cadmium	MG/KG	0.379 U	0.3785 U	0.371 U	0.381 U	0.39 U	0.375 U
Calcium	MG/KG	1520	3440	2290	17.8 U	318	965
Chromium	MG/KG	8.69	5.78	4.23	3.68 J	3.47 J	10.3 J
Cobalt	MG/KG	1.9 U	1.9 U	1.86 U	1.91 U	1.955 U	1.88 U
Copper	MG/KG	1.935 U	5.06 J	1.895 U	1.945 U	1.99 U	1.92 U
Iron	MG/KG	5990	2730	3100	1050 J	983 J	3630 J
Lead	MG/KG	13.4 J	49.3	19.3	4.34 J	3.54 J	6.26 J
Magnesium	MG/KG	265	203	122	22.8	80.3	233
Manganese	MG/KG	14.1	9.03	5.93	0.845 U	5.73	3.72
Mercury	MG/KG	0.127	0.11	0.0505 U	0.066	0.0305 U	0.0295 U
Nickel	MG/KG	3.4 U	3.415 U	3.35 U	3.45 U	3.5 U	3.4 U
Potassium	MG/KG	313	59.5 U	58 U	91 U	93 U	322
Selenium	MG/KG	0.3005 U	0.615	0.294 U	0.179 U	0.1835 U	0.1765 U
Silver	MG/KG	0.19 U	0.19 UJ	0.186 UJ	0.191 U	0.1955 U	0.188 U
Sodium	MG/KG	42.65 U	22.05 UJ	21.6 UJ	98.7	194	43.3 U
Thallium	MG/KG	0.545 U	0.545 U	0.535 U	0.3465 U	0.3545 U	0.341 U
Vanadium	MG/KG	8.57	9.06	7.54	2.435 U	2.495 U	14.1
Zinc	MG/KG	18.2	26.4 J	10.2 J	1.86 U	2.065 U	3.305 U
Total Cyanide	MG/KG	1.19	1.19	1.16	1.19	1.22	1.18

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL INORGANICS

Client Sample ID:	41-OS-SB28-01	41-OS-SB29-01	41-OS-SB30-01	41-OS-SB31-01	41-OS-SB32-01	41-OS-SB33-01	
Laboratory Sample ID:	9402088-09A	9402071-04	9402071-06	9402088-11A	9402088-13A	9402071-09	
Date Sampled:		02/05/94	02/05/94			02/05/94	
Percent Solids	83.2	86.0	81.5	77.5	72.8	79.8	
	<u>UNITS</u>						
Aluminum	MG/KG	2870	3990.0 J	9430.0 J	3030	2000	2060.0 J
Antimony	MG/KG	0.89 U	0.92 UJ	1.76 UJ	0.955 U	1.015 U	0.99 UJ
Arsenic	MG/KG	0.2645 U	0.244 U	0.342 U	0.597	0.302 U	0.546
Barium	MG/KG	18.2	6.25	31.6	17	8.02	5.60
Beryllium	MG/KG	0.0915 U	0.089 U	0.310	0.098 U	0.1045 U	0.095 U
Cadmium	MG/KG	0.3835 U	0.371 U	0.52 U	0.4115 U	0.438 U	0.400 U
Calcium	MG/KG	213	46.5	1300.0	1560	322	74.5
Chromium	MG/KG	4.05 J	3.66	6.62	3.51 J	1.14 UJ	2.65
Cobalt	MG/KG	1.925 U	1.86 U	2.60 U	2.065 U	2.2 U	2.01 U
Copper	MG/KG	1.96 U	1.90 U	2.65 U	2.105 U	2.24 U	2.04 U
Iron	MG/KG	1060 J	1750.0 J	3200.0 J	1570 J	4650 J	935.0 J
Lead	MG/KG	7.47 J	3.78	7.78	7.02 J	2.13	3.12
Magnesium	MG/KG	66.1	133.0	203.0	91.5	67.3 J	86.5
Manganese	MG/KG	0.85 U	2.90 J	4.98 J	9.75	4.63	2.82 J
Mercury	MG/KG	0.03 U			0.032 U	0.0345 U	
Nickel	MG/KG	3.45 U	3.35 U	4.70 U	3.7 U	3.95 U	3.60 U
Potassium	MG/KG	91.5 U	88.5 U	124.0 U	98.5 U	105 U	95.5 U
Selenium	MG/KG	0.18 U	0.294 U	0.412 U	0.1935 U	0.206 U	0.317 UJ
Silver	MG/KG	0.1925 U	0.186 U	0.260 U	0.62 U	0.22 U	0.201 U
Sodium	MG/KG	44.25 U	42.8 U	60.0 U	47.5 U	50.5 U	46.1 U
Thallium	MG/KG	0.3485 U	0.54 U	0.75 U	0.374 U	0.3985 U	0.58 U
Vanadium	MG/KG	2.45 U	5.17	11.5	2.63 U	2.8 U	2.56 U
Zinc	MG/KG	2.875 U	5.18	7.48	14.2	16.2	10.4
Total Cyanide	MG/KG	1.2	1.16	1.63	1.29	1.37	1.25

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
ONSITE SUBSURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL INORGANICS

Client Sample ID:	41-OS-SB34-01	41-GW07-01	41-GW07-04	41-GW08-01	41-GW08-02	41-GW10-01	
Laboratory Sample ID:	9402088-16A	9402087-03	9402087-05	9402078-05	9402078-06	9402071-01	
Date Sampled:							
Percent Solids	82.3	78.6	71.5	91.9	90.9	89.5	
	UNITS						
Aluminum	MG/KG	486	5160	12200	2630	1420	1920 J
Antimony	MG/KG	0.9 U	0.94 UJ	2.12 J	0.805 UJ	0.815 UJ	0.88 UJ
Arsenic	MG/KG	0.2675 UJ	1.08 J	1.19 J	0.2395 UJ	0.242 UJ	1.1 J
Barium	MG/KG	1.505 U	17.5	20.1	6.56	4.94	3.15
Beryllium	MG/KG	0.0925 U	0.0965 U	0.237	0.0825 U	0.0835 U	0.085 U
Cadmium	MG/KG	0.3875 U	0.406 U	0.446 U	0.347 U	0.351 U	0.3565 U
Calcium	MG/KG	18.1 U	1300	121	205	109	73.2
Chromium	MG/KG	2.49 J	5.96	15.7	3.6	3.01	2.1
Cobalt	MG/KG	1.945 U	2.035 U	2.24 U	1.74 U	1.76 U	1.79 U
Copper	MG/KG	1.98 U	2.075 U	2.28 U	1.775 U	1.795 U	1.82 U
Iron	MG/KG	115 J	3850 J	18900 J	1010 J	518 J	1330 J
Lead	MG/KG	1.19 J	7.89	8.48	4.01	2.23	6.5
Magnesium	MG/KG	18.4	189	279	84.4	50.8	49.1
Manganese	MG/KG	0.86 U	11	2.37	2.7	1.73	2.39 J
Mercury	MG/KG	0.0305 U	0.032 U	0.035 U	0.027 U	0.0275 U	
Nickel	MG/KG	3.5 U	3.65 U	4.05 U	3.15 U	3.15 U	3.2 U
Potassium	MG/KG	92.5 U	201	259	83 U	84 U	85 U
Selenium	MG/KG	0.182 U	0.191 UJ	0.21 UJ	0.163 UJ	0.165 UJ	0.2825 U
Silver	MG/KG	0.2845 U	0.2035 UJ	0.224 UJ	0.174 UJ	0.176 UJ	0.179 U
Sodium	MG/KG	44.7 U	46.8 U	51.5 U	40.05 U	40.5 U	41.1 U
Thallium	MG/KG	0.3525 U	0.369 U	0.4055 U	0.3155 U	0.319 U	0.515 U
Vanadium	MG/KG	2.48 U	9.16	25.7	2.22 U	2.245 U	2.28 U
Zinc	MG/KG	2.485 U	8.72 J	7.25 J	2.81 J	1.165 UJ	3.73
Total Cyanide	MG/KG	1.22	1.27	1.4	1.09	1.1	1.12

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL INORGANICS

Client Sample ID:	41-GW11-01	41-GW11-03	41-GW12-01	41-GW12-02	41-GW13-01	41-GW13-03	
Laboratory Sample ID:	9402087-01	9402087-02	9402092-03	9402092-04	9402092-01	9402092-02	
Date Sampled:							
Percent Solids	87.4	94.7	85	83.1	85.5	87.8	
	UNITS						
Aluminum	MG/KG	4320	2350	5880	7740	10300	2900
Antimony	MG/KG	0.845 UJ	0.78 UJ	0.87 UJ	0.89 UJ	1.92 J	0.84 UJ
Arsenic	MG/KG	1.58 J	0.2325 UJ	0.792 J	1.19 J	1.32 J	0.2505 UJ
Barium	MG/KG	22.6	10.2	15.3	18.1	19.3	9.64
Beryllium	MG/KG	0.087 U	0.08 U	0.205	0.0915 U	0.089 U	0.0865 U
Cadmium	MG/KG	0.365 U	0.337 U	0.375 U	0.384 U	0.373 U	0.3635 U
Calcium	MG/KG	1810	295	95.3	17.95 U	88.6	16.95 U
Chromium	MG/KG	11.2	3.41	7.12	9.9	11.3	3.33
Cobalt	MG/KG	1.83 U	1.69 U	1.88 U	1.925 U	1.87 U	1.82 U
Copper	MG/KG	22.5	4.53	1.92 U	1.96 U	1.905 U	1.855 U
Iron	MG/KG	12300 J	1550 J	3950 J	4900 J	7680 J	1000 J
Lead	MG/KG	110	8.76	5.98	3.98	7.11	3.77
Magnesium	MG/KG	189	152	203	297	330	75.3
Manganese	MG/KG	75.9	5.04	4.25	6.25	6.62	1.63
Mercury	MG/KG	0.312	0.122	0.0295 U	0.03 U	0.029 U	0.0285 U
Nickel	MG/KG	3.3 U	3.05 U	3.4 U	3.45 U	3.35 U	3.3 U
Potassium	MG/KG	87 U	167	186	321	249	180
Selenium	MG/KG	0.1715 UJ	0.1585 UJ	0.1765 UJ	0.373 J	0.781 J	0.171 UJ
Silver	MG/KG	0.183 UJ	0.595 J	0.188 UJ	0.1925 UJ	0.187 UJ	0.182 UJ
Sodium	MG/KG	42.1 U	38.85 U	43.3 U	44.3 U	43.05 U	41.9 U
Thallium	MG/KG	0.332 U	0.306 U	0.341 U	0.349 U	0.339 U	0.33 U
Vanadium	MG/KG	9.3	8.31	10	14.2	17.2	5.31
Zinc	MG/KG	130 J	48.4 J	6.41 J	5.61 J	5.6 J	3.43 J
Total Cyanide	MG/KG	1.14	1.06	1.18	1.2	1.17	1.14

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
ONSITE SUBSURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL INORGANICS

Client Sample ID:	41-GW04DW-01	41-GW04DW-02	41-GW06DW-02	41-GW06DW-03	41-GW07DW-02	41-GW07DW-06
Laboratory Sample ID:	9402078-01	9402078-02	9402131-01A	9402131-02A	9402087-07	9402087-09
Date Sampled:						
Percent Solids	87.1	85.1	89.6	83.5	83.3	63.5

	<u>UNITS</u>					
Aluminum	MG/KG	3820	7640	3900	601	7910
Antimony	MG/KG	0.85 UJ	0.87 UJ	0.85 UJ	0.91 UJ	0.89 UJ
Arsenic	MG/KG	0.2525 UJ	0.915 J	0.3235 U	0.3475 U	0.829 J
Barium	MG/KG	9.38	14.4	6.67	1.485 U	20.3
Beryllium	MG/KG	0.087 U	0.0895 U	0.085 U	0.091 U	0.091 U
Cadmium	MG/KG	0.366 U	0.375 U	0.356 U	0.382 U	0.383 U
Calcium	MG/KG	81.5	93	66	37.3	356
Chromium	MG/KG	3.59	7.16	4.76	0.995 U	13
Cobalt	MG/KG	1.835 U	1.88 U	1.785 U	1.915 U	1.92 U
Copper	MG/KG	1.87 U	1.915 U	1.82 U	1.95 U	1.955 U
Iron	MG/KG	2030 J	4280 J	1650	274	6530 J
Lead	MG/KG	4.76	6.22	2.92 J	0.894 J	6.69
Magnesium	MG/KG	91.6	264	104	8.6 U	212
Manganese	MG/KG	3.72	7.8	4.03	2.91	5.26
Mercury	MG/KG	0.0285 U	0.0295 U	0.016 U	0.017 U	0.03 U
Nickel	MG/KG	3.3 U	3.4 U	3.2 U	3.45 U	3.45 U
Potassium	MG/KG	87.5 U	89.5 U	85 U	91.5 U	386
Selenium	MG/KG	0.172 UJ	0.176 UJ	0.1785 U	0.1915 U	0.618 J
Silver	MG/KG	0.1835 UJ	0.188 UJ	0.1785 U	0.1915 U	0.192 UJ
Sodium	MG/KG	42.25 U	43.25 U	41.05 U	44.05 U	44.2 U
Thallium	MG/KG	0.333 U	0.341 U	0.335 U	0.359 U	0.348 U
Vanadium	MG/KG	6.76	14.2	5.71	2.445 U	16.1
Zinc	MG/KG	7.74 J	6.13 J	3.11	4.01	4.84 J
Total Cyanide	MG/KG	1.15	1.18	1.12	1.2	1.2

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 ONSITE SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL INORGANICS

Client Sample ID:	41-GW09DW-02	41-GW09DW-05	41-GW11DW-01	41-GW11DW-06	41-GW12DW-02	41-GW12WD-03	
Laboratory Sample ID:	9402065-01	9402065-02	9402078-03	9402078-04	9402120-01A	9402120-02A	
Date Sampled:							
Percent Solids	80.6	78.5	89.5	81.8	80.1	82.2	
	<u>UNITS</u>						
Aluminum	MG/KG	10900 J	13500 J	3610	2750	5630	5700
Antimony	MG/KG	0.98 UJ	1.005 UJ	2.91 J	0.905 UJ	0.95 UJ	0.925 UJ
Arsenic	MG/KG	0.738	0.2675 U	0.929 J	0.269 UJ	0.733	0.353 U
Barium	MG/KG	19.7	23	21.4	18.5	12.7	12.3
Beryllium	MG/KG	0.094 U	0.253	0.085 U	0.093 U	0.095 U	0.0925 U
Cadmium	MG/KG	0.396 U	0.4065 U	1.32	0.39 U	0.398 U	0.388 U
Calcium	MG/KG	178	2570	2740	548	43.5	18.1 U
Chromium	MG/KG	10.8	18.1	7.7	4.02	7.08	7.24
Cobalt	MG/KG	1.985 U	2.04 U	1.79 U	1.955 U	2 U	1.945 U
Copper	MG/KG	2.02 U	2.075 U	27.8	4.94	2.035 U	1.98 U
Iron	MG/KG	4350 J	4050 J	6040 J	1620 J	4180	1980
Lead	MG/KG	7.53	10.3	47.1	15.2	3.5 J	5.54 J
Magnesium	MG/KG	317	567	208	109	161	162
Manganese	MG/KG	4.4 J	6.77 J	42.9	5.98	3.39	3.62
Mercury	MG/KG			0.109	0.0305 U	0.018 U	0.0175 U
Nickel	MG/KG	3.55 U	3.65 U	3.2 U	3.5 U	3.6 U	3.5 U
Potassium	MG/KG	218	562	268	93 U	95 U	93 U
Selenium	MG/KG	0.314 U	0.322 U	0.1675 UJ	0.41 J	0.2 U	0.1945 U
Silver	MG/KG	0.1985 U	0.204 U	0.179 UJ	0.1955 UJ	0.2 U	0.1945 U
Sodium	MG/KG	45.65 U	46.9 U	41.1 U	45 U	45.95 U	44.75 U
Thallium	MG/KG	0.57 U	0.585 U	0.324 U	0.3545 U	0.3745 U	0.365 U
Vanadium	MG/KG	15.5	23.3	7.43	2.495 U	8.93	7.08
Zinc	MG/KG	5.46	7.98	102 J	30.3 J	5.1	5.53
Total Cyanide	MG/KG	1.24	1.27	1.12	1.22	1.25	1.22

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
ONSITE SUBSURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL INORGANICS

Client Sample ID:				NORMAL	LOG NORMAL
Laboratory Sample ID:				UPPER 95%	UPPER 95%
Date Sampled:				CONFIDENCE	CONFIDENCE
Percent Solids	MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	INTERVAL	INTERVAL
	<u>UNITS</u>				
Aluminum	MG/KG 13500 J	4683.1	2954.7	5290.9	5756.0
Antimony	MG/KG 2.94	1.0	0.4	1.1	1.1
Arsenic	MG/KG 3.02	0.71	0.57	0.83	0.85
Barium	MG/KG 186	17.4	24.8	22.5	21.1
Beryllium	MG/KG 0.31	0.11	0.06	0.13	0.12
Cadmium	MG/KG 4.73	0.5	0.6	0.6	0.5
Calcium	MG/KG 18900	1289.4	2781.3	1861.5	2934.3
Chromium	MG/KG 40.5 J	7.3	6.3	8.6	8.6
Cobalt	MG/KG 4.53	2.0	0.4	2.0	2.0
Copper	MG/KG 39.8	5.0	8.2	6.7	5.1
Iron	MG/KG 41100	4409.7	5674.2	5576.8	5923.9
Lead	MG/KG 829	33.2	104.6	54.8	38.1
Magnesium	MG/KG 567	161.8	112.6	185.0	214.0
Manganese	MG/KG 244	15.2	33.2	22.0	18.9
Mercury	MG/KG 0.312	0.1	0.1	0.1	0.1
Nickel	MG/KG 12.9	3.7	1.3	3.9	3.8
Potassium	MG/KG 562	159.1	113.7	182.5	180.8
Selenium	MG/KG 0.948	0.30	0.17	0.33	0.33
Silver	MG/KG 9.71 J	0.34	1.17	0.59	0.28
Sodium	MG/KG 486	58.7	65.9	72.2	63.8
Thallium	MG/KG ND	NA	NA	NA	NA
Vanadium	MG/KG 25.7	8.1	5.8	9.3	10.2
Zinc	MG/KG 407	28.3	59.8	40.6	38.0
Total Cyanide	MG/KG 1.63	1.2	0.1	1.2	1.2

APPENDIX P.5
SITE 41 GROUNDWATER ORGANICS

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW01-02	41-GW02-02	41-GW02-03	41-GW03-02	41-GW04-02	41-GW04DW-02
Laboratory Sample ID:	9405010-05	9405010-03	AB7984	9404226-01	9405006-03	9405006-01
Date Sampled:	04/28/94	04/27/94	08/26/94	04/27/94		

	UNITS						
SEMIVOLATILES							
1,2-Dichlorobenzene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
1,2,4-Trichlorobenzene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
1,3-Dichlorobenzene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
1,4-Dichlorobenzene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
2-Chloronaphthalene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
2-Chlorophenol	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
2-Methylnaphthalene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
2-Methylphenol	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
2-Nitroaniline	UG/L	15.5 U	14.4 U	NA	13.2 U	15.45 U	15.6 U
2-Nitrophenol	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
2,2'-oxybis-(1-chloropropane)	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
2,4-Dichlorophenol	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
2,4-Dimethylphenol	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
2,4-Dinitrophenol	UG/L	15.5 U	14.4 U	NA	13.2 U	15.45 U	15.6 U
2,4-Dinitrotoluene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
2,4,5-Trichlorophenol	UG/L	15.5 U	14.4 U	NA	13.2 U	15.45 U	15.6 U
2,4,6-Trichlorophenol	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
2,6-Dinitrotoluene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
3-Nitroaniline	UG/L	15.5 U	14.4 U	NA	13.2 U	15.45 U	15.6 U
3,3'-Dichlorobenzidine	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
4-Bromophenyl-phenylether	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
4-Chloro-3-methylphenol	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
4-Chloroaniline	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
4-Chlorophenyl phenyl ether	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
4-Methylphenol	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
4-Nitroaniline	UG/L	15.5 U	14.4 U	NA	13.2 U	15.45 U	15.6 U
4-Nitrophenol	UG/L	15.5 U	14.4 U	NA	13.2 U	15.45 U	15.6 U
4,6-Dinitro-2-methylphenol	UG/L	15.5 U	14.4 U	NA	13.2 U	15.45 U	15.6 U
Acenaphthene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
Acenaphthylene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
Anthracene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
Benzo[a]anthracene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
Benzo[a]pyrene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW01-02	41-GW02-02	41-GW02-03	41-GW03-02	41-GW04-02	41-GW04DW-02
Laboratory Sample ID:	9405010-05	9405010-03	AB7984	9404226-01	9405006-03	9405006-01
Date Sampled:	04/28/94	04/27/94	08/26/94	04/27/94		

UNITS

SEMIVOLATILES Cont.

	41-GW01-02	41-GW02-02	41-GW02-03	41-GW03-02	41-GW04-02	41-GW04DW-02	
Benzo[b]fluoranthene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
Benzo[g,h,i]perylene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
Benzo[k]fluoranthene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
bis(2-Chloroethoxy) methane	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
bis(2-Chloroethyl) ether	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
bis(2-Ethylhexyl)phthalate	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
Butyl benzyl phthalate	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
Carbazole	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
Chrysene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
Dibenzofuran	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
Dibenz[a,h]anthracene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
Diethylphthalate	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
Dimethyl phthalate	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
di-n-Butylphthalate	UG/L	6.00 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
di-n-Octylphthalate	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
Fluoranthene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
Fluorene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
Hexachlorobenzene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
Hexachlorobutadiene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
Hexachlorocyclopentadiene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
Hexachloroethane	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
Indeno[1,2,3-cd]pyrene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
Isophorone	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
Mirex	UG/L	31.0 U	28.5 U	NA	26.5 U	31 U	31 U
Naphthalene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
Nitrobenzene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
N-Nitroso-di-n-propylamine	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
N-nitrosodiphenylamine	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
Pentachlorophenol	UG/L	15.5 U	14.4 U	NA	13.2 U	15.45 U	15.6 U
Phenanthrene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
Phenol	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U
Pyrene	UG/L	6.2 U	5.8 U	NA	5.3 U	6.2 U	6.25 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW01-02	41-GW02-02	41-GW02-03	41-GW03-02	41-GW04-02	41-GW04DW-02
Laboratory Sample ID:	9405010-05	9405010-03	AB7984	9404226-01	9405006-03	9405006-01
Date Sampled:	04/28/94	04/27/94	08/26/94	04/27/94		
	UNITS					
<u>VOLATILES</u>						
Chloromethane	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
Bromomethane	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
Vinyl chloride	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
Chloroethane	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
Methylene chloride	UG/L	5.00 U	5.0 U	NA	5.00 U	5.0 U
Acetone	UG/L	5.0 U	5.0 U	NA	5.0 U	4.00 J
Carbon Disulfide	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
1,1-Dichloroethene	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
1,1-Dichloroethane	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
1,2-Dichloroethene(total)	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
Chloroform	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
1,2-Dichloroethane	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
2-Butanone	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
1,1,1-Trichloroethane	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
Carbon tetrachloride	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
Bromodichloromethane	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
1,2-Dichloropropane	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
cis-1,3-Dichloropropene	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
Trichloroethene	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
Dibromochloromethane	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
1,1,2-Trichloroethane	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
Benzene	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
trans-1,3-Dichloropropene	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
Bromoform	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
4-Methyl-2-pentanone	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
2-Hexanone	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
Tetrachloroethene	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
Toluene	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
Chlorobenzene	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
Ethylbenzene	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
Styrene	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U
Xylenes (total)	UG/L	5.0 U	5.0 U	NA	5.0 U	5.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW01-02	41-GW02-02	41-GW02-03	41-GW03-02	41-GW04-02	41-GW04DW-02
Laboratory Sample ID:	9405010-05	9405010-03	AB7984	9404226-01	9405006-03	9405006-01
Date Sampled:	04/28/94	04/27/94	08/26/94	04/27/94		

	UNITS						
PESTICIDE/PCBS							
alpha-BHC	UG/L	0.031 UJ	NA	0.025 U	0.026 UJ	0.031 UJ	0.034 UJ
beta-BHC	UG/L	0.031 UJ	NA	0.025 U	0.026 UJ	0.031 UJ	0.034 UJ
delta-BHC	UG/L	0.031 UJ	NA	0.025 U	0.026 UJ	0.031 UJ	0.034 UJ
Lindane (gamma-BHC)	UG/L	0.031 UJ	NA	0.025 U	0.026 UJ	0.031 UJ	0.034 UJ
Heptachlor	UG/L	0.031 UJ	NA	0.025 U	0.026 UJ	0.031 UJ	0.034 UJ
Aldrin	UG/L	0.031 UJ	NA	0.025 U	0.026 UJ	0.031 UJ	0.034 UJ
Heptachlor epoxide	UG/L	0.031 UJ	NA	0.025 U	0.026 UJ	0.031 UJ	0.034 UJ
Endosulfan I	UG/L	0.031 UJ	NA	0.025 U	0.026 UJ	0.031 UJ	0.034 UJ
Dieldrin	UG/L	0.062 UJ	NA	0.05 U	0.053 UJ	0.0615 UJ	0.0675 UJ
4,4'-DDE	UG/L	0.062 UJ	NA	0.05 U	0.053 UJ	0.0615 UJ	0.0675 UJ
Endrin	UG/L	0.062 UJ	NA	0.05 U	0.053 UJ	0.0615 UJ	0.0675 UJ
Endosulfan II	UG/L	0.062 UJ	NA	0.05 U	0.053 UJ	0.0615 UJ	0.0675 UJ
4,4'-DDD	UG/L	0.062 UJ	NA	0.05 U	0.053 UJ	0.0615 UJ	0.0675 UJ
Endosulfan sulfate	UG/L	0.062 UJ	NA	0.05 U	0.053 UJ	0.0615 UJ	0.0675 UJ
4,4'-DDT	UG/L	0.062 UJ	NA	0.05 U	0.053 UJ	0.0615 UJ	0.0675 UJ
Methoxychlor	UG/L	0.309 UJ	NA	0.25 U	0.263 UJ	0.3075 UJ	0.3375 UJ
Endrin ketone	UG/L	0.062 UJ	NA	0.05 U	0.053 UJ	0.0615 UJ	0.0675 UJ
Endrin aldehyde	UG/L	0.062 UJ	NA	0.05 U	0.053 UJ	0.0615 UJ	0.0675 UJ
alpha-Chlordane	UG/L	0.031 UJ	NA	0.025 U	0.026 UJ	0.031 UJ	0.034 UJ
gamma-Chlordane	UG/L	0.031 UJ	NA	0.025 U	0.026 UJ	0.031 UJ	0.034 UJ
Toxaphene	UG/L	3.09 UJ	NA	2.5 U	2.63 UJ	3.075 UJ	3.375 UJ
Aroclor 1016	UG/L	0.62 UJ	NA	0.5 U	0.53 UJ	0.615 UJ	0.675 UJ
Aroclor 1221	UG/L	1.24 UJ	NA	1 U	1.05 UJ	1.23 UJ	1.35 UJ
Aroclor 1232	UG/L	0.62 UJ	NA	0.5 U	0.53 UJ	0.615 UJ	0.675 UJ
Aroclor 1242	UG/L	0.62 UJ	NA	0.5 U	0.53 UJ	0.615 UJ	0.675 UJ
Aroclor 1248	UG/L	0.62 UJ	NA	0.5 U	0.53 UJ	0.615 UJ	0.675 UJ
Aroclor 1254	UG/L	0.62 UJ	NA	0.5 U	0.53 UJ	0.615 UJ	0.675 UJ
Aroclor 1260	UG/L	0.62 UJ	NA	0.5 U	0.53 UJ	0.615 UJ	0.675 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW05-02	41-GW06DW-02	41-GW07-02	41-GW07-03	41-GW07DW-02	41-GW08-02
Laboratory Sample ID:	9404226-07	9404226-05	9405016-01	AB8053	9405016-02	9405006-05
Date Sampled:	04/27/94	04/27/94		08/26/94		

UNITS

SEMIVOLATILES

Compound	41-GW05-02	41-GW06DW-02	41-GW07-02	41-GW07-03	41-GW07DW-02	41-GW08-02
1,2-Dichlorobenzene	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
1,2,4-Trichlorobenzene	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
1,3-Dichlorobenzene	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
1,4-Dichlorobenzene	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
2-Chloronaphthalene	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
2-Chlorophenol	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
2-Methylnaphthalene	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
2-Methylphenol	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
2-Nitroaniline	13.8 U	13.2 U	16.25 U	NA	15.8 U	20.15 U
2-Nitrophenol	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
2,2'-oxybis-(1-chloropropane)	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
2,4-Dichlorophenol	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
2,4-Dimethylphenol	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
2,4-Dinitrophenol	13.8 U	13.2 U	16.25 U	NA	15.8 U	20.15 U
2,4-Dinitrotoluene	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
2,4,5-Trichlorophenol	13.8 U	13.2 U	16.25 U	NA	15.8 U	20.15 U
2,4,6-Trichlorophenol	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
2,6-Dinitrotoluene	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
3-Nitroaniline	13.8 U	13.2 U	16.25 U	NA	15.8 U	20.15 U
3,3'-Dichlorobenzidine	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
4-Bromophenyl-phenylether	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
4-Chloro-3-methylphenol	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
4-Chloroaniline	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
4-Chlorophenyl phenyl ether	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
4-Methylphenol	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
4-Nitroaniline	13.8 U	13.2 U	16.25 U	NA	15.8 U	20.15 U
4-Nitrophenol	13.8 U	13.2 U	16.25 U	NA	15.8 U	20.15 U
4,6-Dinitro-2-methylphenol	13.8 U	13.2 U	16.25 U	NA	15.8 U	20.15 U
Acenaphthene	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
Acenaphthylene	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
Anthracene	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
Benzo[a]anthracene	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
Benzo[a]pyrene	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW05-02	41-GW06DW-02	41-GW07-02	41-GW07-03	41-GW07DW-02	41-GW08-02
Laboratory Sample ID:	9404226-07	9404226-05	9405016-01	AB8053	9405016-02	9405006-05
Date Sampled:	04/27/94	04/27/94		08/26/94		

UNITS

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
Benzo[g,h,i]perylene	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
Benzo[k]fluoranthene	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
bis(2-Chloroethoxy) methane	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
bis(2-Chloroethyl) ether	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
bis(2-Ethylhexyl)phthalate	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
Butyl benzyl phthalate	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
Carbazole	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
Chrysene	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
Dibenzofuran	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
Dibenz[a,h]anthracene	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
Diethylphthalate	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
Dimethyl phthalate	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
di-n-Butylphthalate	UG/L	5.3 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
di-n-Octylphthalate	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
Fluoranthene	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
Fluorene	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
Hexachlorobenzene	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
Hexachlorobutadiene	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
Hexachlorocyclopentadiene	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
Hexachloroethane	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
Indeno[1,2,3-cd]pyrene	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
Isophorone	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
Mirex	UG/L	27.5 U	26.5 U	32.5 U	NA	31.5 U	40.5 U
Naphthalene	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
Nitrobenzene	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
N-Nitroso-di-n-propylamine	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
N-nitrosodiphenylamine	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
Pentachlorophenol	UG/L	13.8 U	13.2 U	32.5 R	NA	31.6 R	20.15 U
Phenanthrene	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
Phenol	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U
Pyrene	UG/L	5.5 U	5.3 U	6.5 U	NA	6.35 U	8.05 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW05-02	41-GW06DW-02	41-GW07-02	41-GW07-03	41-GW07DW-02	41-GW08-02
Laboratory Sample ID:	9404226-07	9404226-05	9405016-01	AB8053	9405016-02	9405006-05
Date Sampled:	04/27/94	04/27/94		08/28/94		

	UNITS					
<u>VOLATILES</u>						
Chloromethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Bromomethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Vinyl chloride	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Chloroethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Methylene chloride	UG/L	5.0 U	5.0 U	5.00 U	NA	5.00 U
Acetone	UG/L	5.0 U	5.0 U	5.00 J	NA	5.0 UJ
Carbon Disulfide	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
1,1-Dichloroethene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
1,1-Dichloroethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
1,2-Dichloroethene(total)	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Chloroform	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
1,2-Dichloroethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
2-Butanone	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
1,1,1-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Carbon tetrachloride	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Bromodichloromethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
1,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
cis-1,3-Dichloropropene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Trichloroethene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Dibromochloromethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
1,1,2-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Benzene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
trans-1,3-Dichloropropene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Bromoform	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
4-Methyl-2-pentanone	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
2-Hexanone	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Tetrachloroethene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
1,1,2,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Toluene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Chlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Ethylbenzene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Styrene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Xylenes (total)	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

	41-GW05-02	41-GW06DW-02	41-GW07-02	41-GW07-03	41-GW07DW-02	41-GW08-02
Client Sample ID:	41-GW05-02	41-GW06DW-02	41-GW07-02	41-GW07-03	41-GW07DW-02	41-GW08-02
Laboratory Sample ID:	9404226-07	9404226-05	9405016-01	AB8053	9405016-02	9405006-05
Date Sampled:	04/27/94	04/27/94		08/26/94		
	UNITS					
<u>PESTICIDE/PCBS</u>						
alpha-BHC	UG/L	0.028 UJ	0.027 UJ	NA	0.025 U	0.033 UJ
beta-BHC	UG/L	0.028 UJ	0.027 UJ	NA	0.025 U	0.033 UJ
delta-BHC	UG/L	0.028 UJ	0.027 UJ	NA	0.025 U	0.033 UJ
Lindane (gamma-BHC)	UG/L	0.028 UJ	0.027 UJ	NA	0.025 U	0.033 UJ
Heptachlor	UG/L	0.028 UJ	0.027 UJ	NA	0.025 U	0.033 UJ
Aldrin	UG/L	0.028 UJ	0.027 UJ	NA	0.025 U	0.033 UJ
Heptachlor epoxide	UG/L	0.028 UJ	0.027 UJ	NA	0.025 U	0.033 UJ
Endosulfan I	UG/L	0.028 UJ	0.027 UJ	NA	0.025 U	0.033 UJ
Dieldrin	UG/L	0.057 UJ	0.055 UJ	NA	0.05 U	0.0665 UJ
4,4'-DDE	UG/L	0.057 UJ	0.055 UJ	NA	0.05 U	0.0665 UJ
Endrin	UG/L	0.057 UJ	0.055 UJ	NA	0.05 U	0.0665 UJ
Endosulfan II	UG/L	0.057 UJ	0.055 UJ	NA	0.05 U	0.0665 UJ
4,4'-DDD	UG/L	0.057 UJ	0.055 UJ	NA	0.05 U	0.0665 UJ
Endosulfan sulfate	UG/L	0.057 UJ	0.055 UJ	NA	0.05 U	0.0665 UJ
4,4'-DDT	UG/L	0.057 UJ	0.055 UJ	NA	0.05 U	0.0665 UJ
Methoxychlor	UG/L	0.283 UJ	0.273 UJ	NA	0.25 U	0.3325 UJ
Endrin ketone	UG/L	0.057 UJ	0.055 UJ	NA	0.05 U	0.0665 UJ
Endrin aldehyde	UG/L	0.057 UJ	0.055 UJ	NA	0.05 U	0.0665 UJ
alpha-Chlordane	UG/L	0.028 UJ	0.027 UJ	NA	0.025 U	0.033 UJ
gamma-Chlordane	UG/L	0.028 UJ	0.027 UJ	NA	0.025 U	0.033 UJ
Toxaphene	UG/L	2.83 UJ	2.73 UJ	NA	2.5 U	3.325 UJ
Aroclor 1016	UG/L	0.57 UJ	0.55 UJ	NA	0.5 U	0.665 UJ
Aroclor 1221	UG/L	1.13 UJ	1.09 UJ	NA	1 U	1.33 UJ
Aroclor 1232	UG/L	0.57 UJ	0.55 UJ	NA	0.5 U	0.665 UJ
Aroclor 1242	UG/L	0.57 UJ	0.55 UJ	NA	0.5 U	0.665 UJ
Aroclor 1248	UG/L	0.57 UJ	0.55 UJ	NA	0.5 U	0.665 UJ
Aroclor 1254	UG/L	0.57 UJ	0.55 UJ	NA	0.5 U	0.665 UJ
Aroclor 1260	UG/L	0.57 UJ	0.55 UJ	NA	0.5 U	0.665 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW09-02	41-GW09DW-02	41-GW10-02	41-GW10-03	41-GW11-02	41-GW11-03
Laboratory Sample ID:	9405010-07	9405010-09	9405010-01	AB8047	9405016-03	AB8056
Date Sampled:	04/28/94	04/28/94	04/27/94	08/26/94		08/26/94

UNITS

SEMIVOLATILES

	UG/L	5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
1,2-Dichlorobenzene	UG/L	5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
1,2,4-Trichlorobenzene	UG/L	5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
1,3-Dichlorobenzene	UG/L	5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
1,4-Dichlorobenzene	UG/L	5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
2-Chloronaphthalene	UG/L	5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
2-Chlorophenol	UG/L	5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
2-Methylnaphthalene	UG/L	5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
2-Methylphenol	UG/L	5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
2-Nitroaniline	UG/L	13.9 U	14.7 U	13.6 U	NA	16.9 UJ	NA
2-Nitrophenol	UG/L	5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
2,2'-oxybis-(1-chloropropane)	UG/L	5.6 UJ	5.9 U	5.5 U	NA	6.75 UJ	NA
2,4-Dichlorophenol	UG/L	5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
2,4-Dimethylphenol	UG/L	5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
2,4-Dinitrophenol	UG/L	13.9 U	14.7 U	13.6 U	NA	16.9 UJ	NA
2,4-Dinitrotoluene	UG/L	5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
2,4,5-Trichlorophenol	UG/L	13.9 U	14.7 U	13.6 U	NA	16.9 UJ	NA
2,4,6-Trichlorophenol	UG/L	5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
2,6-Dinitrotoluene	UG/L	5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
3-Nitroaniline	UG/L	13.9 U	14.7 U	13.6 U	NA	16.9 UJ	NA
3,3'-Dichlorobenzidine	UG/L	5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
4-Bromophenyl-phenylether	UG/L	5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
4-Chloro-3-methylphenol	UG/L	5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
4-Chloroaniline	UG/L	5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
4-Chlorophenyl phenyl ether	UG/L	5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
4-Methylphenol	UG/L	5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
4-Nitroaniline	UG/L	13.9 U	14.7 U	13.6 U	NA	16.9 UJ	NA
4-Nitrophenol	UG/L	13.9 U	14.7 U	13.6 U	NA	16.9 UJ	NA
4,6-Dinitro-2-methylphenol	UG/L	13.9 U	14.7 U	13.6 U	NA	16.9 UJ	NA
Acenaphthene	UG/L	5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
Acenaphthylene	UG/L	5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
Anthracene	UG/L	5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
Benzo[a]anthracene	UG/L	5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
Benzo[a]pyrene	UG/L	5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW09-02	41-GW09DW-02	41-GW10-02	41-GW10-03	41-GW11-02	41-GW11-03
Laboratory Sample ID:	9405010-07	9405010-09	9405010-01	AB8047	9405016-03	AB8056
Date Sampled:	04/28/94	04/28/94	04/27/94	08/26/94		08/26/94

UNITS

SEMIVOLATILES Cont.

Compound	41-GW09-02	41-GW09DW-02	41-GW10-02	41-GW10-03	41-GW11-02	41-GW11-03
Benzo[b]fluoranthene	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
Benzo[g,h,i]perylene	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
Benzo[k]fluoranthene	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
bis(2-Chloroethoxy) methane	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
bis(2-Chloroethyl) ether	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
bis(2-Ethylhexyl)phthalate	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
Butyl benzyl phthalate	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
Carbazole	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
Chrysene	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
Dibenzofuran	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
Dibenz[a,h]anthracene	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
Diethylphthalate	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
Dimethyl phthalate	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
di-n-Butylphthalate	UG/L 5.6 U	5.9 U	5.45 U	NA	7 UJ	NA
di-n-Octylphthalate	UG/L 5.6 UJ	5.9 U	5.5 U	NA	6.75 UJ	NA
Fluoranthene	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
Fluorene	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
Hexachlorobenzene	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
Hexachlorobutadiene	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
Hexachlorocyclopentadiene	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
Hexachloroethane	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
Indeno[1,2,3-cd]pyrene	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
Isophorone	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
Mirex	UG/L 28.0 U	29.5 U	27.0 U	NA	34 UJ	NA
Naphthalene	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
Nitrobenzene	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
N-Nitroso-di-n-propylamine	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
N-nitrosodiphenylamine	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
Pentachlorophenol	UG/L 13.9 U	14.7 U	13.6 U	NA	16.9 UJ	NA
Phenanthrene	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
Phenol	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA
Pyrene	UG/L 5.6 U	5.9 U	5.5 U	NA	6.75 UJ	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW09-02	41-GW09DW-02	41-GW10-02	41-GW10-03	41-GW11-02	41-GW11-03
Laboratory Sample ID:	9405010-07	9405010-09	9405010-01	AB8047	9405016-03	AB8056
Date Sampled:	04/28/94	04/28/94	04/27/94	08/26/94		08/26/94

UNITS

VOLATILES

Chloromethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
Bromomethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
Vinyl chloride	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
Chloroethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
Methylene chloride	UG/L	5.00 U	5.00 U	5.00 U	NA	5.00 U	NA
Acetone	UG/L	5.0 U	5.0 U	5.0 U	NA	12.0 J	NA
Carbon Disulfide	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
1,1-Dichloroethene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
1,1-Dichloroethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
1,2-Dichloroethene(total)	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
Chloroform	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
1,2-Dichloroethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
2-Butanone	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
1,1,1-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
Carbon tetrachloride	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
Bromodichloromethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
1,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
cis-1,3-Dichloropropene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
Trichloroethene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
Dibromochloromethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
1,1,2-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
Benzene	UG/L	5.0 U	5.0 U	5.0 U	NA	2.00 J	NA
trans-1,3-Dichloropropene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
Bromoform	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
4-Methyl-2-pentanone	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
2-Hexanone	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
Tetrachloroethene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
1,1,2,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
Toluene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
Chlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	NA	2.00 J	NA
Ethylbenzene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
Styrene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA
Xylenes (total)	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW09-02	41-GW09DW-02	41-GW10-02	41-GW10-03	41-GW11-02	41-GW11-03
Laboratory Sample ID:	9405010-07	9405010-09	9405010-01	AB8047	9405016-03	AB8056
Date Sampled:	04/28/94	04/28/94	04/27/94	08/26/94		08/26/94
	UNITS					
PESTICIDE/PCBS						
alpha-BHC	UG/L	0.031 UJ	0.029 UJ	NA	0.025 U	0.025 U
beta-BHC	UG/L	0.031 UJ	0.029 UJ	NA	0.025 U	0.025 U
delta-BHC	UG/L	0.031 UJ	0.029 UJ	NA	0.025 U	0.025 U
Lindane (gamma-BHC)	UG/L	0.031 UJ	0.029 UJ	NA	0.025 U	0.025 U
Heptachlor	UG/L	0.031 UJ	0.029 UJ	NA	0.025 U	0.025 U
Aldrin	UG/L	0.031 UJ	0.029 UJ	NA	0.025 U	0.025 U
Heptachlor epoxide	UG/L	0.031 UJ	0.029 UJ	NA	0.025 U	0.025 U
Endosulfan I	UG/L	0.031 UJ	0.029 UJ	NA	0.025 U	0.025 U
Dieldrin	UG/L	0.062 UJ	0.058 UJ	NA	0.05 U	0.05 U
4,4'-DDE	UG/L	0.062 UJ	0.058 UJ	NA	0.05 U	0.05 U
Endrin	UG/L	0.062 UJ	0.058 UJ	NA	0.05 U	0.05 U
Endosulfan II	UG/L	0.062 UJ	0.058 UJ	NA	0.05 U	0.05 U
4,4'-DDD	UG/L	0.062 UJ	0.058 UJ	NA	0.05 U	0.05 U
Endosulfan sulfate	UG/L	0.062 UJ	0.058 UJ	NA	0.05 U	0.05 U
4,4'-DDT	UG/L	0.062 UJ	0.058 UJ	NA	0.05 U	0.05 U
Methoxychlor	UG/L	0.309 UJ	0.291 UJ	NA	0.25 U	0.25 U
Endrin ketone	UG/L	0.062 UJ	0.058 UJ	NA	0.05 U	0.05 U
Endrin aldehyde	UG/L	0.062 UJ	0.058 UJ	NA	0.05 U	0.05 U
alpha-Chlordane	UG/L	0.031 UJ	0.029 UJ	NA	0.025 U	0.025 U
gamma-Chlordane	UG/L	0.031 UJ	0.029 UJ	NA	0.025 U	0.025 U
Toxaphene	UG/L	3.09 UJ	2.91 UJ	NA	2.5 U	2.5 U
Aroclor 1016	UG/L	0.62 UJ	0.58 UJ	NA	0.5 U	0.5 U
Aroclor 1221	UG/L	1.24 UJ	1.16 UJ	NA	1 U	1 U
Aroclor 1232	UG/L	0.62 UJ	0.58 UJ	NA	0.5 U	0.5 U
Aroclor 1242	UG/L	0.62 UJ	0.58 UJ	NA	0.5 U	0.5 U
Aroclor 1248	UG/L	0.62 UJ	0.58 UJ	NA	0.5 U	0.5 U
Aroclor 1254	UG/L	0.62 UJ	0.58 UJ	NA	0.5 U	0.5 U
Aroclor 1260	UG/L	0.62 UJ	0.58 UJ	NA	0.5 U	0.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW11DW-02	41-GW12-02	41-GW12DW-02	41-GW13-02
Laboratory Sample ID:	9405016-05	9405006-09	9405006-07	9404226-03
Date Sampled:				04/27/94

	UNITS				
SEMIVOLATILES					
1,2-Dichlorobenzene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
1,2,4-Trichlorobenzene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
1,3-Dichlorobenzene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
1,4-Dichlorobenzene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
2-Chloronaphthalene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
2-Chlorophenol	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
2-Methylnaphthalene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
2-Methylphenol	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
2-Nitroaniline	UG/L	15.25 U	15.8 U	15.8 U	13.5 U
2-Nitrophenol	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
2,2'-oxybis-(1-chloropropane)	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
2,4-Dichlorophenol	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
2,4-Dimethylphenol	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
2,4-Dinitrophenol	UG/L	15.25 U	15.8 U	15.8 U	13.5 U
2,4-Dinitrotoluene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
2,4,5-Trichlorophenol	UG/L	15.25 U	15.8 U	15.8 U	13.5 U
2,4,6-Trichlorophenol	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
2,6-Dinitrotoluene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
3-Nitroaniline	UG/L	15.25 U	15.8 U	15.8 U	13.5 U
3,3'-Dichlorobenzidine	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
4-Bromophenyl-phenylether	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
4-Chloro-3-methylphenol	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
4-Chloroaniline	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
4-Chlorophenyl phenyl ether	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
4-Methylphenol	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
4-Nitroaniline	UG/L	15.25 U	15.8 U	15.8 U	13.5 U
4-Nitrophenol	UG/L	15.25 U	15.8 U	15.8 U	13.5 U
4,6-Dinitro-2-methylphenol	UG/L	15.25 U	15.8 U	15.8 U	13.5 U
Acenaphthene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
Acenaphthylene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
Anthracene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
Benzo[a]anthracene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
Benzo[a]pyrene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW11DW-02	41-GW12-02	41-GW12DW-02	41-GW13-02
Laboratory Sample ID:	9405016-05	9405006-09	9405006-07	9404226-03
Date Sampled:				04/27/94

UNITS

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
Benzo[g,h,i]perylene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
Benzo[k]fluoranthene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
bis(2-Chloroethoxy) methane	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
bis(2-Chloroethyl) ether	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
bis(2-Ethylhexyl)phthalate	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
Butyl benzyl phthalate	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
Carbazole	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
Chrysene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
Dibenzofuran	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
Dibenz[a,h]anthracene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
Diethylphthalate	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
Dimethyl phthalate	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
di-n-Butylphthalate	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
di-n-Octylphthalate	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
Fluoranthene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
Fluorene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
Hexachlorobenzene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
Hexachlorobutadiene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
Hexachlorocyclopentadiene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
Hexachloroethane	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
Indeno[1,2,3-cd]pyrene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
Isophorone	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
Mirex	UG/L	30.5 U	31.5 U	31.5 U	27.0 U
Naphthalene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
Nitrobenzene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
N-Nitroso-di-n-propylamine	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
N-nitrosodiphenylamine	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
Pentachlorophenol	UG/L	30.5 R	15.8 U	15.8 U	13.5 U
Phenanthrene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
Phenol	UG/L	6.1 U	6.35 U	6.35 U	5.4 U
Pyrene	UG/L	6.1 U	6.35 U	6.35 U	5.4 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW11DW-02	41-GW12-02	41-GW12DW-02	41-GW13-02
Laboratory Sample ID:	9405016-05	9405006-09	9405006-07	9404226-03
Date Sampled:				04/27/94

	UNITS				
<u>VOLATILES</u>					
Chloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl chloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	UG/L	5.00 U	5.0 U	5.0 U	5.0 U
Acetone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Disulfide	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene(total)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	UG/L	19.0	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U
Xylenes (total)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW11DW-02	41-GW12-02	41-GW12DW-02	41-GW13-02
Laboratory Sample ID:	9405016-05	9405006-09	9405006-07	9404226-03
Date Sampled:				04/27/94

	UNITS				
PESTICIDE/PCBS					
alpha-BHC	UG/L	0.0315 UJ	0.05 UJ	0.03 UJ	0.027 UJ
beta-BHC	UG/L	0.0315 UJ	0.05 UJ	0.03 UJ	0.027 UJ
delta-BHC	UG/L	0.0315 UJ	0.05 UJ	0.03 UJ	0.027 UJ
Lindane (gamma-BHC)	UG/L	0.0315 UJ	0.05 UJ	0.03 UJ	0.027 UJ
Heptachlor	UG/L	0.0315 UJ	0.05 UJ	0.03 UJ	0.027 UJ
Aldrin	UG/L	0.0315 UJ	0.05 UJ	0.03 UJ	0.027 UJ
Heptachlor epoxide	UG/L	0.0315 UJ	0.05 UJ	0.03 UJ	0.027 UJ
Endosulfan I	UG/L	0.0315 UJ	0.05 UJ	0.03 UJ	0.027 UJ
Dieldrin	UG/L	0.063 UJ	0.1 UJ	0.06 UJ	0.055 UJ
4,4'-DDE	UG/L	0.063 UJ	0.1 UJ	0.06 UJ	0.055 UJ
Endrin	UG/L	0.063 UJ	0.1 UJ	0.06 UJ	0.055 UJ
Endosulfan II	UG/L	0.063 UJ	0.1 UJ	0.06 UJ	0.055 UJ
4,4'-DDD	UG/L	0.063 UJ	0.1 UJ	0.06 UJ	0.055 UJ
Endosulfan sulfate	UG/L	0.063 UJ	0.1 UJ	0.06 UJ	0.055 UJ
4,4'-DDT	UG/L	0.063 UJ	0.1 UJ	0.06 UJ	0.055 UJ
Methoxychlor	UG/L	0.315 UJ	0.5 UJ	0.3 UJ	0.273 UJ
Endrin ketone	UG/L	0.063 UJ	0.1 UJ	0.06 UJ	0.055 UJ
Endrin aldehyde	UG/L	0.063 UJ	0.1 UJ	0.06 UJ	0.055 UJ
alpha-Chlordane	UG/L	0.0315 UJ	0.05 UJ	0.03 UJ	0.027 UJ
gamma-Chlordane	UG/L	0.0315 UJ	0.05 UJ	0.03 UJ	0.027 UJ
Toxaphene	UG/L	3.15 UJ	5 UJ	3 UJ	2.73 UJ
Aroclor 1016	UG/L	0.63 UJ	1 UJ	0.6 UJ	0.55 UJ
Aroclor 1221	UG/L	1.26 UJ	2 UJ	1.2 UJ	1.09 UJ
Aroclor 1232	UG/L	0.63 UJ	1 UJ	0.6 UJ	0.55 UJ
Aroclor 1242	UG/L	0.63 UJ	1 UJ	0.6 UJ	0.55 UJ
Aroclor 1248	UG/L	0.63 UJ	1 UJ	0.6 UJ	0.55 UJ
Aroclor 1254	UG/L	0.63 UJ	1 UJ	0.6 UJ	0.55 UJ
Aroclor 1260	UG/L	0.63 UJ	1 UJ	0.6 UJ	0.55 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled:	MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
	UNITS				
SEMIVOLATILES					
1,2-Dichlorobenzene	UG/L	ND	NA	NA	NA
1,2,4-Trichlorobenzene	UG/L	ND	NA	NA	NA
1,3-Dichlorobenzene	UG/L	ND	NA	NA	NA
1,4-Dichlorobenzene	UG/L	ND	NA	NA	NA
2-Chloronaphthalene	UG/L	ND	NA	NA	NA
2-Chlorophenol	UG/L	ND	NA	NA	NA
2-Methylnaphthalene	UG/L	ND	NA	NA	NA
2-Methylphenol	UG/L	ND	NA	NA	NA
2-Nitroaniline	UG/L	ND	NA	NA	NA
2-Nitrophenol	UG/L	ND	NA	NA	NA
2,2'-oxybis-(1-chloropropane)	UG/L	ND	NA	NA	NA
2,4-Dichlorophenol	UG/L	ND	NA	NA	NA
2,4-Dimethylphenol	UG/L	ND	NA	NA	NA
2,4-Dinitrophenol	UG/L	ND	NA	NA	NA
2,4-Dinitrotoluene	UG/L	ND	NA	NA	NA
2,4,5-Trichlorophenol	UG/L	ND	NA	NA	NA
2,4,6-Trichlorophenol	UG/L	ND	NA	NA	NA
2,6-Dinitrotoluene	UG/L	ND	NA	NA	NA
3-Nitroaniline	UG/L	ND	NA	NA	NA
3,3'-Dichlorobenzidine	UG/L	ND	NA	NA	NA
4-Bromophenyl-phenylether	UG/L	ND	NA	NA	NA
4-Chloro-3-methylphenol	UG/L	ND	NA	NA	NA
4-Chloroaniline	UG/L	ND	NA	NA	NA
4-Chlorophenyl phenyl ether	UG/L	ND	NA	NA	NA
4-Methylphenol	UG/L	ND	NA	NA	NA
4-Nitroaniline	UG/L	ND	NA	NA	NA
4-Nitrophenol	UG/L	ND	NA	NA	NA
4,6-Dinitro-2-methylphenol	UG/L	ND	NA	NA	NA
Acenaphthene	UG/L	ND	NA	NA	NA
Acenaphthylene	UG/L	ND	NA	NA	NA
Anthracene	UG/L	ND	NA	NA	NA
Benzo[a]anthracene	UG/L	ND	NA	NA	NA
Benzo[a]pyrene	UG/L	ND	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled:		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
	UNITS					
	SEMIVOLATILES Cont.					
	Benzo[b]fluoranthene	UG/L	ND	NA	NA	NA
	Benzo[g,h,i]perylene	UG/L	ND	NA	NA	NA
	Benzo[k]fluoranthene	UG/L	ND	NA	NA	NA
	bis(2-Chloroethoxy) methane	UG/L	ND	NA	NA	NA
	bis(2-Chloroethyl) ether	UG/L	ND	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	UG/L	ND	NA	NA	NA
	Butyl benzyl phthalate	UG/L	ND	NA	NA	NA
	Carbazole	UG/L	ND	NA	NA	NA
	Chrysene	UG/L	ND	NA	NA	NA
	Dibenzofuran	UG/L	ND	NA	NA	NA
	Dibenz[a,h]anthracene	UG/L	ND	NA	NA	NA
	Diethylphthalate	UG/L	ND	NA	NA	NA
	Dimethyl phthalate	UG/L	ND	NA	NA	NA
	di-n-Butylphthalate	UG/L	ND	NA	NA	NA
	di-n-Octylphthalate	UG/L	ND	NA	NA	NA
	Fluoranthene	UG/L	ND	NA	NA	NA
	Fluorene	UG/L	ND	NA	NA	NA
	Hexachlorobenzene	UG/L	ND	NA	NA	NA
	Hexachlorobutadiene	UG/L	ND	NA	NA	NA
	Hexachlorocyclopentadiene	UG/L	ND	NA	NA	NA
	Hexachloroethane	UG/L	ND	NA	NA	NA
	Indeno[1,2,3-cd]pyrene	UG/L	ND	NA	NA	NA
	Isophorone	UG/L	ND	NA	NA	NA
	Mirex	UG/L	ND	NA	NA	NA
	Naphthalene	UG/L	ND	NA	NA	NA
	Nitrobenzene	UG/L	ND	NA	NA	NA
	N-Nitroso-di-n-propylamine	UG/L	ND	NA	NA	NA
	N-nitrosodiphenylamine	UG/L	ND	NA	NA	NA
	Pentachlorophenol	UG/L	ND	NA	NA	NA
	Phenanthrene	UG/L	ND	NA	NA	NA
	Phenol	UG/L	ND	NA	NA	NA
	Pyrene	UG/L	ND	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled:	MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
UNITS					
VOLATILES					
Chloromethane	UG/L	ND	NA	NA	NA
Bromomethane	UG/L	ND	NA	NA	NA
Vinyl chloride	UG/L	ND	NA	NA	NA
Chloroethane	UG/L	ND	NA	NA	NA
Methylene chloride	UG/L	ND	NA	NA	NA
Acetone	UG/L	12 J	5.3	1.7	6.0
Carbon Disulfide	UG/L	ND	NA	NA	NA
1,1-Dichloroethene	UG/L	ND	NA	NA	NA
1,1-Dichloroethane	UG/L	ND	NA	NA	NA
1,2-Dichloroethene(total)	UG/L	ND	NA	NA	NA
Chloroform	UG/L	ND	NA	NA	NA
1,2-Dichloroethane	UG/L	ND	NA	NA	NA
2-Butanone	UG/L	ND	NA	NA	NA
1,1,1-Trichloroethane	UG/L	19	5.8	3.3	7.1
Carbon tetrachloride	UG/L	ND	NA	NA	NA
Bromodichloromethane	UG/L	ND	NA	NA	NA
1,2-Dichloropropane	UG/L	ND	NA	NA	NA
cis-1,3-Dichloropropene	UG/L	ND	NA	NA	NA
Trichloroethene	UG/L	ND	NA	NA	NA
Dibromochloromethane	UG/L	ND	NA	NA	NA
1,1,2-Trichloroethane	UG/L	ND	NA	NA	NA
Benzene	UG/L	2 J	4.8	0.7	5.1
trans-1,3-Dichloropropene	UG/L	ND	NA	NA	NA
Bromoform	UG/L	ND	NA	NA	NA
4-Methyl-2-pentanone	UG/L	ND	NA	NA	NA
2-Hexanone	UG/L	ND	NA	NA	NA
Tetrachloroethene	UG/L	ND	NA	NA	NA
1,1,2,2-Tetrachloroethane	UG/L	ND	NA	NA	NA
Toluene	UG/L	ND	NA	NA	NA
Chlorobenzene	UG/L	2 J	4.8	0.7	5.1
Ethylbenzene	UG/L	ND	NA	NA	NA
Styrene	UG/L	ND	NA	NA	NA
Xylenes (total)	UG/L	ND	NA	NA	NA

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
GROUNDWATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled:		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
	UNITS					
	<u>PESTICIDE/PCBS</u>					
	alpha-BHC	UG/L	ND	NA	NA	NA
	beta-BHC	UG/L	ND	NA	NA	NA
	delta-BHC	UG/L	ND	NA	NA	NA
	Lindane (gamma-BHC)	UG/L	ND	NA	NA	NA
	Heptachlor	UG/L	ND	NA	NA	NA
	Aldrin	UG/L	ND	NA	NA	NA
	Heptachlor epoxide	UG/L	ND	NA	NA	NA
	Endosulfan I	UG/L	ND	NA	NA	NA
	Dieldrin	UG/L	ND	NA	NA	NA
	4,4'-DDE	UG/L	ND	NA	NA	NA
	Endrin	UG/L	ND	NA	NA	NA
	Endosulfan II	UG/L	ND	NA	NA	NA
	4,4'-DDD	UG/L	ND	NA	NA	NA
	Endosulfan sulfate	UG/L	ND	NA	NA	NA
	4,4'-DDT	UG/L	ND	NA	NA	NA
	Methoxychlor	UG/L	ND	NA	NA	NA
	Endrin ketone	UG/L	ND	NA	NA	NA
	Endrin aldehyde	UG/L	ND	NA	NA	NA
	alpha-Chlordane	UG/L	ND	NA	NA	NA
	gamma-Chlordane	UG/L	ND	NA	NA	NA
	Toxaphene	UG/L	ND	NA	NA	NA
	Aroclor 1016	UG/L	ND	NA	NA	NA
	Aroclor 1221	UG/L	ND	NA	NA	NA
	Aroclor 1232	UG/L	ND	NA	NA	NA
	Aroclor 1242	UG/L	ND	NA	NA	NA
	Aroclor 1248	UG/L	ND	NA	NA	NA
	Aroclor 1254	UG/L	ND	NA	NA	NA
	Aroclor 1260	UG/L	ND	NA	NA	NA

APPENDIX P.6
SITE 41 GROUNDWATER TOTAL METALS

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL TOTAL METALS

Client Sample ID:	41-GW01-02	41-GW02-03	41-GW03-02	41-GW04-02	41-GW04DW-02	41-GW05-02
Laboratory Sample ID:	9405010-05	AB7985	9404226-01	9405006-03	9405006-01	9404226-07
Date Sampled:		08/26/94	04/27/94			04/27/94

	UNITS						
Aluminum	UG/L	7560	230	94900.0	56900	1570	75900.0
Antimony	UG/L	2.75 UJ	25 U	2.75 UJ	2.75 UJ	2.75 UJ	2.75 UJ
Arsenic	UG/L	4.51 J	1 U	8.02 J	27.9 J	2.5 J	53.5 J
Barium	UG/L	88.9	67.5	838.0	170	45.3	178.0
Beryllium	UG/L	1.61	0.5 U	6.26	1.24	0.324 U	8.52
Cadmium	UG/L	1.055 U	2.5 U	4.84	6.49	2.58	37.5
Calcium	UG/L	26700	116000	33800.0	71500	289000	125000.0
Chromium	UG/L	12.1	5 U	166.0	81.5	3.945 U	159.0
Cobalt	UG/L	6.55 U	5 U	22.2	15.6	6.55 U	25.8
Copper	UG/L	7.95 U	5 U	34.1	19.4 J	7.95 U	53.4
Iron	UG/L	17500	20600	83200.0	102000	3900	199000.0
Lead	UG/L	12.5	2.3	2.58 U	22.5	2.615 U	100.0
Magnesium	UG/L	2780	20300	2970.0	4140	3380	6720.0
Manganese	UG/L	307	334	139.0	274	35.2	766.0
Mercury	UG/L	0.05 U	0.1 U	0.050 U	0.264 J	0.05 U	0.050 U
Nickel	UG/L	11.15 U	10 U	45.3	40.5	11.15 U	177.0
Potassium	UG/L	1130	17200	2490.0	4910	2940	8330.0
Selenium	UG/L	2.225 UJ	1 U	0.75 UJ	1.975 UJ	1.23 UJ	0.75 UJ
Silver	UG/L	0.25 UJ	2.5 U	0.250 U	0.25 UJ	0.25 UJ	0.250 U
Sodium	UG/L	6320	29400	3910.0	6080	11600	5910.0
Thallium	UG/L	1.85 UJ	1 U	1.50 UJ	1.85 UJ	1.85 UJ	3.77 J
Vanadium	UG/L	13	5 U	131.0	136	15.1	138.0
Zinc	UG/L	20.1 U	114	224.0	146	24.45 U	675.0

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL TOTAL METALS

Client Sample ID:	41-GW06DW-02	41-GW07-03	41-GW07DW-02	41-GW08-02	41-GW09-02	41-GW09DW-02
Laboratory Sample ID:	9404226-05	AB8054	9405016-02	9405006-05	9405010-07	9405010-09
Date Sampled:	04/27/94	08/26/94				

	UNITS						
Aluminum	UG/L	12700.0	3410	1280	99200	54900	30600
Antimony	UG/L	2.75 UJ	25 U	2.75 UJ	2.75 UJ	2.75 UJ	2.75 UJ
Arsenic	UG/L	10.4 J	2.1	1.05 UJ	14.8 J	4.51 J	13 J
Barium	UG/L	244.0	57.3	18.2	586	451	505
Beryllium	UG/L	0.954	1.1	0.324 U	21.2	1.07	1.92
Cadmium	UG/L	7.46	2.5 U	2.76	7.39	1.055 U	8.68
Calcium	UG/L	715000.0	2050	148000	68800	12400	945000
Chromium	UG/L	40.1	5 U	3.945 U	112	67.1	81
Cobalt	UG/L	6.6 U	5 U	6.55 U	89.3	6.55 U	6.55 U
Copper	UG/L	18.5	5 U	7.95 U	44.2 J	21.7 J	28.5 J
Iron	UG/L	17900.0	2890	4390	74800	54800	34100
Lead	UG/L	15.2	3.2	1.89 U	145	52.5	34.8
Magnesium	UG/L	8540.0	1750	2280	8740	6590	11400
Manganese	UG/L	154.0	24.5	46.2	218	181	367
Mercury	UG/L	0.050 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U
Nickel	UG/L	22.8	10 U	11.15 U	90.4	11.15 U	44.5
Potassium	UG/L	2790.0	1870	977	5210	2490	3700
Selenium	UG/L	0.75 UJ	1 U	10.3 J	2.64 UJ	3.39 UJ	0.75 UJ
Silver	UG/L	0.250 U	2.5 U	0.25 UJ	0.25 UJ	0.25 UJ	0.25 UJ
Sodium	UG/L	11200.0	9930	6320	6200	22000	10900
Thallium	UG/L	1.50 UJ	1 U	1.85 UJ	1.85 UJ	1.85 UJ	1.85 UJ
Vanadium	UG/L	74.0	5 U	10.6	144	88.8	95
Zinc	UG/L	104.0	237	14.75 U	283	19.45 U	186

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
GROUNDWATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL TOTAL METALS

Client Sample ID:	41-GW10-03	41-GW11-03	41-GW11DW-02	41-GW12-02	41-GW12DW-02	41-GW13-02
Laboratory Sample ID:	AB8048	AB8057	9405016-05	9405006-09	9405006-07	9404226-03
Date Sampled:	08/26/94	08/26/94				04/27/94

	UNITS						
Aluminum	UG/L	40.2	83	4570	42300	6080	60200.0
Antimony	UG/L	25 U	25 U	2.75 UJ	2.75 UJ	2.75 UJ	2.75 UJ
Arsenic	UG/L	1 U	1 U	8.64 J	11.4 J	4.32 J	3.75 U
Barium	UG/L	21.5	358	93.4	276	84.4	533.0
Beryllium	UG/L	0.5 U	0.5 U	0.324 U	37.4	0.324 U	5.25
Cadmium	UG/L	2.5 U	2.5 U	5.38	12.1	1.055 U	4.05
Calcium	UG/L	46300	82900	368000	716000	180000	12500.0
Chromium	UG/L	5 U	5 U	19.8	126	26.4	82.8
Cobalt	UG/L	5 U	5 U	6.55 U	106	6.55 U	32.4
Copper	UG/L	5 U	5 U	16.6 J	23.4 J	7.95 U	28.5
Iron	UG/L	890	26200	12800	117000	7250	59200.0
Lead	UG/L	1 U	26.3	26.5	22.8	3.555 U	16.1
Magnesium	UG/L	1570	14200	7870	9400	9420	3740.0
Manganese	UG/L	64.3	186	136	747	69.9	66.8
Mercury	UG/L	0.1 U	0.33	0.05 U	0.05 U	0.05 U	0.050 U
Nickel	UG/L	10 U	10 U	38.7	99.7	11.15 U	28.9
Potassium	UG/L	500 U	22400	2940	2040	17600	3520.0
Selenium	UG/L	1 U	1 U	0.75 UJ	0.75 UJ	0.75 UJ	0.75 UJ
Silver	UG/L	2.5 U	2.5 U	0.25 UJ	0.25 UJ	0.25 UJ	0.250 U
Sodium	UG/L	4770	27300	140000	7500	208000	6850.0
Thallium	UG/L	1 U	1 U	1.85 UJ	1.85 UJ	1.85 UJ	1.50 UJ
Vanadium	UG/L	5 U	5 U	45.2	179	18.6	104.0
Zinc	UG/L	41.6	118	205	398	23.65 U	159.0

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
GROUNDWATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL TOTAL METALS

Client Sample ID: Laboratory Sample ID: Date Sampled:	MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
	UNITS				
Aluminum	UG/L 99200	30690.2	34765.5	44948.3	3963047.1
Antimony	UG/L ND	NA	NA	NA	NA
Arsenic	UG/L 53.5 J	9.6	12.9	14.9	25.3
Barium	UG/L 836	256.3	237.8	353.8	718.2
Beryllium	UG/L 37.4	5.0	9.6	8.9	16.5
Cadmium	UG/L 37.5	6.2	8.4	9.7	11.1
Calcium	UG/L 945000	219941.7	283831.9	336347.4	1547060.7
Chromium	UG/L 166	55.6	55.9	78.6	257.8
Cobalt	UG/L 106	20.2	29.5	32.3	34.8
Copper	UG/L 53.4	18.9	14.4	24.8	32.5
Iron	UG/L 199000	46578.9	52483.4	68103.5	233622.9
Lead	UG/L 145	27.3	38.1	42.9	119.2
Magnesium	UG/L 20300	6988.3	4919.3	9005.8	11180.8
Manganese	UG/L 766	228.6	218.7	318.2	470.0
Mercury	UG/L 0.33	0.1	0.1	0.1	0.1
Nickel	UG/L 177	38.0	44.1	56.1	69.3
Potassium	UG/L 22400	5724.3	6471.1	8378.2	12614.3
Selenium	UG/L 10.3 J	1.8	2.3	2.7	2.5
Silver	UG/L ND	NA	NA	NA	NA
Sodium	UG/L 208000	29121.7	54503.8	51474.9	54418.7
Thallium	UG/L 3.77 J	1.7	0.6	2.0	2.0
Vanadium	UG/L 179	67.4	60.4	92.1	299.7
Zinc	UG/L 675	166.3	165.9	234.3	472.2

APPENDIX P.7
SITE 41 GROUNDWATER DISSOLVED METALS

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
GROUNDWATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL DISSOLVED METALS

Client Sample ID:	41-GW01D-02	41-GW02D-03	41-GW03D-02	41-GW04D-02	41-GW04DWD-02	41-GW05D-02
Laboratory Sample ID:	9405010-06	AB7997	9404226-02	9405006-04	9405006-02	9404226-08
Date Sampled:		08/26/94				04/27/94

	UNITS					
Aluminum	UG/L	56 U	20 U	56.0 U	56 U	56.0 U
Antimony	UG/L	6.6 U	25 U	8.1 UJ	7.3	2.75 U
Arsenic	UG/L	1.05 U	1 U	1.05 U	10.2	1.05 U
Barium	UG/L	21.7	70.4	11.9	41	25.6
Beryllium	UG/L	0.324 U	0.5 U	0.324 U	0.324 U	0.324 U
Cadmium	UG/L	1.055 U	2.5 U	1.06 U	1.055 U	1.055 U
Calcium	UG/L	28700	125000	16000.0	43400	51300
Chromium	UG/L	3.945 U	5 U	3.95 U	3.945 U	3.945 U
Cobalt	UG/L	6.55 U	5 U	6.6 U	6.55 U	6.55 U
Copper	UG/L	7.95 U	10.1	8.0 U	7.95 U	7.95 U
Iron	UG/L	23.05 U	21200	18.3 U	29500	18.3 U
Lead	UG/L	0.3 U	1 U	0.300 U	0.3 U	0.3 U
Magnesium	UG/L	2460	21200	829.0	2100	1980
Manganese	UG/L	112	352	5.0 U	217	5.2 U
Mercury	UG/L	0.05 U	0.23	0.050 U	0.05 U	0.05 U
Nickel	UG/L	11.15 U	10 U	11.2 U	11.15 U	11.15 U
Potassium	UG/L	675	17800	121.5 U	2790	3670
Selenium	UG/L	3.89 U	1 U	1.91 J	2.39 U	2.475 U
Silver	UG/L	0.25 UJ	2.5 U	0.250 U	0.25 UJ	0.25 UJ
Sodium	UG/L	6670	30700	4260.0	6200	14300
Thallium	UG/L	1.85 UJ	1 U	1.50 UJ	1.85 UJ	1.85 UJ
Vanadium	UG/L	5.25 U	5 U	5.3 U	5.25 U	5.25 U
Zinc	UG/L	2.925 U	52.5	2.93 U	2.925 U	2.925 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL DISSOLVED METALS

Client Sample ID:	41-GW06DWD-02	41-GW07D-03	41-GW07DWD-02	41-GW08D-02	41-GW09D-02	41-GW09DWD-02
Laboratory Sample ID:	9404226-06	AB8060	9405016-08	9405006-06	9405010-08	9405010-10
Date Sampled:	04/27/94	08/26/94				

	UNITS						
Aluminum	UG/L	56.0 U	77.8	56 U	56 U	245	56 U
Antimony	UG/L	19.3	25 U	10.4 U	15.4 U	9.85 U	2.77 U
Arsenic	UG/L	1.05 U	1 U	1.05 U	1.05 U	1.05 U	1.05 U
Barium	UG/L	44.4	44.4	4.62 U	17.6	138	33.1
Beryllium	UG/L	0.324 U	0.5 U	0.324 U	0.324 U	0.324 U	0.324 U
Cadmium	UG/L	1.06 U	2.5 U	1.055 U	1.055 U	1.055 U	1.055 U
Calcium	UG/L	90000.0	1970	63200	16400	10900	43900
Chromium	UG/L	3.95 U	5 U	3.945 U	3.945 U	3.945 U	3.945 U
Cobalt	UG/L	6.6 U	5 U	6.55 U	6.55 U	6.55 U	6.55 U
Copper	UG/L	8.0 U	25.3	7.95 U	7.95 U	7.95 U	7.95 U
Iron	UG/L	18.3 U	298	18.3 U	18.3 U	18.3 U	18.3 U
Lead	UG/L	0.300 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U
Magnesium	UG/L	2270.0	1800	1540	1630	5600	1430
Manganese	UG/L	31.9	25.3	9.8 U	12.95 U	83.1	8.05 U
Mercury	UG/L	0.050 U	0.1 U	0.05 U	0.05 U	0.05 U	0.05 U
Nickel	UG/L	11.2 U	10 U	11.15 U	11.15 U	11.15 U	11.15 U
Potassium	UG/L	1620.0	1510	524	826	1130	826
Selenium	UG/L	0.75 UJ	1 U	1.645 U	3.305 U	3.805 U	2.31 U
Silver	UG/L	0.250 U	2.5 U	0.25 UJ	0.25 UJ	0.25 UJ	0.25 UJ
Sodium	UG/L	11300.0	11000	6320	6670	24100	9870
Thallium	UG/L	1.50 UJ	1 U	1.85 UJ	1.85 UJ	1.85 UJ	1.85 UJ
Vanadium	UG/L	5.3 U	5 U	5.25 U	5.25 U	5.25 U	5.25 U
Zinc	UG/L	2.93 U	86.8	2.925 U	2.925 U	2.925 U	2.925 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
GROUNDWATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL DISSOLVED METALS

Client Sample ID:	41-GW10D-03	41-GW11D-03	41-GW11DWD-02	41-GW12D-02	41-GW12DWD-02	41-GW13D-02
Laboratory Sample ID:	AB8058	AB8061	9405016-11	9405006-10	9405006-08	9404226-04
Date Sampled:	08/26/94	08/26/94				04/27/94

	UNITS						
Aluminum	UG/L	20 U	20 U	56 U	56 U	56 U	56.0 U
Antimony	UG/L	25 U	25 U	5.4 U	6.6 U	11 U	5.5 UJ
Arsenic	UG/L	1 U	1 U	2.6	1.05 U	1.05 U	1.05 U
Barium	UG/L	20.7	427	68.7	16.3	20.2	27.1
Beryllium	UG/L	0.5 U	0.5 U	0.324 U	0.324 U	0.324 U	0.324 U
Cadmium	UG/L	2.5 U	2.5 U	1.055 U	1.055 U	1.055 U	1.06 U
Calcium	UG/L	52100	105000	234000	79300	85700	3940.0
Chromium	UG/L	5 U	5 U	3.945 U	3.945 U	3.945 U	3.95 U
Cobalt	UG/L	5 U	5 U	6.55 U	6.55 U	6.55 U	6.6 U
Copper	UG/L	16.4	16.6	7.95 U	7.95 U	7.95 U	8.0 U
Iron	UG/L	789	24900	1620	18.3 U	18.3 U	55.5 U
Lead	UG/L	1 U	1 U	0.3 U	0.3 U	0.3 U	0.300 U
Magnesium	UG/L	1770	18200	6540	2530	8270	1330.0
Manganese	UG/L	73.8	235	119	123	30.1	9.8 U
Mercury	UG/L	0.23	0.1 U	0.05 U	0.05 U	0.05 U	0.050 U
Nickel	UG/L	10 U	10 U	11.15 U	11.15 U	11.15 U	11.2 U
Potassium	UG/L	500 U	29100	2190	1130	14700	742.0
Selenium	UG/L	1 U	1 U	1.31 U	2.975 U	2.725 U	0.75 U
Silver	UG/L	2.5 U	2.5 U	0.25 UJ	0.25 UJ	0.25 UJ	0.250 U
Sodium	UG/L	5310	35700	144000	6910	133000	7200.0
Thallium	UG/L	1 U	1 U	1.85 UJ	1.85 UJ	1.85 UJ	1.50 UJ
Vanadium	UG/L	5 U	5 U	5.25 U	5.25 U	5.25 U	5.3 U
Zinc	UG/L	11.3	35.7	2.925 U	2.925 U	2.925 U	12.6

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
GROUNDWATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL DISSOLVED METAL.

Client Sample ID: Laboratory Sample ID: Date Sampled:		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
	UNITS					
	Aluminum	245	61.7	48.2	81.5	82.2
	Antimony	19.3	12.0	8.2	15.4	19.0
	Arsenic	10.2	1.7	2.2	2.6	2.1
	Barium	427	57.6	97.5	97.6	124.5
	Beryllium	ND	NA	NA	NA	NA
	Cadmium	ND	NA	NA	NA	NA
	Calcium	234000	61400.6	55770.4	84273.2	200923.1
	Chromium	ND	NA	NA	NA	NA
	Cobalt	ND	NA	NA	NA	NA
	Copper	25.3	10.0	4.7	11.9	11.6
	Iron	29500	4364.9	9701.7	8343.8	582743.7
	Lead	ND	NA	NA	NA	NA
	Magnesium	21200	4589.4	5877.1	6999.7	7917.0
	Manganese	352	81.1	98.5	121.5	340.2
	Mercury	0.23	0.1	0.1	0.1	0.1
	Nickel	ND	NA	NA	NA	NA
	Potassium	29100	4550.8	7850.2	7770.3	14328.4
	Selenium	1.91 J	1.9	1.1	2.4	2.7
	Silver	ND	NA	NA	NA	NA
	Sodium	144000	26085.6	41920.7	43278.1	50459.4
	Thallium	ND	NA	NA	NA	NA
	Vanadium	ND	NA	NA	NA	NA
	Zinc	86.8	13.2	22.8	22.5	26.2

APPENDIX P.8
SITE 41 SHALLOW GROUNDWATER ORGANICS

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 SHALLOW GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW01-01	41-GW02-01	41-GW03-01	41-GW04-01	41-GW05-01	41-GW07-01
Laboratory Sample ID:	9402122-01	9402119-01	9402121-01	9402121-03	9402122-03	9402152-01A
Date Sampled:	02/14/94	02/14/94	02/14/94	02/15/94	02/14/94	

UNITS

SEMIVOLATILES

1,2-Dichlorobenzene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
1,2,4-Trichlorobenzene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
1,3-Dichlorobenzene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
1,4-Dichlorobenzene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
2-Chloronaphthalene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
2-Chlorophenol	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
2-Methylnaphthalene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
2-Methylphenol	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
2-Nitroaniline	UG/L	15.0 U	15.0 U	15.0 U	16.3 U	15.0 U	17.6 U
2-Nitrophenol	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
2,2'-oxybis-(1-chloropropane)	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
2,4-Dichlorophenol	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
2,4-Dimethylphenol	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
2,4-Dinitrophenol	UG/L	15.0 U	15.0 U	15.0 U	16.3 U	15.0 U	17.6 U
2,4-Dinitrotoluene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
2,4,5-Trichlorophenol	UG/L	15.0 U	15.0 U	15.0 U	16.3 U	15.0 U	17.6 U
2,4,6-Trichlorophenol	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
2,6-Dinitrotoluene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
3-Nitroaniline	UG/L	15.0 UJ	15.0 UJ	15.0 UJ	16.3 UJ	15.0 UJ	17.6 U
3,3'-Dichlorobenzidine	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
4-Bromophenyl-phenylether	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
4-Chloro-3-methylphenol	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
4-Chloroaniline	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
4-Chlorophenyl phenyl ether	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
4-Methylphenol	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
4-Nitroaniline	UG/L	15.0 U	15.0 U	15.0 U	16.3 U	15.0 U	17.6 U
4-Nitrophenol	UG/L	15.0 U	15.0 U	15.0 U	16.3 U	15.0 U	17.6 U
4,6-Dinitro-2-methylphenol	UG/L	15.0 U	15.0 U	15.0 U	16.3 U	15.0 U	17.6 U
Acenaphthene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
Acenaphthylene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
Anthracene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
Benzo[a]anthracene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
Benzo[a]pyrene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 SHALLOW GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW01-01	41-GW02-01	41-GW03-01	41-GW04-01	41-GW05-01	41-GW07-01
Laboratory Sample ID:	9402122-01	9402119-01	9402121-01	9402121-03	9402122-03	9402152-01A
Date Sampled:	02/14/94	02/14/94	02/14/94	02/15/94	02/14/94	

UNITS

SEMIVOLATILES Cont.

	41-GW01-01	41-GW02-01	41-GW03-01	41-GW04-01	41-GW05-01	41-GW07-01	
Benzo[b]fluoranthene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
Benzo[g,h,i]perylene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
Benzo[k]fluoranthene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
bis(2-Chloroethoxy) methane	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
bis(2-Chloroethyl) ether	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
bis(2-Ethylhexyl)phthalate	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
Butyl benzyl phthalate	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
Carbazole	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
Chrysene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
Dibenzofuran	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
Dibenz[a,h]anthracene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
Diethylphthalate	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
Dimethyl phthalate	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
di-n-Butylphthalate	UG/L	6.0 U	6.0 U	2.00 J	2.00 J	6.0 U	7.05 U
di-n-Octylphthalate	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
Fluoranthene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
Fluorene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
Hexachlorobenzene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
Hexachlorobutadiene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
Hexachlorocyclopentadiene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
Hexachloroethane	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
Indeno[1,2,3-cd]pyrene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
Isophorone	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
Naphthalene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
Nitrobenzene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
N-Nitroso-di-n-propylamine	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
N-nitrosodiphenylamine	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
Pentachlorophenol	UG/L	15.0 U	15.0 U	15.0 U	16.3 U	15.0 U	17.6 U
Phenanthrene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
Phenol	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U
Pyrene	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	6.0 U	7.05 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 SHALLOW GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW01-01	41-GW02-01	41-GW03-01	41-GW04-01	41-GW05-01	41-GW07-01
Laboratory Sample ID:	9402122-01	9402119-01	9402121-01	9402121-03	9402122-03	9402152-01A
Date Sampled:	02/14/94	02/14/94	02/14/94	02/15/94	02/14/94	

UNITS

VOLATILES

	41-GW01-01	41-GW02-01	41-GW03-01	41-GW04-01	41-GW05-01	41-GW07-01
Chloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
Bromomethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
Vinyl chloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
Chloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
Methylene chloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
Acetone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
Carbon Disulfide	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
1,1-Dichloroethene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
1,1-Dichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
1,2-Dichloroethene(total)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
Chloroform	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
1,2-Dichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
2-Butanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
1,1,1-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
Carbon tetrachloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
Bromodichloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
1,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
cis-1,3-Dichloropropene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
Trichloroethene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
Dibromochloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
1,1,2-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
Benzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
trans-1,3-Dichloropropene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
Bromoform	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
4-Methyl-2-pentanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
2-Hexanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
Tetrachloroethene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
1,1,2,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
Toluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
Chlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
Ethylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
Styrene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U
Xylenes (total)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 SHALLOW GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW01-01	41-GW02-01	41-GW03-01	41-GW04-01	41-GW05-01	41-GW07-01
Laboratory Sample ID:	9402122-01	9402119-01	9402121-01	9402121-03	9402122-03	9402152-01A
Date Sampled:	02/14/94	02/14/94	02/14/94	02/15/94	02/14/94	
	UNITS					
PESTICIDE/PCBS						
alpha-BHC	UG/L	0.028 UJ	0.028 UJ	0.050 UJ	0.031 UJ	0.033 UJ
beta-BHC	UG/L	0.028 U	0.040 J	0.050 U	0.031 UJ	0.033 UJ
delta-BHC	UG/L	0.028 UJ	0.028 UJ	0.050 UJ	0.031 UJ	0.033 UJ
Lindane (gamma-BHC)	UG/L	0.028 U	0.028 UJ	0.050 U	0.031 UJ	0.033 UJ
Heptachlor	UG/L	0.028 U	0.030 UJ	0.050 U	0.030 UJ	0.033 UJ
Aldrin	UG/L	0.028 U	0.028 UJ	0.050 U	0.031 UJ	0.033 UJ
Heptachlor epoxide	UG/L	0.028 U	0.028 UJ	0.050 U	0.031 UJ	0.033 UJ
Endosulfan I	UG/L	0.028 U	0.028 UJ	0.050 U	0.031 UJ	0.033 UJ
Dieldrin	UG/L	0.056 U	0.055 UJ	0.100 U	0.061 UJ	0.066 UJ
4,4'-DDE	UG/L	0.056 U	0.055 UJ	0.100 U	0.061 UJ	0.066 UJ
Endrin	UG/L	0.056 U	0.055 UJ	0.100 U	0.061 UJ	0.066 UJ
Endosulfan II	UG/L	0.056 U	0.055 UJ	0.100 U	0.061 UJ	0.066 UJ
4,4'-DDD	UG/L	0.056 U	0.055 UJ	0.100 U	0.061 UJ	0.066 UJ
Endosulfan sulfate	UG/L	0.056 U	0.055 UJ	0.100 U	0.061 UJ	0.066 UJ
4,4'-DDT	UG/L	0.056 U	0.055 UJ	0.100 U	0.061 UJ	0.066 UJ
Methoxychlor	UG/L	0.278 U	0.275 UJ	0.50 U	0.305 UJ	0.329 UJ
Endrin ketone	UG/L	0.056 U	0.055 UJ	0.100 U	0.061 UJ	0.066 UJ
Endrin aldehyde	UG/L	0.056 U	0.055 UJ	0.100 U	0.061 UJ	0.066 UJ
alpha-Chlordane	UG/L	0.028 U	0.028 UJ	0.050 U	0.031 UJ	0.033 UJ
gamma-Chlordane	UG/L	0.028 U	0.028 UJ	0.050 U	0.031 UJ	0.033 UJ
Toxaphene	UG/L	2.78 U	2.75 UJ	5.0 U	3.05 UJ	3.29 UJ
Aroclor 1016	UG/L	0.56 U	0.55 UJ	1.00 U	0.61 UJ	0.66 UJ
Aroclor 1221	UG/L	1.11 U	1.10 UJ	2.00 U	1.22 UJ	1.315 UJ
Aroclor 1232	UG/L	0.56 U	0.55 UJ	1.00 U	0.61 UJ	0.66 UJ
Aroclor 1242	UG/L	0.56 U	0.55 UJ	1.00 U	0.61 UJ	0.66 UJ
Aroclor 1248	UG/L	0.56 U	0.55 UJ	1.00 U	0.61 UJ	0.66 UJ
Aroclor 1254	UG/L	0.56 U	0.55 UJ	1.00 U	0.61 UJ	0.66 UJ
Aroclor 1260	UG/L	0.56 U	0.55 UJ	1.00 U	0.61 UJ	0.66 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 SHALLOW GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW01-01	41-GW02-01	41-GW03-01	41-GW04-01	41-GW05-01	41-GW07-01
Laboratory Sample ID:	9402122-01	9402119-01	9402121-01	9402121-03	9402122-03	9402152-01A
Date Sampled:	02/14/94	02/14/94	02/14/94	02/15/94	02/14/94	
UNITS						
CHEMICAL SURETY						
Acetophenone	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	7.05 U
Chloroacetophenone	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	7.05 U
Hydroxyacetophenone	UG/L	30.0 U	30.0 U	30.0 U	32.5 U	35.2 U
Bis(2'-chloroethyl)disulfide	UG/L	30.0 U	30.0 U	30.0 U	32.5 U	35.2 U
Bis(2'-chloroethyl)trisulfide	UG/L	30.0 U	30.0 U	30.0 U	32.5 U	35.2 U
1,4-Dithiane	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	7.05 U
1,4-Oxathiane	UG/L	6.0 U	6.0 U	6.0 U	6.5 U	7.05 U
THIODIGLYCOL						
Thiodiglycol	UG/L	12.5 U	12.5 U	12.5 U	12.5 U	12.5 U
ORDNANCE						
1,3,5-Trinitrobenzene		0.250 U	0.250 U	0.250 U	0.250 U	0.25 U
1,3-Dinitrobenzene		0.250 U	0.250 U	0.250 U	0.250 U	0.25 U
2,4,6-Trinitrotoluene		0.250 U	0.250 U	0.250 U	0.250 U	0.25 U
2,4-Dinitrotoluene		0.250 U	0.250 U	0.250 U	0.250 U	0.25 U
2,6-Dinitrotoluene		0.250 U	0.250 U	0.250 U	0.250 U	0.25 U
2-Amino-4,6-dinitrotoluene		0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
2-Nitrotoluene		0.250 U	0.250 U	0.250 U	0.250 U	0.25 U
3-Nitrotoluene		0.250 U	0.250 U	0.250 U	0.250 U	0.25 U
4-Amino-2,6-dinitrotoluene		0.010 U	0.010 U	0.010 U	0.010 U	0.01 U
4-Nitrotoluene		0.250 U	0.250 U	0.250 U	0.250 U	0.25 U
HMX		0.63 U	0.63 U	0.63 U	0.63 U	0.625 U
Nitrobenzene		0.250 U	0.250 U	0.250 U	0.250 U	0.25 U
RDX		0.250 U	0.250 U	0.250 U	0.250 U	0.25 U
Tetryl		0.250 UJ	0.250 UJ	0.250 UJ	0.250 UJ	0.25 U
MIREX						
Mirex		30.0 U	30.0 U	30.0 U	32.5 U	35.2 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 SHALLOW GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW08-01	41-GW09-01	41-GW10-01	41-GW11-01	41-GW12-01	41-GW13-01
Laboratory Sample ID:	9402157-05A	9402161-01A	9402161-03A	9402165-01	9402157-01A	9402157-03A
Date Sampled:						

	<u>UNITS</u>					
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
1,2,4-Trichlorobenzene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
1,3-Dichlorobenzene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
1,4-Dichlorobenzene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
2-Chloronaphthalene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
2-Chlorophenol	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
2-Methylnaphthalene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
2-Methylphenol	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
2-Nitroaniline	UG/L	25 U	16.45 U	15.45 U	15.6 U	14.7 U
2-Nitrophenol	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
2,2'-oxybis-(1-chloropropane)	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
2,4-Dichlorophenol	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
2,4-Dimethylphenol	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
2,4-Dinitrophenol	UG/L	25 U	16.45 U	15.45 U	15.6 U	14.7 U
2,4-Dinitrotoluene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
2,4,5-Trichlorophenol	UG/L	25 U	16.45 U	15.45 U	15.6 U	14.7 U
2,4,6-Trichlorophenol	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
2,6-Dinitrotoluene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
3-Nitroaniline	UG/L	25 U	16.45 U	15.45 U	15.6 U	14.7 U
3,3'-Dichlorobenzidine	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
4-Bromophenyl-phenylether	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
4-Chloro-3-methylphenol	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
4-Chloroaniline	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
4-Chlorophenyl phenyl ether	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
4-Methylphenol	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
4-Nitroaniline	UG/L	25 U	16.45 U	15.45 U	15.6 U	14.7 U
4-Nitrophenol	UG/L	25 U	16.45 U	15.45 U	15.6 U	14.7 U
4,6-Dinitro-2-methylphenol	UG/L	25 U	16.45 U	15.45 U	15.6 U	14.7 U
Acenaphthene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
Acenaphthylene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
Anthracene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
Benzo[a]anthracene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
Benzo[a]pyrene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 SHALLOW GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW08-01	41-GW09-01	41-GW10-01	41-GW11-01	41-GW12-01	41-GW13-01
Laboratory Sample ID:	9402157-05A	9402161-01A	9402161-03A	9402165-01	9402157-01A	9402157-03A
Date Sampled:						

UNITS

<u>SEMIVOLATILES Cont.</u>	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
Benzo[b]fluoranthene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
Benzo[g,h,i]perylene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
Benzo[k]fluoranthene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
bis(2-Chloroethoxy) methane	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
bis(2-Chloroethyl) ether	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
bis(2-Ethylhexyl)phthalate	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	1 J
Butyl benzyl phthalate	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
Carbazole	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
Chrysene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
Dibenzofuran	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
Dibenz[a,h]anthracene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
Diethylphthalate	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
Dimethyl phthalate	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
di-n-Butylphthalate	UG/L	10 U	6.5 U	6.2 U	6 U	5.7 U	1 J
di-n-Octylphthalate	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
Fluoranthene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
Fluorene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
Hexachlorobenzene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
Hexachlorobutadiene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
Hexachlorocyclopentadiene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
Hexachloroethane	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
Indeno[1,2,3-cd]pyrene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
Isophorone	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
Naphthalene	UG/L	10 U	6.6 U	6.2 U	3 J	5.7 U	5.9 U
Nitrobenzene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
N-Nitroso-dl-n-propylamine	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
N-nitrosodiphenylamine	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
Pentachlorophenol	UG/L	25 U	16.45 U	15.45 U	15.6 U	14.2 U	14.7 U
Phenanthrene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
Phenol	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U
Pyrene	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.7 U	5.9 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 SHALLOW GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW08-01	41-GW09-01	41-GW10-01	41-GW11-01	41-GW12-01	41-GW13-01
Laboratory Sample ID:	9402157-05A	9402161-01A	9402161-03A	9402165-01	9402157-01A	9402157-03A
Date Sampled:						

	UNITS						
VOLATILES							
Chloromethane	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Bromomethane	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Methylene chloride	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	UG/L	5 UJ	5 UJ	5 UJ	5 U	6.1 UJ	5 UJ
Carbon Disulfide	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethene(total)	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	UG/L	5 U	1.36 J	3.17 J	5 U	5 U	5 U
1,2-Dichloroethane	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	UG/L	5 U	1.05 J	5 U	5 U	5 U	5 U
1,2-Dichloropropane	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	UG/L	5 U	1.95 J	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	UG/L	5 U	5 U	5 U	2.67 J	5 U	5 U
trans-1,3-Dichloropropene	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	UG/L	5 U	1.33 J	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	UG/L	5 U	5 U	5 U	1.49 J	5 U	5 U
Ethylbenzene	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Xylenes (total)	UG/L	5 U	5 U	5 U	5 U	5 U	5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 SHALLOW GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW08-01	41-GW09-01	41-GW10-01	41-GW11-01	41-GW12-01	41-GW13-01
Laboratory Sample ID:	9402157-05A	9402161-01A	9402161-03A	9402165-01	9402157-01A	9402157-03A
Date Sampled:						

	<u>UNITS</u>						
<u>PESTICIDE/PCBS</u>							
alpha-BHC	UG/L	0.0315 UJ	0.01 J	0.0295 UJ	0.03 UJ	0.034 UJ	0.0375 UJ
beta-BHC	UG/L	0.0315 UJ	0.08 J	0.0295 UJ	0.03 UJ	0.034 UJ	0.0375 UJ
delta-BHC	UG/L	0.0315 UJ	0.031 UJ	0.0295 UJ	0.03 UJ	0.034 UJ	0.0375 UJ
Lindane (gamma-BHC)	UG/L	0.0315 UJ	0.031 U	0.0295 UJ	0.03 UJ	0.034 UJ	0.0375 UJ
Heptachlor	UG/L	0.0315 UJ	0.031 U	0.03 UJ	0.03 UJ	0.034 UJ	0.0375 UJ
Aldrin	UG/L	0.0315 UJ	0.031 U	0.0295 UJ	0.03 UJ	0.034 UJ	0.0375 UJ
Heptachlor epoxide	UG/L	0.0315 UJ	0.031 U	0.0295 UJ	0.03 UJ	0.034 UJ	0.0375 UJ
Endosulfan I	UG/L	0.0315 UJ	0.031 U	0.0295 UJ	0.03 UJ	0.034 UJ	0.0375 UJ
Dieldrin	UG/L	0.063 UJ	0.0625 U	0.059 UJ	0.0595 UJ	0.0685 UJ	0.0745 UJ
4,4'-DDE	UG/L	0.063 UJ	0.0625 U	0.059 UJ	0.0595 UJ	0.0685 UJ	0.0745 UJ
Endrin	UG/L	0.063 UJ	0.0625 U	0.059 UJ	0.0595 UJ	0.0685 UJ	0.0745 UJ
Endosulfan II	UG/L	0.063 UJ	0.0625 U	0.059 UJ	0.0595 UJ	0.0685 UJ	0.0745 UJ
4,4'-DDD	UG/L	0.063 UJ	0.0625 U	0.059 UJ	0.01 NJ	0.0685 UJ	0.0745 UJ
Endosulfan sulfate	UG/L	0.063 UJ	0.0625 U	0.059 UJ	0.0595 UJ	0.0685 UJ	0.0745 UJ
4,4'-DDT	UG/L	0.063 UJ	0.0625 U	0.059 UJ	0.0595 UJ	0.0685 UJ	0.0745 UJ
Methoxychlor	UG/L	0.3165 UJ	0.3125 U	0.294 UJ	0.2975 UJ	0.3425 UJ	0.373 UJ
Endrin ketone	UG/L	0.063 UJ	0.0625 U	0.059 UJ	0.0595 UJ	0.0685 UJ	0.0745 UJ
Endrin aldehyde	UG/L	0.063 UJ	0.0625 U	0.059 UJ	0.0595 UJ	0.0685 UJ	0.0745 UJ
alpha-Chlordane	UG/L	0.0315 UJ	0.031 U	0.0295 UJ	0.03 UJ	0.034 UJ	0.0375 UJ
gamma-Chlordane	UG/L	0.0315 UJ	0.031 U	0.0295 UJ	0.03 UJ	0.034 UJ	0.0375 UJ
Toxaphene	UG/L	3.165 UJ	3.125 U	2.94 UJ	2.975 UJ	3.425 UJ	3.73 UJ
Aroclor 1016	UG/L	0.63 UJ	0.625 U	0.59 UJ	0.595 UJ	0.685 UJ	0.745 UJ
Aroclor 1221	UG/L	1.265 UJ	1.25 U	1.175 UJ	1.19 UJ	1.37 UJ	1.49 UJ
Aroclor 1232	UG/L	0.63 UJ	0.625 U	0.59 UJ	0.595 UJ	0.685 UJ	0.745 UJ
Aroclor 1242	UG/L	0.63 UJ	0.625 U	0.59 UJ	0.595 UJ	0.685 UJ	0.745 UJ
Aroclor 1248	UG/L	0.63 UJ	0.625 U	0.59 UJ	0.595 UJ	0.685 UJ	0.745 UJ
Aroclor 1254	UG/L	0.63 UJ	0.625 U	0.59 UJ	0.595 UJ	0.685 UJ	0.745 UJ
Aroclor 1260	UG/L	0.63 UJ	0.625 U	0.59 UJ	0.595 UJ	0.685 UJ	0.745 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 SHALLOW GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW08-01	41-GW09-01	41-GW10-01	41-GW11-01	41-GW12-01	41-GW13-01
Laboratory Sample ID:	9402157-05A	9402161-01A	9402161-03A	9402165-01	9402157-01A	9402157-03A
Date Sampled:						
	<u>UNITS</u>					
<u>CHEMICAL SURETY</u>						
Acetophenone	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
Chloroacetophenone	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
Hydroxyacetophenone	UG/L	50 U	32.9 U	30.9 U	31.25 U	29.4 U
Bis(2'-chloroethyl)disulfide	UG/L	50 U	32.9 U	30.9 U	31.25 U	29.4 U
Bis(2'-chloroethyl)trisulfide	UG/L	50 U	32.9 U	30.9 U	31.25 U	29.4 U
1,4-Dithiane	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
1,4-Oxathiane	UG/L	10 U	6.6 U	6.2 U	6.25 U	5.9 U
<u>THIODIGLYCOL</u>						
Thiodiglycol	UG/L	12.5 U	12.5 U	12.5 U	12.5 U	12.5 U
<u>ORDNANCE</u>						
1,3,5-Trinitrobenzene		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Dinitrobenzene		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2,4,6-Trinitrotoluene		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2,4-Dinitrotoluene		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2,6-Dinitrotoluene		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2-Amino-4,6-dinitrotoluene		0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
2-Nitrotoluene		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
3-Nitrotoluene		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
4-Amino-2,6-dinitrotoluene		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
4-Nitrotoluene		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
HMX		0.625 U	0.625 U	0.625 U	0.625 U	0.625 U
Nitrobenzene		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
RDX		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Tetryl		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
<u>MIREX</u>						
Mirex		50 U	32.9 U	30.9 U	31.25 U	29.4 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 SHALLOW GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled:		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG-NORMAL UPPER 95% CONFIDENCE INTERVAL
	<u>UNITS</u>					
	<u>SEMIVOLATILES</u>					
	1,2-Dichlorobenzene	UG/L	ND	NA	NA	NA
	1,2,4-Trichlorobenzene	UG/L	ND	NA	NA	NA
	1,3-Dichlorobenzene	UG/L	ND	NA	NA	NA
	1,4-Dichlorobenzene	UG/L	ND	NA	NA	NA
	2-Chloronaphthalene	UG/L	ND	NA	NA	NA
	2-Chlorophenol	UG/L	ND	NA	NA	NA
	2-Methylnaphthalene	UG/L	ND	NA	NA	NA
	2-Methylphenol	UG/L	ND	NA	NA	NA
	2-Nitroaniline	UG/L	ND	NA	NA	NA
	2-Nitrophenol	UG/L	ND	NA	NA	NA
	2,2'-oxybis-(1-chloropropane)	UG/L	ND	NA	NA	NA
	2,4-Dichlorophenol	UG/L	ND	NA	NA	NA
	2,4-Dimethylphenol	UG/L	ND	NA	NA	NA
	2,4-Dinitrophenol	UG/L	ND	NA	NA	NA
	2,4-Dinitrotoluene	UG/L	ND	NA	NA	NA
	2,4,5-Trichlorophenol	UG/L	ND	NA	NA	NA
	2,4,6-Trichlorophenol	UG/L	ND	NA	NA	NA
	2,6-Dinitrotoluene	UG/L	ND	NA	NA	NA
	3-Nitroaniline	UG/L	ND	NA	NA	NA
	3,3'-Dichlorobenzidine	UG/L	ND	NA	NA	NA
	4-Bromophenyl-phenylether	UG/L	ND	NA	NA	NA
	4-Chloro-3-methylphenol	UG/L	ND	NA	NA	NA
	4-Chloroaniline	UG/L	ND	NA	NA	NA
	4-Chlorophenyl phenyl ether	UG/L	ND	NA	NA	NA
	4-Methylphenol	UG/L	ND	NA	NA	NA
	4-Nitroaniline	UG/L	ND	NA	NA	NA
	4-Nitrophenol	UG/L	ND	NA	NA	NA
	4,6-Dinitro-2-methylphenol	UG/L	ND	NA	NA	NA
	Acenaphthene	UG/L	ND	NA	NA	NA
	Acenaphthylene	UG/L	ND	NA	NA	NA
	Anthracene	UG/L	ND	NA	NA	NA
	Benzo[a]anthracene	UG/L	ND	NA	NA	NA
	Benzo[a]pyrene	UG/L	ND	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 SHALLOW GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled:	MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG-NORMAL UPPER 95% CONFIDENCE INTERVAL
<u>UNITS</u>					
<u>SEMIVOLATILES Cont.</u>					
Benzo[b]fluoranthene	UG/L	ND	NA	NA	NA
Benzo[g,h,i]perylene	UG/L	ND	NA	NA	NA
Benzo[k]fluoranthene	UG/L	ND	NA	NA	NA
bis(2-Chloroethoxy) methane	UG/L	ND	NA	NA	NA
bis(2-Chloroethyl) ether	UG/L	ND	NA	NA	NA
bis(2-Ethylhexyl)phthalate	UG/L	1 J	6.1	2.0	7.1
Butyl benzyl phthalate	UG/L	ND	NA	NA	NA
Carbazole	UG/L	ND	NA	NA	NA
Chrysene	UG/L	ND	NA	NA	NA
Dibenzofuran	UG/L	ND	NA	NA	NA
Dibenz[a,h]anthracene	UG/L	ND	NA	NA	NA
Diethylphthalate	UG/L	ND	NA	NA	NA
Dimethyl phthalate	UG/L	ND	NA	NA	NA
di-n-Butylphthalate	UG/L	2 J	5.4	2.5	6.7
di-n-Octylphthalate	UG/L	ND	NA	NA	NA
Fluoranthene	UG/L	ND	NA	NA	NA
Fluorene	UG/L	ND	NA	NA	NA
Hexachlorobenzene	UG/L	ND	NA	NA	NA
Hexachlorobutadiene	UG/L	ND	NA	NA	NA
Hexachlorocyclopentadiene	UG/L	ND	NA	NA	NA
Hexachloroethane	UG/L	ND	NA	NA	NA
Indeno[1,2,3-cd]pyrene	UG/L	ND	NA	NA	NA
Isophorone	UG/L	ND	NA	NA	NA
Naphthalene	UG/L	3 J	6.2	1.5	7.0
Nitrobenzene	UG/L	ND	NA	NA	NA
N-Nitroso-di-n-propylamine	UG/L	ND	NA	NA	NA
N-nitrosodiphenylamine	UG/L	ND	NA	NA	NA
Pentachlorophenol	UG/L	ND	NA	NA	NA
Phenanthrene	UG/L	ND	NA	NA	NA
Phenol	UG/L	ND	NA	NA	NA
Pyrene	UG/L	ND	NA	NA	NA

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
SHALLOW GROUNDWATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:					NORMAL	LOG-NORMAL
Laboratory Sample ID:		MAXIMUM	ARITHMETIC	STANDARD	UPPER 95%	UPPER 95%
Date Sampled:		DETECTED	MEAN	DEVIATION	CONFIDENCE	CONFIDENCE
	UNITS				INTERVAL	INTERVAL
VOLATILES						
Chloromethane	UG/L	ND	NA	NA	NA	NA
Bromomethane	UG/L	ND	NA	NA	NA	NA
Vinyl chloride	UG/L	ND	NA	NA	NA	NA
Chloroethane	UG/L	ND	NA	NA	NA	NA
Methylene chloride	UG/L	ND	NA	NA	NA	NA
Acetone	UG/L	ND	NA	NA	NA	NA
Carbon Disulfide	UG/L	ND	NA	NA	NA	NA
1,1-Dichloroethene	UG/L	ND	NA	NA	NA	NA
1,1-Dichloroethane	UG/L	ND	NA	NA	NA	NA
1,2-Dichloroethene(total)	UG/L	ND	NA	NA	NA	NA
Chloroform	UG/L	3.17 J	4.5	1.1	5.1	5.9
1,2-Dichloroethane	UG/L	ND	NA	NA	NA	NA
2-Butanone	UG/L	ND	NA	NA	NA	NA
1,1,1-Trichloroethane	UG/L	ND	NA	NA	NA	NA
Carbon tetrachloride	UG/L	ND	NA	NA	NA	NA
Bromodichloromethane	UG/L	1.05 J	4.7	1.1	5.3	6.5
1,2-Dichloropropane	UG/L	ND	NA	NA	NA	NA
cis-1,3-Dichloropropene	UG/L	ND	NA	NA	NA	NA
Trichloroethene	UG/L	ND	NA	NA	NA	NA
Dibromochloromethane	UG/L	1.95 J	4.7	0.9	5.2	5.6
1,1,2-Trichloroethane	UG/L	ND	NA	NA	NA	NA
Benzene	UG/L	2.67 J	4.8	0.7	5.2	5.3
trans-1,3-Dichloropropene	UG/L	ND	NA	NA	NA	NA
Bromoform	UG/L	1.33 J	4.7	1.1	5.2	6.1
4-Methyl-2-pentanone	UG/L	ND	NA	NA	NA	NA
2-Hexanone	UG/L	ND	NA	NA	NA	NA
Tetrachloroethene	UG/L	ND	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	UG/L	ND	NA	NA	NA	NA
Toluene	UG/L	ND	NA	NA	NA	NA
Chlorobenzene	UG/L	1.49 J	4.7	1.0	5.2	5.9
Ethylbenzene	UG/L	ND	NA	NA	NA	NA
Styrene	UG/L	ND	NA	NA	NA	NA
Xylenes (total)	UG/L	ND	NA	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 SHALLOW GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled:		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG-NORMAL UPPER 95% CONFIDENCE INTERVAL
	<u>UNITS</u>					
	<u>PESTICIDE/PCBS</u>					
	alpha-BHC	UG/L 0.01 J	0.03	0.01	0.04	0.04
	beta-BHC	UG/L 0.08 J	0.04	0.01	0.05	0.04
	delta-BHC	UG/L ND	NA	NA	NA	NA
	Lindane (gamma-BHC)	UG/L ND	NA	NA	NA	NA
	Heptachlor	UG/L ND	NA	NA	NA	NA
	Aldrin	UG/L ND	NA	NA	NA	NA
	Heptachlor epoxide	UG/L ND	NA	NA	NA	NA
	Endosulfan I	UG/L ND	NA	NA	NA	NA
	Dieldrin	UG/L ND	NA	NA	NA	NA
	4,4'-DDE	UG/L ND	NA	NA	NA	NA
	Endrin	UG/L ND	NA	NA	NA	NA
	Endosulfan II	UG/L ND	NA	NA	NA	NA
	4,4'-DDD	UG/L 0.01 NJ	0.06	0.02	0.07	0.10
	Endosulfan sulfate	UG/L ND	NA	NA	NA	NA
	4,4'-DDT	UG/L ND	NA	NA	NA	NA
	Methoxychlor	UG/L ND	NA	NA	NA	NA
	Endrin ketone	UG/L ND	NA	NA	NA	NA
	Endrin aldehyde	UG/L ND	NA	NA	NA	NA
	alpha-Chlordane	UG/L ND	NA	NA	NA	NA
	gamma-Chlordane	UG/L ND	NA	NA	NA	NA
	Toxaphene	UG/L ND	NA	NA	NA	NA
	Aroclor 1016	UG/L ND	NA	NA	NA	NA
	Aroclor 1221	UG/L ND	NA	NA	NA	NA
	Aroclor 1232	UG/L ND	NA	NA	NA	NA
	Aroclor 1242	UG/L ND	NA	NA	NA	NA
	Aroclor 1248	UG/L ND	NA	NA	NA	NA
	Aroclor 1254	UG/L ND	NA	NA	NA	NA
	Aroclor 1260	UG/L ND	NA	NA	NA	NA

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
SHALLOW GROUNDWATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled:		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG-NORMAL UPPER 95% CONFIDENCE INTERVAL
	<u>UNITS</u>					
	<u>CHEMICAL SURETY</u>					
	Acetophenone	ND	NA	NA	NA	NA
	Chloroacetophenone	ND	NA	NA	NA	NA
	Hydroxyacetophenone	ND	NA	NA	NA	NA
	Bis(2'-chloroethyl)disulfide	ND	NA	NA	NA	NA
	Bis(2'-chloroethyl)trisulfide	ND	NA	NA	NA	NA
	1,4-Dithiane	ND	NA	NA	NA	NA
	1,4-Oxathiane	ND	NA	NA	NA	NA
	<u>THIODIGLYCOL</u>					
	Thiodiglycol	ND	NA	NA	NA	NA
	<u>ORDNANCE</u>					
	1,3,5-Trinitrobenzene	ND	NA	NA	NA	NA
	1,3-Dinitrobenzene	ND	NA	NA	NA	NA
	2,4,6-Trinitrotoluene	ND	NA	NA	NA	NA
	2,4-Dinitrotoluene	ND	NA	NA	NA	NA
	2,6-Dinitrotoluene	ND	NA	NA	NA	NA
	2-Amino-4,6-dinitrotoluene	ND	NA	NA	NA	NA
	2-Nitrotoluene	ND	NA	NA	NA	NA
	3-Nitrotoluene	ND	NA	NA	NA	NA
	4-Amino-2,6-dinitrotoluene	ND	NA	NA	NA	NA
	4-Nitrotoluene	ND	NA	NA	NA	NA
	HMX	ND	NA	NA	NA	NA
	Nitrobenzene	ND	NA	NA	NA	NA
	RDX	ND	NA	NA	NA	NA
	Tetryl	ND	NA	NA	NA	NA
	<u>MIREX</u>					
	Mirex	ND	NA	NA	NA	NA

APPENDIX P.9

SITE 41 SHALLOW GROUNDWATER TOTAL METALS

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
SHALLOW GROUNDWATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL TOTAL METALS

Client Sample ID:	41-GW01-01	41-GW02-01	41-GW03-01	41-GW04-01	41-GW05-01	41-GW07-01
Laboratory Sample ID:	9402122-01	9402119-01	9402121-01	9402121-03	9402122-03	9402152-01A
Date Sampled:	02/14/94	02/14/94	02/14/94	02/15/94	02/14/94	

	UNITS	41-GW01-01	41-GW02-01	41-GW03-01	41-GW04-01	41-GW05-01	41-GW07-01
Aluminum	UG/L	42300.0 J	125000.0 J	58800.0 J	6390.0 J	20300.0 J	145000
Antimony	UG/L	3.80 UJ	3.80 UJ	3.80 UJ	3.80 UJ	3.80 UJ	3.8 UJ
Arsenic	UG/L	11.5 J	7.44 J	2.75 J	6.69 J	13.0 J	13.3
Barium	UG/L	189.0	465.0	310.0	55.2	55.7	717
Beryllium	UG/L	5.40	6.80	2.38	0.380 U	1.57	5.59
Cadmium	UG/L	1.60 U	6.26	1.60 U	1.60 U	9.96	9.08
Calcium	UG/L	42500.0	136000.0	20300.0	29300.0	66200.0	11100
Chromium	UG/L	64.2 J	244.0 J	99.1 J	10.5 J	54.4 J	166
Cobalt	UG/L	31.0	16.5	8.0 U	8.0 U	8.0 U	15.6 U
Copper	UG/L	31.8	83.6	25.9	8.2 U	27.0	28.5
Iron	UG/L	66200.0 J	80800.0 J	35300.0 J	54900.0 J	55300.0 J	71100 J
Lead	UG/L	24.6 J	19.8 J	6.12 J	4.82 J	23.7 J	94.6
Magnesium	UG/L	4010.0	31000.0	2500.0	2150.0	2970.0	5960
Manganese	UG/L	951.0	572.0	72.4	226.0	203.0	167
Mercury	UG/L	0.085 U	0.922	0.092 U	0.088 U	0.079 U	0.08 U
Nickel	UG/L	14.4 UJ	41.4 J	36.1 J	14.4 UJ	38.0 J	88.7
Potassium	UG/L	3080	21300	3080	3080	3080	4780
Selenium	UG/L	0.80 U	3.66	0.80 U	0.80 U	1.66	7.74 J
Silver	UG/L	0.80 U	0.80 U	0.80 U	24.8	0.80 U	
Sodium	UG/L	5830	28600	2080	5510	5940	11700
Thallium	UG/L	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.5 U
Vanadium	UG/L	77.1 J	204.0 J	83.6 J	10.2 UJ	38.1 J	150
Zinc	UG/L	124.0 J	146.0 J	130.0 J	25.7 J	173.0 J	276
Total Cyanide	UG/L	2.50 U	2.50 U	2.50 U	2.50 U	2.50 U	2.5 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
SHALLOW GROUNDWATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL TOTAL METALS

Client Sample ID:	41-GW08-01	41-GW09-01	41-GW10-01	41-GW11-01	41-GW12-01	41-GW13-01
Laboratory Sample ID:	9402157-05A	9402161-01A	9402161-03A	9402165-01	9402157-01A	9402157-03A
Date Sampled:						

	<u>UNITS</u>						
Aluminum	UG/L	13800	26800	81900	75700 J	65900	38100
Antimony	UG/L	3.8 UJ	3.8 UJ	3.8 UJ	17.9 J	3.8 U	3.8 UJ
Arsenic	UG/L	2.4 J	7.66	36.3	24.2	8.98	9.7
Barium	UG/L	139	200	248	999	356	382
Beryllium	UG/L	1.605 U	1.605 U	7.41	1.605 U	42.8	4.53
Cadmium	UG/L	2.1 U	2.1 U	16.3	110	25.1	4.6
Calcium	UG/L	31400	8750	250000	130000	828000	14200
Chromium	UG/L	17.3	36.6	176	149	151	54.5
Cobalt	UG/L	15.6 U	15.6 U	37.8	21.3 U	117	40.1
Copper	UG/L	11.95 U	11.95 U	26.3	1030	11.95 U	11.95 U
Iron	UG/L	13600 J	31200 J	124000 J	155000	160000 J	40700 J
Lead	UG/L	32.6	33.8	73.6	9340	22.1	29.1
Magnesium	UG/L	2280	3570	15300	22700	11900	4660
Manganese	UG/L	56.6	212	455	2110	1070	80.3
Mercury	UG/L	0.0845 U	0.0815 U	0.0735 U	0.0875 U	0.067 U	0.0825 U
Nickel	UG/L	15.6 U	15.6 U	68.1	137	111	32.1
Potassium	UG/L	1340	2900	2750	26800	1960	18100
Selenium	UG/L	0.8 UJ	2.12 J	0.8 UJ	0.8 UJ	0.8 UJ	3.49 J
Silver	UG/L				8.52 J		63.4 J
Sodium	UG/L	3190	18000	40200	27900	8480	7260
Thallium	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Vanadium	UG/L	25.9	46.7	199	244	212	72.2
Zinc	UG/L	56.5	27.8	173	5180	450	178
Total Cyanide	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
SHALLOW GROUNDWATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL TOTAL METALS

Client Sample ID: Laboratory Sample ID: Date Sampled:	MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG-NORMAL UPPER 95% CONFIDENCE INTERVAL	
	<u>UNITS</u>					
Aluminum	UG/L	145000	58332.5	43336.6	80800.8	145891.7
Antimony	UG/L	17.9 J	5.0	4.1	7.1	6.4
Arsenic	UG/L	36.3	12.0	9.5	16.9	22.7
Barium	UG/L	999	343.0	277.7	486.9	774.9
Beryllium	UG/L	42.8	6.8	11.6	12.8	22.1
Cadmium	UG/L	110	15.9	30.5	31.7	69.2
Calcium	UG/L	828000	130645.8	231105.4	250464.9	645791.4
Chromium	UG/L	244 J	101.9	73.9	140.2	275.5
Cobalt	UG/L	117	27.9	30.2	43.5	50.4
Copper	UG/L	1030	109.1	290.7	259.8	302.2
Iron	UG/L	160000 J	74008.3	48028.0	98909.0	134389.9
Lead	UG/L	9340	808.7	2686.8	2201.7	4381.9
Magnesium	UG/L	31000	9083.3	9404.4	13959.1	20738.9
Manganese	UG/L	2110	514.6	605.9	828.7	1794.4
Mercury	UG/L	0.922	0.2	0.2	0.3	NA
Nickel	UG/L	137	51.0	41.3	72.4	103.7
Potassium	UG/L	26800	7687.5	8907.5	12305.7	17859.6
Selenium	UG/L	7.74 J	2.0	2.1	3.1	3.8
Silver	UG/L	63.4 J	14.3	23.4	31.5	3951.9
Sodium	UG/L	40200	13724.2	12254.2	20077.5	32307.0
Thallium	UG/L	ND	NA	NA	NA	NA
Vanadium	UG/L	244	113.6	83.1	156.7	308.7
Zinc	UG/L	5180	578.3	1453.7	1332.0	2148.0
Total Cyanide	UG/L	ND	NA	NA	NA	NA

APPENDIX P.10
SITE 41 SHALLOW GROUNDWATER DISSOLVED METALS

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 SHALLOW GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL DISSOLVED METALS

Client Sample ID:	41-GW01D-01	41-GW02D-01	41-GW03D-01	41-GW04D-01	41-GW05D-01	41-GW07D-01
Laboratory Sample ID:	9402122-02	9402119-02	9402121-02	9402121-04	9402122-04	9402152-02A
Date Sampled:	02/14/94	02/14/94	02/14/94	02/15/94	02/14/94	

	UNITS						
Aluminum	UG/L	69.5 U	69.5 U	69.5 U	69.5 U	69.5 U	69.5 U
Antimony	UG/L	3.80 U	3.80 U	3.80 U	3.80 U	3.80 U	19.1
Arsenic	UG/L	1.10 U	2.22	1.10 U	4.68	1.10 U	1.1 U
Barium	UG/L	12.6	103.0	6.2 U	44.4	6.2 U	49.2
Beryllium	UG/L	0.380 U	0.380 U	0.380 U	0.380 U	0.380 U	1.605 U
Cadmium	UG/L	1.60 U	1.60 U	1.60 U	1.60 U	1.60 U	2.1 U
Calcium	UG/L	28300.0	137000.0	12200.0	32600.0	54000.0	4710
Chromium	UG/L	4.16 U	4.16 U	4.16 U	4.16 U	4.16 U	4.8 U
Cobalt	UG/L	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	15.6 U
Copper	UG/L	8.2 U	8.2 U	8.2 U	8.2 U	8.2 U	11.95 U
Iron	UG/L	27.5 U	23700.0	27.5 U	42400.0	27.5 U	1630 J
Lead	UG/L	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.5 U
Magnesium	UG/L	1910.0	29200.0	366.0	2540.0	1370.0	1750
Manganese	UG/L	129.0	469.0	3.54 U	266.0	21.2	43.2
Mercury	UG/L	0.080 U	0.065 U	0.091 U	0.100 U	0.081 U	0.07 U
Nickel	UG/L	14.4 U	14.4 U	14.4 U	14.4 U	14.4 U	15.6 U
Potassium	UG/L	964	19300	382 U	3970	1630	1340
Selenium	UG/L	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U	0.8 UJ
Silver	UG/L	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U	
Sodium	UG/L	6260	34300	2500	6160	6260	11900
Thallium	UG/L	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.5 U
Vanadium	UG/L	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U
Zinc	UG/L	5.3 U	5.3 U	5.3 U	5.3 U	5.3 U	7.9 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
SHALLOW GROUNDWATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL DISSOLVED METALS

Client Sample ID:	41-GW08D-01	41-GW09D-01	41-GW10D-01	41-GW11D-01	41-GW12D-01	41-GW13D-01
Laboratory Sample ID:	9402157-06A	9402161-02A	9402161-04A	9402165-02	9402157-02A	9402157-04A
Date Sampled:						

	UNITS						
Aluminum	UG/L	69.5 U	69.5 U	69.5 U	69.5 U	69.5 U	69.5 U
Antimony	UG/L	17	3.8 U	11.4	14.9	12.8	3.8 U
Arsenic	UG/L	1.1 U	1.1 U	1.1 UJ	1.1 U	1.1 U	1.1 U
Barium	UG/L	23.7	44.5	40.3	451	22.5	40.8
Beryllium	UG/L	1.605 U	1.605 U	1.605 U	1.605 U	1.605 U	1.605 U
Cadmium	UG/L	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
Calcium	UG/L	21200	7150	99600	111000	91100	8620
Chromium	UG/L	4.75 U	4.8 U	4.8 U	4.8 U	4.75 U	4.75 U
Cobalt	UG/L	15.6 U	15.6 U	15.6 U	21.3 U	15.6 U	15.6 U
Copper	UG/L	11.95 U	11.95 U	11.95 U	11.95 U	11.95 U	11.95 U
Iron	UG/L	35.55 U	35.55 U	35.55 U	40700	35.55 U	313 J
Lead	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Magnesium	UG/L	1940	2730	8410	22100	3530	3460
Manganese	UG/L	29.3	138	45.3	521	342	39.3
Mercury	UG/L	0.0755 U	0.086 U	0.076 U	0.0765 U	0.084 U	0.079 U
Nickel	UG/L	15.6 U	15.6 U	15.6 U	15.6 U	15.6 U	15.6 U
Potassium	UG/L	381.5 U	2010	381.5 U	29400	381.5 U	1070
Selenium	UG/L	0.8 UJ	0.8 UJ	0.8 UJ	0.8 U	0.8 UJ	0.8 UJ
Silver	UG/L				0.8 U		
Sodium	UG/L	4650	19400	33600	30400	7800	7070
Thallium	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Vanadium	UG/L	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U
Zinc	UG/L	5.3 U	7.9 U	7.9 U	125	7.9 U	47

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
SHALLOW GROUNDWATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL DISSOLVED METALS

Client Sample ID:					NORMAL UPPER 95%	LOG-NORMAL UPPER 95%
Laboratory Sample ID:	MAXIMUM	ARITHMETIC	STANDARD		CONFIDENCE	CONFIDENCE
Date Sampled:	DETECTED	MEAN	DEVIATION		INTERVAL	INTERVAL
	<u>UNITS</u>					
Aluminum	UG/L	ND	NA	NA	NA	NA
Antimony	UG/L	19.1	8.5	6.1	11.6	14.9
Arsenic	UG/L	4.68	1.5	1.1	2.0	1.9
Barium	UG/L	451	70.4	122.7	134.0	223.9
Beryllium	UG/L	ND	NA	NA	NA	NA
Cadmium	UG/L	ND	NA	NA	NA	NA
Calcium	UG/L	137000	50623.3	46789.9	74882.1	195456.8
Chromium	UG/L	ND	NA	NA	NA	NA
Cobalt	UG/L	ND	NA	NA	NA	NA
Copper	UG/L	ND	NA	NA	NA	NA
Iron	UG/L	42400	9080.6	16594.7	17684.3	91393654.8
Lead	UG/L	ND	NA	NA	NA	NA
Magnesium	UG/L	29200	6608.8	9236.7	11397.7	23103.7
Manganese	UG/L	521	170.6	184.0	266.0	1394.2
Mercury	UG/L	ND	NA	NA	NA	NA
Nickel	UG/L	ND	NA	NA	NA	NA
Potassium	UG/L	29400	5100.8	9300.7	9922.9	26891.4
Selenium	UG/L	ND	NA	NA	NA	NA
Silver	UG/L	1.6 R	NA	NA	NA	NA
Sodium	UG/L	34300	14191.7	12006.7	20416.6	29775.8
Thallium	UG/L	ND	NA	NA	NA	NA
Vanadium	UG/L	ND	NA	NA	NA	NA
Zinc	UG/L	125	19.6	35.2	37.9	44.8

APPENDIX P.11
SITE 41 DEEP GROUNDWATER ORGANICS

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DEEP GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW04DW-01	41-GW06DW-01	41-GW07DW-01	41-GW09DW-01	41-GW11DW-01	41-GW12DW-01
Laboratory Sample ID:	9402159-01A	9402163-03	9402162-03	9402162-01	9402163-01	9402159-03A
Date Sampled:						

	<u>UNITS</u>					
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ 6.75 U
1,2,4-Trichlorobenzene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ 6.75 U
1,3-Dichlorobenzene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ 6.75 U
1,4-Dichlorobenzene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ 6.75 U
2-Chloronaphthalene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ 6.75 U
2-Chlorophenol	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ 6.75 U
2-Methylnaphthalene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ 6.75 U
2-Methylphenol	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ 6.75 U
2-Nitroaniline	UG/L	15.6 U	17.85 U	17.5 U	16.6 U	25 UJ 16.9 U
2-Nitrophenol	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ 6.75 U
2,2'-oxybis-(1-chloropropane)	UG/L	6.25 U	7.15 UJ	7 U	6.65 U	10 UJ 6.75 U
2,4-Dichlorophenol	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ 6.75 U
2,4-Dimethylphenol	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ 6.75 U
2,4-Dinitrophenol	UG/L	15.6 U	17.85 U	17.5 U	16.6 U	25 UJ 16.9 U
2,4-Dinitrotoluene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ 6.75 U
2,4,5-Trichlorophenol	UG/L	15.6 U	17.85 U	17.5 U	16.6 U	25 UJ 16.9 U
2,4,6-Trichlorophenol	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ 6.75 U
2,6-Dinitrotoluene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ 6.75 U
3-Nitroaniline	UG/L	15.6 U	17.85 U	17.5 U	16.6 U	25 UJ 16.9 U
3,3'-Dichlorobenzidine	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ 6.75 U
4-Bromophenyl-phenylether	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ 6.75 U
4-Chloro-3-methylphenol	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ 6.75 U
4-Chloroaniline	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ 6.75 U
4-Chlorophenyl phenyl ether	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ 6.75 U
4-Methylphenol	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ 6.75 U
4-Nitroaniline	UG/L	15.6 U	17.85 UJ	17.5 U	16.6 U	25 UJ 16.9 U
4-Nitrophenol	UG/L	15.6 U	17.85 U	17.5 U	16.6 U	25 UJ 16.9 U
4,6-Dinitro-2-methylphenol	UG/L	15.6 U	17.85 U	17.5 U	16.6 U	25 UJ 16.9 U
Acenaphthene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ 6.75 U
Acenaphthylene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ 6.75 U
Anthracene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ 6.75 U
Benzo[a]anthracene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ 6.75 U
Benzo[a]pyrene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ 6.75 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DEEP GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW04DW-01	41-GW06DW-01	41-GW07DW-01	41-GW09DW-01	41-GW11DW-01	41-GW12DW-01
Laboratory Sample ID:	9402159-01A	9402163-03	9402162-03	9402162-01	9402163-01	9402159-03A
Date Sampled:						

UNITS

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
Benzo[g,h,i]perylene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
Benzo[k]fluoranthene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
bis(2-Chloroethoxy) methane	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
bis(2-Chloroethyl) ether	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
bis(2-Ethylhexyl)phthalate	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
Butyl benzyl phthalate	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
Carbazole	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
Chrysene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
Dibenzofuran	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
Dibenz[a,h]anthracene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
Diethylphthalate	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
Dimethyl phthalate	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
di-n-Butylphthalate	UG/L	6.25 U	7 U	7 U	6.5 U	10 UJ	7 U
di-n-Octylphthalate	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
Fluoranthene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
Fluorene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
Hexachlorobenzene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
Hexachlorobutadiene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
Hexachlorocyclopentadiene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
Hexachloroethane	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
Indeno[1,2,3-cd]pyrene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
Isophorone	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
Naphthalene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
Nitrobenzene	UG/L	6.25 U	7.15 U	7 U	4 J	10 UJ	6.75 U
N-Nitroso-di-n-propylamine	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
N-nitrosodiphenylamine	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
Pentachlorophenol	UG/L	15.6 U	17.85 U	17.5 U	16.6 U	17.35 UJ	16.9 U
Phenanthrene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
Phenol	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
Pyrene	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DEEP GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW04DW-01	41-GW06DW-01	41-GW07DW-01	41-GW09DW-01	41-GW11DW-01	41-GW12DW-01
Laboratory Sample ID:	9402159-01A	9402163-03	9402162-03	9402162-01	9402163-01	9402159-03A
Date Sampled:						

	<u>UNITS</u>						
<u> VOLATILES</u>							
Chloromethane	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Bromomethane	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Methylene chloride	UG/L	5 U	5 U	5 U	6.4 U	5 U	5 U
Acetone	UG/L	5 UJ	5 U	5 U	5 U	5 U	6.75 UJ
Carbon Disulfide	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethene(total)	UG/L	5 U	5 U	5 U	5 U	1.22 J	5 U
Chloroform	UG/L	5 U	5 U	5 U	5 U	5 U	1.02 J
1,2-Dichloroethane	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	UG/L	5 U	5 U	5 U	5 U	5 U	1.27 J
1,1,2-Trichloroethane	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Xylenes (total)	UG/L	5 U	5 U	5 U	5 U	5 U	5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DEEP GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW04DW-01	41-GW06DW-01	41-GW07DW-01	41-GW09DW-01	41-GW11DW-01	41-GW12DW-01
Laboratory Sample ID:	9402159-01A	9402163-03	9402162-03	9402162-01	9402163-01	9402159-03A
Date Sampled:						

	UNITS						
<u>PESTICIDE/PCBS</u>							
alpha-BHC	UG/L	0.03 UJ	0.031 UJ	0.033 UJ	0.031 UJ	0.0305 UJ	0.0385 UJ
beta-BHC	UG/L	0.06 NJ	0.031 U	0.033 U	0.04 J	0.0305 U	0.0385 UJ
delta-BHC	UG/L	0.03 UJ	0.031 UJ	0.033 UJ	0.031 UJ	0.0305 UJ	0.0385 UJ
Lindane (gamma-BHC)	UG/L	0.03 UJ	0.031 U	0.033 U	0.031 U	0.0305 U	0.0385 UJ
Heptachlor	UG/L	0.03 UJ	0.031 U	0.033 U	0.031 U	0.0305 U	0.04 UJ
Aldrin	UG/L	0.03 UJ	0.031 U	0.033 U	0.031 U	0.0305 U	0.0385 UJ
Heptachlor epoxide	UG/L	0.03 UJ	0.031 U	0.033 U	0.031 U	0.0305 U	0.0385 UJ
Endosulfan I	UG/L	0.03 UJ	0.031 U	0.033 U	0.031 U	0.0305 U	0.0385 UJ
Dieldrin	UG/L	0.0595 UJ	0.0615 U	0.066 U	0.0625 U	0.061 U	0.077 UJ
4,4'-DDE	UG/L	0.0595 UJ	0.0615 U	0.066 U	0.0625 U	0.061 U	0.077 UJ
Endrin	UG/L	0.0595 UJ	0.0615 U	0.066 U	0.0625 U	0.061 U	0.077 UJ
Endosulfan II	UG/L	0.0595 UJ	0.0615 U	0.066 U	0.0625 U	0.061 U	0.077 UJ
4,4'-DDD	UG/L	0.0595 UJ	0.0615 U	0.066 U	0.0625 U	0.061 U	0.077 UJ
Endosulfan sulfate	UG/L	0.0595 UJ	0.0615 U	0.066 U	0.0625 U	0.061 U	0.077 UJ
4,4'-DDT	UG/L	0.0595 UJ	0.0615 U	0.066 U	0.0625 U	0.061 U	0.077 UJ
Methoxychlor	UG/L	0.2975 UJ	0.3085 U	0.329 U	0.3125 U	0.305 U	0.3845 UJ
Endrin ketone	UG/L	0.0595 UJ	0.0615 U	0.066 U	0.0625 U	0.061 U	0.077 UJ
Endrin aldehyde	UG/L	0.0595 UJ	0.0615 U	0.066 U	0.0625 U	0.061 U	0.077 UJ
alpha-Chlordane	UG/L	0.03 UJ	0.031 U	0.033 U	0.031 U	0.0305 U	0.0385 UJ
gamma-Chlordane	UG/L	0.03 UJ	0.031 U	0.033 U	0.031 U	0.0305 U	0.0385 UJ
Toxaphene	UG/L	2.975 UJ	3.085 U	3.29 U	3.125 U	3.05 U	3.845 UJ
Aroclor 1016	UG/L	0.595 UJ	0.615 U	0.66 U	0.625 U	0.61 U	0.77 UJ
Aroclor 1221	UG/L	1.19 UJ	1.235 U	1.315 U	1.25 U	1.22 U	1.54 UJ
Aroclor 1232	UG/L	0.595 UJ	0.615 U	0.66 U	0.625 U	0.61 U	0.77 UJ
Aroclor 1242	UG/L	0.595 UJ	0.615 U	0.66 U	0.625 U	0.61 U	0.77 UJ
Aroclor 1248	UG/L	0.595 UJ	0.615 U	0.66 U	0.625 U	0.61 U	0.77 UJ
Aroclor 1254	UG/L	0.595 UJ	0.615 U	0.66 U	0.625 U	0.61 U	0.77 UJ
Aroclor 1260	UG/L	0.595 UJ	0.615 U	0.66 U	0.625 U	0.61 U	0.77 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DEEP GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-GW04DW-01	41-GW06DW-01	41-GW07DW-01	41-GW09DW-01	41-GW11DW-01	41-GW12DW-01
Laboratory Sample ID:	9402159-01A	9402163-03	9402162-03	9402162-01	9402163-01	9402159-03A
Date Sampled:						

UNITS

CHEMICAL SURETY

Acetophenone	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
Chloroacetophenone	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
Hydroxyacetophenone	UG/L	31.25 U	35.7 U	35 U	33.25 U	34.7 UJ	33.8 U
Bis(2'-chloroethyl)disulfide	UG/L	31.25 U	35.7 U	35 U	33.25 U	34.7 U	33.8 U
Bis(2'-chloroethyl)trisulfide	UG/L	31.25 U	35.7 U	35 U	33.25 U	34.7 U	33.8 U
1,4-Dithiane	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U
1,4-Oxathiane	UG/L	6.25 U	7.15 U	7 U	6.65 U	10 UJ	6.75 U

THIODIGLYCOL

Thiodiglycol	UG/L	12.5 U	12.5 U	12.5 U	12.5 U	12.5 U	12.5 U
--------------	------	--------	--------	--------	--------	--------	--------

ORDNANCE

1,3,5-Trinitrobenzene		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-Dinitrobenzene		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2,4,6-Trinitrotoluene		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2,4-Dinitrotoluene		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2,6-Dinitrotoluene		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
2-Amino-4,6-dinitrotoluene		0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
2-Nitrotoluene		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
3-Nitrotoluene		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
4-Amino-2,6-dinitrotoluene		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
4-Nitrotoluene		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
HMX		0.625 U	0.625 U	0.625 U	0.625 U	0.625 U	0.625 U
Nitrobenzene		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
RDX		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Tetryl		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U

MIREX

Mirex		31.25 U	35.7 U	35 U	33.25 U	34.7 U	33.8 U
-------	--	---------	--------	------	---------	--------	--------

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DEEP GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled:		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG-NORMAL UPPER 95% CONFIDENCE INTERVAL
	<u>UNITS</u>					
	<u>SEMIVOLATILES</u>					
	1,2-Dichlorobenzene	UG/L	ND	NA	NA	NA
	1,2,4-Trichlorobenzene	UG/L	ND	NA	NA	NA
	1,3-Dichlorobenzene	UG/L	ND	NA	NA	NA
	1,4-Dichlorobenzene	UG/L	ND	NA	NA	NA
	2-Chloronaphthalene	UG/L	ND	NA	NA	NA
	2-Chlorophenol	UG/L	ND	NA	NA	NA
	2-Methylnaphthalene	UG/L	ND	NA	NA	NA
	2-Methylphenol	UG/L	ND	NA	NA	NA
	2-Nitroaniline	UG/L	ND	NA	NA	NA
	2-Nitrophenol	UG/L	ND	NA	NA	NA
	2,2'-oxybis-(1-chloropropane)	UG/L	ND	NA	NA	NA
	2,4-Dichlorophenol	UG/L	ND	NA	NA	NA
	2,4-Dimethylphenol	UG/L	ND	NA	NA	NA
	2,4-Dinitrophenol	UG/L	ND	NA	NA	NA
	2,4-Dinitrotoluene	UG/L	ND	NA	NA	NA
	2,4,5-Trichlorophenol	UG/L	ND	NA	NA	NA
	2,4,6-Trichlorophenol	UG/L	ND	NA	NA	NA
	2,6-Dinitrotoluene	UG/L	ND	NA	NA	NA
	3-Nitroaniline	UG/L	ND	NA	NA	NA
	3,3'-Dichlorobenzidine	UG/L	ND	NA	NA	NA
	4-Bromophenyl-phenylether	UG/L	ND	NA	NA	NA
	4-Chloro-3-methylphenol	UG/L	ND	NA	NA	NA
	4-Chloroaniline	UG/L	ND	NA	NA	NA
	4-Chlorophenyl phenyl ether	UG/L	ND	NA	NA	NA
	4-Methylphenol	UG/L	ND	NA	NA	NA
	4-Nitroaniline	UG/L	ND	NA	NA	NA
	4-Nitrophenol	UG/L	ND	NA	NA	NA
	4,6-Dinitro-2-methylphenol	UG/L	ND	NA	NA	NA
	Acenaphthene	UG/L	ND	NA	NA	NA
	Acenaphthylene	UG/L	ND	NA	NA	NA
	Anthracene	UG/L	ND	NA	NA	NA
	Benzo[a]anthracene	UG/L	ND	NA	NA	NA
	Benzo[a]pyrene	UG/L	ND	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DEEP GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled:		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG-NORMAL UPPER 95% CONFIDENCE INTERVAL
	<u>UNITS</u>					
<u>SEMIVOLATILES Cont.</u>						
	Benzo[b]fluoranthene	UG/L	ND	NA	NA	NA
	Benzo[g,h,i]perylene	UG/L	ND	NA	NA	NA
	Benzo[k]fluoranthene	UG/L	ND	NA	NA	NA
	bis(2-Chloroethoxy) methane	UG/L	ND	NA	NA	NA
	bis(2-Chloroethyl) ether	UG/L	ND	NA	NA	NA
	bis(2-Ethylhexyl)phthalate	UG/L	ND	NA	NA	NA
	Butyl benzyl phthalate	UG/L	ND	NA	NA	NA
	Carbazole	UG/L	ND	NA	NA	NA
	Chrysene	UG/L	ND	NA	NA	NA
	Dibenzofuran	UG/L	ND	NA	NA	NA
	Dibenz[a,h]anthracene	UG/L	ND	NA	NA	NA
	Diethylphthalate	UG/L	ND	NA	NA	NA
	Dimethyl phthalate	UG/L	ND	NA	NA	NA
	di-n-Butylphthalate	UG/L	ND	NA	NA	NA
	di-n-Octylphthalate	UG/L	ND	NA	NA	NA
	Fluoranthene	UG/L	ND	NA	NA	NA
	Fluorene	UG/L	ND	NA	NA	NA
	Hexachlorobenzene	UG/L	ND	NA	NA	NA
	Hexachlorobutadiene	UG/L	ND	NA	NA	NA
	Hexachlorocyclopentadiene	UG/L	ND	NA	NA	NA
	Hexachloroethane	UG/L	ND	NA	NA	NA
	Indeno[1,2,3-cd]pyrene	UG/L	ND	NA	NA	NA
	Isophorone	UG/L	ND	NA	NA	NA
	Naphthalene	UG/L	ND	NA	NA	NA
	Nitrobenzene	UG/L	4 J	6.9	1.9	8.4
	N-Nitroso-di-n-propylamine	UG/L	ND	NA	NA	NA
	N-nitrosodiphenylamine	UG/L	ND	NA	NA	NA
	Pentachlorophenol	UG/L	ND	NA	NA	NA
	Phenanthrene	UG/L	ND	NA	NA	NA
	Phenol	UG/L	ND	NA	NA	NA
	Pyrene	UG/L	ND	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DEEP GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled:		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG-NORMAL UPPER 95% CONFIDENCE INTERVAL
	<u>UNITS</u>					
	<u>VOLATILES</u>					
	Chloromethane	ND	NA	NA	NA	NA
	Bromomethane	ND	NA	NA	NA	NA
	Vinyl chloride	ND	NA	NA	NA	NA
	Chloroethane	ND	NA	NA	NA	NA
	Methylene chloride	ND	NA	NA	NA	NA
	Acetone	ND	NA	NA	NA	NA
	Carbon Disulfide	ND	NA	NA	NA	NA
	1,1-Dichloroethene	ND	NA	NA	NA	NA
	1,1-Dichloroethane	ND	NA	NA	NA	NA
	1,2-Dichloroethene(total)	1.22 J	4.4	1.5	5.6	10.1
	Chloroform	1.02 J	4.3	1.6	5.7	12.3
	1,2-Dichloroethane	ND	NA	NA	NA	NA
	2-Butanone	ND	NA	NA	NA	NA
	1,1,1-Trichloroethane	ND	NA	NA	NA	NA
	Carbon tetrachloride	ND	NA	NA	NA	NA
	Bromodichloromethane	ND	NA	NA	NA	NA
	1,2-Dichloropropane	ND	NA	NA	NA	NA
	cis-1,3-Dichloropropene	ND	NA	NA	NA	NA
	Trichloroethene	ND	NA	NA	NA	NA
	Dibromochloromethane	1.27 J	4.4	1.5	5.6	9.8
	1,1,2-Trichloroethane	ND	NA	NA	NA	NA
	Benzene	ND	NA	NA	NA	NA
	trans-1,3-Dichloropropene	ND	NA	NA	NA	NA
	Bromoform	ND	NA	NA	NA	NA
	4-Methyl-2-pentanone	ND	NA	NA	NA	NA
	2-Hexanone	ND	NA	NA	NA	NA
	Tetrachloroethene	ND	NA	NA	NA	NA
	1,1,2,2-Tetrachloroethane	ND	NA	NA	NA	NA
	Toluene	ND	NA	NA	NA	NA
	Chlorobenzene	ND	NA	NA	NA	NA
	Ethylbenzene	ND	NA	NA	NA	NA
	Styrene	ND	NA	NA	NA	NA
	Xylenes (total)	ND	NA	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DEEP GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled:		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG-NORMAL UPPER 95% CONFIDENCE INTERVAL
	<u>UNITS</u>					
	<u>PESTICIDE/PCBS</u>					
	alpha-BHC	ND	NA	NA	NA	NA
	beta-BHC	0.06 NJ	0.04	0.01	0.05	0.05
	delta-BHC	ND	NA	NA	NA	NA
	Lindane (gamma-BHC)	ND	NA	NA	NA	NA
	Heptachlor	ND	NA	NA	NA	NA
	Aldrin	ND	NA	NA	NA	NA
	Heptachlor epoxide	ND	NA	NA	NA	NA
	Endosulfan I	ND	NA	NA	NA	NA
	Dieldrin	ND	NA	NA	NA	NA
	4,4'-DDE	ND	NA	NA	NA	NA
	Endrin	ND	NA	NA	NA	NA
	Endosulfan II	ND	NA	NA	NA	NA
	4,4'-DDD	ND	NA	NA	NA	NA
	Endosulfan sulfate	ND	NA	NA	NA	NA
	4,4'-DDT	ND	NA	NA	NA	NA
	Methoxychlor	ND	NA	NA	NA	NA
	Endrin ketone	ND	NA	NA	NA	NA
	Endrin aldehyde	ND	NA	NA	NA	NA
	alpha-Chlordane	ND	NA	NA	NA	NA
	gamma-Chlordane	ND	NA	NA	NA	NA
	Toxaphene	ND	NA	NA	NA	NA
	Aroclor 1016	ND	NA	NA	NA	NA
	Aroclor 1221	ND	NA	NA	NA	NA
	Aroclor 1232	ND	NA	NA	NA	NA
	Aroclor 1242	ND	NA	NA	NA	NA
	Aroclor 1248	ND	NA	NA	NA	NA
	Aroclor 1254	ND	NA	NA	NA	NA
	Aroclor 1260	ND	NA	NA	NA	NA

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
DEEP GROUNDWATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:					NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG-NORMAL UPPER 95% CONFIDENCE INTERVAL
Laboratory Sample ID:		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION		
Date Sampled:	UNITS					
CHEMICAL SURETY						
Acetophenone	UG/L	ND	NA	NA	NA	NA
Chloroacetophenone	UG/L	ND	NA	NA	NA	NA
Hydroxyacetophenone	UG/L	ND	NA	NA	NA	NA
Bis(2'-chloroethyl)disulfide	UG/L	ND	NA	NA	NA	NA
Bis(2'-chloroethyl)trisulfide	UG/L	ND	NA	NA	NA	NA
1,4-Dithiane	UG/L	ND	NA	NA	NA	NA
1,4-Oxathiane	UG/L	ND	NA	NA	NA	NA
THIODIGLYCOL						
Thiodiglycol	UG/L	ND	NA	NA	NA	NA
ORDNANCE						
1,3,5-Trinitrobenzene		ND	NA	NA	NA	NA
1,3-Dinitrobenzene		ND	NA	NA	NA	NA
2,4,6-Trinitrotoluene		ND	NA	NA	NA	NA
2,4-Dinitrotoluene		ND	NA	NA	NA	NA
2,6-Dinitrotoluene		ND	NA	NA	NA	NA
2-Amino-4,6-dinitrotoluene		ND	NA	NA	NA	NA
2-Nitrotoluene		ND	NA	NA	NA	NA
3-Nitrotoluene		ND	NA	NA	NA	NA
4-Amino-2,6-dinitrotoluene		ND	NA	NA	NA	NA
4-Nitrotoluene		ND	NA	NA	NA	NA
HMX		ND	NA	NA	NA	NA
Nitrobenzene		ND	NA	NA	NA	NA
RDX		ND	NA	NA	NA	NA
Tetryl		0.5 R	NA	NA	NA	NA
MIREX						
Mirex		ND	NA	NA	NA	NA

APPENDIX P.12
SITE 41 DEEP GROUNDWATER TOTAL METALS

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
DEEP GROUNDWATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL TOTAL METALS

Client Sample ID:	41-GW04DW-01	41-GW06DW-01	41-GW07DW-01	41-GW09DW-01	41-GW11DW-01	41-GW12DW-01
Laboratory Sample ID:	9402159-01A	9402163-03	9402162-03	9402162-01	9402163-01	9402159-03A
Date Sampled:						

	UNITS						
Aluminum	UG/L	269	12600 J	1770 J	2490 J	247 J	1880
Antimony	UG/L	3.8 U					3.8 U
Arsenic	UG/L	3.71 J	9.58	4.79	1.1 U	1.1 U	1.1 U
Barium	UG/L	22.6	186	42.7	39.8	92.1	53
Beryllium	UG/L	1.605 U	1.605 U	1.605 U	1.605 U	1.605 U	1.605 U
Cadmium	UG/L	2.1 U	4.7	2.1 U	2.1 U	2.1 U	2.1 U
Calcium	UG/L	107000	434000	172000	74300	224000	93300
Chromium	UG/L	4.8 U	40.5	4.8 U	4.8 U	4.8 U	12.6
Cobalt	UG/L	15.6 U	21.3 U	21.3 U	21.3 U	21.3 U	15.6 U
Copper	UG/L	11.95 U	11.95 U	11.95 U	11.95 U	11.95 U	11.95 U
Iron	UG/L	691 J	15300	3140	2260	1360	2430 J
Lead	UG/L	0.5 U	11.1 J	5.96 J	4.33 J	1.88 J	3.16 J
Magnesium	UG/L	1630	6710	2800	2070	5860	6410
Manganese	UG/L	16.9	101	41.8	36.8	87.5	35
Mercury	UG/L	0.076 U	0.152	0.083 U	0.076 U	0.0865 U	0.0775 U
Nickel	UG/L	15.6 U	15.6 U	15.6 U	15.6 U	15.6 U	15.6 U
Potassium	UG/L	1550	2900	1180	1030	2740	13800
Selenium	UG/L	0.8 UJ	0.8 UJ	8.36 J	1.87 J	2.74 J	4.24 J
Silver	UG/L						62.8 J
Sodium	UG/L	11800	17800	8880	22700	95100	200000
Thallium	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Vanadium	UG/L	10.2 U	49.8	10.2 U	10.2 U	10.2 U	10.2 U
Zinc	UG/L	17.8	83.8	32.9	26.4	50.3	25.3
Total Cyanide	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
DEEP GROUNDWATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL TOTAL METALS

Client Sample ID: Laboratory Sample ID: Date Sampled:	MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG-NORMAL UPPER 95% CONFIDENCE INTERVAL
	<u>UNITS</u>				
Aluminum	UG/L 12600 J	3209.3	4689.6	7067.1	247730.1
Antimony	UG/L 7.6 R	NA	NA	NA	NA
Arsenic	UG/L 9.58	3.6	3.3	6.3	23.3
Barium	UG/L 186	72.7	60.2	122.2	245.3
Beryllium	UG/L ND	NA	NA	NA	NA
Cadmium	UG/L 4.7	2.5	1.1	3.4	3.6
Calcium	UG/L 434000	184100.0	134486.8	294731.6	492451.2
Chromium	UG/L 40.5	12.1	14.3	23.8	56.2
Cobalt	UG/L ND	NA	NA	NA	NA
Copper	UG/L ND	NA	NA	NA	NA
Iron	UG/L 15300	4196.8	5506.5	8726.6	48027.5
Lead	UG/L 11.1 J	4.5	3.8	7.6	66.6
Magnesium	UG/L 6710	4246.7	2325.0	6159.3	11123.5
Manganese	UG/L 101	53.2	33.2	80.5	146.0
Mercury	UG/L 0.152	0.1	0.0	0.1	0.1
Nickel	UG/L ND	NA	NA	NA	NA
Potassium	UG/L 13800	3866.7	4929.6	7921.9	23815.0
Selenium	UG/L 8.36 J	3.1	2.9	5.5	20.4
Silver	UG/L 62.8 J	62.8	ERR	NA	NA
Sodium	UG/L 200000	59380.0	76076.7	121962.2	1166078.1
Thallium	UG/L ND	NA	NA	NA	NA
Vanadium	UG/L 49.8	16.8	16.2	30.1	42.4
Zinc	UG/L 83.8	39.4	24.4	59.5	83.9
Total Cyanide	UG/L ND	NA	NA	NA	NA

APPENDIX P.13

SITE 41 DEEP GROUNDWATER DISSOLVED METALS

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 DEEP GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL DISSOLVED METALS

Client Sample ID:	41-GW04DWD-01	41-GW06DWD-01	41-GW07DWD-01	41-GW09DWD-01	41-GW11DWD-01	41-GW12DWD-01
Laboratory Sample ID:	9402159-02A	9402163-04	9402162-04	9402162-02	9402163-02	9402159-04A
Date Sampled:						

	UNITS						
Aluminum	UG/L	69.5 U	69.5 U	69.5 U	69.5 U	69.5 U	69.5 U
Antimony	UG/L	12.1	15.6	11.4	12.1	14.9	3.8 U
Arsenic	UG/L	1.1 U	1.1 U	1.1 U	1.1 UJ	1.1 U	1.1 UJ
Barium	UG/L	17.8	45.1	8.4 U	8.4 U	97.3	32.3
Beryllium	UG/L	1.605 U	1.605 U	1.605 U	1.605 U	1.605 U	1.605 U
Cadmium	UG/L	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
Calcium	UG/L	50100	80100	64500	43300	188000	63100
Chromium	UG/L	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U
Cobalt	UG/L	15.6 U	21.3 U	21.3 U	21.3 U	21.3 U	15.6 U
Copper	UG/L	11.95 U	11.95 U	11.95 U	11.95 U	11.95 U	11.95 U
Iron	UG/L	35.55 U	35.55 U	35.55 U	35.55 U	243	35.55 U
Lead	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Magnesium	UG/L	1570	2610	2020	1840	6380	6740
Manganese	UG/L	7.2 U	22.7	23.2	20.1	94	24.2
Mercury	UG/L	0.075 U	0.0775 U	0.079 U	0.08 U	0.081 U	0.0755 U
Nickel	UG/L	15.6 U	15.6 U	15.6 U	15.6 U	15.6 U	15.6 U
Potassium	UG/L	1210	1470	1070	938	3480	16700
Selenium	UG/L	0.8 UJ	0.8 U	0.8 U	0.8 U	0.8 U	7.23 J
Silver	UG/L		0.8 U	0.8 U	0.8 U	0.8 UJ	
Sodium	UG/L	13500	18600	9130	25100	108000	244000
Thallium	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Vanadium	UG/L	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U
Zinc	UG/L	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
DEEP GROUNDWATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL DISSOLVED METALS

Client Sample ID:					NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG-NORMAL UPPER 95% CONFIDENCE INTERVAL
Laboratory Sample ID:	MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION			
Date Sampled:						
	<u>UNITS</u>					
Aluminum	UG/L	ND	NA	NA	NA	NA
Antimony	UG/L	15.6	11.7	4.2	15.1	24.5
Arsenic	UG/L	ND	NA	NA	NA	NA
Barium	UG/L	97.3	34.9	33.8	62.7	247.8
Beryllium	UG/L	ND	NA	NA	NA	NA
Cadmium	UG/L	ND	NA	NA	NA	NA
Calcium	UG/L	188000	81516.7	53697.2	125689.1	163531.1
Chromium	UG/L	ND	NA	NA	NA	NA
Cobalt	UG/L	ND	NA	NA	NA	NA
Copper	UG/L	ND	NA	NA	NA	NA
Iron	UG/L	243	70.1	84.7	139.8	236.4
Lead	UG/L	ND	NA	NA	NA	NA
Magnesium	UG/L	6740	3526.7	2377.0	5482.0	9282.0
Manganese	UG/L	94	31.9	31.1	57.5	140.0
Mercury	UG/L	ND	NA	NA	NA	NA
Nickel	UG/L	ND	NA	NA	NA	NA
Potassium	UG/L	16700	4144.7	6222.2	9263.2	52137.1
Selenium	UG/L	7.23 J	1.9	2.6	4.0	8.5
Silver	UG/L	1.6 R	NA	NA	NA	NA
Sodium	UG/L	244000	69721.7	93032.2	146251.8	2656379.6
Thallium	UG/L	ND	NA	NA	NA	NA
Vanadium	UG/L	ND	NA	NA	NA	NA
Zinc	UG/L	ND	NA	NA	NA	NA

APPENDIX P.14
SITE 41 UNNAMED TRIBUTARY AND TANK CREEK
SURFACE WATER ORGANICS

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-TC-SW06	41-TC-SW07	41-TC-SW08	41-TC-SW09	41-NE-SW05	41-UN-SW01
Laboratory Sample ID:	9402081-05	9402080-01	9402081-01	9402081-02	9402093-01	9402063-03
Date Sampled:	02/06/94	02/07/94	02/06/94	02/06/94	02/08/94	02/04/94

	UNITS					
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
1,2,4-Trichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
1,3-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
1,4-Dichlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
2-Chloronaphthalene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
2-Chlorophenol	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
2-Methylnaphthalene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
2-Methylphenol	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
2-Nitroaniline	UG/L	12.5 U	12.5 U	12.5 U	12.5 U	17.5 U
2-Nitrophenol	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
2,2'-oxybis-(1-chloropropane)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
2,4-Dichlorophenol	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
2,4-Dimethylphenol	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
2,4-Dinitrophenol	UG/L	12.5 U	12.5 U	12.5 U	12.5 U	17.5 U
2,4-Dinitrotoluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
2,4,5-Trichlorophenol	UG/L	12.5 U	12.5 U	12.5 U	12.5 U	17.5 U
2,4,6-Trichlorophenol	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
2,6-Dinitrotoluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
3-Nitroaniline	UG/L	12.5 U	12.5 U	12.5 U	12.5 U	17.5 U
3,3'-Dichlorobenzidine	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
4-Bromophenyl-phenylether	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
4-Chloro-3-methylphenol	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
4-Chloroaniline	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
4-Chlorophenyl phenyl ether	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
4-Methylphenol	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
4-Nitroaniline	UG/L	12.5 U	12.5 U	12.5 U	12.5 U	17.5 U
4-Nitrophenol	UG/L	12.5 U	12.5 U	12.5 U	12.5 U	17.5 U
4,6-Dinitro-2-methylphenol	UG/L	12.5 U	12.5 U	12.5 U	12.5 U	17.5 U
Acenaphthene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
Acenaphthylene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
Anthracene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
Benzo[a]anthracene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
Benzo[a]pyrene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-TC-SW06	41-TC-SW07	41-TC-SW08	41-TC-SW09	41-NE-SW05	41-UN-SW01
Laboratory Sample ID:	9402081-05	9402080-01	9402081-01	9402081-02	9402093-01	9402063-03
Date Sampled:	02/06/94	02/07/94	02/06/94	02/06/94	02/08/94	02/04/94

UNITS

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
Benzo[g,h,i]perylene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
Benzo[k]fluoranthene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
bis(2-Chloroethoxy) methane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
bis(2-Chloroethyl) ether	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
bis(2-Ethylhexyl)phthalate	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
Butyl benzyl phthalate	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
Carbazole	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
Chrysene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
Dibenzofuran	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
Dibenz[a,h]anthracene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
Diethylphthalate	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
Dimethyl phthalate	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
di-n-Butylphthalate	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
di-n-Octylphthalate	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
Fluoranthene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
Fluorene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
Hexachlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
Hexachlorobutadiene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
Hexachlorocyclopentadiene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
Hexachloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
Indeno[1,2,3-cd]pyrene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
Isophorone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
Naphthalene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
Nitrobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
N-Nitroso-di-n-propylamine	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
N-nitrosodiphenylamine	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
Pentachlorophenol	UG/L	12.5 U	12.5 U	12.5 U	12.5 U	12.5 U	17.5 U
Phenanthrene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
Phenol	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U
Pyrene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	7.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-TC-SW06	41-TC-SW07	41-TC-SW08	41-TC-SW09	41-NE-SW05	41-UN-SW01
Laboratory Sample ID:	9402081-05	9402080-01	9402081-01	9402081-02	9402093-01	9402063-03
Date Sampled:	02/06/94	02/07/94	02/06/94	02/06/94	02/08/94	02/04/94

UNITS

VOLATILES

	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl chloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	UG/L	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
Acetone	UG/L	5.0 U	5.00 U	5.00 U	5.00 U	5.0 UJ	5.0 U
Carbon Disulfide	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene(total)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylenes (total)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-TC-SW06	41-TC-SW07	41-TC-SW08	41-TC-SW09	41-NE-SW05	41-UN-SW01
Laboratory Sample ID:	9402081-05	9402080-01	9402081-01	9402081-02	9402093-01	9402063-03
Date Sampled:	02/06/94	02/07/94	02/06/94	02/06/94	02/08/94	02/04/94

UNITS

<u>PESTICIDE/PCBS</u>	UG/L	0.025 UJ	0.028 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.035 UJ
alpha-BHC	UG/L	0.025 U	0.028 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.035 U
beta-BHC	UG/L	0.025 UJ	0.028 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.035 UJ
delta-BHC	UG/L	0.025 UJ	0.028 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.035 UJ
Lindane (gamma-BHC)	UG/L	0.025 U	0.028 UJ	0.025 UJ	0.025 UJ	0.025 U	0.035 U
Heptachlor	UG/L	0.025 U	0.028 UJ	0.015 UJ	0.025 UJ	0.025 U	0.035 U
Aldrin	UG/L	0.025 U	0.028 UJ	0.025 UJ	0.025 UJ	0.025 U	0.035 U
Heptachlor epoxide	UG/L	0.025 U	0.028 UJ	0.025 UJ	0.025 UJ	0.025 U	0.035 U
Endosulfan I	UG/L	0.025 U	0.028 UJ	0.025 UJ	0.025 UJ	0.025 U	0.035 U
Dieldrin	UG/L	0.050 U	0.055 UJ	0.050 UJ	0.050 UJ	0.050 U	0.070 U
4,4'-DDE	UG/L	0.050 U	0.055 UJ	0.050 UJ	0.050 UJ	0.050 U	0.070 U
Endrin	UG/L	0.050 U	0.055 UJ	0.050 UJ	0.050 UJ	0.1 R	0.070 U
Endosulfan II	UG/L	0.050 U	0.055 UJ	0.050 UJ	0.050 UJ	0.050 U	0.070 U
4,4'-DDD	UG/L	0.050 U	0.055 UJ	0.050 UJ	0.050 UJ	0.050 U	0.070 U
Endosulfan sulfate	UG/L	0.050 U	0.055 UJ	0.050 UJ	0.050 UJ	0.050 U	0.070 U
4,4'-DDT	UG/L	0.050 U	0.055 UJ	0.050 UJ	0.050 UJ	0.050 U	0.070 U
Methoxychlor	UG/L	0.250 U	0.275 UJ	0.250 UJ	0.250 UJ	0.250 U	0.350 U
Endrin ketone	UG/L	0.050 U	0.055 UJ	0.050 UJ	0.050 UJ	0.050 U	0.070 U
Endrin aldehyde	UG/L	0.050 U	0.055 UJ	0.050 UJ	0.050 UJ	0.050 U	0.070 U
alpha-Chlordane	UG/L	0.025 U	0.028 UJ	0.025 UJ	0.025 UJ	0.025 U	0.035 U
gamma-Chlordane	UG/L	0.025 U	0.028 UJ	0.025 UJ	0.025 UJ	0.025 U	0.035 U
Toxaphene	UG/L	2.50 U	2.75 UJ	2.50 UJ	2.50 UJ	2.50 U	3.50 U
Aroclor 1016	UG/L	0.50 U	0.55 UJ	0.50 UJ	0.50 UJ	0.50 U	0.70 U
Aroclor 1221	UG/L	1.00 U	1.10 UJ	1.00 UJ	1.00 UJ	1.00 U	1.40 U
Aroclor 1232	UG/L	0.50 U	0.55 UJ	0.50 UJ	0.50 UJ	0.50 U	0.70 U
Aroclor 1242	UG/L	0.50 U	0.55 UJ	0.50 UJ	0.50 UJ	0.50 U	0.70 U
Aroclor 1248	UG/L	0.50 U	0.55 UJ	0.50 UJ	0.50 UJ	0.50 U	0.70 U
Aroclor 1254	UG/L	0.50 U	0.55 UJ	0.50 UJ	0.50 UJ	0.50 U	0.70 U
Aroclor 1260	UG/L	0.50 U	0.55 UJ	0.50 UJ	0.50 UJ	0.50 U	0.70 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SW02	41-UN-SW03	41-UN-SW04	41-UN-SW10	41-UN-SW11	41-UN-SW12
Laboratory Sample ID:	9402067-01	9402039-01	9402039-03	9402022-01	9402063-01	9402067-02
Date Sampled:	02/03/94	02/01/94	02/01/94	02/01/94	02/04/94	02/04/94

UNITS

SEMIVOLATILES Cont.

	41-UN-SW02	41-UN-SW03	41-UN-SW04	41-UN-SW10	41-UN-SW11	41-UN-SW12	
Benzo[b]fluoranthene	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
Benzo[g,h,i]perylene	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
Benzo[k]fluoranthene	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
bis(2-Chloroethoxy) methane	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
bis(2-Chloroethyl) ether	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
bis(2-Ethylhexyl)phthalate	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
Butyl benzyl phthalate	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
Carbazole	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
Chrysene	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
Dibenzofuran	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
Dibenz[a,h]anthracene	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
Diethylphthalate	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
Dimethyl phthalate	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
di-n-Butylphthalate	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
di-n-Octylphthalate	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
Fluoranthene	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
Fluorene	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
Hexachlorobenzene	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
Hexachlorobutadiene	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
Hexachlorocyclopentadiene	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
Hexachloroethane	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
Indeno[1,2,3-cd]pyrene	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
Isophorone	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
Naphthalene	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
Nitrobenzene	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
N-Nitroso-di-n-propylamine	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
N-nitrosodiphenylamine	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
Pentachlorophenol	UG/L	17.9 U	15.0 U	13.8 U	13.8 U	17.5 U	17.9 U
Phenanthrene	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
Phenol	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U
Pyrene	UG/L	7.2 U	6.0 U	5.5 U	5.5 U	7.0 U	7.2 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SW02	41-UN-SW03	41-UN-SW04	41-UN-SW10	41-UN-SW11	41-UN-SW12
Laboratory Sample ID:	9402067-01	9402039-01	9402039-03	9402022-01	9402063-01	9402067-02
Date Sampled:	02/03/94	02/01/94	02/01/94	02/01/94	02/04/94	02/04/94

UNITS

VOLATILES

	41-UN-SW02	41-UN-SW03	41-UN-SW04	41-UN-SW10	41-UN-SW11	41-UN-SW12
Chloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl chloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	UG/L	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
Acetone	UG/L	5.00 UJ	5.00 UJ	5.00 UJ	5.00 U	5.00 U
Carbon Disulfide	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene(total)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Butanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	4.00 J
Ethylbenzene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Xylenes (total)	UG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SW02	41-UN-SW03	41-UN-SW04	41-UN-SW10	41-UN-SW11	41-UN-SW12
Laboratory Sample ID:	9402067-01	9402039-01	9402039-03	9402022-01	9402063-01	9402067-02
Date Sampled:	02/03/94	02/01/94	02/01/94	02/01/94	02/04/94	02/04/94

	UNITS						
PESTICIDE/PCBS							
alpha-BHC	UG/L	0.043 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.043 UJ	0.040 UJ
beta-BHC	UG/L	0.043 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.043 UJ	0.040 U
delta-BHC	UG/L	0.043 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.043 UJ	0.040 UJ
Lindane (gamma-BHC)	UG/L	0.020 J	0.025 UJ	0.025 UJ	0.025 UJ	0.043 UJ	0.040 U
Heptachlor	UG/L	0.040 UJ	0.010 UJ	0.015 UJ	0.005 UJ	0.043 UJ	0.040 U
Aldrin	UG/L	0.043 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.043 UJ	0.040 U
Heptachlor epoxide	UG/L	0.043 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.043 UJ	0.040 U
Endosulfan I	UG/L	0.043 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.043 UJ	0.040 U
Dieldrin	UG/L	0.085 UJ	0.050 UJ	0.050 UJ	0.050 UJ	0.085 UJ	0.080 U
4,4'-DDE	UG/L	0.085 UJ	0.050 UJ	0.050 UJ	0.050 UJ	0.085 UJ	0.080 U
Endrin	UG/L	0.085 UJ	0.050 UJ	0.050 UJ	0.050 UJ	0.085 UJ	0.080 U
Endosulfan II	UG/L	0.085 UJ	0.050 UJ	0.050 UJ	0.050 UJ	0.085 UJ	0.080 U
4,4'-DDD	UG/L	0.085 UJ	0.050 UJ	0.050 UJ	0.050 UJ	0.085 UJ	0.080 U
Endosulfan sulfate	UG/L	0.085 UJ	0.050 UJ	0.050 UJ	0.050 UJ	0.085 UJ	0.080 U
4,4'-DDT	UG/L	0.030 J	0.050 UJ	0.050 UJ	0.050 UJ	0.085 UJ	0.080 U
Methoxychlor	UG/L	0.425 UJ	0.250 UJ	0.250 UJ	0.250 UJ	0.425 UJ	0.400 U
Endrin ketone	UG/L	0.085 UJ	0.050 UJ	0.050 UJ	0.050 UJ	0.085 UJ	0.080 U
Endrin aldehyde	UG/L	0.085 UJ	0.050 UJ	0.050 UJ	0.050 UJ	0.085 UJ	0.080 U
alpha-Chlordane	UG/L	0.043 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.043 UJ	0.040 U
gamma-Chlordane	UG/L	0.043 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.043 UJ	0.040 U
Toxaphene	UG/L	4.25 UJ	2.50 UJ	2.50 UJ	2.50 UJ	4.25 UJ	4.00 U
Aroclor 1016	UG/L	0.85 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.85 UJ	0.80 U
Aroclor 1221	UG/L	1.70 UJ	1.00 UJ	1.00 UJ	1.00 UJ	1.70 UJ	1.60 U
Aroclor 1232	UG/L	0.85 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.85 UJ	0.80 U
Aroclor 1242	UG/L	0.85 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.85 UJ	0.80 U
Aroclor 1248	UG/L	0.85 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.85 UJ	0.80 U
Aroclor 1254	UG/L	0.85 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.85 UJ	0.80 U
Aroclor 1260	UG/L	0.85 UJ	0.50 UJ	0.50 UJ	0.50 UJ	0.85 UJ	0.80 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	41-UN-SW02	41-UN-SW03	41-UN-SW04	41-UN-SW10	41-UN-SW11	41-UN-SW12
Laboratory Sample ID:	9402067-01	9402039-01	9402039-03	9402022-01	9402063-01	9402067-02
Date Sampled:	02/03/94	02/01/94	02/01/94	02/01/94	02/04/94	02/04/94
	UNITS					
ORDNANCE						
1,3,5-Trinitrobenzene	UG/L	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
1,3-Dinitrobenzene	UG/L	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
2,4,6-Trinitrotoluene	UG/L	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
2,4-Dinitrotoluene	UG/L	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
2,6-Dinitrotoluene	UG/L	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
2-Amino-4,6-dinitrotoluene	UG/L	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
2-Nitrotoluene	UG/L	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
3-Nitrotoluene	UG/L	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
4-Amino-2,6-dinitrotoluene	UG/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
4-Nitrotoluene	UG/L	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
HMX	UG/L	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
Nitrobenzene	UG/L	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
RDX	UG/L	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
Tetryl	UG/L	0.250 UJ	0.250 UJ	0.250 UJ	0.250 UJ	0.250 UJ
MIREX						
Mirex	UG/L	35.8 U	6.0 U	5.5 U	5.5 U	7.000 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SW-13	41-UN-SW-14	41-UN-SW15	41-UN-SW16	41-UN-SW17	41-UN-SW18
Laboratory Sample ID:	9402060-03	9402060-01	AB7581	AB7578	AB7574	AB7570
Date Sampled:	02/03/94	02/03/94	08/23/94	08/23/94	08/23/94	08/23/94

	UNITS					
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/L	5.5 U	6.0 U	NA	NA	NA
1,2,4-Trichlorobenzene	UG/L	5.5 U	6.0 U	NA	NA	NA
1,3-Dichlorobenzene	UG/L	5.5 U	6.0 U	NA	NA	NA
1,4-Dichlorobenzene	UG/L	5.5 U	6.0 U	NA	NA	NA
2-Chloronaphthalene	UG/L	5.5 U	6.0 U	NA	NA	NA
2-Chlorophenol	UG/L	5.5 U	6.0 U	NA	NA	NA
2-Methylnaphthalene	UG/L	5.5 U	6.0 U	NA	NA	NA
2-Methylphenol	UG/L	5.5 U	6.0 U	NA	NA	NA
2-Nitroaniline	UG/L	13.8 U	15.0 U	NA	NA	NA
2-Nitrophenol	UG/L	5.5 U	6.0 U	NA	NA	NA
2,2'-oxybis-(1-chloropropane)	UG/L	5.5 U	6.0 U	NA	NA	NA
2,4-Dichlorophenol	UG/L	5.5 U	6.0 U	NA	NA	NA
2,4-Dimethylphenol	UG/L	5.5 U	6.0 U	NA	NA	NA
2,4-Dinitrophenol	UG/L	13.8 U	15.0 U	NA	NA	NA
2,4-Dinitrotoluene	UG/L	5.5 U	6.0 U	NA	NA	NA
2,4,5-Trichlorophenol	UG/L	13.8 U	15.0 U	NA	NA	NA
2,4,6-Trichlorophenol	UG/L	5.5 U	6.0 U	NA	NA	NA
2,6-Dinitrotoluene	UG/L	5.5 U	6.0 U	NA	NA	NA
3-Nitroaniline	UG/L	13.8 U	15.0 U	NA	NA	NA
3,3'-Dichlorobenzidine	UG/L	5.5 U	6.0 U	NA	NA	NA
4-Bromophenyl-phenylether	UG/L	5.5 U	6.0 U	NA	NA	NA
4-Chloro-3-methylphenol	UG/L	5.5 U	6.0 U	NA	NA	NA
4-Chloroaniline	UG/L	5.5 U	6.0 U	NA	NA	NA
4-Chlorophenyl phenyl ether	UG/L	5.5 U	6.0 U	NA	NA	NA
4-Methylphenol	UG/L	5.5 U	6.0 U	NA	NA	NA
4-Nitroaniline	UG/L	13.8 U	15.0 U	NA	NA	NA
4-Nitrophenol	UG/L	13.8 U	15.0 U	NA	NA	NA
4,6-Dinitro-2-methylphenol	UG/L	13.8 U	15.0 U	NA	NA	NA
Acenaphthene	UG/L	5.5 U	6.0 U	NA	NA	NA
Acenaphthylene	UG/L	5.5 U	6.0 U	NA	NA	NA
Anthracene	UG/L	5.5 U	6.0 U	NA	NA	NA
Benzo[a]anthracene	UG/L	5.5 U	6.0 U	NA	NA	NA
Benzo[a]pyrene	UG/L	5.5 U	6.0 U	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SW-13	41-UN-SW-14	41-UN-SW15	41-UN-SW16	41-UN-SW17	41-UN-SW18
Laboratory Sample ID:	9402060-03	9402060-01	AB7581	AB7578	AB7574	AB7570
Date Sampled:	02/03/94	02/03/94	08/23/94	08/23/94	08/23/94	08/23/94

UNITS

SEMIVOLATILES Cont.

Compound	41-UN-SW-13	41-UN-SW-14	41-UN-SW15	41-UN-SW16	41-UN-SW17	41-UN-SW18
Benzo[b]fluoranthene	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
Benzo[g,h,i]perylene	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
Benzo[k]fluoranthene	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
bis(2-Chloroethoxy) methane	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
bis(2-Chloroethyl) ether	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
Butyl benzyl phthalate	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
Carbazole	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
Chrysene	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
Dibenzofuran	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
Dibenz[a,h]anthracene	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
Diethylphthalate	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
Dimethyl phthalate	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
di-n-Butylphthalate	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
di-n-Octylphthalate	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
Fluoranthene	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
Fluorene	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
Hexachlorobenzene	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
Hexachlorobutadiene	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
Hexachlorocyclopentadiene	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
Hexachloroethane	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
Indeno[1,2,3-cd]pyrene	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
Isophorone	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
Naphthalene	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
Nitrobenzene	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
N-nitrosodiphenylamine	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
Pentachlorophenol	UG/L 13.8 U	15.0 U	NA	NA	NA	NA
Phenanthrene	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
Phenol	UG/L 5.5 U	6.0 U	NA	NA	NA	NA
Pyrene	UG/L 5.5 U	6.0 U	NA	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SW-13	41-UN-SW-14	41-UN-SW15	41-UN-SW16	41-UN-SW17	41-UN-SW18
Laboratory Sample ID:	9402060-03	9402060-01	AB7581	AB7578	AB7574	AB7570
Date Sampled:	02/03/94	02/03/94	08/23/94	08/23/94	08/23/94	08/23/94

UNITS

VOLATILES

	41-UN-SW-13	41-UN-SW-14	41-UN-SW15	41-UN-SW16	41-UN-SW17	41-UN-SW18
Chloromethane	UG/L	5.0 U	5.0 U	NA	NA	NA
Bromomethane	UG/L	5.0 U	5.0 U	NA	NA	NA
Vinyl chloride	UG/L	5.0 U	5.0 U	NA	NA	NA
Chloroethane	UG/L	5.0 U	5.0 U	NA	NA	NA
Methylene chloride	UG/L	5.00 U	5.00 U	NA	NA	NA
Acetone	UG/L	19.5 UJ	6.0 UJ	NA	NA	NA
Carbon Disulfide	UG/L	5.0 U	5.0 U	NA	NA	NA
1,1-Dichloroethene	UG/L	5.0 U	5.0 U	NA	NA	NA
1,1-Dichloroethane	UG/L	5.0 U	5.0 U	NA	NA	NA
1,2-Dichloroethene(total)	UG/L	5.0 U	5.0 U	NA	NA	NA
Chloroform	UG/L	5.0 U	5.0 U	NA	NA	NA
1,2-Dichloroethane	UG/L	5.0 U	5.0 U	NA	NA	NA
2-Butanone	UG/L	5.0 U	5.0 U	NA	NA	NA
1,1,1-Trichloroethane	UG/L	5.0 U	5.0 U	NA	NA	NA
Carbon tetrachloride	UG/L	5.0 U	5.0 U	NA	NA	NA
Bromodichloromethane	UG/L	5.0 U	5.0 U	NA	NA	NA
1,2-Dichloropropane	UG/L	5.0 U	5.0 U	NA	NA	NA
cis-1,3-Dichloropropene	UG/L	5.0 U	5.0 U	NA	NA	NA
Trichloroethene	UG/L	5.0 U	5.0 U	NA	NA	NA
Dibromochloromethane	UG/L	5.0 U	5.0 U	NA	NA	NA
1,1,2-Trichloroethane	UG/L	5.0 U	5.0 U	NA	NA	NA
Benzene	UG/L	5.0 U	5.0 U	NA	NA	NA
trans-1,3-Dichloropropene	UG/L	5.0 U	5.0 U	NA	NA	NA
Bromoform	UG/L	5.0 U	5.0 U	NA	NA	NA
4-Methyl-2-pentanone	UG/L	5.0 U	5.0 U	NA	NA	NA
2-Hexanone	UG/L	5.0 U	5.0 U	NA	NA	NA
Tetrachloroethene	UG/L	5.0 U	5.0 U	NA	NA	NA
1,1,2,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	NA	NA	NA
Toluene	UG/L	5.0 U	5.0 U	NA	NA	NA
Chlorobenzene	UG/L	5.0 U	1.00 J	NA	NA	NA
Ethylbenzene	UG/L	5.0 U	5.0 U	NA	NA	NA
Styrene	UG/L	5.0 U	5.0 U	NA	NA	NA
Xylenes (total)	UG/L	5.0 U	5.0 U	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SW-13	41-UN-SW-14	41-UN-SW15	41-UN-SW16	41-UN-SW17	41-UN-SW18
Laboratory Sample ID:	9402060-03	9402060-01	AB7581	AB7578	AB7574	AB7570
Date Sampled:	02/03/94	02/03/94	08/23/94	08/23/94	08/23/94	08/23/94

	UNITS						
PESTICIDE/PCBS							
alpha-BHC	UG/L	0.025 UJ	0.025 UJ	0.026 U	0.025 U	0.0285 U	0.0265 U
beta-BHC	UG/L	0.025 UJ	0.025 UJ	0.026 U	0.025 U	0.0285 U	0.0265 U
delta-BHC	UG/L	0.025 UJ	0.025 UJ	0.026 U	0.025 U	0.0285 U	0.0265 U
Lindane (gamma-BHC)	UG/L	0.025 UJ	0.025 UJ	0.026 U	0.025 U	0.0285 U	0.0265 U
Heptachlor	UG/L	0.025 UJ	0.025 UJ	0.026 U	0.025 U	0.0285 U	0.0265 U
Aldrin	UG/L	0.025 UJ	0.025 UJ	0.026 U	0.025 U	0.0285 U	0.0265 U
Heptachlor epoxide	UG/L	0.025 UJ	0.025 UJ	0.026 U	0.025 U	0.0285 U	0.0265 U
Endosulfan I	UG/L	0.025 UJ	0.025 UJ	0.026 U	0.025 U	0.0285 U	0.0265 U
Dieldrin	UG/L	0.050 UJ	0.050 UJ	0.05 U	0.05 U	0.055 U	0.055 U
4,4'-DDE	UG/L	0.050 UJ	0.050 UJ	0.05 U	0.05 U	0.055 U	0.055 U
Endrin	UG/L	0.050 UJ	0.050 UJ	0.05 U	0.05 U	0.055 U	0.055 U
Endosulfan II	UG/L	0.050 UJ	0.050 UJ	0.05 U	0.05 U	0.055 U	0.055 U
4,4'-DDD	UG/L	0.050 UJ	0.050 UJ	0.05 U	0.05 U	0.055 U	0.055 U
Endosulfan sulfate	UG/L	0.050 UJ	0.050 UJ	0.05 U	0.05 U	0.055 U	0.055 U
4,4'-DDT	UG/L	0.050 UJ	0.050 UJ	0.05 U	0.05 U	0.055 U	0.055 U
Methoxychlor	UG/L	0.250 UJ	0.250 UJ	0.26 U	0.25 U	0.285 U	0.265 U
Endrin ketone	UG/L	0.050 UJ	0.050 UJ	0.05 U	0.05 U	0.055 U	0.055 U
Endrin aldehyde	UG/L	0.050 UJ	0.050 UJ	0.05 U	0.05 U	0.055 U	0.055 U
alpha-Chlordane	UG/L	0.025 UJ	0.025 UJ	0.026 U	0.025 U	0.0285 U	0.0265 U
gamma-Chlordane	UG/L	0.025 UJ	0.025 UJ	0.026 U	0.025 U	0.0285 U	0.0265 U
Toxaphene	UG/L	2.50 UJ	2.50 UJ	2.6 U	2.5 U	2.85 U	2.65 U
Aroclor 1016	UG/L	0.50 UJ	0.50 UJ	0.5 U	0.5 U	0.55 U	0.55 U
Aroclor 1221	UG/L	1.00 UJ	1.00 UJ	1.05 U	1 U	1.15 U	1.05 U
Aroclor 1232	UG/L	0.50 UJ	0.50 UJ	0.5 U	0.5 U	0.55 U	0.55 U
Aroclor 1242	UG/L	0.50 UJ	0.50 UJ	0.5 U	0.5 U	0.55 U	0.55 U
Aroclor 1248	UG/L	0.50 UJ	0.50 UJ	0.5 U	0.5 U	0.55 U	0.55 U
Aroclor 1254	UG/L	0.50 UJ	0.50 UJ	0.5 U	0.5 U	0.55 U	0.55 U
Aroclor 1260	UG/L	0.50 UJ	0.50 UJ	0.5 U	0.5 U	0.55 U	0.55 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	41-UN-SW-13	41-UN-SW-14	41-UN-SW15	41-UN-SW16	41-UN-SW17	41-UN-SW18
Laboratory Sample ID:	9402060-03	9402060-01	AB7581	AB7578	AB7574	AB7570
Date Sampled:	02/03/94	02/03/94	08/23/94	08/23/94	08/23/94	08/23/94

UNITS

ORDNANCE

1,3,5-Trinitrobenzene	UG/L	0.250 U	0.250 U	NA	NA	NA	NA
1,3-Dinitrobenzene	UG/L	0.250 U	0.250 U	NA	NA	NA	NA
2,4,6-Trinitrotoluene	UG/L	0.250 U	0.250 U	NA	NA	NA	NA
2,4-Dinitrotoluene	UG/L	0.250 U	0.250 U	NA	NA	NA	NA
2,6-Dinitrotoluene	UG/L	0.250 U	0.250 UJ	NA	NA	NA	NA
2-Amino-4,6-dinitrotoluene	UG/L	0.015 U	0.015 U	NA	NA	NA	NA
2-Nitrotoluene	UG/L	0.250 U	0.250 U	NA	NA	NA	NA
3-Nitrotoluene	UG/L	0.250 U	0.250 U	NA	NA	NA	NA
4-Amino-2,6-dinitrotoluene	UG/L	0.010 UJ	0.010 U	NA	NA	NA	NA
4-Nitrotoluene	UG/L	0.250 U	0.250 U	NA	NA	NA	NA
HMX	UG/L	0.63 U	0.63 U	NA	NA	NA	NA
Nitrobenzene	UG/L	0.250 U	0.250 U	NA	NA	NA	NA
RDX	UG/L	0.250 U	0.250 U	NA	NA	NA	NA
Tetryl	UG/L	0.5 R	0.5 R	NA	NA	NA	NA

MIREX

Mirex	UG/L	5.5 U	6.0 U	NA	NA	NA	NA
-------	------	-------	-------	----	----	----	----

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SW19	41-UN-SW20	41-UN-SW21	41-UN-SW22	41-UN-SW23	41-UN-SW24
Laboratory Sample ID:	AB7567	AB7564	AB7561	AB7558	AB7555	AB7552
Date Sampled:	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94

UNITS

SEMIVOLATILES

1,2-Dichlorobenzene	UG/L	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	UG/L	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	UG/L	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	UG/L	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	UG/L	NA	NA	NA	NA	NA	NA
2-Chlorophenol	UG/L	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	NA	NA	NA	NA	NA	NA
2-Methylphenol	UG/L	NA	NA	NA	NA	NA	NA
2-Nitroaniline	UG/L	NA	NA	NA	NA	NA	NA
2-Nitrophenol	UG/L	NA	NA	NA	NA	NA	NA
2,2'-oxybis-(1-chloropropane)	UG/L	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	UG/L	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	UG/L	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	UG/L	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	UG/L	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	UG/L	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	UG/L	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	UG/L	NA	NA	NA	NA	NA	NA
3-Nitroaniline	UG/L	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	UG/L	NA	NA	NA	NA	NA	NA
4-Bromophenyl-phenylether	UG/L	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	UG/L	NA	NA	NA	NA	NA	NA
4-Chloroaniline	UG/L	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	UG/L	NA	NA	NA	NA	NA	NA
4-Methylphenol	UG/L	NA	NA	NA	NA	NA	NA
4-Nitroaniline	UG/L	NA	NA	NA	NA	NA	NA
4-Nitrophenol	UG/L	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	UG/L	NA	NA	NA	NA	NA	NA
Acenaphthene	UG/L	NA	NA	NA	NA	NA	NA
Acenaphthylene	UG/L	NA	NA	NA	NA	NA	NA
Anthracene	UG/L	NA	NA	NA	NA	NA	NA
Benzo[a]anthracene	UG/L	NA	NA	NA	NA	NA	NA
Benzo[a]pyrene	UG/L	NA	NA	NA	NA	NA	NA

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	41-UN-SW19	41-UN-SW20	41-UN-SW21	41-UN-SW22	41-UN-SW23	41-UN-SW24
Laboratory Sample ID:	AB7567	AB7564	AB7561	AB7558	AB7555	AB7552
Date Sampled:	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94

UNITS

SEMIVOLATILES Cont.

Compound	41-UN-SW19	41-UN-SW20	41-UN-SW21	41-UN-SW22	41-UN-SW23	41-UN-SW24
Benzo[b]fluoranthene	UG/L	NA	NA	NA	NA	NA
Benzo[g,h,i]perylene	UG/L	NA	NA	NA	NA	NA
Benzo[k]fluoranthene	UG/L	NA	NA	NA	NA	NA
bis(2-Chloroethoxy) methane	UG/L	NA	NA	NA	NA	NA
bis(2-Chloroethyl) ether	UG/L	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	UG/L	NA	NA	NA	NA	NA
Butyl benzyl phthalate	UG/L	NA	NA	NA	NA	NA
Carbazole	UG/L	NA	NA	NA	NA	NA
Chrysene	UG/L	NA	NA	NA	NA	NA
Dibenzofuran	UG/L	NA	NA	NA	NA	NA
Dibenz[a,h]anthracene	UG/L	NA	NA	NA	NA	NA
Diethylphthalate	UG/L	NA	NA	NA	NA	NA
Dimethyl phthalate	UG/L	NA	NA	NA	NA	NA
di-n-Butylphthalate	UG/L	NA	NA	NA	NA	NA
di-n-Octylphthalate	UG/L	NA	NA	NA	NA	NA
Fluoranthene	UG/L	NA	NA	NA	NA	NA
Fluorene	UG/L	NA	NA	NA	NA	NA
Hexachlorobenzene	UG/L	NA	NA	NA	NA	NA
Hexachlorobutadiene	UG/L	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	UG/L	NA	NA	NA	NA	NA
Hexachloroethane	UG/L	NA	NA	NA	NA	NA
Indeno[1,2,3-cd]pyrene	UG/L	NA	NA	NA	NA	NA
Isophorone	UG/L	NA	NA	NA	NA	NA
Naphthalene	UG/L	NA	NA	NA	NA	NA
Nitrobenzene	UG/L	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	UG/L	NA	NA	NA	NA	NA
N-nitrosodiphenylamine	UG/L	NA	NA	NA	NA	NA
Pentachlorophenol	UG/L	NA	NA	NA	NA	NA
Phenanthrene	UG/L	NA	NA	NA	NA	NA
Phenol	UG/L	NA	NA	NA	NA	NA
Pyrene	UG/L	NA	NA	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

	41-UN-SW19	41-UN-SW20	41-UN-SW21	41-UN-SW22	41-UN-SW23	41-UN-SW24
Client Sample ID:	41-UN-SW19	41-UN-SW20	41-UN-SW21	41-UN-SW22	41-UN-SW23	41-UN-SW24
Laboratory Sample ID:	AB7567	AB7564	AB7561	AB7558	AB7555	AB7552
Date Sampled:	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94
	<u>UNITS</u>					
<u>VOLATILES</u>						
Chloromethane	UG/L	NA	NA	NA	NA	NA
Bromomethane	UG/L	NA	NA	NA	NA	NA
Vinyl chloride	UG/L	NA	NA	NA	NA	NA
Chloroethane	UG/L	NA	NA	NA	NA	NA
Methylene chloride	UG/L	NA	NA	NA	NA	NA
Acetone	UG/L	NA	NA	NA	NA	NA
Carbon Disulfide	UG/L	NA	NA	NA	NA	NA
1,1-Dichloroethene	UG/L	NA	NA	NA	NA	NA
1,1-Dichloroethane	UG/L	NA	NA	NA	NA	NA
1,2-Dichloroethene(total)	UG/L	NA	NA	NA	NA	NA
Chloroform	UG/L	NA	NA	NA	NA	NA
1,2-Dichloroethane	UG/L	NA	NA	NA	NA	NA
2-Butanone	UG/L	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	UG/L	NA	NA	NA	NA	NA
Carbon tetrachloride	UG/L	NA	NA	NA	NA	NA
Bromodichloromethane	UG/L	NA	NA	NA	NA	NA
1,2-Dichloropropane	UG/L	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	UG/L	NA	NA	NA	NA	NA
Trichloroethene	UG/L	NA	NA	NA	NA	NA
Dibromochloromethane	UG/L	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	UG/L	NA	NA	NA	NA	NA
Benzene	UG/L	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	UG/L	NA	NA	NA	NA	NA
Bromoform	UG/L	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	UG/L	NA	NA	NA	NA	NA
2-Hexanone	UG/L	NA	NA	NA	NA	NA
Tetrachloroethene	UG/L	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	UG/L	NA	NA	NA	NA	NA
Toluene	UG/L	NA	NA	NA	NA	NA
Chlorobenzene	UG/L	NA	NA	NA	NA	NA
Ethylbenzene	UG/L	NA	NA	NA	NA	NA
Styrene	UG/L	NA	NA	NA	NA	NA
Xylenes (total)	UG/L	NA	NA	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SW19	41-UN-SW20	41-UN-SW21	41-UN-SW22	41-UN-SW23	41-UN-SW24	
Laboratory Sample ID:	AB7567	AB7564	AB7561	AB7558	AB7555	AB7552	
Date Sampled:	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94	
	UNITS						
PESTICIDE/PCBS							
alpha-BHC	UG/L	0.025 U	0.0265 U	0.027 U	0.025 U	0.031 U	0.03 U
beta-BHC	UG/L	0.025 U	0.0265 U	0.027 U	0.025 U	0.031 U	0.03 U
delta-BHC	UG/L	0.025 U	0.0265 U	0.027 U	0.025 U	0.031 U	0.03 U
Lindane (gamma-BHC)	UG/L	0.025 U	0.0265 U	0.027 U	0.025 U	0.031 U	0.03 U
Heptachlor	UG/L	0.025 U	0.055	0.027 U	0.025 U	0.031 U	0.03 U
Aldrin	UG/L	0.025 U	0.0265 U	0.027 U	0.025 U	0.031 U	0.03 U
Heptachlor epoxide	UG/L	0.025 U	0.0265 U	0.027 U	0.025 U	0.031 U	0.03 U
Endosulfan I	UG/L	0.025 U	0.0265 U	0.027 U	0.025 U	0.031 U	0.03 U
Dieldrin	UG/L	0.05 U	0.055 U	0.055 U	0.05 U	0.06 U	0.06 U
4,4'-DDE	UG/L	0.05 U	0.055 U	0.055 U	0.05 U	0.06 U	0.06 U
Endrin	UG/L	0.05 U	0.055 U	0.055 U	0.05 U	0.06 U	0.06 U
Endosulfan II	UG/L	0.05 U	0.055 U	0.055 U	0.05 U	0.06 U	0.06 U
4,4'-DDD	UG/L	0.05 U	0.055 U	0.055 U	0.05 U	0.06 U	0.06 U
Endosulfan sulfate	UG/L	0.05 U	0.055 U	0.055 U	0.05 U	0.06 U	0.06 U
4,4'-DDT	UG/L	0.05 U	0.055 U	0.055 U	0.05 U	0.06 U	0.06 U
Methoxychlor	UG/L	0.25 U	0.265 U	0.27 U	0.25 U	0.31 U	0.3 U
Endrin ketone	UG/L	0.05 U	0.055 U	0.055 U	0.05 U	0.06 U	0.06 U
Endrin aldehyde	UG/L	0.05 U	0.055 U	0.055 U	0.05 U	0.06 U	0.06 U
alpha-Chlordane	UG/L	0.025 U	0.0265 U	0.027 U	0.025 U	0.031 U	0.03 U
gamma-Chlordane	UG/L	0.025 U	0.0265 U	0.027 U	0.025 U	0.031 U	0.03 U
Toxaphene	UG/L	2.5 U	2.65 U	2.7 U	2.5 U	3.1 U	3 U
Aroclor 1016	UG/L	0.5 U	0.55 U	0.55 U	0.5 U	0.6 U	0.6 U
Aroclor 1221	UG/L	1 U	1.05 U	1.1 U	1 U	1.25 U	1.2 U
Aroclor 1232	UG/L	0.5 U	0.55 U	0.55 U	0.5 U	0.6 U	0.6 U
Aroclor 1242	UG/L	0.5 U	0.55 U	0.55 U	0.5 U	0.6 U	0.6 U
Aroclor 1248	UG/L	0.5 U	0.55 U	0.55 U	0.5 U	0.6 U	0.6 U
Aroclor 1254	UG/L	0.5 U	0.55 U	0.55 U	0.5 U	0.6 U	0.6 U
Aroclor 1260	UG/L	0.5 U	0.55 U	0.55 U	0.5 U	0.6 U	0.6 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	41-UN-SW19	41-UN-SW20	41-UN-SW21	41-UN-SW22	41-UN-SW23	41-UN-SW24
Laboratory Sample ID:	AB7567	AB7564	AB7561	AB7558	AB7555	AB7552
Date Sampled:	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94

UNITS

ORDNANCE

1,3,5-Trinitrobenzene	UG/L	NA	NA	NA	NA	NA	NA
1,3-Dinitrobenzene	UG/L	NA	NA	NA	NA	NA	NA
2,4,6-Trinitrotoluene	UG/L	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	UG/L	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	UG/L	NA	NA	NA	NA	NA	NA
2-Amino-4,6-dinitrotoluene	UG/L	NA	NA	NA	NA	NA	NA
2-Nitrotoluene	UG/L	NA	NA	NA	NA	NA	NA
3-Nitrotoluene	UG/L	NA	NA	NA	NA	NA	NA
4-Amino-2,6-dinitrotoluene	UG/L	NA	NA	NA	NA	NA	NA
4-Nitrotoluene	UG/L	NA	NA	NA	NA	NA	NA
HMX	UG/L	NA	NA	NA	NA	NA	NA
Nitrobenzene	UG/L	NA	NA	NA	NA	NA	NA
RDX	UG/L	NA	NA	NA	NA	NA	NA
Tetryl	UG/L	NA	NA	NA	NA	NA	NA

MIREX

Mirex	UG/L	NA	NA	NA	NA	NA	NA
-------	------	----	----	----	----	----	----

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SW25	41-UN-SW26	41-UN-SW27	41-UN-SW28
Laboratory Sample ID:	AB7549	AB7546	AB7543	AB7540
Date Sampled:	08/23/94	08/23/94	08/23/94	08/23/94

UNITS

SEMIVOLATILES

	UG/L	NA	NA	NA	NA
1,2-Dichlorobenzene	UG/L	NA	NA	NA	NA
1,2,4-Trichlorobenzene	UG/L	NA	NA	NA	NA
1,3-Dichlorobenzene	UG/L	NA	NA	NA	NA
1,4-Dichlorobenzene	UG/L	NA	NA	NA	NA
2-Chloronaphthalene	UG/L	NA	NA	NA	NA
2-Chlorophenol	UG/L	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	NA	NA	NA	NA
2-Methylphenol	UG/L	NA	NA	NA	NA
2-Nitroaniline	UG/L	NA	NA	NA	NA
2-Nitrophenol	UG/L	NA	NA	NA	NA
2,2'-oxybis-(1-chloropropane)	UG/L	NA	NA	NA	NA
2,4-Dichlorophenol	UG/L	NA	NA	NA	NA
2,4-Dimethylphenol	UG/L	NA	NA	NA	NA
2,4-Dinitrophenol	UG/L	NA	NA	NA	NA
2,4-Dinitrotoluene	UG/L	NA	NA	NA	NA
2,4,5-Trichlorophenol	UG/L	NA	NA	NA	NA
2,4,6-Trichlorophenol	UG/L	NA	NA	NA	NA
2,6-Dinitrotoluene	UG/L	NA	NA	NA	NA
3-Nitroaniline	UG/L	NA	NA	NA	NA
3,3'-Dichlorobenzidine	UG/L	NA	NA	NA	NA
4-Bromophenyl-phenylether	UG/L	NA	NA	NA	NA
4-Chloro-3-methylphenol	UG/L	NA	NA	NA	NA
4-Chloroaniline	UG/L	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	UG/L	NA	NA	NA	NA
4-Methylphenol	UG/L	NA	NA	NA	NA
4-Nitroaniline	UG/L	NA	NA	NA	NA
4-Nitrophenol	UG/L	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	UG/L	NA	NA	NA	NA
Acenaphthene	UG/L	NA	NA	NA	NA
Acenaphthylene	UG/L	NA	NA	NA	NA
Anthracene	UG/L	NA	NA	NA	NA
Benzo[a]anthracene	UG/L	NA	NA	NA	NA
Benzo[a]pyrene	UG/L	NA	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SW25	41-UN-SW26	41-UN-SW27	41-UN-SW28
Laboratory Sample ID:	AB7549	AB7546	AB7543	AB7540
Date Sampled:	08/23/94	08/23/94	08/23/94	08/23/94

UNITS

SEMIVOLATILES Cont.

	41-UN-SW25	41-UN-SW26	41-UN-SW27	41-UN-SW28
Benzo[b]fluoranthene	UG/L	NA	NA	NA
Benzo[g,h,i]perylene	UG/L	NA	NA	NA
Benzo[k]fluoranthene	UG/L	NA	NA	NA
bis(2-Chloroethoxy) methane	UG/L	NA	NA	NA
bis(2-Chloroethyl) ether	UG/L	NA	NA	NA
bis(2-Ethylhexyl)phthalate	UG/L	NA	NA	NA
Butyl benzyl phthalate	UG/L	NA	NA	NA
Carbazole	UG/L	NA	NA	NA
Chrysene	UG/L	NA	NA	NA
Dibenzofuran	UG/L	NA	NA	NA
Dibenz[a,h]anthracene	UG/L	NA	NA	NA
Diethylphthalate	UG/L	NA	NA	NA
Dimethyl phthalate	UG/L	NA	NA	NA
di-n-Butylphthalate	UG/L	NA	NA	NA
di-n-Octylphthalate	UG/L	NA	NA	NA
Fluoranthene	UG/L	NA	NA	NA
Fluorene	UG/L	NA	NA	NA
Hexachlorobenzene	UG/L	NA	NA	NA
Hexachlorobutadiene	UG/L	NA	NA	NA
Hexachlorocyclopentadiene	UG/L	NA	NA	NA
Hexachloroethane	UG/L	NA	NA	NA
Indeno[1,2,3-cd]pyrene	UG/L	NA	NA	NA
Isophorone	UG/L	NA	NA	NA
Naphthalene	UG/L	NA	NA	NA
Nitrobenzene	UG/L	NA	NA	NA
N-Nitroso-di-n-propylamine	UG/L	NA	NA	NA
N-nitrosodiphenylamine	UG/L	NA	NA	NA
Pentachlorophenol	UG/L	NA	NA	NA
Phenanthrene	UG/L	NA	NA	NA
Phenol	UG/L	NA	NA	NA
Pyrene	UG/L	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SW25	41-UN-SW26	41-UN-SW27	41-UN-SW28
Laboratory Sample ID:	AB7549	AB7546	AB7543	AB7540
Date Sampled:	08/23/94	08/23/94	08/23/94	08/23/94

UNITS

VOLATILES

	UG/L	NA	NA	NA	NA
Chloromethane	UG/L	NA	NA	NA	NA
Bromomethane	UG/L	NA	NA	NA	NA
Vinyl chloride	UG/L	NA	NA	NA	NA
Chloroethane	UG/L	NA	NA	NA	NA
Methylene chloride	UG/L	NA	NA	NA	NA
Acetone	UG/L	NA	NA	NA	NA
Carbon Disulfide	UG/L	NA	NA	NA	NA
1,1-Dichloroethene	UG/L	NA	NA	NA	NA
1,1-Dichloroethane	UG/L	NA	NA	NA	NA
1,2-Dichloroethene(total)	UG/L	NA	NA	NA	NA
Chloroform	UG/L	NA	NA	NA	NA
1,2-Dichloroethane	UG/L	NA	NA	NA	NA
2-Butanone	UG/L	NA	NA	NA	NA
1,1,1-Trichloroethane	UG/L	NA	NA	NA	NA
Carbon tetrachloride	UG/L	NA	NA	NA	NA
Bromodichloromethane	UG/L	NA	NA	NA	NA
1,2-Dichloropropane	UG/L	NA	NA	NA	NA
cis-1,3-Dichloropropene	UG/L	NA	NA	NA	NA
Trichloroethene	UG/L	NA	NA	NA	NA
Dibromochloromethane	UG/L	NA	NA	NA	NA
1,1,2-Trichloroethane	UG/L	NA	NA	NA	NA
Benzene	UG/L	NA	NA	NA	NA
trans-1,3-Dichloropropene	UG/L	NA	NA	NA	NA
Bromoform	UG/L	NA	NA	NA	NA
4-Methyl-2-pentanone	UG/L	NA	NA	NA	NA
2-Hexanone	UG/L	NA	NA	NA	NA
Tetrachloroethene	UG/L	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	UG/L	NA	NA	NA	NA
Toluene	UG/L	NA	NA	NA	NA
Chlorobenzene	UG/L	NA	NA	NA	NA
Ethylbenzene	UG/L	NA	NA	NA	NA
Styrene	UG/L	NA	NA	NA	NA
Xylenes (total)	UG/L	NA	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SW25	41-UN-SW26	41-UN-SW27	41-UN-SW28
Laboratory Sample ID:	AB7549	AB7546	AB7543	AB7540
Date Sampled:	08/23/94	08/23/94	08/23/94	08/23/94

UNITS

PESTICIDE/PCBS

	41-UN-SW25	41-UN-SW26	41-UN-SW27	41-UN-SW28
alpha-BHC	UG/L 0.029 U	0.025 U	0.025 U	0.025 U
beta-BHC	UG/L 0.029 U	0.025 U	0.025 U	0.025 U
delta-BHC	UG/L 0.029 U	0.025 U	0.025 U	0.025 U
Lindane (gamma-BHC)	UG/L 0.029 U	0.025 U	0.025 U	0.025 U
Heptachlor	UG/L 0.029 U	0.025 U	0.025 U	0.025 U
Aldrin	UG/L 0.029 U	0.025 U	0.025 U	0.025 U
Heptachlor epoxide	UG/L 0.029 U	0.025 U	0.025 U	0.025 U
Endosulfan I	UG/L 0.029 U	0.025 U	0.025 U	0.025 U
Dieldrin	UG/L 0.06 U	0.05 U	0.05 U	0.05 U
4,4'-DDE	UG/L 0.06 U	0.05 U	0.05 U	0.05 U
Endrin	UG/L 0.06 U	0.05 U	0.05 U	0.05 U
Endosulfan II	UG/L 0.06 U	0.05 U	0.05 U	0.05 U
4,4'-DDD	UG/L 0.06 U	0.05 U	0.05 U	0.05 U
Endosulfan sulfate	UG/L 0.06 U	0.05 U	0.05 U	0.05 U
4,4'-DDT	UG/L 0.06 U	0.05 U	0.05 U	0.05 U
Methoxychlor	UG/L 0.29 U	0.25 U	0.25 U	0.25 U
Endrin ketone	UG/L 0.06 U	0.05 U	0.05 U	0.05 U
Endrin aldehyde	UG/L 0.06 U	0.05 U	0.05 U	0.05 U
alpha-Chlordane	UG/L 0.029 U	0.025 U	0.025 U	0.025 U
gamma-Chlordane	UG/L 0.029 U	0.025 U	0.025 U	0.025 U
Toxaphene	UG/L 2.9 U	2.5 U	2.5 U	2.5 U
Aroclor 1016	UG/L 0.6 U	0.5 U	0.5 U	0.5 U
Aroclor 1221	UG/L 1.15 U	1 U	1 U	1 U
Aroclor 1232	UG/L 0.6 U	0.5 U	0.5 U	0.5 U
Aroclor 1242	UG/L 0.6 U	0.5 U	0.5 U	0.5 U
Aroclor 1248	UG/L 0.6 U	0.5 U	0.5 U	0.5 U
Aroclor 1254	UG/L 0.6 U	0.5 U	0.5 U	0.5 U
Aroclor 1260	UG/L 0.6 U	0.5 U	0.5 U	0.5 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	41-UN-SW25	41-UN-SW26	41-UN-SW27	41-UN-SW28
Laboratory Sample ID:	AB7549	AB7546	AB7543	AB7540
Date Sampled:	08/23/94	08/23/94	08/23/94	08/23/94

	<u>UNITS</u>				
ORDNANCE					
1,3,5-Trinitrobenzene	UG/L	NA	NA	NA	NA
1,3-Dinitrobenzene	UG/L	NA	NA	NA	NA
2,4,6-Trinitrotoluene	UG/L	NA	NA	NA	NA
2,4-Dinitrotoluene	UG/L	NA	NA	NA	NA
2,6-Dinitrotoluene	UG/L	NA	NA	NA	NA
2-Amino-4,6-dinitrotoluene	UG/L	NA	NA	NA	NA
2-Nitrotoluene	UG/L	NA	NA	NA	NA
3-Nitrotoluene	UG/L	NA	NA	NA	NA
4-Amino-2,6-dinitrotoluene	UG/L	NA	NA	NA	NA
4-Nitrotoluene	UG/L	NA	NA	NA	NA
HMX	UG/L	NA	NA	NA	NA
Nitrobenzene	UG/L	NA	NA	NA	NA
RDX	UG/L	NA	NA	NA	NA
Tetryl	UG/L	NA	NA	NA	NA
MIREX					
Mirex	UG/L	NA	NA	NA	NA

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled:	MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
	UNITS				
	SEMIVOLATILES				
1,2-Dichlorobenzene	UG/L	ND	NA	NA	NA
1,2,4-Trichlorobenzene	UG/L	ND	NA	NA	NA
1,3-Dichlorobenzene	UG/L	ND	NA	NA	NA
1,4-Dichlorobenzene	UG/L	ND	NA	NA	NA
2-Chloronaphthalene	UG/L	ND	NA	NA	NA
2-Chlorophenol	UG/L	ND	NA	NA	NA
2-Methylnaphthalene	UG/L	ND	NA	NA	NA
2-Methylphenol	UG/L	ND	NA	NA	NA
2-Nitroaniline	UG/L	ND	NA	NA	NA
2-Nitrophenol	UG/L	ND	NA	NA	NA
2,2'-oxybis-(1-chloropropane)	UG/L	ND	NA	NA	NA
2,4-Dichlorophenol	UG/L	ND	NA	NA	NA
2,4-Dimethylphenol	UG/L	ND	NA	NA	NA
2,4-Dinitrophenol	UG/L	ND	NA	NA	NA
2,4-Dinitrotoluene	UG/L	ND	NA	NA	NA
2,4,5-Trichlorophenol	UG/L	ND	NA	NA	NA
2,4,6-Trichlorophenol	UG/L	ND	NA	NA	NA
2,6-Dinitrotoluene	UG/L	ND	NA	NA	NA
3-Nitroaniline	UG/L	ND	NA	NA	NA
3,3'-Dichlorobenzidine	UG/L	ND	NA	NA	NA
4-Bromophenyl-phenylether	UG/L	ND	NA	NA	NA
4-Chloro-3-methylphenol	UG/L	ND	NA	NA	NA
4-Chloroaniline	UG/L	ND	NA	NA	NA
4-Chlorophenyl phenyl ether	UG/L	ND	NA	NA	NA
4-Methylphenol	UG/L	ND	NA	NA	NA
4-Nitroaniline	UG/L	ND	NA	NA	NA
4-Nitrophenol	UG/L	ND	NA	NA	NA
4,6-Dinitro-2-methylphenol	UG/L	ND	NA	NA	NA
Acenaphthene	UG/L	ND	NA	NA	NA
Acenaphthylene	UG/L	ND	NA	NA	NA
Anthracene	UG/L	ND	NA	NA	NA
Benzo[a]anthracene	UG/L	ND	NA	NA	NA
Benzo[a]pyrene	UG/L	ND	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled:	MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
<u>UNITS</u>					
<u>SEMIVOLATILES Cont.</u>					
Benzo[b]fluoranthene	UG/L	ND	NA	NA	NA
Benzo[g,h,i]perylene	UG/L	ND	NA	NA	NA
Benzo[k]fluoranthene	UG/L	ND	NA	NA	NA
bis(2-Chloroethoxy) methane	UG/L	ND	NA	NA	NA
bis(2-Chloroethyl) ether	UG/L	ND	NA	NA	NA
bis(2-Ethylhexyl)phthalate	UG/L	ND	NA	NA	NA
Butyl benzyl phthalate	UG/L	ND	NA	NA	NA
Carbazole	UG/L	ND	NA	NA	NA
Chrysene	UG/L	ND	NA	NA	NA
Dibenzofuran	UG/L	ND	NA	NA	NA
Dibenz[a,h]anthracene	UG/L	ND	NA	NA	NA
Diethylphthalate	UG/L	ND	NA	NA	NA
Dimethyl phthalate	UG/L	ND	NA	NA	NA
di-n-Butylphthalate	UG/L	ND	NA	NA	NA
di-n-Octylphthalate	UG/L	ND	NA	NA	NA
Fluoranthene	UG/L	ND	NA	NA	NA
Fluorene	UG/L	ND	NA	NA	NA
Hexachlorobenzene	UG/L	ND	NA	NA	NA
Hexachlorobutadiene	UG/L	ND	NA	NA	NA
Hexachlorocyclopentadiene	UG/L	ND	NA	NA	NA
Hexachloroethane	UG/L	ND	NA	NA	NA
Indeno[1,2,3-cd]pyrene	UG/L	ND	NA	NA	NA
Isophorone	UG/L	ND	NA	NA	NA
Naphthalene	UG/L	ND	NA	NA	NA
Nitrobenzene	UG/L	ND	NA	NA	NA
N-Nitroso-di-n-propylamine	UG/L	ND	NA	NA	NA
N-nitrosodiphenylamine	UG/L	ND	NA	NA	NA
Pentachlorophenol	UG/L	ND	NA	NA	NA
Phenanthrene	UG/L	ND	NA	NA	NA
Phenol	UG/L	ND	NA	NA	NA
Pyrene	UG/L	ND	NA	NA	NA

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled:	MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
UNITS					
VOLATILES					
Chloromethane	UG/L	ND	NA	NA	NA
Bromomethane	UG/L	ND	NA	NA	NA
Vinyl chloride	UG/L	ND	NA	NA	NA
Chloroethane	UG/L	ND	NA	NA	NA
Methylene chloride	UG/L	ND	NA	NA	NA
Acetone	UG/L	ND	NA	NA	NA
Carbon Disulfide	UG/L	ND	NA	NA	NA
1,1-Dichloroethene	UG/L	ND	NA	NA	NA
1,1-Dichloroethane	UG/L	ND	NA	NA	NA
1,2-Dichloroethene(total)	UG/L	ND	NA	NA	NA
Chloroform	UG/L	ND	NA	NA	NA
1,2-Dichloroethane	UG/L	ND	NA	NA	NA
2-Butanone	UG/L	ND	NA	NA	NA
1,1,1-Trichloroethane	UG/L	ND	NA	NA	NA
Carbon tetrachloride	UG/L	ND	NA	NA	NA
Bromodichloromethane	UG/L	ND	NA	NA	NA
1,2-Dichloropropane	UG/L	ND	NA	NA	NA
cis-1,3-Dichloropropene	UG/L	ND	NA	NA	NA
Trichloroethene	UG/L	ND	NA	NA	NA
Dibromochloromethane	UG/L	ND	NA	NA	NA
1,1,2-Trichloroethane	UG/L	ND	NA	NA	NA
Benzene	UG/L	ND	NA	NA	NA
trans-1,3-Dichloropropene	UG/L	ND	NA	NA	NA
Bromoform	UG/L	ND	NA	NA	NA
4-Methyl-2-pentanone	UG/L	ND	NA	NA	NA
2-Hexanone	UG/L	ND	NA	NA	NA
Tetrachloroethene	UG/L	ND	NA	NA	NA
1,1,2,2-Tetrachloroethane	UG/L	ND	NA	NA	NA
Toluene	UG/L	ND	NA	NA	NA
Chlorobenzene	UG/L	4 J	4.6	1.1	5.2
Ethylbenzene	UG/L	ND	NA	NA	NA
Styrene	UG/L	ND	NA	NA	NA
Xylenes (total)	UG/L	ND	NA	NA	NA

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled:	MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
	<u>UNITS</u>				
	<u>PESTICIDE/PCBS</u>				
alpha-BHC	UG/L	ND	NA	NA	NA
beta-BHC	UG/L	ND	NA	NA	NA
delta-BHC	UG/L	ND	NA	NA	NA
Lindane (gamma-BHC)	UG/L	0.02 J	0.027	0.005	0.029
Heptachlor	UG/L	0.055	0.027	0.010	0.030
Aldrin	UG/L	ND	NA	NA	NA
Heptachlor epoxide	UG/L	ND	NA	NA	NA
Endosulfan I	UG/L	ND	NA	NA	NA
Dieldrin	UG/L	ND	NA	NA	NA
4,4'-DDE	UG/L	ND	NA	NA	NA
Endrin	UG/L	ND	NA	NA	NA
Endosulfan II	UG/L	ND	NA	NA	NA
4,4'-DDD	UG/L	ND	NA	NA	NA
Endosulfan sulfate	UG/L	ND	NA	NA	NA
4,4'-DDT	UG/L	0.03 J	0.05	0.01	0.06
Methoxychlor	UG/L	ND	NA	NA	NA
Endrin ketone	UG/L	ND	NA	NA	NA
Endrin aldehyde	UG/L	ND	NA	NA	NA
alpha-Chlordane	UG/L	ND	NA	NA	NA
gamma-Chlordane	UG/L	ND	NA	NA	NA
Toxaphene	UG/L	ND	NA	NA	NA
Aroclor 1016	UG/L	ND	NA	NA	NA
Aroclor 1221	UG/L	ND	NA	NA	NA
Aroclor 1232	UG/L	ND	NA	NA	NA
Aroclor 1242	UG/L	ND	NA	NA	NA
Aroclor 1248	UG/L	ND	NA	NA	NA
Aroclor 1254	UG/L	ND	NA	NA	NA
Aroclor 1260	UG/L	ND	NA	NA	NA

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled:		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
	<u>UNITS</u>					
	<u>ORDNANCE</u>					
	1,3,5-Trinitrobenzene	UG/L	ND	NA	NA	NA
	1,3-Dinitrobenzene	UG/L	ND	NA	NA	NA
	2,4,6-Trinitrotoluene	UG/L	ND	NA	NA	NA
	2,4-Dinitrotoluene	UG/L	ND	NA	NA	NA
	2,6-Dinitrotoluene	UG/L	ND	NA	NA	NA
	2-Amino-4,6-dinitrotoluene	UG/L	ND	NA	NA	NA
	2-Nitrotoluene	UG/L	ND	NA	NA	NA
	3-Nitrotoluene	UG/L	ND	NA	NA	NA
	4-Amino-2,6-dinitrotoluene	UG/L	ND	NA	NA	NA
	4-Nitrotoluene	UG/L	ND	NA	NA	NA
	HMX	UG/L	ND	NA	NA	NA
	Nitrobenzene	UG/L	ND	NA	NA	NA
	RDX	UG/L	ND	NA	NA	NA
	Tetryl	UG/L	ND	NA	NA	NA
	<u>MIREX</u>					
	Mirex	UG/L	ND	NA	NA	NA

APPENDIX P.15
SITE 41 UNNAMED TRIBUTARY AND TANK CREEK
SURFACE WATER INORGANICS

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL METALS

Client Sample ID:	41-TC-SW06	41-TC-SW07	41-TC-SW08	41-TC-SW09	41-NE-SW05	41-UN-SW01
Laboratory Sample ID:	9402081-05	9402080-01	9402081-01	9402081-02	9402093-01	9402063-03
Date Sampled:	02/06/94	02/07/94	02/06/94	02/06/94	02/08/94	02/04/94

	UNITS						
Aluminum	UG/L	390.0	395.0	411.0	397.0	178.0	447.0 J
Antimony	UG/L	3.80 U	3.80 U	3.80 U	3.80 U	3.80 U	3.80 U
Arsenic	UG/L	1.45 U	1.45 U	1.45 U	1.45 U	1.45 U	1.10 U
Barium	UG/L	23.6	25.6	29.0	25.1	27.2	23.3
Beryllium	UG/L	0.380 U	0.380 U	0.380 U	0.380 U	0.380 U	0.380 U
Cadmium	UG/L	1.60 U	1.60 U	1.60 U	1.60 U	1.60 U	1.60 U
Calcium	UG/L	18900.0	21400.0	20300.0	19400.0	40300.0	41600.0
Chromium	UG/L	4.16 U	8.52	4.16 U	4.16 U	4.16 U	4.16 U
Cobalt	UG/L	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U
Copper	UG/L	8.2 U	8.2 U	8.2 U	8.2 U	8.2 U	8.2 U
Iron	UG/L	1480.0	1540.0	1490.0	1510.0	469.0	1300.0 J
Lead	UG/L	1.40	1.40	1.74	0.50 U	1.17	1.85
Magnesium	UG/L	1620.0	1720.0	1710.0	2360.0	2410.0	1770.0
Manganese	UG/L	25.7	30.6	28.3	30.7	40.0	17.5
Mercury	UG/L	0.086 U	0.101 U	0.116 U	0.086 U	0.080 U	0.091 UJ
Nickel	UG/L	8.7 U	14.4 U	8.7 U	8.7 U	8.7 U	14.4 U
Potassium	UG/L	2210	2090	2090	2320	1620	1860
Selenium	UG/L	0.80 UJ	0.80 UJ	0.80 UJ	0.80 UJ	0.80 UJ	0.80 UJ
Silver	UG/L	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U
Sodium	UG/L	15000	15200	15000	22800	12300	22100
Thallium	UG/L	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U	1.50 U
Vanadium	UG/L	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U
Zinc	UG/L	21.4	16.7	16.8	16.3	33.2	24.9

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL METALS

Client Sample ID:	41-UN-SW02	41-UN-SW03	41-UN-SW04	41-UN-SW10	41-UN-SW11	41-UN-SW12
Laboratory Sample ID:	9402067-01	9402039-01	9402039-03	9402022-01	9402063-01	9402067-02
Date Sampled:	02/03/94	02/01/94	02/01/94	02/01/94	02/04/94	02/04/94

	UNITS						
Aluminum	UG/L	303.0	437.0	442.0	460.0	3380.0 J	69.5 U
Antimony	UG/L	3.80 U	3.95 U	3.95 U	3.95 U	3.80 U	3.80 U
Arsenic	UG/L	1.45 U	1.45 UJ	1.45 UJ	1.45 UJ	1.10 U	1.45 U
Barium	UG/L	21.2	20.0	26.6	17.9	24.4	37.5
Beryllium	UG/L	0.380 U	0.380 U	0.380 U	0.380 U	0.380 U	0.380 U
Cadmium	UG/L	1.60 U	1.60 U	1.60 U	1.60 U	1.60 U	1.60 U
Calcium	UG/L	41400.0	30000.0	31300.0	9980.0	20200.0	39800.0
Chromium	UG/L	4.16 U	4.16 U	4.16 U	4.16 U	4.16 U	4.16 U
Cobalt	UG/L	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U	8.0 U
Copper	UG/L	8.2 U	8.2 U	8.2 U	8.2 U	8.2 U	8.2 U
Iron	UG/L	662.0	633.0	655.0	718.0	2690.0 J	6260.0
Lead	UG/L	0.50 U	0.50 U	1.13 J	0.50 U	8.10	0.50 U
Magnesium	UG/L	1940.0	1860.0	2040.0	1550.0	2160.0	4220.0
Manganese	UG/L	16.6	25.2	28.5	17.1	12.3	47.7
Mercury	UG/L	0.084 U	0.050 U	0.050 U	0.050 U	0.092 UJ	0.067 U
Nickel	UG/L	14.4 U	14.4 U	14.4 U	14.4 U	14.4 U	14.4 U
Potassium	UG/L	2090	1700	1600	1490	923	3370
Selenium	UG/L	0.80 UJ	1.27 U	1.27 U	1.27 U	0.80 UJ	0.80 U
Silver	UG/L	0.80 U	0.200 UJ	0.200 UJ	0.200 UJ	0.80 U	0.80 U
Sodium	UG/L	20900	13200	12900	11200	4760	7490
Thallium	UG/L	1.50 U	2.30 UJ	2.30 UJ	2.30 UJ	1.50 U	1.50 U
Vanadium	UG/L	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U	10.2 U
Zinc	UG/L	30.4	20.1 U	16.0 U	9.3 U	25.0	27.2

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL METALS

	41-UN-SW-13	41-UN-SW-14	41-UN-SW15	41-UN-SW16	41-UN-SW17	41-UN-SW18
Client Sample ID:	41-UN-SW-13	41-UN-SW-14	41-UN-SW15	41-UN-SW16	41-UN-SW17	41-UN-SW18
Laboratory Sample ID:	9402060-03	9402060-01	AB7582	AB7579	AB7575	AB7571
Date Sampled:	02/03/94	02/03/94	08/23/94	08/23/94	08/23/94	08/23/94
	<u>UNITS</u>					
Aluminum	UG/L 3390.0	69.5 U	260	183	988	356
Antimony	UG/L 3.95 U	3.95 U	25 U	25 U	25 U	25 U
Arsenic	UG/L 1.45 UJ	1.45 UJ	11.8	2.7	2.2	1 U
Barium	UG/L 113.0	54.5	26.3	85.4	53.8	39.4
Beryllium	UG/L 0.380 U	0.380 U	0.5 U	0.5 U	0.5 U	0.5 U
Cadmium	UG/L 1.60 U	1.60 U	2.5 U	2.5 U	2.5 U	2.5 U
Calcium	UG/L 75800.0	84200.0	43200	62200	20100	34600
Chromium	UG/L 4.16 U	4.16 U	5 U	5 U	5 U	5 U
Cobalt	UG/L 8.0 U	8.0 U	5 U	5 U	5 U	5 U
Copper	UG/L 8.2 U	8.2 U	5 U	5 U	5 U	5 U
Iron	UG/L 14100.0	2810.0	39600	33400	17600	10600
Lead	UG/L 12.1	1.52 J	3.1	7.7	3.6	4.3
Magnesium	UG/L 12700.0	11000.0	2790	10500	3340	2960
Manganese	UG/L 34.1	209.0	76.5	106	52.4	130
Mercury	UG/L 0.101	0.050 U	0.28	0.1 U	0.36	0.28
Nickel	UG/L 14.4 U	14.4 U	10 U	10 U	10 U	10 U
Potassium	UG/L 10200	6760	2220	13400	2920	2080
Selenium	UG/L 1.27 UJ	1.27 U	1 U	1 U	1 U	1 U
Silver	UG/L 0.200 UJ	0.200 UJ	2.5 U	2.5 U	2.5 U	2.5 U
Sodium	UG/L 14800	23600	573	19300	9680	11300
Thallium	UG/L 2.30 UJ	2.30 UJ	1 U	1 U	1 U	1 U
Vanadium	UG/L 10.2 U	10.2 U	5 U	5 U	5 U	5 U
Zinc	UG/L 37.1 U	9.5 U	59.2	68.7	80.7	43

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL METALS

	41-UN-SW19	41-UN-SW20	41-UN-SW21	41-UN-SW22	41-UN-SW23	41-UN-SW24
Client Sample ID:	41-UN-SW19	41-UN-SW20	41-UN-SW21	41-UN-SW22	41-UN-SW23	41-UN-SW24
Laboratory Sample ID:	AB7568	AB7565	AB7562	AB7559	AB7556	AB7553
Date Sampled:	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94
	UNITS					
Aluminum	UG/L 245	110	20 U	20 U	11000	17800
Antimony	UG/L 25 U	25 U	25 U	25 U	25 U	25 U
Arsenic	UG/L 2.4	1 U	1 U	4.8	22.1	30.2
Barium	UG/L 19.2	18.4	18.6	89.9	360	442
Beryllium	UG/L 0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cadmium	UG/L 2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	6.2
Calcium	UG/L 46900	46700	50100	104000	165000	158000
Chromium	UG/L 5 U	5 U	5 U	5 U	5 U	5 U
Cobalt	UG/L 5 U	5 U	5 U	5 U	19.6	43.9
Copper	UG/L 5 U	5 U	5 U	5 U	34.1	41.2
Iron	UG/L 747	683	649	15700	245000	278000
Lead	UG/L 1 U	1 U	1 U	1 U	36.2	36
Magnesium	UG/L 1910	1850	1990	13500	12800	11400
Manganese	UG/L 19.9	17.5	17.7	1380	1590	1700
Mercury	UG/L 0.21	0.1 U	0.1 U	0.1 U	0.56	0.46
Nickel	UG/L 10 U	10 U	10 U	10 U	10 U	20
Potassium	UG/L 2540	2180	2650	8740	5870	4920
Selenium	UG/L 1 U	1 U	1 U	5 U	10 U	10 U
Silver	UG/L 2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Sodium	UG/L 21200	20800	21800	38300	60700	67600
Thallium	UG/L 1 U	1 U	1 U	1 U	1 U	1 U
Vanadium	UG/L 5 U	5 U	5 U	5 U	40.4	51.5
Zinc	UG/L 27.2	31.9	28.1	29.8	231	235

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL METALS

Client Sample ID:	41-UN-SW25	41-UN-SW26	41-UN-SW27	41-UN-SW28
Laboratory Sample ID:	AB7550	AB7547	AB7544	AB7541
Date Sampled:	08/23/94	08/23/94	08/23/94	08/23/94

	UNITS				
Aluminum	UG/L	7060	102	76.6	585
Antimony	UG/L	25 U	25 U	25 U	25 U
Arsenic	UG/L	11.7	1 U	1 U	2.6
Barium	UG/L	327	21.8	23.6	26.5
Beryllium	UG/L	0.5 U	0.5 U	0.5 U	0.5 U
Cadmium	UG/L	2.5 U	2.5 U	2.5 U	2.5 U
Calcium	UG/L	121000	42500	44000	45600
Chromium	UG/L	5 U	5 U	5 U	5 U
Cobalt	UG/L	20.5	5 U	5 U	5 U
Copper	UG/L	20.1	13.3	5 U	5 U
Iron	UG/L	238000	936	1340	2940
Lead	UG/L	36.8	7.2	17	4.8
Magnesium	UG/L	10000	1940	2140	2410
Manganese	UG/L	1200	20.4	44.9	85.6
Mercury	UG/L	0.26	0.23	0.1 U	0.1 U
Nickel	UG/L	10 U	10 U	10 U	10 U
Potassium	UG/L	4450	2290	1960	1620
Selenium	UG/L	10 U	1 U	1 U	1 U
Silver	UG/L	2.5 U	2.5 U	2.5 U	2.5 U
Sodium	UG/L	52600	14100	15300	16300
Thallium	UG/L	1 U	1 U	1 U	1 U
Vanadium	UG/L	35.4	5 U	5 U	5 U
Zinc	UG/L	133	21.4	30.8	47.8

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY AND TANK CREEK SURFACE WATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL METALS

Client Sample ID: Laboratory Sample ID: Date Sampled:		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
	<u>UNITS</u>					
	Aluminum	UG/L 17800	1770.5	3972.3	3048.9	5267.9
	Antimony	UG/L ND	NA	NA	NA	NA
	Arsenic	UG/L 30.2	4.1	6.9	6.3	5.4
	Barium	UG/L 442	72.2	111.0	107.9	97.2
	Beryllium	UG/L ND	NA	NA	NA	NA
	Cadmium	UG/L 6.2	2.2	0.9	2.5	2.4
	Calcium	UG/L 165000	52802.9	39956.1	65662.2	70139.5
	Chromium	UG/L 8.52	4.7	0.9	5.0	5.0
	Cobalt	UG/L 43.9	9.0	7.8	11.5	10.5
	Copper	UG/L 41.2	9.7	8.5	12.5	11.6
	Iron	UG/L 278000	32910.4	78706.5	58241.1	126114.4
	Lead	UG/L 36.8	6.9	11.1	10.5	16.0
	Magnesium	UG/L 13500	4592.5	4260.9	5963.8	6265.4
	Manganese	UG/L 1700	250.2	513.2	415.3	469.4
	Mercury	UG/L 0.56	0.2	0.1	0.2	0.2
	Nickel	UG/L 20	11.7	2.8	12.7	12.7
	Potassium	UG/L 13400	3505.8	2963.1	4459.5	4457.3
	Selenium	UG/L ND	NA	NA	NA	NA
	Silver	UG/L ND	NA	NA	NA	NA
	Sodium	UG/L 67600	20743.0	15739.4	25808.5	34770.2
	Thallium	UG/L ND	NA	NA	NA	NA
	Vanadium	UG/L 51.5	11.6	11.4	15.3	14.5
	Zinc	UG/L 235	49.0	57.8	67.6	67.0

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY SURFACE WATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL DISSOLVED METALS

Client Sample ID:	41-UN-SW15 F	41-UN-SW16 F	41-UN-SW17 F	41-UN-SW18 F	41-UN-SW19 F	41-UN-SW20 F
Laboratory Sample ID:	AB7596	AB7595	AB7594	AB7593	AB7592	AB7591
Date Sampled:	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94

	UNITS						
Aluminum	UG/L	20 U	20 U	20 U	20 U	20 U	20 U
Antimony	UG/L	25 U	25 U	25 U	25 U	25 U	25 U
Arsenic	UG/L	2	1 U	1 U	1 U	1 U	1 U
Barium	UG/L	24.6	82.4	47.2	34.1	19.1	18.8
Beryllium	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cadmium	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Calcium	UG/L	53000	74000	23700	39200	54400	55400
Chromium	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Cobalt	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Copper	UG/L	18.2	5 U	15.1	21.5	20.8	19
Iron	UG/L	118	6000	1060	2390	161	146
Lead	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Magnesium	UG/L	3570	12700	4000	3380	2200	2230
Manganese	UG/L	83.8	121	50.7	152	18.5	18.1
Mercury	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel	UG/L	10 U	10 U	10 U	10 U	10 U	10 U
Potassium	UG/L	2520	15600	3120	2380	2670	2500
Selenium	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Silver	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Sodium	UG/L	6860	22700	11400	12300	24500	24700
Thallium	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Vanadium	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Zinc	UG/L	7.8	5.4	11.1	11.4	8.1	8.1

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY SURFACE WATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL DISSOLVED METALS

Client Sample ID:	41-UN-SW21 F	41-UN-SW22 F	41-UN-SW23 F	41-UN-SW24 F	41-UN-SW25 F	41-UN-SW26 F
Laboratory Sample ID:	AB7590	AB7589	AB7588	AB7587	AB7586	AB7585
Date Sampled:	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94

	UNITS						
Aluminum	UG/L	20 U	20 U	20 U	20 U	20 U	20 U
Antimony	UG/L	25 U	25 U	25 U	25 U	25 U	25 U
Arsenic	UG/L	1 U	2.6	1 U	2.8	1 U	1 U
Barium	UG/L	18.2	79.5	73	75.1	80.5	21
Beryllium	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cadmium	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Calcium	UG/L	56500	106000	154000	144000	115000	44400
Chromium	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Cobalt	UG/L	5 U	5 U	5 U	15.7	5 U	5 U
Copper	UG/L	5 U	5 U	11.2	17.8	18.9	23.8
Iron	UG/L	148	6110	8170	12800	11300	498
Lead	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Magnesium	UG/L	2220	14200	13400	12200	11200	2020
Manganese	UG/L	20.6	1360	1170	1230	972	21.2
Mercury	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel	UG/L	10 U	10 U	10 U	10 U	10 U	10 U
Potassium	UG/L	2780	9670	6020	4820	3670	2150
Selenium	UG/L	5 U	1 U	5 U	1 U	5 U	5 U
Silver	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Sodium	UG/L	24300	38100	65900	76600	58800	14900
Thallium	UG/L	1 U	1 U	1 U	1 U	1 U	1 U
Vanadium	UG/L	5 U	5 U	5 U	5 U	5 U	5 U
Zinc	UG/L	6	8.9	6.4	9.5	10.2	13

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY SURFACE WATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL DISSOLVED METALS

Client Sample ID:	41-UN-SW27 F	41-UN-SW28 F
Laboratory Sample ID:	AB7584	AB7583
Date Sampled:	08/23/94	08/23/94

	<u>UNITS</u>		
Aluminum	UG/L	20 U	20 U
Antimony	UG/L	25 U	25 U
Arsenic	UG/L	1 U	2.9
Barium	UG/L	25.1	22.3
Beryllium	UG/L	0.5 U	0.5 U
Cadmium	UG/L	2.5 U	2.5 U
Calcium	UG/L	49200	47000
Chromium	UG/L	5 U	5 U
Cobalt	UG/L	5 U	5 U
Copper	UG/L	18.7	17.7
Iron	UG/L	1210	783
Lead	UG/L	1 U	2.4
Magnesium	UG/L	2630	2290
Manganese	UG/L	88.8	47.4
Mercury	UG/L	0.1 U	0.1 U
Nickel	UG/L	10 U	10 U
Potassium	UG/L	1770	1840
Selenium	UG/L	5 U	5 U
Silver	UG/L	2.5 U	2.5 U
Sodium	UG/L	17700	16000
Thallium	UG/L	1 U	1 U
Vanadium	UG/L	5 U	5 U
Zinc	UG/L	14.1	11.2

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY SURFACE WATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL DISSOLVED METALS

Client Sample ID: Laboratory Sample ID: Date Sampled:		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
	<u>UNITS</u>					
	Aluminum	ND	NA	NA	NA	NA
	Antimony	ND	NA	NA	NA	NA
	Arsenic	2.9	1.5	0.8	1.8	1.9
	Barium	82.4	44.4	27.2	57.2	67.8
	Beryllium	ND	NA	NA	NA	NA
	Cadmium	ND	NA	NA	NA	NA
	Calcium	154000	72557.1	40586.6	91767.6	101249.7
	Chromium	ND	NA	NA	NA	NA
	Cobalt	15.7	5.8	2.9	7.1	6.7
	Copper	23.8	15.6	6.4	18.6	23.1
	Iron	12800	3635.3	4436.2	5735.0	42388.9
	Lead	2.4	1.1	0.4	1.3	1.2
	Magnesium	14200	6302.9	5051.7	8693.9	11565.7
	Manganese	1360	382.4	532.6	634.5	3226.8
	Mercury	ND	NA	NA	NA	NA
	Nickel	ND	NA	NA	NA	NA
	Potassium	15600	4393.6	3858.7	6219.9	6465.2
	Selenium	ND	NA	NA	NA	NA
	Silver	ND	NA	NA	NA	NA
	Sodium	76800	29640.0	21990.2	40048.4	48838.9
	Thallium	ND	NA	NA	NA	NA
	Vanadium	ND	NA	NA	NA	NA
	Zinc	14.1	9.4	2.6	10.6	11.0

APPENDIX P.16
SITE 41 UNNAMED TRIBUTARY AND TANK CREEK
SEDIMENT ORGANICS

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SD01-06	41-UN-SD01-612	41-UN-SD02-06	41-UN-SD02-612	41-UN-SD03-06	41-UN-SD03-612	
Laboratory Sample ID:	9402062-03	9402062-04	9402066-01A	9402066-02A	9402041-01	9402041-03	
Date Sampled:	02/04/94	02/04/94			02/01/94	02/01/94	
Percent Solids	73.5	75.5	78.8	78.8	74.9	72.9	
SEMIVOLATILES							
1,2-Dichlorobenzene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U	227.5 U
1,2,4-Trichlorobenzene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U	227.5 U
1,3-Dichlorobenzene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U	227.5 U
1,4-Dichlorobenzene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U	227.5 U
2-Chloronaphthalene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U	227.5 U
2-Chlorophenol	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U	227.5 U
2-Methylnaphthalene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U	227.5 U
2-Methylphenol	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U	227.5 U
2-Nitroaniline	UG/KG	540.0 U	530.0 U	505 UJ	505 U	530.0 U	550.0 U
2-Nitrophenol	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U	227.5 U
2,2'-oxybis-(1-chloropropane)	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U	227.5 U
2,4-Dichlorophenol	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U	227.5 U
2,4-Dimethylphenol	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U	227.5 U
2,4-Dinitrophenol	UG/KG	540.0 U	530.0 U	505 UJ	505 U	530.0 U	550.0 U
2,4-Dinitrotoluene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U	227.5 U
2,4,5-Trichlorophenol	UG/KG	540.0 U	530.0 U	505 UJ	505 U	530.0 U	550.0 U
2,4,6-Trichlorophenol	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U	227.5 U
2,6-Dinitrotoluene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U	227.5 U
3-Nitroaniline	UG/KG	540.0 U	530.0 U	505 UJ	505 U	530.0 U	550.0 UJ
3,3'-Dichlorobenzidine	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U	227.5 UJ
4-Bromophenyl-phenylether	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U	227.5 U
4-Chloro-3-methylphenol	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U	227.5 U
4-Chloroaniline	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U	227.5 U
4-Chlorophenyl phenyl ether	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U	227.5 U
4-Methylphenol	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U	227.5 U
4-Nitroaniline	UG/KG	540.0 U	530.0 U	505 UJ	505 U	530.0 U	550.0 U
4-Nitrophenol	UG/KG	540.0 U	530.0 U	505 UJ	505 U	530.0 U	550.0 U
4,6-Dinitro-2-methylphenol	UG/KG	540.0 U	530.0 U	505 UJ	505 U	530.0 U	550.0 U
Acenaphthene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U	227.5 U
Acenaphthylene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U	227.5 U
Anthracene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U	227.5 U
Benzo[a]anthracene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U	227.5 U
Benzo[a]pyrene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U	227.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SD01-06	41-UN-SD01-612	41-UN-SD02-06	41-UN-SD02-612	41-UN-SD03-06	41-UN-SD03-612
Laboratory Sample ID:	9402062-03	9402062-04	9402066-01A	9402066-02A	9402041-01	9402041-03
Date Sampled:	02/04/94	02/04/94			02/01/94	02/01/94
Percent Solids	73.5	75.5	78.8	78.8	74.9	72.9

<u>SEMIVOLATILES Cont.</u>						
Benzo[b]fluoranthene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
Benzo[g,h,i]perylene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
Benzo[k]fluoranthene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
bis(2-Chloroethoxy) methane	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
bis(2-Chloroethyl) ether	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
bis(2-Ethylhexyl)phthalate	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
Butyl benzyl phthalate	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
Carbazole	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
Chrysene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
Dibenzofuran	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
Dibenz[a,h]anthracene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
Diethylphthalate	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
Dimethyl phthalate	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
di-n-Butylphthalate	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 230.0 U
di-n-Octylphthalate	UG/KG	95.0 J	49.0 J	209 UJ	209 U	219.5 U 310.0 J
Fluoranthene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
Fluorene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
Hexachlorobenzene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
Hexachlorobutadiene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
Hexachlorocyclopentadiene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
Hexachloroethane	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
Indeno[1,2,3-cd]pyrene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
Isophorone	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
Naphthalene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
Nitrobenzene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
N-Nitroso-di-n-propylamine	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
N-nitrosodiphenylamine	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
Pentachlorophenol	UG/KG	540.0 U	530.0 U	505 UJ	505 U	530.0 U 550.0 U
Phenanthrene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
Phenol	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U
Pyrene	UG/KG	223.0 U	218.0 U	209 UJ	209 U	219.5 U 227.5 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	41-UN-SD01-06	41-UN-SD01-612	41-UN-SD02-06	41-UN-SD02-612	41-UN-SD03-06	41-UN-SD03-612
Laboratory Sample ID:	9402062-03	9402062-04	9402066-01A	9402066-02A	9402041-01	9402041-03
Date Sampled:	02/04/94	02/04/94			02/01/94	02/01/94
Percent Solids	73.5	75.5	78.8	78.8	74.9	72.9
VOLATILES						
Chloromethane	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
Bromomethane	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
Vinyl chloride	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
Chloroethane	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
Methylene chloride	UG/KG	7.00 U	6.5 U	7 U	6.5 U	2.00 J
Acetone	UG/KG	40.0	6.7 U	8 UJ	9.5 UJ	51.0 J
Carbon Disulfide	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
1,1-Dichloroethene	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
1,1-Dichloroethane	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
1,2-Dichloroethene(total)	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
Chloroform	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
1,2-Dichloroethane	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
2-Butanone	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 UJ
1,1,1-Trichloroethane	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
Carbon tetrachloride	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
Bromodichloromethane	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
1,2-Dichloropropane	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
cis-1,3-Dichloropropene	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
Trichloroethene	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
Dibromochloromethane	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
1,1,2-Trichloroethane	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
Benzene	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
trans-1,3-Dichloropropene	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
Bromoform	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
4-Methyl-2-pentanone	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
2-Hexanone	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
Tetrachloroethene	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
1,1,2,2-Tetrachloroethane	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
Toluene	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
Chlorobenzene	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
Ethylbenzene	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
Styrene	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U
Xylenes (total)	UG/KG	6.8 U	6.7 U	6.5 U	6.5 U	6.7 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SD01-06	41-UN-SD01-612	41-UN-SD02-06	41-UN-SD02-612	41-UN-SD03-06	41-UN-SD03-612	
Laboratory Sample ID:	9402062-03	9402062-04	9402066-01A	9402066-02A	9402041-01	9402041-03	
Date Sampled:	02/04/94	02/04/94			02/01/94	02/01/94	
Percent Solids	73.5	75.5	78.8	78.8	74.9	72.9	
PESTICIDE/PCBS							
alpha-BHC	UG/KG	1.15 UJ	1.14 UJ	1.075 UJ	1.075 UJ	1.14 UJ	1.17 UJ
beta-BHC	UG/KG	1.15 UJ	1.14 UJ	1.075 UJ	1.075 UJ	1.14 UJ	1.17 UJ
delta-BHC	UG/KG	1.15 UJ	1.14 UJ	1.075 UJ	1.075 UJ	1.14 UJ	1.17 UJ
Lindane (gamma-BHC)	UG/KG	1.15 U	1.14 UJ	1.075 UJ	1.075 UJ	1.14 U	1.17 U
Heptachlor	UG/KG	1.15 U	1.14 UJ	1.075 UJ	1.08 UJ	1.14 U	1.17 U
Aldrin	UG/KG	1.15 U	1.14 UJ	1.075 UJ	1.075 UJ	1.14 U	1.17 U
Heptachlor epoxide	UG/KG	1.15 U	1.14 UJ	1.075 UJ	1.075 UJ	1.14 U	1.17 U
Endosulfan I	UG/KG	1.15 U	1.14 UJ	1.075 UJ	1.075 UJ	1.14 U	1.17 U
Dieldrin	UG/KG	1.35 NJ	1.08 NJ	1.21 J	2.09 UJ	0.830 NJ	2.26 U
4,4'-DDE	UG/KG	4.66	4.90 J	2.09 UJ	2.09 UJ	3.05 J	3.98 J
Endrin	UG/KG	2.23 U	2.20 UJ	2.09 UJ	2.09 UJ	2.20 U	2.26 U
Endosulfan II	UG/KG	0.800 NJ	2.20 UJ	0.96 NJ	0.76 NJ	0.640 NJ	2.26 U
4,4'-DDD	UG/KG	2.77 J	12.7 J	2.09 UJ	1.59 J	3.73 J	15.3 J
Endosulfan sulfate	UG/KG	2.23 U	2.20 UJ	2.09 UJ	2.09 UJ	2.20 U	2.26 U
4,4'-DDT	UG/KG	2.23 U	0.810 NJ	1.36 NJ	2.58 J	1.26 J	1.25 J
Methoxychlor	UG/KG	11.5 UJ	11.4 UJ	10.75 UJ	10.75 UJ	11.4 UJ	11.7 UJ
Endrin ketone	UG/KG	2.23 U	2.20 UJ	2.09 UJ	2.09 UJ	2.20 U	2.26 U
Endrin aldehyde	UG/KG	2.23 U	2.20 UJ	2.09 UJ	2.09 UJ	2.20 U	2.26 U
alpha-Chlordane	UG/KG	1.38 J	1.15 J	1.075 UJ	1.075 UJ	0.820 J	0.340 J
gamma-Chlordane	UG/KG	1.43 J	1.35 J	1.075 UJ	1.075 UJ	0.920 J	0.440 J
Toxaphene	UG/KG	115.0 U	113.5 UJ	107.5 UJ	107.5 UJ	113.5 U	116.5 U
Aroclor 1016	UG/KG	22.3 U	22.0 UJ	20.9 UJ	20.9 UJ	22.0 U	22.6 U
Aroclor 1221	UG/KG	45.3 U	44.7 UJ	42.4 UJ	42.4 UJ	44.7 U	45.9 U
Aroclor 1232	UG/KG	22.3 U	22.0 UJ	20.9 UJ	20.9 UJ	22.0 U	22.6 U
Aroclor 1242	UG/KG	22.3 U	22.0 UJ	20.9 UJ	20.9 UJ	22.0 U	22.6 U
Aroclor 1248	UG/KG	22.3 U	22.0 UJ	20.9 UJ	20.9 UJ	22.0 U	22.6 U
Aroclor 1254	UG/KG	22.3 U	22.0 UJ	20.9 UJ	20.9 UJ	22.0 U	22.6 U
Aroclor 1260	UG/KG	22.3 U	22.0 UJ	20.9 UJ	20.9 UJ	22.0 U	22.6 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	41-UN-SD01-06	41-UN-SD01-612	41-UN-SD02-06	41-UN-SD02-612	41-UN-SD03-06	41-UN-SD03-612
Laboratory Sample ID:	9402062-03	9402062-04	9402066-01A	9402066-02A	9402041-01	9402041-03
Date Sampled:	02/04/94	02/04/94			02/01/94	02/01/94
Percent Solids	73.5	75.5	78.8	78.8	74.9	72.9
ORDNANCE						
1,3,5-Trinitrobenzene	UG/KG	20.1 U	20.1 U	20.1 U	20.1 U	20.1 U
1,3-Dinitrobenzene	UG/KG	18.6 U	18.6 U	18.6 U	18.6 U	18.6 U
2,4,6-Trinitrotoluene	UG/KG	17.8 U	17.8 U	17.8 U	17.8 U	17.8 U
2,4-Dinitrotoluene	UG/KG	25.8 U	25.8 U	25.8 U	25.8 U	25.8 U
2,6-Dinitrotoluene	UG/KG	23.8 U	23.8 U	23.8 U	23.8 U	23.8 U
2-Amino-4,6-dinitrotoluene	UG/KG	23.4 U	23.4 U	23.35 U	23.35 U	23.4 U
2-Nitrotoluene	UG/KG	40.7 U	40.7 U	40.7 U	40.7 U	40.7 U
3-Nitrotoluene	UG/KG	40.9 U	40.9 U	40.85 U	40.85 U	40.9 U
4-Amino-2,6-dinitrotoluene	UG/KG	20.4 U	20.4 U	20.4 U	20.4 U	20.4 U
4-Nitrotoluene	UG/KG	43.6 U	43.6 U	43.6 U	43.6 U	43.6 U
HMX	UG/KG	35.3 U	35.3 U	35.25 U	35.25 U	35.3 U
Nitrobenzene	UG/KG	17.6 U	17.6 U	17.6 U	17.6 U	17.6 U
RDX	UG/KG	25.5 U	25.5 U	25.45 U	25.45 U	25.5 U
Tetryl	UG/KG	81.5 U	81.5 U	81.5 UJ	81.5 UJ	81.5 U
MIREX						
Mirex	UG/KG	NA	NA	1050 UJ	1050 U	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SD04-06	41-UN-SD04-612	41-NE-SD05-06	41-NE-SD05-612	41-UN-SD10-06	41-UN-SD10-612	
Laboratory Sample ID:	9402041-05	9402041-06	9402091-01A	9402091-02A	9402020-01	9402020-02	
Date Sampled:	02/01/94	02/01/94					
Percent Solids	78.1	77.1	77.5	78.9	43.8	56	
SEMIVOLATILES							
1,2-Dichlorobenzene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
1,2,4-Trichlorobenzene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
1,3-Dichlorobenzene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
1,4-Dichlorobenzene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
2-Chloronaphthalene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
2-Chlorophenol	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
2-Methylnaphthalene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
2-Methylphenol	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
2-Nitroaniline	UG/KG	520.0 U	520.0 U	510 U	505 U	910 U	715 U
2-Nitrophenol	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
2,2'-oxybis-(1-chloropropane)	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
2,4-Dichlorophenol	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
2,4-Dimethylphenol	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
2,4-Dinitrophenol	UG/KG	520.0 U	520.0 U	510 U	505 U	910 U	715 U
2,4-Dinitrotoluene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
2,4,5-Trichlorophenol	UG/KG	520.0 U	520.0 U	510 U	505 U	910 U	715 U
2,4,6-Trichlorophenol	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
2,6-Dinitrotoluene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
3-Nitroaniline	UG/KG	520.0 UJ	520.0 UJ	510 U	505 U	910 U	715 U
3,3'-Dichlorobenzidine	UG/KG	214.5 UJ	214.5 UJ	211.5 U	209 U	375 U	294.5 U
4-Bromophenyl-phenylether	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
4-Chloro-3-methylphenol	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
4-Chloroaniline	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
4-Chlorophenyl phenyl ether	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
4-Methylphenol	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
4-Nitroaniline	UG/KG	520.0 U	520.0 U	510 U	505 U	910 U	715 U
4-Nitrophenol	UG/KG	520.0 U	520.0 U	510 U	505 U	910 U	715 U
4,6-Dinitro-2-methylphenol	UG/KG	520.0 U	520.0 U	510 U	505 U	910 U	715 U
Acenaphthene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
Acenaphthylene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
Anthracene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
Benzo[a]anthracene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
Benzo[a]pyrene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SD04-06	41-UN-SD04-612	41-NE-SD05-06	41-NE-SD05-612	41-UN-SD10-06	41-UN-SD10-612
Laboratory Sample ID:	9402041-05	9402041-06	9402091-01A	9402091-02A	9402020-01	9402020-02
Date Sampled:	02/01/94	02/01/94				
Percent Solids	78.1	77.1	77.5	78.9	43.8	56

SEMIVOLATILES Cont.							
Benzo[b]fluoranthene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
Benzo[g,h,i]perylene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
Benzo[k]fluoranthene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
bis(2-Chloroethoxy) methane	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
bis(2-Chloroethyl) ether	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
bis(2-Ethylhexyl)phthalate	UG/KG	214.5 U	214.5 U	65 J	44 J	89 J	94 J
Butyl benzyl phthalate	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
Carbazole	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
Chrysene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
Dibenzofuran	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
Dibenz[a,h]anthracene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
Diethylphthalate	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
Dimethyl phthalate	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
di-n-Butylphthalate	UG/KG	215.0 U	214.5 U	59 J	65 J	370 J	240 J
di-n-Octylphthalate	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
Fluoranthene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
Fluorene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
Hexachlorobenzene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
Hexachlorobutadiene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
Hexachlorocyclopentadiene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
Hexachloroethane	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
Indeno[1,2,3-cd]pyrene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
Isophorone	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
Naphthalene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
Nitrobenzene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
N-Nitroso-di-n-propylamine	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
N-nitrosodiphenylamine	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
Pentachlorophenol	UG/KG	520.0 U	520.0 U	510 U	505 U	910 U	715 U
Phenanthrene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
Phenol	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U
Pyrene	UG/KG	214.5 U	214.5 U	211.5 U	209 U	375 U	294.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SD04-06	41-UN-SD04-612	41-NE-SD05-06	41-NE-SD05-612	41-UN-SD10-06	41-UN-SD10-612	
Laboratory Sample ID:	9402041-05	9402041-06	9402091-01A	9402091-02A	9402020-01	9402020-02	
Date Sampled:	02/01/94	02/01/94					
Percent Solids	78.1	77.1	77.5	78.9	43.8	56	
VOLATILES							
Chloromethane	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
Bromomethane	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
Vinyl chloride	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
Chloroethane	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
Methylene chloride	UG/KG	2.00 J	3.00 J	6 J	7 J	11.5 U	9 U
Acetone	UG/KG	6.4 UJ	150.0 J	6.5 U	16 U	11.35 U	8.9 UJ
Carbon Disulfide	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
1,1-Dichloroethene	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
1,1-Dichloroethane	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
1,2-Dichloroethene(total)	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
Chloroform	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
1,2-Dichloroethane	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
2-Butanone	UG/KG	6.4 UJ	6.5 UJ	6.5 U	6.5 U	11.35 U	8.9 U
1,1,1-Trichloroethane	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
Carbon tetrachloride	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
Bromodichloromethane	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
1,2-Dichloropropane	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
cis-1,3-Dichloropropene	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
Trichloroethene	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
Dibromochloromethane	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
1,1,2-Trichloroethane	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
Benzene	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
trans-1,3-Dichloropropene	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
Bromoform	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
4-Methyl-2-pentanone	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
2-Hexanone	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
Tetrachloroethene	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
1,1,2,2-Tetrachloroethane	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
Toluene	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
Chlorobenzene	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
Ethylbenzene	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
Styrene	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U
Xylenes (total)	UG/KG	6.4 U	6.5 U	6.5 U	6.5 U	11.35 U	8.9 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SD04-06	41-UN-SD04-612	41-NE-SD05-06	41-NE-SD05-612	41-UN-SD10-06	41-UN-SD10-612
Laboratory Sample ID:	9402041-05	9402041-06	9402091-01A	9402091-02A	9402020-01	9402020-02
Date Sampled:	02/01/94	02/01/94				
Percent Solids	78.1	77.1	77.5	78.9	43.8	56
PESTICIDE/PCBS						
alpha-BHC	UG/KG	1.09 UJ	1.11 UJ	1.105 UJ	1.075 UJ	1.93 UJ
beta-BHC	UG/KG	1.09 UJ	1.11 UJ	1.105 UJ	1.075 UJ	1.93 U
delta-BHC	UG/KG	1.09 UJ	1.11 UJ	1.105 UJ	1.075 UJ	1.93 UJ
Lindane (gamma-BHC)	UG/KG	1.09 U	1.11 U	1.105 UJ	1.075 UJ	1.93 U
Heptachlor	UG/KG	1.09 U	1.11 U	1.105 UJ	1.075 UJ	1.93 U
Aldrin	UG/KG	1.09 U	1.11 U	1.105 UJ	1.075 UJ	1.93 U
Heptachlor epoxide	UG/KG	1.09 U	1.11 U	1.105 UJ	1.075 UJ	1.93 U
Endosulfan I	UG/KG	1.09 U	1.11 U	1.105 UJ	1.075 UJ	1.93 U
Dieldrin	UG/KG	0.460 NJ	2.14 U	2.14 UJ	2.09 UJ	3.745 U
4,4'-DDE	UG/KG	2.07 J	1.34 J	1.27 J	2.09 UJ	29 J
Endrin	UG/KG	2.12 U	2.14 U	2.14 UJ	2.09 UJ	3.745 U
Endosulfan II	UG/KG	2.12 U	2.14 U	2.14 UJ	2.09 UJ	2.13 NJ
4,4'-DDD	UG/KG	3.95 J	1.70 J	1.09 J	2.09 UJ	23.1 J
Endosulfan sulfate	UG/KG	2.12 U	2.14 U	2.14 UJ	2.09 UJ	3.745 U
4,4'-DDT	UG/KG	2.12 UJ	2.14 UJ	0.36 NJ	2.09 UJ	4.51 J
Methoxychlor	UG/KG	10.9 UJ	11.1 UJ	11.05 UJ	10.75 UJ	3.2 J
Endrin ketone	UG/KG	2.12 U	2.14 U	2.14 UJ	2.09 UJ	3.745 U
Endrin aldehyde	UG/KG	2.12 U	2.14 U	2.14 UJ	2.09 UJ	3.745 U
alpha-Chlordane	UG/KG	0.410 J	1.11 U	1.105 UJ	1.075 UJ	3.72 J
gamma-Chlordane	UG/KG	0.400 J	1.11 U	1.105 UJ	1.075 UJ	6.35 J
Toxaphene	UG/KG	109.0 U	110.5 U	110.5 UJ	107.5 UJ	193 U
Aroclor 1016	UG/KG	21.2 U	21.4 U	21.4 UJ	20.9 UJ	37.45 U
Aroclor 1221	UG/KG	43.0 U	43.5 U	43.5 UJ	42.4 UJ	76 U
Aroclor 1232	UG/KG	21.2 U	21.4 U	21.4 UJ	20.9 UJ	37.45 U
Aroclor 1242	UG/KG	21.2 U	21.4 U	21.4 UJ	20.9 UJ	37.45 U
Aroclor 1248	UG/KG	21.2 U	21.4 U	21.4 UJ	20.9 UJ	37.45 U
Aroclor 1254	UG/KG	21.2 U	21.4 U	21.4 UJ	20.9 UJ	37.45 U
Aroclor 1260	UG/KG	21.2 U	21.4 U	21.4 UJ	20.9 UJ	37.45 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	41-UN-SD04-06	41-UN-SD04-612	41-NE-SD05-06	41-NE-SD05-612	41-UN-SD10-06	41-UN-SD10-612
Laboratory Sample ID:	9402041-05	9402041-06	9402091-01A	9402091-02A	9402020-01	9402020-02
Date Sampled:	02/01/94	02/01/94				
Percent Solids	78.1	77.1	77.5	78.9	43.8	56
ORDNANCE						
1,3,5-Trinitrobenzene	UG/KG	20.1 U	20.1 U	20.1 U	20.1 U	20.1 U
1,3-Dinitrobenzene	UG/KG	18.6 U	18.6 U	18.6 U	18.6 U	18.6 U
2,4,6-Trinitrotoluene	UG/KG	17.8 U	17.8 U	17.8 U	17.8 U	17.8 U
2,4-Dinitrotoluene	UG/KG	25.8 U	25.8 U	25.8 U	25.8 U	25.8 U
2,6-Dinitrotoluene	UG/KG	23.8 U	23.8 U	23.8 U	23.8 U	23.8 U
2-Amino-4,6-dinitrotoluene	UG/KG	23.4 U	23.4 U	23.35 U	23.35 U	23.35 U
2-Nitrotoluene	UG/KG	40.7 U	40.7 U	40.7 U	40.7 U	40.7 U
3-Nitrotoluene	UG/KG	40.9 U	40.9 U	40.85 U	40.85 U	40.85 U
4-Amino-2,6-dinitrotoluene	UG/KG	20.4 U	20.4 U	20.4 U	20.4 U	20.4 U
4-Nitrotoluene	UG/KG	43.6 U	43.6 U	43.6 U	43.6 U	43.6 U
HMX	UG/KG	35.3 U	35.3 U	35.25 U	35.25 U	35.25 U
Nitrobenzene	UG/KG	17.6 U	17.6 U	17.6 U	17.6 U	17.6 U
RDX	UG/KG	25.5 U	25.5 U	25.45 U	25.45 U	25.45 U
Tetryl	UG/KG	81.5 U	81.5 U	81.5 UJ	81.5 U	81.5 U
MIREX						
Mirex	UG/KG	NA	NA	1050 U	375 U	294.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SD11-06	41-UN-SD11-612	41-UN-SD12-06	41-UN-SD12-612	41-UN-SD13-06	41-UN-SD13-612	
Laboratory Sample ID:	9402062-01	9402062-02	9402066-03A	9402066-04A	9402053-05	9402053-06	
Date Sampled:	02/04/94	02/04/94			02/03/94	02/03/94	
Percent Solids	77.1	79.6	80.1	81.5	45.8	52.9	
SEMIVOLATILES							
1,2-Dichlorobenzene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
1,2,4-Trichlorobenzene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
1,3-Dichlorobenzene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
1,4-Dichlorobenzene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
2-Chloronaphthalene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
2-Chlorophenol	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
2-Methylnaphthalene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
2-Methylphenol	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
2-Nitroaniline	UG/KG	520.0 U	500.0 U	500 U	494 U	870.0 U	760.0 U
2-Nitrophenol	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
2,2'-oxybis-(1-chloropropane)	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
2,4-Dichlorophenol	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
2,4-Dimethylphenol	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
2,4-Dinitrophenol	UG/KG	520.0 U	500.0 U	500 U	494 U	870.0 U	760.0 U
2,4-Dinitrotoluene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
2,4,5-Trichlorophenol	UG/KG	520.0 U	500.0 U	500 U	494 U	870.0 U	760.0 U
2,4,6-Trichlorophenol	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
2,6-Dinitrotoluene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
3-Nitroaniline	UG/KG	520.0 U	500.0 U	500 U	494 U	870.0 U	760.0 U
3,3'-Dichlorobenzidine	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
4-Bromophenyl-phenylether	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
4-Chloro-3-methylphenol	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
4-Chloroaniline	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
4-Chlorophenyl phenyl ether	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
4-Methylphenol	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
4-Nitroaniline	UG/KG	520.0 U	500.0 U	500 U	494 U	870.0 U	760.0 U
4-Nitrophenol	UG/KG	520.0 U	500.0 U	500 U	494 U	870.0 U	760.0 U
4,6-Dinitro-2-methylphenol	UG/KG	520.0 U	500.0 U	500 U	494 U	870.0 U	760.0 U
Acenaphthene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
Acenaphthylene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
Anthracene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
Benzo[a]anthracene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
Benzo[a]pyrene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SD11-06	41-UN-SD11-612	41-UN-SD12-06	41-UN-SD12-612	41-UN-SD13-06	41-UN-SD13-612
Laboratory Sample ID:	9402062-01	9402062-02	9402066-03A	9402066-04A	9402053-05	9402053-06
Date Sampled:	02/04/94	02/04/94			02/03/94	02/03/94
Percent Solids	77.1	79.6	80.1	81.5	45.8	52.9

<u>SEMIVOLATILES Cont.</u>							
Benzo[b]fluoranthene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
Benzo[g,h,i]perylene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
Benzo[k]fluoranthene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
bis(2-Chloroethoxy) methane	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
bis(2-Chloroethyl) ether	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
bis(2-Ethylhexyl)phthalate	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
Butyl benzyl phthalate	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
Carbazole	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
Chrysene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
Dibenzofuran	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
Dibenz[a,h]anthracene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
Diethylphthalate	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
Dimethyl phthalate	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
di-n-Butylphthalate	UG/KG	214.5 U	206.0 U	206 U	203.5 U	360.0 U	315.0 U
di-n-Octylphthalate	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
Fluoranthene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
Fluorene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
Hexachlorobenzene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
Hexachlorobutadiene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
Hexachlorocyclopentadiene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
Hexachloroethane	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
Indeno[1,2,3-cd]pyrene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
Isophorone	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
Naphthalene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
Nitrobenzene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
N-Nitroso-di-n-propylamine	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
N-nitrosodiphenylamine	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
Pentachlorophenol	UG/KG	520.0 U	500.0 U	500 U	494 U	870.0 U	760.0 U
Phenanthrene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
Phenol	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U
Pyrene	UG/KG	214.5 U	206.0 U	206 U	203.5 U	358.0 U	313.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SD11-06	41-UN-SD11-612	41-UN-SD12-06	41-UN-SD12-612	41-UN-SD13-06	41-UN-SD13-612	
Laboratory Sample ID:	9402062-01	9402062-02	9402066-03A	9402066-04A	9402053-05	9402053-06	
Date Sampled:	02/04/94	02/04/94			02/03/94	02/03/94	
Percent Solids	77.1	79.6	80.1	81.5	45.8	52.9	
VOLATILES							
Chloromethane	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
Bromomethane	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
Vinyl chloride	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
Chloroethane	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
Methylene chloride	UG/KG	6.5 U	6.25 U	6 U	6 U	11.0 U	9.5 U
Acetone	UG/KG	11.5 U	6.3 U	6 UJ	7 UJ	130.0	25.0
Carbon Disulfide	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
1,1-Dichloroethene	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
1,1-Dichloroethane	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
1,2-Dichloroethene(total)	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
Chloroform	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
1,2-Dichloroethane	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
2-Butanone	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
1,1,1-Trichloroethane	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
Carbon tetrachloride	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
Bromodichloromethane	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
1,2-Dichloropropane	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
cis-1,3-Dichloropropene	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
Trichloroethene	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
Dibromochloromethane	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
1,1,2-Trichloroethane	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
Benzene	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
trans-1,3-Dichloropropene	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
Bromoform	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
4-Methyl-2-pentanone	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
2-Hexanone	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
Tetrachloroethene	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
1,1,2,2-Tetrachloroethane	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
Toluene	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
Chlorobenzene	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
Ethylbenzene	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
Styrene	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U
Xylenes (total)	UG/KG	6.5 U	6.3 U	6 U	6 U	10.9 U	9.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SD11-06	41-UN-SD11-612	41-UN-SD12-06	41-UN-SD12-612	41-UN-SD13-06	41-UN-SD13-612	
Laboratory Sample ID:	9402062-01	9402062-02	9402066-03A	9402066-04A	9402053-05	9402053-06	
Date Sampled:	02/04/94	02/04/94			02/03/94	02/03/94	
Percent Solids	77.1	79.6	80.1	81.5	45.8	52.9	
PESTICIDE/PCBS							
alpha-BHC	UG/KG	1.11 UJ	1.06 UJ	1.06 UJ	1.06 UJ	1.85 UJ	1.61 U
beta-BHC	UG/KG	1.11 UJ	1.06 UJ	1.06 UJ	1.06 UJ	1.85 UJ	1.61 U
delta-BHC	UG/KG	1.11 UJ	1.06 UJ	1.06 UJ	1.06 UJ	1.85 UJ	1.61 U
Lindane (gamma-BHC)	UG/KG	1.11 UJ	1.06 U	1.06 UJ	1.06 UJ	1.85 U	1.61 U
Heptachlor	UG/KG	1.11 UJ	1.06 U	1.06 U	1.06 U	1.85 U	1.61 U
Aldrin	UG/KG	1.11 UJ	1.06 U	1.06 U	1.06 U	1.85 U	1.61 U
Heptachlor epoxide	UG/KG	1.11 UJ	1.06 U	1.06 U	1.06 U	1.85 U	1.61 U
Endosulfan I	UG/KG	1.11 UJ	1.06 U	1.06 U	1.06 U	1.85 U	1.61 U
Dieldrin	UG/KG	2.14 UJ	2.06 U	2.06 U	2.06 U	6.39 NJ	5.19 NJ
4,4'-DDE	UG/KG	2.14 UJ	2.06 U	2.06 U	2.06 U	14.3	14.9 J
Endrin	UG/KG	2.14 UJ	2.06 U	2.06 U	2.06 U	3.59 U	3.12 U
Endosulfan II	UG/KG	2.14 UJ	2.06 U	2.06 U	2.06 U	5.90 J	3.44 NJ
4,4'-DDD	UG/KG	2.14 UJ	2.06 U	2.06 UJ	2.06 UJ	7.69 J	10.5 J
Endosulfan sulfate	UG/KG	2.14 UJ	2.06 U	2.06 U	2.06 U	3.59 U	3.12 U
4,4'-DDT	UG/KG	0.430 NJ	2.06 UJ	2.06 UJ	2.06 UJ	4.78 J	9.64 J
Methoxychlor	UG/KG	11.1 UJ	10.6 UJ	10.6 U	1.93 J	18.5 UJ	16.1 UJ
Endrin ketone	UG/KG	2.14 UJ	0.660 NJ	2.06 U	2.06 U	3.59 U	3.12 U
Endrin aldehyde	UG/KG	2.14 UJ	2.06 U	2.06 U	2.06 U	3.59 U	3.12 U
alpha-Chlordane	UG/KG	1.11 UJ	1.06 U	1.06 U	1.06 U	2.56 J	3.09 J
gamma-Chlordane	UG/KG	1.11 UJ	1.06 U	1.06 U	1.06 U	2.00 J	2.44 J
Toxaphene	UG/KG	110.5 UJ	106.0 U	106 U	106 U	185.0 U	160.5 U
Aroclor 1016	UG/KG	21.4 UJ	20.6 U	20.6 U	20.6 U	35.9 U	31.2 U
Aroclor 1221	UG/KG	43.5 UJ	41.9 U	41.9 U	41.9 U	73.0 U	63.0 U
Aroclor 1232	UG/KG	21.4 UJ	20.6 U	20.6 U	20.6 U	35.9 U	31.2 U
Aroclor 1242	UG/KG	21.4 UJ	20.6 U	20.6 U	20.6 U	35.9 U	31.2 U
Aroclor 1248	UG/KG	21.4 UJ	20.6 U	20.6 U	20.6 U	63.0 J	140.0 J
Aroclor 1254	UG/KG	21.4 UJ	20.6 U	20.6 U	20.6 U	68.0 J	31.2 U
Aroclor 1260	UG/KG	21.4 UJ	20.6 U	20.6 U	20.6 U	35.9 U	31.2 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SD11-06	41-UN-SD11-612	41-UN-SD12-06	41-UN-SD12-612	41-UN-SD13-06	41-UN-SD13-612
Laboratory Sample ID:	9402062-01	9402062-02	9402066-03A	9402066-04A	9402053-05	9402053-06
Date Sampled:	02/04/94	02/04/94			02/03/94	02/03/94
Percent Solids	77.1	79.6	80.1	81.5	45.8	52.9
ORDNANCE						
1,3,5-Trinitrobenzene	UG/KG	20.1 U	20.1 U	20.1 U	20.1 U	20.1 U
1,3-Dinitrobenzene	UG/KG	18.6 U	18.6 U	18.6 U	18.6 U	18.6 U
2,4,6-Trinitrotoluene	UG/KG	17.8 U	17.8 U	17.8 U	17.8 U	17.8 U
2,4-Dinitrotoluene	UG/KG	25.8 U	25.8 U	25.8 U	25.8 U	25.8 U
2,6-Dinitrotoluene	UG/KG	23.8 U	23.8 U	23.8 U	23.8 U	23.8 U
2-Amino-4,6-dinitrotoluene	UG/KG	23.4 U	23.4 U	23.35 U	23.35 U	23.4 U
2-Nitrotoluene	UG/KG	40.7 U	40.7 U	40.7 U	40.7 U	40.7 U
3-Nitrotoluene	UG/KG	40.9 U	40.9 U	40.85 U	40.85 U	40.9 U
4-Amino-2,6-dinitrotoluene	UG/KG	20.4 U	20.4 U	20.4 U	20.4 U	20.4 U
4-Nitrotoluene	UG/KG	43.6 U	43.6 U	43.6 U	43.6 U	43.6 U
HMX	UG/KG	35.3 U	35.3 U	35.25 U	35.25 U	35.3 U
Nitrobenzene	UG/KG	17.6 U	17.6 U	17.6 U	17.6 U	17.6 U
RDX	UG/KG	25.5 U	25.5 U	25.45 U	25.45 U	25.5 U
Tetryl	UG/KG	81.5 U	81.5 U	81.5 UJ	81.5 UJ	81.5 U
MIREX						
Mirex	UG/KG	NA	NA	1050 U	1050 U	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SD14-06	41-UN-SD14-612	41-UN-SD15	41-UN-SD16	41-UN-SD17	41-UN-SD18
Laboratory Sample ID:	9402053-01	9402053-02	AB7537	AB7534	AB7531	AB7528
Date Sampled:	02/03/94	02/03/94	08/23/94	08/23/94	08/23/94	08/23/94
Percent Solids	62.7	63.6	65.4	65.5	81.7	68.8
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	264.0 U	257.5 U	NA	NA	NA
1,2,4-Trichlorobenzene	UG/KG	264.0 U	257.5 U	NA	NA	NA
1,3-Dichlorobenzene	UG/KG	264.0 U	257.5 U	NA	NA	NA
1,4-Dichlorobenzene	UG/KG	264.0 U	257.5 U	NA	NA	NA
2-Chloronaphthalene	UG/KG	264.0 U	257.5 U	NA	NA	NA
2-Chlorophenol	UG/KG	264.0 U	257.5 U	NA	NA	NA
2-Methylnaphthalene	UG/KG	264.0 U	257.5 U	NA	NA	NA
2-Methylphenol	UG/KG	264.0 U	257.5 U	NA	NA	NA
2-Nitroaniline	UG/KG	640.0 U	625.0 U	NA	NA	NA
2-Nitrophenol	UG/KG	264.0 U	257.5 U	NA	NA	NA
2,2'-oxybis-(1-chloropropane)	UG/KG	264.0 U	257.5 U	NA	NA	NA
2,4-Dichlorophenol	UG/KG	264.0 U	257.5 U	NA	NA	NA
2,4-Dimethylphenol	UG/KG	264.0 U	257.5 U	NA	NA	NA
2,4-Dinitrophenol	UG/KG	640.0 U	625.0 U	NA	NA	NA
2,4-Dinitrotoluene	UG/KG	264.0 U	257.5 U	NA	NA	NA
2,4,5-Trichlorophenol	UG/KG	640.0 U	625.0 U	NA	NA	NA
2,4,6-Trichlorophenol	UG/KG	264.0 U	257.5 U	NA	NA	NA
2,6-Dinitrotoluene	UG/KG	264.0 U	257.5 U	NA	NA	NA
3-Nitroaniline	UG/KG	640.0 U	625.0 U	NA	NA	NA
3,3'-Dichlorobenzidine	UG/KG	264.0 U	257.5 U	NA	NA	NA
4-Bromophenyl-phenylether	UG/KG	264.0 U	257.5 U	NA	NA	NA
4-Chloro-3-methylphenol	UG/KG	264.0 U	257.5 U	NA	NA	NA
4-Chloroaniline	UG/KG	264.0 U	257.5 U	NA	NA	NA
4-Chlorophenyl phenyl ether	UG/KG	264.0 U	257.5 U	NA	NA	NA
4-Methylphenol	UG/KG	264.0 U	257.5 U	NA	NA	NA
4-Nitroaniline	UG/KG	640.0 U	625.0 U	NA	NA	NA
4-Nitrophenol	UG/KG	640.0 U	625.0 U	NA	NA	NA
4,6-Dinitro-2-methylphenol	UG/KG	640.0 U	625.0 U	NA	NA	NA
Acenaphthene	UG/KG	264.0 U	257.5 U	NA	NA	NA
Acenaphthylene	UG/KG	264.0 U	257.5 U	NA	NA	NA
Anthracene	UG/KG	264.0 U	257.5 U	NA	NA	NA
Benzo[a]anthracene	UG/KG	264.0 U	257.5 U	NA	NA	NA
Benzo[a]pyrene	UG/KG	264.0 U	257.5 U	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SD14-06	41-UN-SD14-612	41-UN-SD15	41-UN-SD16	41-UN-SD17	41-UN-SD18
Laboratory Sample ID:	9402053-01	9402053-02	AB7537	AB7534	AB7531	AB7528
Date Sampled:	02/03/94	02/03/94	08/23/94	08/23/94	08/23/94	08/23/94
Percent Solids	62.7	63.6	65.4	85.5	81.7	68.8

SEMIVOLATILES Cont.

Compound	UG/KG	41-UN-SD14-06	41-UN-SD14-612	41-UN-SD15	41-UN-SD16	41-UN-SD17	41-UN-SD18
Benzo[b]fluoranthene	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
Benzo[g,h,i]perylene	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
Benzo[k]fluoranthene	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
bis(2-Chloroethoxy) methane	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
bis(2-Chloroethyl) ether	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
Butyl benzyl phthalate	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
Carbazole	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
Chrysene	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
Dibenzofuran	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
Dibenz[a,h]anthracene	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
Diethylphthalate	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
Dimethyl phthalate	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
di-n-Butylphthalate	UG/KG	265.0 U	260.0 U	NA	NA	NA	NA
di-n-Octylphthalate	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
Fluoranthene	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
Fluorene	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
Hexachlorobenzene	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
Hexachlorobutadiene	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
Hexachlorocyclopentadiene	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
Hexachloroethane	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
Indeno[1,2,3-cd]pyrene	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
Isophorone	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
Naphthalene	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
Nitrobenzene	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
N-nitrosodiphenylamine	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
Pentachlorophenol	UG/KG	640.0 U	625.0 U	NA	NA	NA	NA
Phenanthrene	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
Phenol	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA
Pyrene	UG/KG	264.0 U	257.5 U	NA	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SD14-06	41-UN-SD14-612	41-UN-SD15	41-UN-SD16	41-UN-SD17	41-UN-SD18
Laboratory Sample ID:	9402053-01	9402053-02	AB7537	AB7534	AB7531	AB7528
Date Sampled:	02/03/94	02/03/94	08/23/94	08/23/94	08/23/94	08/23/94
Percent Solids	62.7	63.6	65.4	85.5	81.7	68.8
VOLATILES						
Chloromethane	UG/KG	8.0 U	7.8 U	NA	NA	NA
Bromomethane	UG/KG	8.0 U	7.8 U	NA	NA	NA
Vinyl chloride	UG/KG	8.0 U	7.8 U	NA	NA	NA
Chloroethane	UG/KG	8.0 U	7.8 U	NA	NA	NA
Methylene chloride	UG/KG	12.5 U	8.0 U	NA	NA	NA
Acetone	UG/KG	30.5 U	14.5 UJ	NA	NA	NA
Carbon Disulfide	UG/KG	8.0 U	7.8 U	NA	NA	NA
1,1-Dichloroethene	UG/KG	8.0 U	7.8 U	NA	NA	NA
1,1-Dichloroethane	UG/KG	8.0 U	7.8 U	NA	NA	NA
1,2-Dichloroethene(total)	UG/KG	8.0 U	7.8 U	NA	NA	NA
Chloroform	UG/KG	8.0 U	7.8 U	NA	NA	NA
1,2-Dichloroethane	UG/KG	8.0 U	7.8 U	NA	NA	NA
2-Butanone	UG/KG	8.0 U	7.8 U	NA	NA	NA
1,1,1-Trichloroethane	UG/KG	8.0 U	7.8 U	NA	NA	NA
Carbon tetrachloride	UG/KG	8.0 U	7.8 U	NA	NA	NA
Bromodichloromethane	UG/KG	8.0 U	7.8 U	NA	NA	NA
1,2-Dichloropropane	UG/KG	8.0 U	7.8 U	NA	NA	NA
cis-1,3-Dichloropropene	UG/KG	8.0 U	7.8 U	NA	NA	NA
Trichloroethene	UG/KG	8.0 U	2.00 J	NA	NA	NA
Dibromochloromethane	UG/KG	8.0 U	7.8 U	NA	NA	NA
1,1,2-Trichloroethane	UG/KG	8.0 U	7.8 U	NA	NA	NA
Benzene	UG/KG	8.0 U	7.8 U	NA	NA	NA
trans-1,3-Dichloropropene	UG/KG	8.0 U	7.8 U	NA	NA	NA
Bromoform	UG/KG	8.0 U	7.8 U	NA	NA	NA
4-Methyl-2-pentanone	UG/KG	8.0 U	7.8 U	NA	NA	NA
2-Hexanone	UG/KG	8.0 U	7.8 U	NA	NA	NA
Tetrachloroethene	UG/KG	8.0 U	7.8 U	NA	NA	NA
1,1,2,2-Tetrachloroethane	UG/KG	8.0 U	7.8 U	NA	NA	NA
Toluene	UG/KG	8.0 U	7.8 U	NA	NA	NA
Chlorobenzene	UG/KG	8.0 U	7.8 U	NA	NA	NA
Ethylbenzene	UG/KG	8.0 U	7.8 U	NA	NA	NA
Styrene	UG/KG	8.0 U	7.8 U	NA	NA	NA
Xylenes (total)	UG/KG	8.0 U	7.8 U	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SD14-06	41-UN-SD14-612	41-UN-SD15	41-UN-SD16	41-UN-SD17	41-UN-SD18	
Laboratory Sample ID:	9402053-01	9402053-02	AB7537	AB7534	AB7531	AB7528	
Date Sampled:	02/03/94	02/03/94	08/23/94	08/23/94	08/23/94	08/23/94	
Percent Solids	62.7	63.6	65.4	85.5	81.7	68.8	
<u>PESTICIDE/PCBS</u>							
alpha-BHC	UG/KG	1.35 UJ	1.33 UJ	1.25 U	0.95 U	1.05 U	1.2 U
beta-BHC	UG/KG	1.35 UJ	1.33 UJ	1.25 U	0.95 U	1.05 U	1.2 U
delta-BHC	UG/KG	1.35 UJ	1.33 UJ	1.25 U	0.95 U	1.05 U	1.2 U
Lindane (gamma-BHC)	UG/KG	1.35 U	1.33 U	1.25 U	0.95 U	1.05 U	1.2 U
Heptachlor	UG/KG	1.35 U	1.33 U	1.25 U	0.95 U	1.05 U	1.2 U
Aldrin	UG/KG	1.35 U	1.33 U	1.25 U	0.95 U	1.05 U	1.2 U
Heptachlor epoxide	UG/KG	1.35 U	1.33 U	1.25 U	0.95 U	1.05 U	1.2 U
Endosulfan I	UG/KG	1.35 U	1.33 U	1.25 U	0.95 U	1.05 U	1.2 U
Dieldrin	UG/KG	2.07 NJ	1.57 NJ	2.45 U	1.9 U	2 U	2.35 U
4,4'-DDE	UG/KG	4.04 J	2.91 NJ	2.45 U	1.9 U	2 U	2.35 U
Endrin	UG/KG	2.62 U	2.58 U	2.45 U	1.9 U	2 U	2.35 U
Endosulfan II	UG/KG	8.22 J	3.57 J	2.45 U	1.9 U	2 U	2.35 U
4,4'-DDD	UG/KG	5.90 J	6.68 J	2.45 U	1.9 U	2 U	2.35 U
Endosulfan sulfate	UG/KG	2.62 U	2.58 U	2.45 U	1.9 U	2 U	2.35 U
4,4'-DDT	UG/KG	2.29 J	1.58 NJ	2.45 U	1.9 U	2 U	2.35 U
Methoxychlor	UG/KG	13.5 UJ	2.22 NJ	12.5 U	9.5 U	10.5 U	12 U
Endrin ketone	UG/KG	2.62 U	2.58 U	2.45 U	1.9 U	2 U	2.35 U
Endrin aldehyde	UG/KG	2.62 U	2.58 U	2.45 U	1.9 U	2 U	2.35 U
alpha-Chlordane	UG/KG	1.39 NJ	0.980 J	1.25 U	0.95 U	1.05 U	1.2 U
gamma-Chlordane	UG/KG	1.00 NJ	1.33 U	1.25 U	0.95 U	1.05 U	1.2 U
Toxaphene	UG/KG	135.0 U	133.0 U	125 U	95 U	105 U	120 U
Aroclor 1016	UG/KG	26.2 U	25.8 U	24.5 U	19 U	20 U	23.5 U
Aroclor 1221	UG/KG	53.0 U	52.5 U	50 U	38.5 U	40.5 U	47.5 U
Aroclor 1232	UG/KG	26.2 U	25.8 U	24.5 U	19 U	20 U	23.5 U
Aroclor 1242	UG/KG	26.2 U	25.8 U	24.5 U	19 U	20 U	23.5 U
Aroclor 1248	UG/KG	26.2 U	25.8 U	24.5 U	19 U	20 U	23.5 U
Aroclor 1254	UG/KG	26.2 U	25.8 U	24.5 U	19 U	20 U	23.5 U
Aroclor 1260	UG/KG	26.2 U	25.8 U	24.5 U	19 U	20 U	23.5 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	41-UN-SD14-06	41-UN-SD14-612	41-UN-SD15	41-UN-SD16	41-UN-SD17	41-UN-SD18
Laboratory Sample ID:	9402053-01	9402053-02	AB7537	AB7534	AB7531	AB7528
Date Sampled:	02/03/94	02/03/94	08/23/94	08/23/94	08/23/94	08/23/94
Percent Solids	62.7	63.6	65.4	85.5	81.7	68.8
ORDNANCE						
1,3,5-Trinitrobenzene	UG/KG	1390.0	20.1 U	NA	NA	NA
1,3-Dinitrobenzene	UG/KG	18.6 U	18.6 U	NA	NA	NA
2,4,6-Trinitrotoluene	UG/KG	17.8 U	17.8 U	NA	NA	NA
2,4-Dinitrotoluene	UG/KG	25.8 U	25.8 U	NA	NA	NA
2,6-Dinitrotoluene	UG/KG	23.8 U	23.8 U	NA	NA	NA
2-Amino-4,6-dinitrotoluene	UG/KG	23.4 U	23.4 U	NA	NA	NA
2-Nitrotoluene	UG/KG	40.7 U	40.7 U	NA	NA	NA
3-Nitrotoluene	UG/KG	40.9 U	40.9 U	NA	NA	NA
4-Amino-2,6-dinitrotoluene	UG/KG	20.4 U	20.4 U	NA	NA	NA
4-Nitrotoluene	UG/KG	43.6 U	43.6 U	NA	NA	NA
HMX	UG/KG	35.3 U	35.3 U	NA	NA	NA
Nitrobenzene	UG/KG	17.6 U	17.6 U	NA	NA	NA
RDX	UG/KG	25.5 U	25.5 U	NA	NA	NA
Tetryl	UG/KG	81.5 U	81.5 U	NA	NA	NA
MIREX						
Mirex	UG/KG	NA	NA	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SD19	41-UN-SD20	41-UN-SD21	41-UN-SD22	41-UN-SD23	41-UN-SD24
Laboratory Sample ID:	AB7525	AB7522	AB7519	AB7516	AB7513	AB7510
Date Sampled:	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94
Percent Solids	81.4	82	80	55	42.4	69.2
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	UG/KG	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	UG/KG	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	UG/KG	NA	NA	NA	NA	NA
2-Chloronaphthalene	UG/KG	NA	NA	NA	NA	NA
2-Chlorophenol	UG/KG	NA	NA	NA	NA	NA
2-Methylnaphthalene	UG/KG	NA	NA	NA	NA	NA
2-Methylphenol	UG/KG	NA	NA	NA	NA	NA
2-Nitroaniline	UG/KG	NA	NA	NA	NA	NA
2-Nitrophenol	UG/KG	NA	NA	NA	NA	NA
2,2'-oxybis-(1-chloropropane)	UG/KG	NA	NA	NA	NA	NA
2,4-Dichlorophenol	UG/KG	NA	NA	NA	NA	NA
2,4-Dimethylphenol	UG/KG	NA	NA	NA	NA	NA
2,4-Dinitrophenol	UG/KG	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	UG/KG	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	UG/KG	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	UG/KG	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	UG/KG	NA	NA	NA	NA	NA
3-Nitroaniline	UG/KG	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	UG/KG	NA	NA	NA	NA	NA
4-Bromophenyl-phenylether	UG/KG	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	UG/KG	NA	NA	NA	NA	NA
4-Chloroaniline	UG/KG	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	UG/KG	NA	NA	NA	NA	NA
4-Methylphenol	UG/KG	NA	NA	NA	NA	NA
4-Nitroaniline	UG/KG	NA	NA	NA	NA	NA
4-Nitrophenol	UG/KG	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	UG/KG	NA	NA	NA	NA	NA
Acenaphthene	UG/KG	NA	NA	NA	NA	NA
Acenaphthylene	UG/KG	NA	NA	NA	NA	NA
Anthracene	UG/KG	NA	NA	NA	NA	NA
Benzo[a]anthracene	UG/KG	NA	NA	NA	NA	NA
Benzo[a]pyrene	UG/KG	NA	NA	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SD19	41-UN-SD20	41-UN-SD21	41-UN-SD22	41-UN-SD23	41-UN-SD24
Laboratory Sample ID:	AB7525	AB7522	AB7519	AB7516	AB7513	AB7510
Date Sampled:	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94
Percent Solids	81.4	82	80	55	42.4	69.2

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/KG	NA	NA	NA	NA	NA	NA
Benzo[g,h,i]perylene	UG/KG	NA	NA	NA	NA	NA	NA
Benzo[k]fluoranthene	UG/KG	NA	NA	NA	NA	NA	NA
bis(2-Chloroethoxy) methane	UG/KG	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl) ether	UG/KG	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	UG/KG	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	UG/KG	NA	NA	NA	NA	NA	NA
Carbazole	UG/KG	NA	NA	NA	NA	NA	NA
Chrysene	UG/KG	NA	NA	NA	NA	NA	NA
Dibenzofuran	UG/KG	NA	NA	NA	NA	NA	NA
Dibenz[a,h]anthracene	UG/KG	NA	NA	NA	NA	NA	NA
Diethylphthalate	UG/KG	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	UG/KG	NA	NA	NA	NA	NA	NA
di-n-Butylphthalate	UG/KG	NA	NA	NA	NA	NA	NA
di-n-Octylphthalate	UG/KG	NA	NA	NA	NA	NA	NA
Fluoranthene	UG/KG	NA	NA	NA	NA	NA	NA
Fluorene	UG/KG	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	UG/KG	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	UG/KG	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	UG/KG	NA	NA	NA	NA	NA	NA
Hexachloroethane	UG/KG	NA	NA	NA	NA	NA	NA
Indeno[1,2,3-cd]pyrene	UG/KG	NA	NA	NA	NA	NA	NA
Isophorone	UG/KG	NA	NA	NA	NA	NA	NA
Naphthalene	UG/KG	NA	NA	NA	NA	NA	NA
Nitrobenzene	UG/KG	NA	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	UG/KG	NA	NA	NA	NA	NA	NA
N-nitrosodiphenylamine	UG/KG	NA	NA	NA	NA	NA	NA
Pentachlorophenol	UG/KG	NA	NA	NA	NA	NA	NA
Phenanthrene	UG/KG	NA	NA	NA	NA	NA	NA
Phenol	UG/KG	NA	NA	NA	NA	NA	NA
Pyrene	UG/KG	NA	NA	NA	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SD19	41-UN-SD20	41-UN-SD21	41-UN-SD22	41-UN-SD23	41-UN-SD24
Laboratory Sample ID:	AB7525	AB7522	AB7519	AB7516	AB7513	AB7510
Date Sampled:	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94
Percent Solids	81.4	82	80	55	42.4	69.2
<u>VOLATILES</u>						
Chloromethane	UG/KG	NA	NA	NA	NA	NA
Bromomethane	UG/KG	NA	NA	NA	NA	NA
Vinyl chloride	UG/KG	NA	NA	NA	NA	NA
Chloroethane	UG/KG	NA	NA	NA	NA	NA
Methylene chloride	UG/KG	NA	NA	NA	NA	NA
Acetone	UG/KG	NA	NA	NA	NA	NA
Carbon Disulfide	UG/KG	NA	NA	NA	NA	NA
1,1-Dichloroethene	UG/KG	NA	NA	NA	NA	NA
1,1-Dichloroethane	UG/KG	NA	NA	NA	NA	NA
1,2-Dichloroethene(total)	UG/KG	NA	NA	NA	NA	NA
Chloroform	UG/KG	NA	NA	NA	NA	NA
1,2-Dichloroethane	UG/KG	NA	NA	NA	NA	NA
2-Butanone	UG/KG	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	UG/KG	NA	NA	NA	NA	NA
Carbon tetrachloride	UG/KG	NA	NA	NA	NA	NA
Bromodichloromethane	UG/KG	NA	NA	NA	NA	NA
1,2-Dichloropropane	UG/KG	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	UG/KG	NA	NA	NA	NA	NA
Trichloroethene	UG/KG	NA	NA	NA	NA	NA
Dibromochloromethane	UG/KG	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	UG/KG	NA	NA	NA	NA	NA
Benzene	UG/KG	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	UG/KG	NA	NA	NA	NA	NA
Bromoform	UG/KG	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	UG/KG	NA	NA	NA	NA	NA
2-Hexanone	UG/KG	NA	NA	NA	NA	NA
Tetrachloroethene	UG/KG	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	UG/KG	NA	NA	NA	NA	NA
Toluene	UG/KG	NA	NA	NA	NA	NA
Chlorobenzene	UG/KG	NA	NA	NA	NA	NA
Ethylbenzene	UG/KG	NA	NA	NA	NA	NA
Styrene	UG/KG	NA	NA	NA	NA	NA
Xylenes (total)	UG/KG	NA	NA	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SD19	41-UN-SD20	41-UN-SD21	41-UN-SD22	41-UN-SD23	41-UN-SD24	
Laboratory Sample ID:	AB7525	AB7522	AB7519	AB7516	AB7513	AB7510	
Date Sampled:	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94	
Percent Solids	81.4	82	80	55	42.4	69.2	
PESTICIDE/PCBS							
alpha-BHC	UG/KG	1.05 U	1.05 U	1.05 U	1.5 U	2 U	1.2 U
beta-BHC	UG/KG	1.05 U	1.05 U	1.05 U	1.5 U	2 U	1.2 U
delta-BHC	UG/KG	1.05 U	1.05 U	1.05 U	1.5 U	2 U	1.2 U
Lindane (gamma-BHC)	UG/KG	1.05 U	1.05 U	1.05 U	1.5 U	2 U	1.2 U
Heptachlor	UG/KG	1.05 U	1.05 U	1.05 U	1.5 U	2 U	1.2 U
Aldrin	UG/KG	1.05 U	1.05 U	1.05 U	1.5 U	2 U	1.2 U
Heptachlor epoxide	UG/KG	1.05 U	1.05 U	1.05 U	1.5 U	2 U	1.2 U
Endosulfan I	UG/KG	1.05 U	1.05 U	1.05 U	1.5 U	2 U	1.2 U
Dieldrin	UG/KG	2.05 U	2 U	2.05 U	2.9 U	3.85 U	2.35 U
4,4'-DDE	UG/KG	2.05 U	18	2.05 U	2.9 U	3.85 U	2.35 U
Endrin	UG/KG	2.05 U	2 U	2.05 U	2.9 U	3.85 U	2.35 U
Endosulfan II	UG/KG	2.05 U	2 U	2.05 U	2.9 U	3.85 U	2.35 U
4,4'-DDD	UG/KG	2.05 U	27	2.05 U	2.9 U	17	2.35 U
Endosulfan sulfate	UG/KG	2.05 U	2 U	2.05 U	2.9 U	3.85 U	2.35 U
4,4'-DDT	UG/KG	2.05 U	210	2.05 U	2.9 U	3.85 U	2.35 U
Methoxychlor	UG/KG	10.5 U	10.5 U	10.5 U	15 U	20 U	12 U
Endrin ketone	UG/KG	2.05 U	2 U	2.05 U	2.9 U	3.85 U	2.35 U
Endrin aldehyde	UG/KG	2.05 U	2 U	2.05 U	2.9 U	3.85 U	2.35 U
alpha-Chlordane	UG/KG	1.05 U	1.05 U	1.05 U	1.5 U	2 U	1.2 U
gamma-Chlordane	UG/KG	1.05 U	1.05 U	1.05 U	1.5 U	2 U	1.2 U
Toxaphene	UG/KG	105 U	105 U	105 U	150 U	200 U	120 U
Aroclor 1016	UG/KG	20.5 U	20 U	20.5 U	29 U	38.5 U	23.5 U
Aroclor 1221	UG/KG	41.5 U	40.5 U	41.5 U	60 U	80 U	48 U
Aroclor 1232	UG/KG	20.5 U	20 U	20.5 U	29 U	38.5 U	23.5 U
Aroclor 1242	UG/KG	20.5 U	20 U	20.5 U	29 U	38.5 U	23.5 U
Aroclor 1248	UG/KG	20.5 U	20 U	20.5 U	29 U	38.5 U	23.5 U
Aroclor 1254	UG/KG	20.5 U	20 U	20.5 U	29 U	38.5 U	23.5 U
Aroclor 1260	UG/KG	20.5 U	20 U	20.5 U	29 U	38.5 U	23.5 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	41-UN-SD19	41-UN-SD20	41-UN-SD21	41-UN-SD22	41-UN-SD23	41-UN-SD24
Laboratory Sample ID:	AB7525	AB7522	AB7519	AB7516	AB7513	AB7510
Date Sampled:	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94
Percent Solids	81.4	82	80	55	42.4	69.2
ORDNANCE						
1,3,5-Trinitrobenzene	UG/KG	NA	NA	NA	NA	NA
1,3-Dinitrobenzene	UG/KG	NA	NA	NA	NA	NA
2,4,6-Trinitrotoluene	UG/KG	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	UG/KG	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	UG/KG	NA	NA	NA	NA	NA
2-Amino-4,6-dinitrotoluene	UG/KG	NA	NA	NA	NA	NA
2-Nitrotoluene	UG/KG	NA	NA	NA	NA	NA
3-Nitrotoluene	UG/KG	NA	NA	NA	NA	NA
4-Amino-2,6-dinitrotoluene	UG/KG	NA	NA	NA	NA	NA
4-Nitrotoluene	UG/KG	NA	NA	NA	NA	NA
HMX	UG/KG	NA	NA	NA	NA	NA
Nitrobenzene	UG/KG	NA	NA	NA	NA	NA
RDX	UG/KG	NA	NA	NA	NA	NA
Tetryl	UG/KG	NA	NA	NA	NA	NA
MIREX						
Mirex	UG/KG	NA	NA	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SD25	41-UN-SD26	41-UN-SD27	41-UN-SD28	41-TC-SD06-06	41-TC-SD06-612
Laboratory Sample ID:	AB7507	AB7504	AB7501	AB7498	9402082-05A	9402082-06A
Date Sampled:	08/23/94	08/23/94	08/23/94	08/23/94	02/06/94	02/06/94
Percent Solids	19.7	80.6	80.2	74.8	65.0	70.2
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	NA	NA	NA	254.0 U	235.5 U
1,2,4-Trichlorobenzene	UG/KG	NA	NA	NA	254.0 U	235.5 U
1,3-Dichlorobenzene	UG/KG	NA	NA	NA	254.0 U	235.5 U
1,4-Dichlorobenzene	UG/KG	NA	NA	NA	254.0 U	235.5 U
2-Chloronaphthalene	UG/KG	NA	NA	NA	254.0 U	235.5 U
2-Chlorophenol	UG/KG	NA	NA	NA	254.0 U	235.5 U
2-Methylnaphthalene	UG/KG	NA	NA	NA	254.0 U	235.5 U
2-Methylphenol	UG/KG	NA	NA	NA	254.0 U	235.5 U
2-Nitroaniline	UG/KG	NA	NA	NA	615.0 U	570.0 U
2-Nitrophenol	UG/KG	NA	NA	NA	254.0 U	235.5 U
2,2'-oxybis-(1-chloropropane)	UG/KG	NA	NA	NA	254.0 U	235.5 U
2,4-Dichlorophenol	UG/KG	NA	NA	NA	254.0 U	235.5 U
2,4-Dimethylphenol	UG/KG	NA	NA	NA	254.0 U	235.5 U
2,4-Dinitrophenol	UG/KG	NA	NA	NA	615.0 U	570.0 U
2,4-Dinitrotoluene	UG/KG	NA	NA	NA	254.0 U	235.5 U
2,4,5-Trichlorophenol	UG/KG	NA	NA	NA	615.0 U	570.0 U
2,4,6-Trichlorophenol	UG/KG	NA	NA	NA	254.0 U	235.5 U
2,6-Dinitrotoluene	UG/KG	NA	NA	NA	254.0 U	235.5 U
3-Nitroaniline	UG/KG	NA	NA	NA	615.0 U	570.0 U
3,3'-Dichlorobenzidine	UG/KG	NA	NA	NA	254.0 U	235.5 U
4-Bromophenyl-phenylether	UG/KG	NA	NA	NA	254.0 U	235.5 U
4-Chloro-3-methylphenol	UG/KG	NA	NA	NA	254.0 U	235.5 U
4-Chloroaniline	UG/KG	NA	NA	NA	254.0 U	235.5 U
4-Chlorophenyl phenyl ether	UG/KG	NA	NA	NA	254.0 U	235.5 U
4-Methylphenol	UG/KG	NA	NA	NA	254.0 U	235.5 U
4-Nitroaniline	UG/KG	NA	NA	NA	615.0 U	570.0 U
4-Nitrophenol	UG/KG	NA	NA	NA	615.0 U	570.0 U
4,6-Dinitro-2-methylphenol	UG/KG	NA	NA	NA	615.0 U	570.0 U
Acenaphthene	UG/KG	NA	NA	NA	254.0 U	235.5 U
Acenaphthylene	UG/KG	NA	NA	NA	254.0 U	235.5 U
Anthracene	UG/KG	NA	NA	NA	254.0 U	235.5 U
Benzo[a]anthracene	UG/KG	NA	NA	NA	254.0 U	235.5 U
Benzo[a]pyrene	UG/KG	NA	NA	NA	57.0 J	235.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SD25	41-UN-SD26	41-UN-SD27	41-UN-SD28	41-TC-SD06-06	41-TC-SD06-612
Laboratory Sample ID:	AB7507	AB7504	AB7501	AB7498	9402082-05A	9402082-06A
Date Sampled:	08/23/94	08/23/94	08/23/94	08/23/94	02/06/94	02/06/94
Percent Solids	19.7	80.6	80.2	74.8	65.0	70.2

SEMIVOLATILES Cont.

Compound	41-UN-SD25	41-UN-SD26	41-UN-SD27	41-UN-SD28	41-TC-SD06-06	41-TC-SD06-612
Benzo[b]fluoranthene	UG/KG	NA	NA	NA	69.0 J	235.5 U
Benzo[g,h,i]perylene	UG/KG	NA	NA	NA	254.0 U	235.5 U
Benzo[k]fluoranthene	UG/KG	NA	NA	NA	58.0 J	235.5 U
bis(2-Chloroethoxy) methane	UG/KG	NA	NA	NA	254.0 U	235.5 U
bis(2-Chloroethyl) ether	UG/KG	NA	NA	NA	254.0 U	235.5 U
bis(2-Ethylhexyl)phthalate	UG/KG	NA	NA	NA	254.0 U	235.5 U
Butyl benzyl phthalate	UG/KG	NA	NA	NA	254.0 U	235.5 U
Carbazole	UG/KG	NA	NA	NA	254.0 U	235.5 U
Chrysene	UG/KG	NA	NA	NA	254.0 U	235.5 U
Dibenzofuran	UG/KG	NA	NA	NA	254.0 U	235.5 U
Dibenz[a,h]anthracene	UG/KG	NA	NA	NA	254.0 U	235.5 U
Diethylphthalate	UG/KG	NA	NA	NA	254.0 U	235.5 U
Dimethyl phthalate	UG/KG	NA	NA	NA	254.0 U	235.5 U
di-n-Butylphthalate	UG/KG	NA	NA	NA	254.0 U	235.5 U
di-n-Octylphthalate	UG/KG	NA	NA	NA	254.0 U	235.5 U
Fluoranthene	UG/KG	NA	NA	NA	100.0 J	235.5 U
Fluorene	UG/KG	NA	NA	NA	254.0 U	235.5 U
Hexachlorobenzene	UG/KG	NA	NA	NA	254.0 U	235.5 U
Hexachlorobutadiene	UG/KG	NA	NA	NA	254.0 U	235.5 U
Hexachlorocyclopentadiene	UG/KG	NA	NA	NA	254.0 U	235.5 U
Hexachloroethane	UG/KG	NA	NA	NA	254.0 U	235.5 U
Indeno[1,2,3-cd]pyrene	UG/KG	NA	NA	NA	254.0 U	235.5 U
Isophorone	UG/KG	NA	NA	NA	254.0 U	235.5 U
Naphthalene	UG/KG	NA	NA	NA	254.0 U	235.5 U
Nitrobenzene	UG/KG	NA	NA	NA	254.0 U	235.5 U
N-Nitroso-di-n-propylamine	UG/KG	NA	NA	NA	254.0 U	235.5 U
N-nitrosodiphenylamine	UG/KG	NA	NA	NA	254.0 U	235.5 U
Pentachlorophenol	UG/KG	NA	NA	NA	615.0 U	570.0 U
Phenanthrene	UG/KG	NA	NA	NA	254.0 U	235.5 U
Phenol	UG/KG	NA	NA	NA	254.0 U	235.5 U
Pyrene	UG/KG	NA	NA	NA	100.0 J	235.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SD25	41-UN-SD26	41-UN-SD27	41-UN-SD28	41-TC-SD06-08	41-TC-SD06-612
Laboratory Sample ID:	AB7507	AB7504	AB7501	AB7498	9402082-05A	9402082-06A
Date Sampled:	08/23/94	08/23/94	08/23/94	08/23/94	02/06/94	02/06/94
Percent Solids	19.7	80.6	80.2	74.8	65.0	70.2
<u>VOLATILES</u>						
Chloromethane	UG/KG	NA	NA	NA	7.5 U	7.0 U
Bromomethane	UG/KG	NA	NA	NA	7.5 U	7.0 U
Vinyl chloride	UG/KG	NA	NA	NA	7.5 U	7.0 U
Chloroethane	UG/KG	NA	NA	NA	7.5 U	7.0 U
Methylene chloride	UG/KG	NA	NA	NA	7.5 U	7.0 U
Acetone	UG/KG	NA	NA	NA	51.0	7.0 U
Carbon Disulfide	UG/KG	NA	NA	NA	7.5 U	7.0 U
1,1-Dichloroethene	UG/KG	NA	NA	NA	7.5 U	7.0 U
1,1-Dichloroethane	UG/KG	NA	NA	NA	7.5 U	7.0 U
1,2-Dichloroethene(total)	UG/KG	NA	NA	NA	7.5 U	7.0 U
Chloroform	UG/KG	NA	NA	NA	7.5 U	7.0 U
1,2-Dichloroethane	UG/KG	NA	NA	NA	7.5 U	7.0 U
2-Butanone	UG/KG	NA	NA	NA	7.5 U	7.0 U
1,1,1-Trichloroethane	UG/KG	NA	NA	NA	7.5 U	7.0 U
Carbon tetrachloride	UG/KG	NA	NA	NA	7.5 U	7.0 U
Bromodichloromethane	UG/KG	NA	NA	NA	7.5 U	7.0 U
1,2-Dichloropropane	UG/KG	NA	NA	NA	7.5 U	7.0 U
cis-1,3-Dichloropropene	UG/KG	NA	NA	NA	7.5 U	7.0 U
Trichloroethene	UG/KG	NA	NA	NA	7.5 U	7.0 U
Dibromochloromethane	UG/KG	NA	NA	NA	7.5 U	7.0 U
1,1,2-Trichloroethane	UG/KG	NA	NA	NA	7.5 U	7.0 U
Benzene	UG/KG	NA	NA	NA	7.5 U	7.0 U
trans-1,3-Dichloropropene	UG/KG	NA	NA	NA	7.5 U	7.0 U
Bromoform	UG/KG	NA	NA	NA	7.5 U	7.0 U
4-Methyl-2-pentanone	UG/KG	NA	NA	NA	7.5 U	7.0 U
2-Hexanone	UG/KG	NA	NA	NA	7.5 U	7.0 U
Tetrachloroethene	UG/KG	NA	NA	NA	7.5 U	7.0 U
1,1,2,2-Tetrachloroethane	UG/KG	NA	NA	NA	7.5 U	7.0 U
Toluene	UG/KG	NA	NA	NA	2.00 J	7.0 U
Chlorobenzene	UG/KG	NA	NA	NA	7.5 U	7.0 U
Ethylbenzene	UG/KG	NA	NA	NA	7.5 U	7.0 U
Styrene	UG/KG	NA	NA	NA	7.5 U	7.0 U
Xylenes (total)	UG/KG	NA	NA	NA	7.5 U	7.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-UN-SD25	41-UN-SD26	41-UN-SD27	41-UN-SD28	41-TC-SD06-06	41-TC-SD06-612
Laboratory Sample ID:	AB7507	AB7504	AB7501	AB7498	9402082-05A	9402082-06A
Date Sampled:	08/23/94	08/23/94	08/23/94	08/23/94	02/06/94	02/06/94
Percent Solids	19.7	80.6	80.2	74.8	65.0	70.2
<u>PESTICIDE/PCBS</u>						
alpha-BHC	UG/KG	4.2 U	1 U	1.05 U	1.1 U	1.22 UJ
beta-BHC	UG/KG	4.2 U	1 U	1.05 U	1.1 U	1.22 UJ
delta-BHC	UG/KG	4.2 U	1 U	1.05 U	1.1 U	1.22 UJ
Lindane (gamma-BHC)	UG/KG	4.2 U	1 U	1.05 U	1.1 U	1.22 UJ
Heptachlor	UG/KG	4.2 U	1 U	1.05 U	1.1 U	1.22 UJ
Aldrin	UG/KG	4.2 U	1 U	1.05 U	1.1 U	1.22 UJ
Heptachlor epoxide	UG/KG	4.2 U	1 U	1.05 U	1.1 U	1.22 UJ
Endosulfan I	UG/KG	4.2 U	1 U	1.05 U	1.1 U	1.22 UJ
Dieldrin	UG/KG	8 U	2 U	2.05 U	2.15 U	2.36 UJ
4,4'-DDE	UG/KG	19	2 U	2.05 U	7.8	1.28 NJ
Endrin	UG/KG	8 U	2 U	2.05 U	2.15 U	2.36 UJ
Endosulfan II	UG/KG	8 U	2 U	2.05 U	2.15 U	2.36 UJ
4,4'-DDD	UG/KG	8 U	4.2	2.05 U	42	1.24 NJ
Endosulfan sulfate	UG/KG	8 U	2 U	2.05 U	2.15 U	2.36 UJ
4,4'-DDT	UG/KG	8 U	5.8	2.05 U	2.15 U	2.00 J
Methoxychlor	UG/KG	42 U	10 U	10.5 U	11 U	13.1 UJ
Endrin ketone	UG/KG	8 U	2 U	2.05 U	2.15 U	2.36 UJ
Endrin aldehyde	UG/KG	8 U	2 U	2.05 U	2.15 U	2.36 UJ
alpha-Chlordane	UG/KG	4.2 U	1 U	1.05 U	1.1 U	1.22 UJ
gamma-Chlordane	UG/KG	4.2 U	1 U	1.05 U	1.1 U	0.990 NJ
Toxaphene	UG/KG	420 U	100 U	105 U	110 U	121.5 UJ
Aroclor 1016	UG/KG	80 U	20 U	20.5 U	21.5 U	23.6 UJ
Aroclor 1221	UG/KG	165 U	40.5 U	41.5 U	44 U	47.9 UJ
Aroclor 1232	UG/KG	80 U	20 U	20.5 U	21.5 U	23.6 UJ
Aroclor 1242	UG/KG	80 U	20 U	20.5 U	21.5 U	23.6 UJ
Aroclor 1248	UG/KG	80 U	20 U	20.5 U	21.5 U	23.6 UJ
Aroclor 1254	UG/KG	80 U	20 U	20.5 U	21.5 U	23.6 UJ
Aroclor 1260	UG/KG	80 U	20 U	20.5 U	21.5 U	23.6 UJ

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	41-UN-SD25	41-UN-SD26	41-UN-SD27	41-UN-SD28	41-TC-SD06-06	41-TC-SD06-612
Laboratory Sample ID:	AB7507	AB7504	AB7501	AB7498	9402082-05A	9402082-06A
Date Sampled:	08/23/94	08/23/94	08/23/94	08/23/94	02/06/94	02/06/94
Percent Solids	19.7	80.6	80.2	74.8	65.0	70.2
ORDNANCE						
1,3,5-Trinitrobenzene	UG/KG	NA	NA	NA	NA	20.1 U
1,3-Dinitrobenzene	UG/KG	NA	NA	NA	NA	18.6 U
2,4,6-Trinitrotoluene	UG/KG	NA	NA	NA	NA	17.8 U
2,4-Dinitrotoluene	UG/KG	NA	NA	NA	NA	25.8 U
2,6-Dinitrotoluene	UG/KG	NA	NA	NA	NA	23.8 U
2-Amino-4,6-dinitrotoluene	UG/KG	NA	NA	NA	NA	23.4 U
2-Nitrotoluene	UG/KG	NA	NA	NA	NA	40.7 U
3-Nitrotoluene	UG/KG	NA	NA	NA	NA	40.9 U
4-Amino-2,6-dinitrotoluene	UG/KG	NA	NA	NA	NA	20.4 U
4-Nitrotoluene	UG/KG	NA	NA	NA	NA	43.6 U
HMX	UG/KG	NA	NA	NA	NA	35.3 U
Nitrobenzene	UG/KG	NA	NA	NA	NA	17.6 U
RDX	UG/KG	NA	NA	NA	NA	25.5 U
Tetryl	UG/KG	NA	NA	NA	NA	81.5 UJ
MIREX						
Mirex	UG/KG	NA	NA	NA	NA	1300.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-TC-SD07-06	41-TC-SD07-612	41-TC-SD08-06	41-TC-SD08-612	41-TC-SD09-06	41-TC-SD09-612	
Laboratory Sample ID:	9402079-01A	9402079-02A	9402082-01A	9402082-02A	9402082-03A	9402082-04A	
Date Sampled:	02/07/94	02/07/94	02/06/94	02/06/94	02/06/94	02/06/94	
Percent Solids	76.6	73.9	70.6	58.2	25.2	39.4	
SEMIVOLATILES							
1,2-Dichlorobenzene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
1,2,4-Trichlorobenzene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
1,3-Dichlorobenzene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
1,4-Dichlorobenzene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
2-Chloronaphthalene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
2-Chlorophenol	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
2-Methylnaphthalene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
2-Methylphenol	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
2-Nitroaniline	UG/KG	520.0 U	540.0 U	565.0 U	690.0 U	1600.0 U	1025.0 U
2-Nitrophenol	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
2,2'-oxybis-(1-chloropropane)	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
2,4-Dichlorophenol	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
2,4-Dimethylphenol	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
2,4-Dinitrophenol	UG/KG	520.0 U	540.0 U	565.0 U	690.0 U	1600.0 U	1025.0 U
2,4-Dinitrotoluene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
2,4,5-Trichlorophenol	UG/KG	520.0 U	540.0 U	565.0 U	690.0 U	1600.0 U	1025.0 U
2,4,6-Trichlorophenol	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
2,6-Dinitrotoluene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
3-Nitroaniline	UG/KG	520.0 U	540.0 U	565.0 U	690.0 U	1600.0 U	1025.0 U
3,3'-Dichlorobenzidine	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
4-Bromophenyl-phenylether	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
4-Chloro-3-methylphenol	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
4-Chloroaniline	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
4-Chlorophenyl phenyl ether	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
4-Methylphenol	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
4-Nitroaniline	UG/KG	520.0 U	540.0 U	565.0 U	690.0 U	1600.0 U	1025.0 U
4-Nitrophenol	UG/KG	520.0 U	540.0 U	565.0 U	690.0 U	1600.0 U	1025.0 U
4,6-Dinitro-2-methylphenol	UG/KG	520.0 U	540.0 U	565.0 U	690.0 U	1600.0 U	1025.0 U
Acenaphthene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
Acenaphthylene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
Anthracene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
Benzo[a]anthracene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
Benzo[a]pyrene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-TC-SD07-06	41-TC-SD07-612	41-TC-SD08-06	41-TC-SD08-612	41-TC-SD09-06	41-TC-SD09-612
Laboratory Sample ID:	9402079-01A	9402079-02A	9402082-01A	9402082-02A	9402082-03A	9402082-04A
Date Sampled:	02/07/94	02/07/94	02/06/94	02/06/94	02/06/94	02/06/94
Percent Solids	76.6	73.9	70.6	58.2	25.2	39.4

SEMIVOLATILES Cont.							
Benzo[b]fluoranthene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
Benzo[g,h,i]perylene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
Benzo[k]fluoranthene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
bis(2-Chloroethoxy) methane	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
bis(2-Chloroethyl) ether	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
bis(2-Ethylhexyl)phthalate	UG/KG	214.0 U	223.0 U	47.0 J	284.5 U	660.0 U	423.0 U
Butyl benzyl phthalate	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
Carbazole	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
Chrysene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
Dibenzofuran	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
Dibenz[a,h]anthracene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
Diethylphthalate	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
Dimethyl phthalate	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
di-n-Butylphthalate	UG/KG	214.0 U	48.0 J	56.0 J	284.5 U	660.0 U	423.0 U
di-n-Octylphthalate	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
Fluoranthene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
Fluorene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
Hexachlorobenzene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
Hexachlorobutadiene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
Hexachlorocyclopentadiene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
Hexachloroethane	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
Indeno[1,2,3-cd]pyrene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
Isophorone	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
Naphthalene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
Nitrobenzene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
N-Nitroso-di-n-propylamine	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
N-nitrosodiphenylamine	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
Pentachlorophenol	UG/KG	520.0 U	540.0 U	565.0 U	690.0 U	1600.0 U	1025.0 U
Phenanthrene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
Phenol	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U
Pyrene	UG/KG	214.0 U	223.0 U	232.5 U	284.5 U	660.0 U	423.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-TC-SD07-06	41-TC-SD07-612	41-TC-SD08-06	41-TC-SD08-612	41-TC-SD09-06	41-TC-SD09-612
Laboratory Sample ID:	9402079-01A	9402079-02A	9402082-01A	9402082-02A	9402082-03A	9402082-04A
Date Sampled:	02/07/94	02/07/94	02/06/94	02/06/94	02/06/94	02/06/94
Percent Solids	76.6	73.9	70.6	58.2	25.2	39.4
<u>VOLATILES</u>						
Chloromethane	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
Bromomethane	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
Vinyl chloride	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
Chloroethane	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
Methylene chloride	UG/KG	7.00 J	6.00 J	7.0 U	8.50 U	13.00 U
Acetone	UG/KG	6.50 U	26.0 U	4.00 J	44.0	150.0
Carbon Disulfide	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
1,1-Dichloroethene	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
1,1-Dichloroethane	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
1,2-Dichloroethene(total)	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
Chloroform	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
1,2-Dichloroethane	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
2-Butanone	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
1,1,1-Trichloroethane	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
Carbon tetrachloride	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
Bromodichloromethane	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
1,2-Dichloropropane	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
cis-1,3-Dichloropropene	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
Trichloroethene	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
Dibromochloromethane	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
1,1,2-Trichloroethane	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
Benzene	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
trans-1,3-Dichloropropene	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
Bromoform	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
4-Methyl-2-pentanone	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
2-Hexanone	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
Tetrachloroethene	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
1,1,2,2-Tetrachloroethane	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
Toluene	UG/KG	2.00 J	7.0 U	7.0 U	8.5 U	13.0 U
Chlorobenzene	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
Ethylbenzene	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
Styrene	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U
Xylenes (total)	UG/KG	6.5 U	7.0 U	7.0 U	8.5 U	13.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-TC-SD07-06	41-TC-SD07-612	41-TC-SD08-06	41-TC-SD08-612	41-TC-SD09-06	41-TC-SD09-612	
Laboratory Sample ID:	9402079-01A	9402079-02A	9402082-01A	9402082-02A	9402082-03A	9402082-04A	
Date Sampled:	02/07/94	02/07/94	02/06/94	02/06/94	02/06/94	02/06/94	
Percent Solids	76.6	73.9	70.6	58.2	25.2	39.4	
PESTICIDE/PCBS							
alpha-BHC	UG/KG	1.11 UJ	1.15 UJ	1.20 UJ	1.47 UJ	3.40 UJ	4.36 R
beta-BHC	UG/KG	1.11 UJ	1.15 UJ	1.20 UJ	1.47 UJ	3.40 UJ	4.36 R
delta-BHC	UG/KG	1.11 UJ	1.15 UJ	1.20 UJ	1.47 UJ	3.40 UJ	4.36 R
Lindane (gamma-BHC)	UG/KG	1.11 UJ	1.15 UJ	1.20 UJ	1.47 UJ	3.40 UJ	4.36 R
Heptachlor	UG/KG	1.11 UJ	1.15 UJ	1.20 UJ	1.47 UJ	3.40 UJ	4.36 R
Aldrin	UG/KG	1.11 UJ	1.15 UJ	1.20 UJ	1.47 UJ	3.40 UJ	4.36 R
Heptachlor epoxide	UG/KG	1.11 UJ	1.15 UJ	1.20 UJ	1.47 UJ	3.40 UJ	4.36 R
Endosulfan I	UG/KG	1.11 UJ	1.15 UJ	1.20 UJ	1.47 UJ	3.40 UJ	4.36 R
Dieldrin	UG/KG	2.14 UJ	2.23 UJ	2.33 UJ	2.85 UJ	6.6 UJ	8.46 R
4,4'-DDE	UG/KG	2.14 UJ	2.23 UJ	0.530 J	2.85 UJ	11.2 NJ	8.46 R
Endrin	UG/KG	2.14 UJ	2.23 UJ	2.33 UJ	2.85 UJ	6.6 UJ	8.46 R
Endosulfan II	UG/KG	2.14 UJ	2.23 UJ	2.33 UJ	2.85 UJ	6.6 UJ	8.46 R
4,4'-DDD	UG/KG	2.14 UJ	2.23 UJ	0.380 NJ	2.85 UJ	63.3 J	8.46 R
Endosulfan sulfate	UG/KG	2.14 UJ	2.23 UJ	2.33 UJ	2.85 UJ	6.6 UJ	8.46 R
4,4'-DDT	UG/KG	2.14 UJ	2.23 UJ	2.33 UJ	2.85 UJ	6.6 UJ	8.46 R
Methoxychlor	UG/KG	11.1 UJ	1.38 J	0.910 J	14.7 UJ	21.7 J	43.6 R
Endrin ketone	UG/KG	2.14 UJ	2.23 UJ	2.33 UJ	2.85 UJ	6.6 UJ	8.46 R
Endrin aldehyde	UG/KG	2.14 UJ	2.23 UJ	2.33 UJ	2.85 UJ	6.6 UJ	8.46 R
alpha-Chlordane	UG/KG	1.11 UJ	1.15 UJ	1.20 UJ	1.47 UJ	3.48 J	4.36 R
gamma-Chlordane	UG/KG	1.11 UJ	1.15 UJ	1.20 UJ	1.47 UJ	3.40 UJ	4.36 R
Toxaphene	UG/KG	110.5 UJ	115.0 UJ	119.5 UJ	146.5 UJ	340.0 UJ	436 R
Aroclor 1016	UG/KG	21.4 UJ	22.3 UJ	23.3 UJ	28.5 UJ	66.0 UJ	84.6 R
Aroclor 1221	UG/KG	43.5 UJ	45.3 UJ	47.2 UJ	58.0 UJ	134.0 UJ	172 R
Aroclor 1232	UG/KG	21.4 UJ	22.3 UJ	23.3 UJ	28.5 UJ	66.0 UJ	84.6 R
Aroclor 1242	UG/KG	21.4 UJ	22.3 UJ	23.3 UJ	28.5 UJ	66.0 UJ	84.6 R
Aroclor 1248	UG/KG	21.4 UJ	22.3 UJ	23.3 UJ	28.5 UJ	66.0 UJ	84.6 R
Aroclor 1254	UG/KG	21.4 UJ	22.3 UJ	23.3 UJ	28.5 UJ	66.0 UJ	84.6 R
Aroclor 1260	UG/KG	21.4 UJ	22.3 UJ	23.3 UJ	28.5 UJ	66.0 UJ	84.6 R

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	41-TC-SD07-06	41-TC-SD07-612	41-TC-SD08-06	41-TC-SD08-612	41-TC-SD09-06	41-TC-SD09-612
Laboratory Sample ID:	9402079-01A	9402079-02A	9402082-01A	9402082-02A	9402082-03A	9402082-04A
Date Sampled:	02/07/94	02/07/94	02/06/94	02/06/94	02/06/94	02/06/94
Percent Solids	76.6	73.9	70.6	58.2	25.2	39.4
ORDNANCE						
1,3,5-Trinitrobenzene	UG/KG	20.1 U	20.1 U	20.1 U	20.1 U	20.1 U
1,3-Dinitrobenzene	UG/KG	18.6 U	18.6 U	18.6 U	18.6 U	18.6 U
2,4,6-Trinitrotoluene	UG/KG	17.8 U	17.8 U	17.8 U	17.8 U	17.8 U
2,4-Dinitrotoluene	UG/KG	25.8 U	25.8 U	25.8 U	25.8 U	25.8 U
2,6-Dinitrotoluene	UG/KG	23.8 U	23.8 U	23.8 U	23.8 U	23.8 U
2-Amino-4,6-dinitrotoluene	UG/KG	23.4 U	23.4 U	23.4 U	23.4 U	23.4 U
2-Nitrotoluene	UG/KG	40.7 U	40.7 U	40.7 U	40.7 U	40.7 U
3-Nitrotoluene	UG/KG	40.9 U	40.9 U	40.9 U	40.9 U	40.9 U
4-Amino-2,6-dinitrotoluene	UG/KG	20.4 U	20.4 U	20.4 U	20.4 U	20.4 U
4-Nitrotoluene	UG/KG	43.6 U	43.6 U	43.6 U	43.6 U	43.6 U
HMX	UG/KG	35.3 U	35.3 U	35.3 U	35.3 U	35.3 U
Nitrobenzene	UG/KG	17.6 U	17.6 U	17.6 U	17.6 U	17.6 U
RDX	UG/KG	25.5 U	25.5 U	25.5 U	25.5 U	25.5 U
Tetryl	UG/KG	81.5 UJ	81.5 UJ	81.5 UJ	81.5 UJ	81.5 UJ
MIREX						
Mirex	UG/KG	1100.0 U	1150.0 U	1150.0 U	1450.0 U	2150.0 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled: Percent Solids		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	ND	NA	NA	NA	NA
1,2,4-Trichlorobenzene	UG/KG	ND	NA	NA	NA	NA
1,3-Dichlorobenzene	UG/KG	ND	NA	NA	NA	NA
1,4-Dichlorobenzene	UG/KG	ND	NA	NA	NA	NA
2-Chloronaphthalene	UG/KG	ND	NA	NA	NA	NA
2-Chlorophenol	UG/KG	ND	NA	NA	NA	NA
2-Methylnaphthalene	UG/KG	ND	NA	NA	NA	NA
2-Methylphenol	UG/KG	ND	NA	NA	NA	NA
2-Nitroaniline	UG/KG	ND	NA	NA	NA	NA
2-Nitrophenol	UG/KG	ND	NA	NA	NA	NA
2,2'-oxybis-(1-chloropropane)	UG/KG	ND	NA	NA	NA	NA
2,4-Dichlorophenol	UG/KG	ND	NA	NA	NA	NA
2,4-Dimethylphenol	UG/KG	ND	NA	NA	NA	NA
2,4-Dinitrophenol	UG/KG	ND	NA	NA	NA	NA
2,4-Dinitrotoluene	UG/KG	ND	NA	NA	NA	NA
2,4,5-Trichlorophenol	UG/KG	ND	NA	NA	NA	NA
2,4,6-Trichlorophenol	UG/KG	ND	NA	NA	NA	NA
2,6-Dinitrotoluene	UG/KG	ND	NA	NA	NA	NA
3-Nitroaniline	UG/KG	ND	NA	NA	NA	NA
3,3'-Dichlorobenzidine	UG/KG	ND	NA	NA	NA	NA
4-Bromophenyl-phenylether	UG/KG	ND	NA	NA	NA	NA
4-Chloro-3-methylphenol	UG/KG	ND	NA	NA	NA	NA
4-Chloroaniline	UG/KG	ND	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	UG/KG	ND	NA	NA	NA	NA
4-Methylphenol	UG/KG	ND	NA	NA	NA	NA
4-Nitroaniline	UG/KG	ND	NA	NA	NA	NA
4-Nitrophenol	UG/KG	ND	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	UG/KG	ND	NA	NA	NA	NA
Acenaphthene	UG/KG	ND	NA	NA	NA	NA
Acenaphthylene	UG/KG	ND	NA	NA	NA	NA
Anthracene	UG/KG	ND	NA	NA	NA	NA
Benzo[<i>a</i>]anthracene	UG/KG	ND	NA	NA	NA	NA
Benzo[<i>a</i>]pyrene	UG/KG	57 J	256.3	103.8	289.7	298.2

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled: Percent Solids	MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL	
SEMIVOLATILES Cont.						
Benzo[b]fluoranthene	UG/KG	69 J	256.8	103.0	289.9	294.7
Benzo[g,h,i]perylene	UG/KG	ND	NA	NA	NA	NA
Benzo[k]fluoranthene	UG/KG	58 J	256.4	103.7	289.8	297.8
bis(2-Chloroethoxy) methane	UG/KG	ND	NA	NA	NA	NA
bis(2-Chloroethyl) ether	UG/KG	ND	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	UG/KG	94 J	228.3	120.0	266.9	304.8
Butyl benzyl phthalate	UG/KG	ND	NA	NA	NA	NA
Carbazole	UG/KG	ND	NA	NA	NA	NA
Chrysene	UG/KG	ND	NA	NA	NA	NA
Dibenzofuran	UG/KG	ND	NA	NA	NA	NA
Dibenz[a,h]anthracene	UG/KG	ND	NA	NA	NA	NA
Diethylphthalate	UG/KG	ND	NA	NA	NA	NA
Dimethyl phthalate	UG/KG	ND	NA	NA	NA	NA
di-n-Butylphthalate	UG/KG	370 J	238.5	120.7	277.3	318.9
di-n-Octylphthalate	UG/KG	310 J	255.7	108.8	290.7	308.7
Fluoranthene	UG/KG	100 J	257.9	101.0	290.4	289.7
Fluorene	UG/KG	ND	NA	NA	NA	NA
Hexachlorobenzene	UG/KG	ND	NA	NA	NA	NA
Hexachlorobutadiene	UG/KG	ND	NA	NA	NA	NA
Hexachlorocyclopentadiene	UG/KG	ND	NA	NA	NA	NA
Hexachloroethane	UG/KG	ND	NA	NA	NA	NA
Indeno[1,2,3-cd]pyrene	UG/KG	ND	NA	NA	NA	NA
Isophorone	UG/KG	ND	NA	NA	NA	NA
Naphthalene	UG/KG	ND	NA	NA	NA	NA
Nitrobenzene	UG/KG	ND	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	UG/KG	ND	NA	NA	NA	NA
N-nitrosodiphenylamine	UG/KG	ND	NA	NA	NA	NA
Pentachlorophenol	UG/KG	ND	NA	NA	NA	NA
Phenanthrene	UG/KG	ND	NA	NA	NA	NA
Phenol	UG/KG	ND	NA	NA	NA	NA
Pyrene	UG/KG	100 J	257.9	101.0	290.4	289.7

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled: Percent Solids		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
VOLATILES						
Chloromethane	UG/KG	ND	NA	NA	NA	NA
Bromomethane	UG/KG	ND	NA	NA	NA	NA
Vinyl chloride	UG/KG	ND	NA	NA	NA	NA
Chloroethane	UG/KG	ND	NA	NA	NA	NA
Methylene chloride	UG/KG	7 J	7.6	3.7	8.8	9.5
Acetone	UG/KG	190	39.4	52.1	56.2	74.6
Carbon Disulfide	UG/KG	ND	NA	NA	NA	NA
1,1-Dichloroethene	UG/KG	ND	NA	NA	NA	NA
1,1-Dichloroethane	UG/KG	ND	NA	NA	NA	NA
1,2-Dichloroethene(total)	UG/KG	ND	NA	NA	NA	NA
Chloroform	UG/KG	ND	NA	NA	NA	NA
1,2-Dichloroethane	UG/KG	ND	NA	NA	NA	NA
2-Butanone	UG/KG	ND	NA	NA	NA	NA
1,1,1-Trichloroethane	UG/KG	ND	NA	NA	NA	NA
Carbon tetrachloride	UG/KG	ND	NA	NA	NA	NA
Bromodichloromethane	UG/KG	ND	NA	NA	NA	NA
1,2-Dichloropropane	UG/KG	ND	NA	NA	NA	NA
cis-1,3-Dichloropropene	UG/KG	ND	NA	NA	NA	NA
Trichloroethene	UG/KG	2 J	7.8	3.1	8.8	8.9
Dibromochloromethane	UG/KG	ND	NA	NA	NA	NA
1,1,2-Trichloroethane	UG/KG	ND	NA	NA	NA	NA
Benzene	UG/KG	ND	NA	NA	NA	NA
trans-1,3-Dichloropropene	UG/KG	ND	NA	NA	NA	NA
Bromoform	UG/KG	ND	NA	NA	NA	NA
4-Methyl-2-pentanone	UG/KG	ND	NA	NA	NA	NA
2-Hexanone	UG/KG	ND	NA	NA	NA	NA
Tetrachloroethene	UG/KG	ND	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	UG/KG	ND	NA	NA	NA	NA
Toluene	UG/KG	2 J	7.6	3.3	8.7	9.2
Chlorobenzene	UG/KG	ND	NA	NA	NA	NA
Ethylbenzene	UG/KG	ND	NA	NA	NA	NA
Styrene	UG/KG	ND	NA	NA	NA	NA
Xylenes (total)	UG/KG	ND	NA	NA	NA	NA

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled: Percent Solids		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
PESTICIDE/PCBS						
alpha-BHC	UG/KG	ND	NA	NA	NA	NA
beta-BHC	UG/KG	ND	NA	NA	NA	NA
delta-BHC	UG/KG	ND	NA	NA	NA	NA
Lindane (gamma-BHC)	UG/KG	ND	NA	NA	NA	NA
Heptachlor	UG/KG	ND	NA	NA	NA	NA
Aldrin	UG/KG	ND	NA	NA	NA	NA
Heptachlor epoxide	UG/KG	ND	NA	NA	NA	NA
Endosulfan I	UG/KG	ND	NA	NA	NA	NA
Dieldrin	UG/KG	6.39 NJ	2.6	1.5	3.0	3.0
4,4'-DDE	UG/KG	31.3 J	5.5	7.2	7.5	7.1
Endrin	UG/KG	ND	NA	NA	NA	NA
Endosulfan II	UG/KG	8.22 J	2.7	1.7	3.1	3.2
4,4'-DDD	UG/KG	73.9 J	9.4	15.9	13.7	13.7
Endosulfan sulfate	UG/KG	ND	NA	NA	NA	NA
4,4'-DDT	UG/KG	210	8.6	32.7	17.4	7.3
Methoxychlor	UG/KG	21.7 J	11.8	6.5	13.6	16.4
Endrin ketone	UG/KG	0.66 NJ	2.6	1.2	2.9	2.9
Endrin aldehyde	UG/KG	ND	NA	NA	NA	NA
alpha-Chlordane	UG/KG	3.72 J	1.4	0.8	1.7	1.7
gamma-Chlordane	UG/KG	6.35 J	1.4	1.0	1.7	1.6
Toxaphene	UG/KG	ND	NA	NA	NA	NA
Aroclor 1016	UG/KG	ND	NA	NA	NA	NA
Aroclor 1221	UG/KG	ND	NA	NA	NA	NA
Aroclor 1232	UG/KG	ND	NA	NA	NA	NA
Aroclor 1242	UG/KG	ND	NA	NA	NA	NA
Aroclor 1248	UG/KG	140 J	29.6	22.0	35.5	32.5
Aroclor 1254	UG/KG	68 J	27.0	13.4	30.6	29.4
Aroclor 1260	UG/KG	ND	NA	NA	NA	NA

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled: Percent Solids		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
ORDNANCE						
1,3,5-Trinitrobenzene	UG/KG	1390	69.0	258.9	152.3	46.9
1,3-Dinitrobenzene	UG/KG	ND	NA	NA	NA	NA
2,4,6-Trinitrotoluene	UG/KG	ND	NA	NA	NA	NA
2,4-Dinitrotoluene	UG/KG	ND	NA	NA	NA	NA
2,6-Dinitrotoluene	UG/KG	ND	NA	NA	NA	NA
2-Amino-4,6-dinitrotoluene	UG/KG	ND	NA	NA	NA	NA
2-Nitrotoluene	UG/KG	ND	NA	NA	NA	NA
3-Nitrotoluene	UG/KG	ND	NA	NA	NA	NA
4-Amino-2,6-dinitrotoluene	UG/KG	ND	NA	NA	NA	NA
4-Nitrotoluene	UG/KG	ND	NA	NA	NA	NA
HMX	UG/KG	ND	NA	NA	NA	NA
Nitrobenzene	UG/KG	ND	NA	NA	NA	NA
RDX	UG/KG	ND	NA	NA	NA	NA
Tetryl	UG/KG	ND	NA	NA	NA	NA
MIREX						
Mirex	UG/KG	ND	NA	NA	NA	NA

APPENDIX P.17
SITE 41 UNNAMED TRIBUTARY AND TANK CREEK
SEDIMENT INORGANICS

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL METALS

Client Sample ID:	41-UN-SD01-06	41-UN-SD01-612	41-UN-SD02-06	41-UN-SD02-612	41-UN-SD03-06	41-UN-SD03-612
Laboratory Sample ID:	9402062-03	9402062-04	9402066-01A	9402066-02A	9402041-01	9402041-03
Date Sampled:	02/04/94	02/04/94			02/01/94	02/01/94
Percent Solids	73.5	75.5	78.8	78.8	74.9	72.9

	UNITS					
Aluminum	MG/KG	1720.0	2780.0	466 J	670 J	623.0
Antimony	MG/KG	1.08 U	1.05 U	0.94 U	0.94 U	1.06 U
Arsenic	MG/KG	0.395 U	0.384 U	0.2665 U	0.2665 U	0.387 UJ
Barium	MG/KG	5.24	7.66	3.5	5.5	4.07
Beryllium	MG/KG	0.176 U	0.171 U	0.0965 U	0.0965 U	0.172 U
Cadmium	MG/KG	0.320 U	0.311 U	0.405 U	0.405 U	0.314 U
Calcium	MG/KG	1250.0	1660.0	157 J	208 J	409.0
Chromium	MG/KG	2.41 U	1.59 U	1.055 UJ	1.055 UJ	1.65 U
Cobalt	MG/KG	1.33 U	1.29 U	2.03 U	2.03 U	1.30 U
Copper	MG/KG	2.21 U	2.15 U	2.07 U	2.07 U	2.16 U
Iron	MG/KG	924.0 J	1160.0 J	290 J	439 J	567.0 J
Lead	MG/KG	13.8 J	12.6 J	3.79	3.26	4.07 J
Magnesium	MG/KG	62.5	59.4	20.5	9.1 U	28.2
Manganese	MG/KG	2.94	2.67	10.1 J	1.93 J	2.27
Mercury	MG/KG	0.034 U	0.033 U	0.0315 U	0.0315 U	0.034 U
Nickel	MG/KG	5.97	3.79	3.65 U	3.65 U	1.82 U
Potassium	MG/KG	68.0 U	66.0 U	97 U	97 U	67.0 U
Selenium	MG/KG	0.344 U	0.335 U	0.651 J	0.1905 UJ	0.338 UJ
Silver	MG/KG	0.218 U	0.212 U	0.203 UJ	0.203 UJ	0.214 U
Sodium	MG/KG	73.6 J	24.7 UJ	117	46.7 U	24.9 UJ
Thallium	MG/KG	0.63 U	0.61 U	0.368 UJ	0.368 UJ	0.62 U
Vanadium	MG/KG	2.26 U	2.20 U	2.59 U	2.59 U	2.22 U
Zinc	MG/KG	5.3 U	7.6 U	2.65 U	3.455 U	5.3 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL METALS

Client Sample ID:	41-UN-SD04-06	41-UN-SD04-612	41-NE-SD05-06	41-NE-SD05-612	41-UN-SD10-06	41-UN-SD10-612	
Laboratory Sample ID:	9402041-05	9402041-06	9402091-01A	9402091-02A	9402020-01	9402020-02	
Date Sampled:	02/01/94	02/01/94					
Percent Solids	78.1	77.1	77.5	78.9	43.8	56	
	<u>UNITS</u>						
Aluminum	MG/KG	613.0	371.0	437 J	351 J	6400 J	3380 J
Antimony	MG/KG	1.01 U	1.03 U	0.955 U	0.94 U	1.805 UJ	1.41 UJ
Arsenic	MG/KG	0.372 U	0.376 U	0.271 U	0.266 U	0.4795 U	0.981
Barium	MG/KG	1.76 U	1.78 U	1.6 U	1.57 U	21.9	17.3
Beryllium	MG/KG	0.165 U	0.168 U	0.098 U	0.0965 U	0.413	0.1355 U
Cadmium	MG/KG	0.301 U	0.305 U	0.4115 U	0.4045 U	0.73 U	0.57 U
Calcium	MG/KG	177.0	96.4	314 J	216 J	2000	1170
Chromium	MG/KG	1.97 U	0.96 U	2.42 J	1.055 UJ	6.85	3.72
Cobalt	MG/KG	1.25 U	1.27 U	2.065 U	2.03 U	3.65 U	2.855 U
Copper	MG/KG	2.08 U	2.10 U	2.105 U	2.065 U	3.72 U	2.91 U
Iron	MG/KG	343.0 J	267.0 J	354 J	262 J	4760 J	4410 J
Lead	MG/KG	5.49 J	4.20 J	1.94	2.19	33.1	19.9
Magnesium	MG/KG	25.2	15.3	21.5	9.1 U	844	439
Manganese	MG/KG	1.38	0.68 U	1.96 J	0.895 UJ	17.3 J	14.5 J
Mercury	MG/KG	0.032 U	0.033 U	0.032 U	0.0315 U	0.114 R	0.089 R
Nickel	MG/KG	1.74 U	1.77 U	3.7 U	3.65 U	6.6 U	5.15 U
Potassium	MG/KG	64.0 U	65.0 U	98.5 U	96.5 U	174 U	136 U
Selenium	MG/KG	0.324 U	0.328 U	0.1935 UJ	0.19 UJ	0.58 U	0.452 U
Silver	MG/KG	0.205 U	1.14	0.2065 UJ	0.203 UJ	0.365 U	0.2855 U
Sodium	MG/KG	23.8 UJ	24.1 UJ	47.5 U	117	632	421
Thallium	MG/KG	0.59 U	1.19 J	0.374 UJ	0.3675 UJ	1.05 U	0.82 U
Vanadium	MG/KG	2.13 U	2.16 U	2.63 U	2.585 U	9.72	3.64 U
Zinc	MG/KG	3.12 U	2.74 U	3.705 U	13.6	40.2	28.1

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL METALS

Client Sample ID:	41-UN-SD11-06	41-UN-SD11-612	41-UN-SD12-06	41-UN-SD12-612	41-UN-SD13-06	41-UN-SD13-612	
Laboratory Sample ID:	9402062-01	9402062-02	9402066-03A	9402066-04A	9402053-05	9402053-06	
Date Sampled:	02/04/94	02/04/94			02/03/94	02/03/94	
Percent Solids	77.1	79.6	80.1	81.5	45.8	52.9	
	UNITS						
Aluminum	MG/KG	1790.0	1240.0	674 J	675 J	5890.0	6230.0
Antimony	MG/KG	1.03 U	0.99 U	0.925 U	0.91 U	1.73 U	1.50 U
Arsenic	MG/KG	0.376 U	0.365 U	0.617	0.2575 U	1.81	1.97
Barium	MG/KG	8.02	4.76	1.55 U	3.06	18.0	20.3
Beryllium	MG/KG	0.168 U	0.162 U	0.095 U	0.093 U	0.282 U	0.244 U
Cadmium	MG/KG	0.305 U	0.295 U	0.398 U	0.3915 U	0.52 U	0.444 U
Calcium	MG/KG	341.0	129.0	188 J	126 J	3970.0	3320.0
Chromium	MG/KG	2.44 U	1.51 U	2.95 J	1.02 UJ	11.9	13.8
Cobalt	MG/KG	1.27 U	1.23 U	2 U	1.965 U	2.13 U	1.85 U
Copper	MG/KG	2.10 U	2.04 U	2.035 U	2 U	7.34	8.34
Iron	MG/KG	1070.0 J	524.0 J	2920 J	969 J	10400.0 J	12200.0 J
Lead	MG/KG	9.30 J	4.47 J	1.13	1.62	59.4 J	58.9 J
Magnesium	MG/KG	69.1	47.5	28.7	20.4	450.0	563.0
Manganese	MG/KG	0.68 U	0.66 U	6.93 J	2.47 J	28.0	21.9
Mercury	MG/KG	0.033 U	0.032 U	0.031 U	0.0305 U	0.055 U	0.047 U
Nickel	MG/KG	4.17	4.48	3.8 U	3.55 U	2.97 U	2.57 U
Potassium	MG/KG	65.0 U	63.0 U	95 U	93.5 U	332.0	485.0
Selenium	MG/KG	0.328 U	0.318 U	0.187 UJ	0.184 UJ	0.55 U	0.478 U
Silver	MG/KG	0.208 U	1.20	0.2 UJ	0.1965 UJ	29.7	0.303 U
Sodium	MG/KG	24.1 UJ	23.4 UJ	45.95 U	45.15 U	40.6 UJ	35.2 UJ
Thallium	MG/KG	0.60 U	0.58 U	0.362 UJ	0.356 UJ	1.01 U	0.87 U
Vanadium	MG/KG	2.16 U	2.09 U	2.545 U	2.505 U	10.9	11.8
Zinc	MG/KG	3.13 U	2.45 U	1.655 U	1.31 U	56.9	76.1

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL METALS

	41-UN-SD14-06	41-UN-SD14-612	41-UN-SD15	41-UN-SD16	41-UN-SD17	41-UN-SD18
Client Sample ID:	41-UN-SD14-06	41-UN-SD14-612	41-UN-SD15	41-UN-SD16	41-UN-SD17	41-UN-SD18
Laboratory Sample ID:	9402053-01	9402053-02	AB7538	AB7535	AB7532	AB7529
Date Sampled:	02/03/94	02/03/94	08/23/94	08/23/94	08/23/94	08/23/94
Percent Solids	62.7	63.6	65.4	85.5	81.7	68.8
	<u>UNITS</u>					
Aluminum	MG/KG 9000.0	5000.0	5140	456	664	596
Antimony	MG/KG 1.26 UJ	1.24 U	7.55 U	5.7 U	5.95 U	7.05 U
Arsenic	MG/KG 1.08	0.456 U	2.8	0.21 U	0.3 U	0.28 U
Barium	MG/KG 20.0	12.8	9.4	1.4	2.7	2.9
Beryllium	MG/KG 0.206 U	0.203 U	0.15 U	0.115 U	0.12 U	0.14 U
Cadmium	MG/KG 0.375 U	0.370 U	0.75 U	0.55 U	0.6 U	0.7 U
Calcium	MG/KG 561.0	377.0	416	107	48.6	610
Chromium	MG/KG 11.2	7.04	6.5	1.15 U	1.2 U	1.4 U
Cobalt	MG/KG 1.56 U	1.54 U	1.5 U	1.15 U	1.2 U	1.4 U
Copper	MG/KG 2.59 U	2.55 U	1.5 U	1.15 U	1.2 U	1.4 U
Iron	MG/KG 4850.0 J	3410.0 J	4390	691	714	952
Lead	MG/KG 18.6 J	6.84 J	22.2	1.9	1.5	3.5
Magnesium	MG/KG 317.0	175.0	180	24.2	29.6	30.9
Manganese	MG/KG 8.38	4.29	6.2	1.3	1.4	3.1
Mercury	MG/KG 0.040 U	0.040 U	0.075 U	0.06 U	0.06 U	0.075 U
Nickel	MG/KG 6.12	2.14 U	3.05 U	2.25 U	2.4 U	2.8 U
Potassium	MG/KG 79.5 U	78.5 U	151.5 U	113.5 U	119 U	141 U
Selenium	MG/KG 0.404 U	0.398 U	0.285 U	0.21 U	0.23 U	0.28 U
Silver	MG/KG 0.255 U	0.252 U	0.75 U	0.55 U	0.6 U	0.7 U
Sodium	MG/KG 29.7 UJ	29.3 UJ	41	32.6	29.8	34.3
Thallium	MG/KG 0.74 U	0.73 U	0.285 U	0.21 U	0.23 U	0.28 U
Vanadium	MG/KG 10.1	2.61 U	10.4	1.15 U	1.2 U	1.4 U
Zinc	MG/KG 15.4	5.1 U	15.7	12.8	5.5	9.5

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL METALS

Client Sample ID:	41-UN-SD19	41-UN-SD20	41-UN-SD21	41-UN-SD22	41-UN-SD23	41-UN-SD24	
Laboratory Sample ID:	AB7526	AB7523	AB7520	AB7517	AB7514	AB7511	
Date Sampled:	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94	08/23/94	
Percent Solids	81.4	82	80	55	42.4	69.2	
	UNITS						
Aluminum	MG/KG	276	827	525	830	2820	1170
Antimony	MG/KG	5.75 U	6.05 U	5.5 U	8.1 U	10.7 U	6.7 U
Arsenic	MG/KG	0.245 U	0.215 U	0.215 U	3.8	2.5	0.27 U
Barium	MG/KG	1.5	2.8	2.2	11.8	22.8	6.4
Beryllium	MG/KG	0.115 U	0.12 U	0.11 U	0.16 U	0.215 U	0.135 U
Cadmium	MG/KG	0.55 U	0.6 U	0.55 U	0.8 U	1.05 U	0.65 U
Calcium	MG/KG	538	531	601	2310	7530	884
Chromium	MG/KG	2.3	1.2 U	1.1 U	1.6 U	2.15 U	2.8
Cobalt	MG/KG	1.15 U	1.2 U	1.1 U	1.6 U	2.15 U	2.8
Copper	MG/KG	1.15 U	1.2 U	1.1 U	1.6 U	6.3	1.35 U
Iron	MG/KG	391	601	400	4510	36800	1300
Lead	MG/KG	2.7	5	3.4	6.9	13.5	3.5
Magnesium	MG/KG	25.5	35.8	29.7	138	154	68.3
Manganese	MG/KG	1.7	2.7	1.7	97.3	306	10.2
Mercury	MG/KG	0.06 U	0.46	0.06 U	0.09 U	0.63	0.07 U
Nickel	MG/KG	2.3 U	2.4 U	2.2 U	3.25 U	4.3 U	2.7 U
Potassium	MG/KG	115 U	120.5 U	109.5 U	162.5 U	214.5 U	134 U
Selenium	MG/KG	0.245 U	0.215 U	0.215 U	0.335 U	0.465 U	0.27 U
Silver	MG/KG	0.55 U	0.6 U	0.55 U	0.8 U	1.05 U	0.65 U
Sodium	MG/KG	43	54.3	40.3	171	363	80.9
Thallium	MG/KG	0.245 U	0.215 U	0.215 U	0.335 U	0.465 U	0.27 U
Vanadium	MG/KG	1.15 U	1.2 U	1.1 U	1.6 U	9.3	3.5
Zinc	MG/KG	19.8	17.6	25	42.4	86.7	22.8

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL METALS

Client Sample ID:	41-UN-SD25	41-UN-SD26	41-UN-SD27	41-UN-SD28	41-TC-SD06-06	410TC-SD06-612	
Laboratory Sample ID:	AB7508	AB7505	AB7502	AB7499	9402082-05A	9402082-06A	
Date Sampled:	08/23/94	08/23/94	08/23/94	08/23/94	02/06/94	02/06/94	
Percent Solids	19.7	80.6	80.2	74.8	65.0	70.2	
	UNITS						
Aluminum	MG/KG	10200	988	355	394	2580.0 J	6600.0 J
Antimony	MG/KG	24.15 U	5.65 U	6.1 U	6.7 U	1.14 U	1.06 U
Arsenic	MG/KG	9.3	0.24 U	0.235 U	0.24 U	0.702	0.864
Barium	MG/KG	161	4.5	2.4	2.6	13.5	25.3
Beryllium	MG/KG	0.485 U	0.115 U	0.12 U	0.135 U	0.117 U	0.377
Cadmium	MG/KG	2.4 U	0.55 U	0.6 U	0.65 U	0.491 U	0.455 U
Calcium	MG/KG	8420	683	307	238	1090.0 J	1230.0 J
Chromium	MG/KG	4.85 U	1.15 U	1.2 U	1.35 U	3.42 J	8.72 J
Cobalt	MG/KG	4.85 U	1.15 U	1.2 U	1.35 U	2.46 U	2.28 U
Copper	MG/KG	19.9	1.15 U	1.2 U	1.35 U	2.51 U	2.32 U
Iron	MG/KG	104000	510	322	300	2840.0 J	6030.0 J
Lead	MG/KG	28.1	3.8	1.7	1.7	18.7	13.6
Magnesium	MG/KG	321	42.6	27.1	27.7	99.8	235.0
Manganese	MG/KG	180	1.9	1.9	2.2	8.72 J	13.7 J
Mercury	MG/KG	0.255 U	0.06 U	0.06 U	0.065 U	0.039 U	0.036 U
Nickel	MG/KG	9.65 U	2.25 U	2.45 U	2.65 U	4.45 U	4.10 U
Potassium	MG/KG	483.5 U	113 U	122 U	133.5 U	117.5 U	381.0
Selenium	MG/KG	0.9 U	0.24 U	0.235 U	0.24 U	0.231 UJ	0.862 J
Silver	MG/KG	2.4 U	0.55 U	0.6 U	0.65 U	0.246 UJ	0.228 UJ
Sodium	MG/KG	410	44.6	37.3	45.8	347.0	52.5 U
Thallium	MG/KG	0.9 U	0.24 U	0.235 U	0.24 U	0.446 UJ	0.413 UJ
Vanadium	MG/KG	30	1.15 U	1.2 U	1.35 U	3.14 U	12.7
Zinc	MG/KG	155	30.7	18.5	19.9	18.0	19.9

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 41)
 UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL METALS

Client Sample ID:	41-TC-SD07-06	41-TC-SD07-612	41-TC-SD08-06	41-TC-SD08-612	41-TC-SD09-06	41-TC-SD09-612	
Laboratory Sample ID:	9402079-01A	9402079-02A	9402082-01A	9402082-02A	9402082-03A	9402082-04A	
Date Sampled:	02/07/94	02/07/94	02/06/94	02/06/94	02/06/94	02/06/94	
Percent Solids	76.6	73.9	70.6	58.2	25.2	39.4	
	UNITS						
Aluminum	MG/KG	406.0 J	1270.0 J	1790.0 J	6440.0 J	18800.0 J	16700.0 J
Antimony	MG/KG	0.97 U	1.00 U	1.05 U	1.27 U	2.94 U	1.88 U
Arsenic	MG/KG	0.274 U	0.284 U	0.298 U	0.361 U	3.67	1.68
Barium	MG/KG	4.52	10.4	12.5	33.4	79.9	71.9
Beryllium	MG/KG	0.099 U	0.235	0.108 U	0.135 U	1.02	0.744
Cadmium	MG/KG	0.417 U	0.432 U	0.452 U	0.55 U	1.27 U	0.81 U
Calcium	MG/KG	96.3 J	440.0 J	480.0 J	810.0 J	4790.0 J	3620.0 J
Chromium	MG/KG	1.09 UJ	1.13 UJ	1.18 UJ	7.61 J	16.5 J	14.7 J
Cobalt	MG/KG	2.09 U	2.17 U	2.27 U	2.75 U	6.4 U	4.06 U
Copper	MG/KG	2.13 U	2.21 U	2.31 U	2.80 U	6.5 U	4.14 U
Iron	MG/KG	434.0 J	1390.0 J	1580.0 J	2960.0 J	15100.0 J	7470.0 J
Lead	MG/KG	1.10	2.34	4.23	7.54	28.7	17.1
Magnesium	MG/KG	19.1	50.7	61.0	172.0	1590.0	1060.0
Manganese	MG/KG	0.93 UJ	5.75 J	7.08 J	8.26 J	46.4 J	31.9 J
Mercury	MG/KG	0.033 U	0.034 U	0.036 U	0.043 U	0.099 U	0.064 U
Nickel	MG/KG	3.75 U	3.90 U	4.10 U	4.95 U	11.5 U	7.3 U
Potassium	MG/KG	99.5 U	103.0 U	108.0 U	131.0 U	1060.0	916.0
Selenium	MG/KG	0.629 J	0.203 UJ	0.213 UJ	0.258 UJ	0.60 UJ	0.381 UJ
Silver	MG/KG	0.209 UJ	0.217 UJ	0.227 UJ	0.275 UJ	0.64 UJ	0.406 UJ
Sodium	MG/KG	48.1 U	49.8 U	52.0 U	158.0	1430.0	1480.0
Thallium	MG/KG	0.379 UJ	0.393 UJ	0.411 UJ	0.498 UJ	1.15 U	0.74 U
Vanadium	MG/KG	2.67 U	2.76 U	2.89 U	9.86	28.6	20.2
Zinc	MG/KG	2.86 U	4.20 U	5.2 U	12.8	85.3	24.1

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 41)
UNNAMED TRIBUTARY AND TANK CREEK SEDIMENT
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL METALS

Client Sample ID: Laboratory Sample ID: Date Sampled: Percent Solids		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
	UNITS					
Aluminum	MG/KG	18800 J	3066.5	4214.9	4161.7	5020.4
Antimony	MG/KG	ND	NA	NA	NA	NA
Arsenic	MG/KG	9.3	1.0	1.6	1.4	1.2
Barium	MG/KG	161	15.4	28.3	22.8	23.2
Beryllium	MG/KG	1.02	0.2	0.2	0.2	0.2
Cadmium	MG/KG	ND	NA	NA	NA	NA
Calcium	MG/KG	8420	1256.1	1893.6	1748.2	2262.5
Chromium	MG/KG	16.5 J	3.9	4.2	5.0	5.1
Cobalt	MG/KG	2.8	2.0	1.1	2.3	2.2
Copper	MG/KG	19.9	2.9	3.2	3.8	3.4
Iron	MG/KG	104000	5816.5	16736.0	10165.2	8636.0
Lead	MG/KG	59.4 J	11.0	13.7	14.6	17.3
Magnesium	MG/KG	1590	182.3	317.1	264.7	315.2
Manganese	MG/KG	306	20.8	54.8	35.0	31.2
Mercury	MG/KG	0.63	0.1	0.1	0.1	0.1
Nickel	MG/KG	6.12	3.9	2.0	4.4	4.4
Potassium	MG/KG	1060	179.5	209.2	233.8	206.6
Selenium	MG/KG	0.862 J	0.4	0.2	0.4	0.4
Silver	MG/KG	29.7	1.2	4.5	2.4	0.9
Sodium	MG/KG	1480	164.2	321.5	247.7	207.1
Thallium	MG/KG	1.19 J	0.5	0.3	0.6	0.6
Vanadium	MG/KG	30	5.5	6.9	7.3	7.3
Zinc	MG/KG	155	22.3	30.2	30.2	38.0

APPENDIX P.18
**SITE 74 FORMER DISPOSAL/POTENTIAL DISPOSAL/
FORMER PEST CONTROL AREA SURFACE SOIL ORGANICS**

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	74-FDA-SB01-00	74-FDA-SB02-00	74-FDA-SB03-00	74-FDA-SB04-00	74-FDA-SB05-00	74-FDA-SB06-00	
Laboratory Sample ID:	9401109-01	9401109-04	9401108-01	9401108-10	9401108-13	9401116-01A	
Date Sampled:	34353	34353	01/19/94	01/20/94	01/20/94	34354	
Percent Solids	85.4	78.5	86.0	83.9	88.0	82.6	
SEMIVOLATILES							
1,2-Dichlorobenzene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
1,2,4-Trichlorobenzene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
1,3-Dichlorobenzene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
1,4-Dichlorobenzene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
2-Chloronaphthalene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
2-Chlorophenol	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
2-Methylnaphthalene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
2-Methylphenol	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
2-Nitroaniline	UG/KG	472 U	510 U	465.0 U	476.0 U	454.5 U	480 U
2-Nitrophenol	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
2,2'-oxybis-(1-chloropropane)	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
2,4-Dichlorophenol	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
2,4-Dimethylphenol	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
2,4-Dinitrophenol	UG/KG	472 UJ	510 UJ	465.0 U	476.0 U	454.5 UJ	480 U
2,4-Dinitrotoluene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
2,4,5-Trichlorophenol	UG/KG	472 U	510 U	465.0 U	476.0 U	454.5 U	480 U
2,4,6-Trichlorophenol	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
2,6-Dinitrotoluene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
3-Nitroaniline	UG/KG	472 U	510 U	465.0 U	476.0 U	454.5 U	480 U
3,3'-Dichlorobenzidine	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
4-Bromophenyl-phenylether	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
4-Chloro-3-methylphenol	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
4-Chloroaniline	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
4-Chlorophenyl phenyl ether	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
4-Methylphenol	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
4-Nitroaniline	UG/KG	472 U	510 U	465.0 U	476.0 U	454.5 U	480 U
4-Nitrophenol	UG/KG	472 UJ	510 UJ	465.0 U	476.0 U	454.5 UJ	480 U
4,6-Dinitro-2-methylphenol	UG/KG	472 U	510 U	465.0 U	476.0 U	454.5 U	480 U
Acenaphthene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Acenaphthylene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Anthracene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Benzo[a]anthracene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Benzo[a]pyrene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB01-00	74-FDA-SB02-00	74-FDA-SB03-00	74-FDA-SB04-00	74-FDA-SB05-00	74-FDA-SB06-00
Laboratory Sample ID:	9401109-01	9401109-04	9401108-01	9401108-10	9401108-13	9401116-01A
Date Sampled:	34353	34353	01/19/94	01/20/94	01/20/94	34354
Percent Solids	85.4	78.5	86.0	83.9	86.0	82.6

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Benzo[g,h,i]perylene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Benzo[k]fluoranthene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
bis(2-Chloroethoxy) methane	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
bis(2-Chloroethyl) ether	UG/KG	194.5 U	180 J	192.0 U	48.0 J	187.5 U	198 U
bis(2-Ethylhexyl)phthalate	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Butyl benzyl phthalate	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Carbazole	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Chrysene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Dibenzofuran	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Dibenz[a,h]anthracene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Diethylphthalate	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Dimethyl phthalate	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
di-n-Butylphthalate	UG/KG	194.5 U	209.5 U	75.0 J	85.0 J	187.5 U	200 U
di-n-Octylphthalate	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Fluoranthene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Fluorene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Hexachlorobenzene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Hexachlorobutadiene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Hexachlorocyclopentadiene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Hexachloroethane	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Indeno[1,2,3-cd]pyrene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Isophorone	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Naphthalene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Nitrobenzene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
N-Nitroso-di-n-propylamine	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
N-nitrosodiphenylamine	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Pentachlorophenol	UG/KG	472 U	510 U	465.0 U	476.0 U	454.5 U	480 U
Phenanthrene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Phenol	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Pyrene	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB01-00	74-FDA-SB02-00	74-FDA-SB03-00	74-FDA-SB04-00	74-FDA-SB05-00	74-FDA-SB06-00	
Laboratory Sample ID:	9401109-01	9401109-04	9401108-01	9401108-10	9401108-13	9401116-01A	
Date Sampled:	34353	34353	01/19/94	01/20/94	01/20/94	34354	
Percent Solids	85.4	78.5	86.0	83.9	88.0	82.6	
VOLATILES							
Chloromethane	UG/KG	6 UJ	6.5 UJ	5.8 UJ	6.0 UJ	5.7 UJ	6 UJ
Bromomethane	UG/KG	6 UJ	6.5 UJ	5.8 UJ	6.0 UJ	5.7 UJ	6 UJ
Vinyl chloride	UG/KG	6 UJ	6.5 UJ	5.8 UJ	6.0 UJ	5.7 UJ	6 UJ
Chloroethane	UG/KG	6 UJ	6.5 UJ	5.8 UJ	6.0 UJ	5.7 UJ	6 UJ
Methylene chloride	UG/KG	5.5 UJ	9 UJ	6.0 UJ	8.00 J	16.0 J	13 J
Acetone	UG/KG	2.5 UJ	6.5 UJ	6.0 UJ	27.0 J	210.0 J	23 J
Carbon Disulfide	UG/KG	6 UJ	6.5 UJ	5.8 UJ	6.0 UJ	5.7 UJ	6 UJ
1,1-Dichloroethene	UG/KG	6 UJ	6.5 UJ	5.8 UJ	6.0 UJ	5.7 UJ	6 UJ
1,1-Dichloroethane	UG/KG	6 UJ	6.5 UJ	5.8 UJ	6.0 UJ	5.7 UJ	6 UJ
1,2-Dichloroethene(total)	UG/KG	6 UJ	6.5 UJ	5.8 UJ	6.0 UJ	5.7 UJ	6 UJ
Chloroform	UG/KG	6 UJ	6.5 UJ	5.8 UJ	6.0 UJ	5.7 UJ	6 UJ
1,2-Dichloroethane	UG/KG	6 UJ	6.5 UJ	5.8 UJ	6.0 UJ	5.7 UJ	6 UJ
2-Butanone	UG/KG	6 UJ	6.5 UJ	5.8 UJ	6.0 UJ	5.7 UJ	6 UJ
1,1,1-Trichloroethane	UG/KG	6 UJ	6.5 UJ	5.8 U	6.0 UJ	5.7 UJ	6 UJ
Carbon tetrachloride	UG/KG	6 UJ	6.5 UJ	5.8 U	6.0 UJ	5.7 UJ	6 UJ
Bromodichloromethane	UG/KG	6 UJ	6.5 UJ	5.8 U	6.0 UJ	5.7 UJ	6 UJ
1,2-Dichloropropane	UG/KG	6 UJ	6.5 UJ	5.8 U	6.0 UJ	5.7 UJ	6 UJ
cis-1,3-Dichloropropene	UG/KG	6 UJ	6.5 UJ	5.8 U	6.0 UJ	5.7 UJ	6 UJ
Trichloroethene	UG/KG	6 UJ	6.5 UJ	5.8 U	6.0 UJ	5.7 UJ	6 UJ
Dibromochloromethane	UG/KG	6 UJ	6.5 UJ	5.8 U	6.0 UJ	5.7 UJ	6 UJ
1,1,2-Trichloroethane	UG/KG	6 UJ	6.5 UJ	5.8 U	6.0 UJ	5.7 UJ	6 UJ
Benzene	UG/KG	6 UJ	6.5 UJ	5.8 U	6.0 UJ	5.7 UJ	6 UJ
trans-1,3-Dichloropropene	UG/KG	6 UJ	6.5 UJ	5.8 U	6.0 UJ	5.7 UJ	6 UJ
Bromoform	UG/KG	6 UJ	6.5 UJ	5.8 U	6.0 UJ	5.7 UJ	6 UJ
4-Methyl-2-pentanone	UG/KG	6 UJ	6.5 UJ	5.8 UJ	6.0 UJ	5.7 UJ	6 UJ
2-Hexanone	UG/KG			5.8 UJ		5.7 UJ	6 UJ
Tetrachloroethene	UG/KG	6 UJ	6.5 UJ	5.8 UJ	6.0 UJ	5.7 UJ	6 UJ
1,1,2,2-Tetrachloroethane	UG/KG	6 UJ	6.5 UJ	5.8 UJ	6.0 UJ	5.7 UJ	6 UJ
Toluene	UG/KG	6 UJ	6.5 UJ	5.8 UJ	6.0 UJ	5.7 UJ	6 UJ
Chlorobenzene	UG/KG	6 UJ	6.5 UJ	5.8 UJ	6.0 UJ	5.7 UJ	6 UJ
Ethylbenzene	UG/KG	6 UJ	6.5 UJ	5.8 UJ	6.0 UJ	5.50 UJ	6 UJ
Styrene	UG/KG	6 UJ	6.5 UJ	5.8 UJ	6.0 UJ	5.7 UJ	6 UJ
Xylenes (total)	UG/KG	6 UJ	6.5 UJ	5.8 UJ	6.0 UJ	6.00 J	6 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB01-00	74-FDA-SB02-00	74-FDA-SB03-00	74-FDA-SB04-00	74-FDA-SB05-00	74-FDA-SB06-00
Laboratory Sample ID:	9401109-01	9401109-04	9401108-01	9401108-10	9401108-13	9401116-01A
Date Sampled:	34353	34353	01/19/94	01/20/94	01/20/94	34354
Percent Solids	85.4	78.5	86.0	83.9	88.0	82.6

<u>PESTICIDE/PCBS</u>							
alpha-BHC	UG/KG	1 UJ	1.09 UJ	0.99 UJ	1.01 UJ	0.97 UJ	1.02 UJ
beta-BHC	UG/KG	1 U	1.09 U	0.99 UJ	1.01 UJ	0.97 UJ	1.02 UJ
delta-BHC	UG/KG	1 UJ	1.09 UJ	0.99 UJ	1.01 UJ	0.97 UJ	1.02 UJ
Lindane (gamma-BHC)	UG/KG	1 U	1.09 U	0.99 UJ	1.01 UJ	0.97 UJ	1.02 UJ
Heptachlor	UG/KG	1 U	1.09 U	0.99 UJ	1.01 UJ	0.97 UJ	1.02 UJ
Aldrin	UG/KG	1 U	1.09 U	0.99 UJ	0.41 NJ	0.97 UJ	1.02 UJ
Heptachlor epoxide	UG/KG	1 U	1.09 U	0.99 UJ	1.01 UJ	0.97 UJ	1.02 UJ
Endosulfan I	UG/KG	1 U	1.09 U	0.99 UJ	1.01 UJ	0.97 UJ	1.02 UJ
Dieldrin	UG/KG	1.94 U	2.115 U	1.92 UJ	1.97 UJ	1.88 UJ	1.98 UJ
4,4'-DDE	UG/KG	2.45 J	2.85 J	1.92 UJ	4.79 J	1.88 UJ	0.31 J
Endrin	UG/KG	1.94 U	2.115 U	1.92 UJ	1.97 UJ	1.88 UJ	1.98 UJ
Endosulfan II	UG/KG	1.94 U	2.115 U	1.92 UJ	1.97 UJ	1.88 UJ	1.98 UJ
4,4'-DDD	UG/KG	1.94 U	2.115 U	1.92 UJ	2.44 J	1.88 UJ	1.98 UJ
Endosulfan sulfate	UG/KG	1.94 U	2.115 U	1.92 UJ	1.97 UJ	1.88 UJ	1.98 UJ
4,4'-DDT	UG/KG	1.94 U	4.87 J	1.92 UJ	3.46 J	1.96 J	1.98 UJ
Methoxychlor	UG/KG	10 U	10.9 U	9.9 UJ	10.1 UJ	9.7 UJ	10.2 UJ
Endrin ketone	UG/KG	1.94 U	2.115 U	1.92 UJ	1.97 UJ	1.88 UJ	1.98 UJ
Endrin aldehyde	UG/KG	1.94 U	2.115 U	1.92 UJ	1.97 UJ	1.88 UJ	1.98 UJ
alpha-Chlordane	UG/KG	1 U	1.09 U	0.99 UJ	1.01 UJ	0.97 UJ	1.02 UJ
gamma-Chlordane	UG/KG	1 U	1.09 U	0.99 UJ	1.01 UJ	0.97 UJ	1.02 UJ
Toxaphene	UG/KG	100 U	109 U	99.0 UJ	101.0 UJ	96.5 UJ	102 UJ
Aroclor 1016	UG/KG	19.4 U	21.15 U	19.2 UJ	19.7 UJ	18.8 UJ	19.8 UJ
Aroclor 1221	UG/KG	39.4 U	42.95 U	39.0 UJ	39.9 UJ	38.1 UJ	40.2 UJ
Aroclor 1232	UG/KG	19.4 U	21.15 U	19.2 UJ	19.7 UJ	18.8 UJ	19.8 UJ
Aroclor 1242	UG/KG	19.4 U	21.15 U	19.2 UJ	19.7 UJ	18.8 UJ	19.8 UJ
Aroclor 1248	UG/KG	19.4 U	21.15 U	19.2 UJ	19.7 UJ	18.8 UJ	19.8 UJ
Aroclor 1254	UG/KG	19.4 U	21.15 U	19.2 UJ	19.7 UJ	18.8 UJ	19.8 UJ
Aroclor 1260	UG/KG	19.4 U	21.15 U	19.2 UJ	19.7 UJ	18.8 UJ	19.8 UJ

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	74-FDA-SB01-00	74-FDA-SB02-00	74-FDA-SB03-00	74-FDA-SB04-00	74-FDA-SB05-00	74-FDA-SB06-00
Laboratory Sample ID:	9401109-01	9401109-04	9401108-01	9401108-10	9401108-13	9401116-01A
Date Sampled:	34353	34353	01/19/94	01/20/94	01/20/94	34354
Percent Solids	85.4	78.5	86.0	83.9	88.0	82.6

CHEMICAL SURETY

Acetophenone	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Chloroacetophenone	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
Hydroxyacetophenone	UG/KG	975 U	1050 U	960.0 U	980.0 U	935.0 U	990 U
Bis(2'-chloroethyl)disulfide	UG/KG	975 U	1050 U	960.0 U	980.0 U	935.0 U	990 U
Bis(2'-chloroethyl)trisulfide	UG/KG	975 U	1050 U	960.0 U	980.0 U	935.0 U	990 U
1,4-Dithiane	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U
1,4-Oxathiane	UG/KG	194.5 U	209.5 U	192.0 U	196.5 U	187.5 U	198 U

THIODIGLYCOL

Thiodiglycol	MG/KG	3.655 U	3.97 U				3.78 U
--------------	-------	---------	--------	--	--	--	--------

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB07-00	74-FDA-SB08-00	74-FDA-SB09-00	74-FDA-SB10-00	74-FDA-SB11-00	74-FDA-SB12-00
Laboratory Sample ID:	9401116-05A	9401116-08A	9401116-11A	9401116-14A	9401121-01A	9401121-05A
Date Sampled:	34354	34354	34355	34355	34355	34355
Percent Solids	89.2	84.4	83	82.7	90.1	84.3

SEMIVOLATILES

1,2-Dichlorobenzene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
1,2,4-Trichlorobenzene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
1,3-Dichlorobenzene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
1,4-Dichlorobenzene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
2-Chloronaphthalene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
2-Chlorophenol	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
2-Methylnaphthalene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
2-Methylphenol	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
2-Nitroaniline	UG/KG	448 U	476 U	480 U	480 U	444.5 U	480 U
2-Nitrophenol	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
2,2'-oxybis-(1-chloropropane)	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
2,4-Dichlorophenol	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
2,4-Dimethylphenol	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
2,4-Dinitrophenol	UG/KG	448 U	476 U	480 U	480 U	444.5 U	480 U
2,4-Dinitrotoluene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
2,4,5-Trichlorophenol	UG/KG	448 U	476 U	480 U	480 U	444.5 U	480 U
2,4,6-Trichlorophenol	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
2,6-Dinitrotoluene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
3-Nitroaniline	UG/KG	448 U	476 U	480 U	480 U	444.5 U	480 U
3,3'-Dichlorobenzidine	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
4-Bromophenyl-phenylether	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
4-Chloro-3-methylphenol	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
4-Chloroaniline	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
4-Chlorophenyl phenyl ether	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
4-Methylphenol	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
4-Nitroaniline	UG/KG	448 U	476 U	480 U	480 U	444.5 U	480 U
4-Nitrophenol	UG/KG	448 U	476 U	480 U	480 U	444.5 U	480 U
4,6-Dinitro-2-methylphenol	UG/KG	448 U	476 U	480 U	480 U	444.5 U	480 U
Acenaphthene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
Acenaphthylene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
Anthracene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
Benzo[a]anthracene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
Benzo[a]pyrene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB07-00	74-FDA-SB08-00	74-FDA-SB09-00	74-FDA-SB10-00	74-FDA-SB11-00	74-FDA-SB12-00
Laboratory Sample ID:	9401116-05A	9401116-08A	9401116-11A	9401116-14A	9401121-01A	9401121-05A
Date Sampled:	34354	34354	34355	34355	34355	34355
Percent Solids	89.2	84.4	83	82.7	90.1	84.3

SEMIVOLATILES Cont.

Compound	UG/KG	74-FDA-SB07-00	74-FDA-SB08-00	74-FDA-SB09-00	74-FDA-SB10-00	74-FDA-SB11-00	74-FDA-SB12-00
Benzo[b]fluoranthene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
Benzo[g,h,i]perylene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
Benzo[k]fluoranthene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
bis(2-Chloroethoxy) methane	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
bis(2-Chloroethyl) ether	UG/KG	185 U	196.5 U	51 J	198 U	183.5 U	198 U
bis(2-Ethylhexyl)phthalate	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
Butyl benzyl phthalate	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
Carbazole	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
Chrysene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
Dibenzofuran	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
Dibenz[a,h]anthracene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
Diethylphthalate	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
Dimethyl phthalate	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
di-n-Butylphthalate	UG/KG	185 U	195 U	200 U	200 U	185 U	200 UJ
di-n-Octylphthalate	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
Fluoranthene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
Fluorene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
Hexachlorobenzene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
Hexachlorobutadiene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
Hexachlorocyclopentadiene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
Hexachloroethane	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
Indeno[1,2,3-cd]pyrene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
Isophorone	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
Naphthalene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
Nitrobenzene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
N-Nitroso-di-n-propylamine	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
N-nitrosodiphenylamine	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
Pentachlorophenol	UG/KG	448 U	476 U	480 U	480 U	444.5 U	480 U
Phenanthrene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
Phenol	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U
Pyrene	UG/KG	185 U	196.5 U	198 U	198 U	183.5 U	198 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB07-00	74-FDA-SB08-00	74-FDA-SB09-00	74-FDA-SB10-00	74-FDA-SB11-00	74-FDA-SB12-00
Laboratory Sample ID:	9401116-05A	9401116-08A	9401116-11A	9401116-14A	9401121-01A	9401121-05A
Date Sampled:	34354	34354	34355	34355	34355	34355
Percent Solids	89.2	84.4	83	82.7	90.1	84.3

VOLATILES

	UG/KG	5.6 UJ	5.95 U	6 UJ	6 U	5.55 U	5.95 U
Chloromethane	UG/KG	5.6 UJ	5.95 U	6 UJ	6 U	5.55 U	5.95 U
Bromomethane	UG/KG	5.6 UJ	5.95 U	6 UJ	6 U	5.55 U	5.95 U
Vinyl chloride	UG/KG	5.6 UJ	5.95 U	6 UJ	6 U	5.55 U	5.95 U
Chloroethane	UG/KG	5.6 UJ	5.95 U	6 UJ	6 U	5.55 U	5.95 U
Methylene chloride	UG/KG	5.5 UJ	7 UJ	9.5 UJ	8.5 U	4 J	6 U
Acetone	UG/KG	110 J	46 J	6 UJ	33 J	5.55 UJ	5.95 UJ
Carbon Disulfide	UG/KG	5.6 UJ	5.95 UJ	6 UJ	6 U	5.55 U	5.95 U
1,1-Dichloroethene	UG/KG	5.6 UJ	5.95 UJ	6 UJ	6 U	5.55 U	5.95 U
1,1-Dichloroethane	UG/KG	5.6 UJ	5.95 UJ	6 UJ	6 U	5.55 U	5.95 U
1,2-Dichloroethene(total)	UG/KG	5.6 UJ	5.95 UJ	6 UJ	6 U	5.55 U	5.95 U
Chloroform	UG/KG	5.6 UJ	5.95 UJ	6 UJ	6 U	5.55 U	5.95 U
1,2-Dichloroethane	UG/KG	5.6 UJ	5.95 UJ	6 UJ	6 U	5.55 U	5.95 U
2-Butanone	UG/KG	5.6 UJ	5.95 UJ	6 UJ	6 U	5.55 U	5.95 U
1,1,1-Trichloroethane	UG/KG	5.6 U	5.95 UJ	6 UJ	6 U	5.55 U	5.95 U
Carbon tetrachloride	UG/KG	5.6 U	5.95 UJ	6 UJ	6 U	5.55 U	5.95 U
Bromodichloromethane	UG/KG	5.6 U	5.95 UJ	6 UJ	6 U	5.55 U	5.95 U
1,2-Dichloropropane	UG/KG	5.6 U	5.95 UJ	6 UJ	6 U	5.55 U	5.95 U
cis-1,3-Dichloropropene	UG/KG	5.6 U	5.95 UJ	6 UJ	6 U	5.55 U	5.95 U
Trichloroethene	UG/KG	5.6 U	5.95 UJ	6 UJ	6 U	4 J	5.95 U
Dibromochloromethane	UG/KG	5.6 U	5.95 UJ	6 UJ	6 U	5.55 U	5.95 U
1,1,2-Trichloroethane	UG/KG	5.6 U	5.95 UJ	6 UJ	6 U	5.55 U	5.95 U
Benzene	UG/KG	5.6 U	5.95 UJ	6 UJ	6 U	5.55 U	5.95 U
trans-1,3-Dichloropropene	UG/KG	5.6 U	5.95 UJ	6 UJ	6 U	5.55 U	5.95 U
Bromoform	UG/KG	5.6 U	5.95 UJ	6 UJ	6 U	5.55 U	5.95 U
4-Methyl-2-pentanone	UG/KG	5.6 UJ	5.95 UJ	6 UJ	6 UJ	5.55 U	5.95 U
2-Hexanone	UG/KG	5.6 UJ	5.95 UJ	6 UJ	6 UJ	5.55 U	5.95 U
Tetrachloroethene	UG/KG	5.6 UJ	5.95 UJ	6 UJ	6 UJ	5.55 U	5.95 U
1,1,2,2-Tetrachloroethane	UG/KG	5.6 UJ	5.95 UJ	6 UJ	6 UJ	5.55 U	5.95 U
Toluene	UG/KG	5.6 UJ	5.95 UJ	6 UJ	6 UJ	5.55 U	5.95 U
Chlorobenzene	UG/KG	5.6 UJ	5.95 UJ	6 UJ	6 UJ	5.55 U	5.95 U
Ethylbenzene	UG/KG	5.6 UJ	5.95 UJ	6 UJ	6 UJ	5.55 U	5.95 U
Styrene	UG/KG	5.6 UJ	5.95 UJ	6 UJ	6 UJ	5.55 U	5.95 U
Xylenes (total)	UG/KG	5.6 UJ	5.95 UJ	6 UJ	6 UJ	5.55 U	5.95 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB07-00	74-FDA-SB08-00	74-FDA-SB09-00	74-FDA-SB10-00	74-FDA-SB11-00	74-FDA-SB12-00
Laboratory Sample ID:	9401116-05A	9401116-08A	9401116-11A	9401116-14A	9401121-01A	9401121-05A
Date Sampled:	34354	34354	34355	34355	34355	34355
Percent Solids	89.2	84.4	83	82.7	90.1	84.3
PESTICIDE/PCBS						
alpha-BHC	UG/KG	0.95 UJ	1.01 UJ	1.02 UJ	1.02 UJ	0.945 UJ
beta-BHC	UG/KG	0.95 UJ	1.01 UJ	1.02 UJ	1.02 UJ	0.945 U
delta-BHC	UG/KG	0.95 UJ	1.01 UJ	1.02 UJ	1.02 UJ	0.945 UJ
Lindane (gamma-BHC)	UG/KG	0.95 UJ	1.01 UJ	1.02 UJ	1.02 UJ	0.945 U
Heptachlor	UG/KG	0.95 UJ	1.01 UJ	1.02 UJ	1.02 UJ	0.945 U
Aldrin	UG/KG	0.95 UJ	1.01 UJ	1.02 UJ	1.02 UJ	0.945 U
Heptachlor epoxide	UG/KG	0.95 UJ	1.01 UJ	1.02 UJ	1.02 UJ	0.945 U
Endosulfan I	UG/KG	0.95 UJ	1.01 UJ	1.02 UJ	1.02 UJ	0.945 U
Dieldrin	UG/KG	1.85 UJ	1.965 UJ	1.98 UJ	1.98 UJ	1.83 U
4,4'-DDE	UG/KG	0.57 J	30.2 J	1.98 UJ	1.98 UJ	1.83 U
Endrin	UG/KG	1.85 UJ	1.965 UJ	1.98 UJ	1.98 UJ	1.83 U
Endosulfan II	UG/KG	1.85 UJ	1.965 UJ	1.98 UJ	1.98 UJ	1.83 U
4,4'-DDD	UG/KG	1.85 UJ	13.3 J	1.98 UJ	1.98 UJ	2.53 J
Endosulfan sulfate	UG/KG	1.85 UJ	1.965 UJ	1.98 UJ	1.98 UJ	1.83 U
4,4'-DDT	UG/KG	1.85 UJ	24.3 J	1.98 UJ	1.98 UJ	1.83 U
Methoxychlor	UG/KG	9.5 UJ	10.1 UJ	10.2 UJ	10.2 UJ	9.45 U
Endrin ketone	UG/KG	1.85 UJ	1.965 UJ	1.98 UJ	1.98 UJ	1.83 U
Endrin aldehyde	UG/KG	1.85 UJ	1.965 UJ	1.98 UJ	1.98 UJ	1.83 U
alpha-Chlordane	UG/KG	0.95 UJ	1.01 UJ	1.02 UJ	1.02 UJ	0.945 U
gamma-Chlordane	UG/KG	0.95 UJ	1.01 UJ	1.02 UJ	1.02 UJ	0.945 U
Toxaphene	UG/KG	95 UJ	101 UJ	102 UJ	102 UJ	94.5 U
Aroclor 1016	UG/KG	18.5 UJ	19.65 UJ	19.8 UJ	19.8 UJ	18.3 U
Aroclor 1221	UG/KG	37.5 UJ	39.85 UJ	40.2 UJ	40.2 UJ	37.2 U
Aroclor 1232	UG/KG	18.5 UJ	19.65 UJ	19.8 UJ	19.8 UJ	18.3 U
Aroclor 1242	UG/KG	18.5 UJ	19.65 UJ	19.8 UJ	19.8 UJ	18.3 U
Aroclor 1248	UG/KG	18.5 UJ	19.65 UJ	19.8 UJ	19.8 UJ	18.3 U
Aroclor 1254	UG/KG	18.5 UJ	19.65 UJ	19.8 UJ	19.8 UJ	18.3 U
Aroclor 1260	UG/KG	18.5 UJ	19.65 UJ	19.8 UJ	19.8 UJ	18.3 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	74-FDA-SB07-00	74-FDA-SB08-00	74-FDA-SB09-00	74-FDA-SB10-00	74-FDA-SB11-00	74-FDA-SB12-00
Laboratory Sample ID:	9401116-05A	9401116-08A	9401116-11A	9401116-14A	9401121-01A	9401121-05A
Date Sampled:	34354	34354	34355	34355	34355	34355
Percent Solids	89.2	84.4	83	82.7	90.1	84.3
CHEMICAL SURETY						
Acetophenone	UG/KG	185 U	196.5 U	198 U	198 U	198 U
Chloroacetophenone	UG/KG	185 U	196.5 U	198 U	198 U	198 U
Hydroxyacetophenone	UG/KG	925 U	980 U	990 U	990 U	990 U
Bis(2'-chloroethyl)disulfide	UG/KG	925 U	980 U	990 U	990 U	990 U
Bis(2'-chloroethyl)trisulfide	UG/KG	925 U	980 U	990 U	990 U	990 U
1,4-Dithiane	UG/KG	185 U	196.5 U	198 U	198 U	198 U
1,4-Oxathiane	UG/KG	185 U	196.5 U	198 U	198 U	198 U
THIODIGLYCOL						
Thiodiglycol	MG/KG	3.5 U	3.69 U	3.75 U	3.78 U	3.72 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB13-00	74-FDA-SB14-00	74-FDA-SB15-00	74-FDA-SB16-00	74-FDA-SB17-00	74-FDA-SB18-00
Laboratory Sample ID:	9401121-08A	9401121-11A	9401132-02	9401132-05	9401132-08	9401132-11
Date Sampled:	34355	34356	34356	34356	34356	34356
Percent Solids	87.5	81	89.4	88.4	81.6	83.5

SEMIVOLATILES

	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
1,2-Dichlorobenzene	187.5 U	204 U	185 U	188 U	201.5 U	198 U
1,2,4-Trichlorobenzene	187.5 U	204 U	185 U	188 U	201.5 U	198 U
1,3-Dichlorobenzene	187.5 U	204 U	185 U	188 U	201.5 U	198 U
1,4-Dichlorobenzene	187.5 U	204 U	185 U	188 U	201.5 U	198 U
2-Chloronaphthalene	187.5 U	204 U	185 U	188 U	201.5 U	198 U
2-Chlorophenol	187.5 U	204 U	185 U	188 U	201.5 U	198 U
2-Methylnaphthalene	187.5 U	204 U	185 U	188 U	201.5 U	198 U
2-Methylphenol	187.5 U	204 U	185 U	188 U	201.5 U	198 U
2-Nitroaniline	454.5 U	494 U	448 U	456 U	488 U	480 U
2-Nitrophenol	187.5 U	204 U	185 U	188 U	201.5 U	198 U
2,2'-oxybis-(1-chloropropane)	187.5 U	204 U	185 U	188 U	201.5 U	198 U
2,4-Dichlorophenol	187.5 U	204 U	185 U	188 U	201.5 U	198 U
2,4-Dimethylphenol	187.5 U	204 U	185 U	188 U	201.5 U	198 U
2,4-Dinitrophenol	454.5 U	494 U	448 U	456 U	488 U	480 U
2,4-Dinitrotoluene	187.5 U	204 U	185 U	188 U	201.5 U	198 U
2,4,5-Trichlorophenol	454.5 U	494 U	448 U	456 U	488 U	480 U
2,4,6-Trichlorophenol	187.5 U	204 U	185 U	188 U	201.5 U	198 U
2,6-Dinitrotoluene	187.5 U	204 U	185 U	188 U	201.5 U	198 U
3-Nitroaniline	454.5 U	494 U	448 U	456 U	488 U	480 U
3,3'-Dichlorobenzidine	187.5 U	204 U	185 U	188 U	201.5 U	198 U
4-Bromophenyl-phenylether	187.5 U	204 U	185 U	188 U	201.5 U	198 U
4-Chloro-3-methylphenol	187.5 U	204 U	185 U	188 U	240 J	198 U
4-Chloroaniline	187.5 U	204 U	185 U	188 U	201.5 U	198 U
4-Chlorophenyl phenyl ether	187.5 U	204 U	185 U	188 U	201.5 U	198 U
4-Methylphenol	187.5 U	204 U	185 U	188 U	201.5 U	198 U
4-Nitroaniline	454.5 U	494 U	448 U	456 U	488 U	480 U
4-Nitrophenol	454.5 U	494 U	448 U	456 U	488 U	480 U
4,6-Dinitro-2-methylphenol	454.5 U	494 U	448 U	456 U	488 U	480 U
Acenaphthene	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Acenaphthylene	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Anthracene	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Benzo[a]anthracene	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Benzo[a]pyrene	187.5 U	204 U	185 U	188 U	201.5 U	198 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB13-00	74-FDA-SB14-00	74-FDA-SB15-00	74-FDA-SB16-00	74-FDA-SB17-00	74-FDA-SB18-00
Laboratory Sample ID:	9401121-08A	9401121-11A	9401132-02	9401132-05	9401132-08	9401132-11
Date Sampled:	34355	34356	34356	34356	34356	34356
Percent Solids	87.5	81	89.4	88.4	81.6	83.5

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Benzo[g,h,i]perylene	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Benzo[k]fluoranthene	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
bis(2-Chloroethoxy) methane	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
bis(2-Chloroethyl) ether	UG/KG	12 J	204 U	185 U	188 U	59 J	198 U
bis(2-Ethylhexyl)phthalate	UG/KG	187.5 U	240 J	185 U	188 U	201.5 U	198 U
Butyl benzyl phthalate	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Carbazole	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Chrysene	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Dibenzofuran	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Dibenz[a,h]anthracene	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Diethylphthalate	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Dimethyl phthalate	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
di-n-Butylphthalate	UG/KG	190 U	205 U	185 U	188 U	201.5 U	198 U
di-n-Octylphthalate	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Fluoranthene	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Fluorene	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Hexachlorobenzene	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Hexachlorobutadiene	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Hexachlorocyclopentadiene	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Hexachloroethane	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Indeno[1,2,3-cd]pyrene	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Isophorone	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Naphthalene	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Nitrobenzene	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
N-Nitroso-di-n-propylamine	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
N-nitrosodiphenylamine	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Pentachlorophenol	UG/KG	454.5 U	494 U	448 U	456 U	488 U	480 U
Phenanthrene	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Phenol	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Pyrene	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB13-00	74-FDA-SB14-00	74-FDA-SB15-00	74-FDA-SB16-00	74-FDA-SB17-00	74-FDA-SB18-00
Laboratory Sample ID:	9401121-08A	9401121-11A	9401132-02	9401132-05	9401132-08	9401132-11
Date Sampled:	34355	34356	34356	34356	34356	34356
Percent Solids	87.5	81	89.4	88.4	81.6	83.5

VOLATILES

	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
Chloromethane	5.7 U	6.2 U	5.6 U	5.7 U	6.1 U	5.95 U
Bromomethane	5.7 U	6.2 U	5.6 U	5.7 U	6.1 U	5.95 U
Vinyl chloride	5.7 U	6.2 U	5.6 U	5.7 U	6.1 U	5.95 U
Chloroethane	5.7 U	6.2 U	5.6 U	5.7 U	6.1 U	5.95 U
Methylene chloride	8 J	18	18.5 U	7.5 U	7 J	6 J
Acetone	5.7 UJ	6.2 U	5.6 UJ	11.5 UJ	23 J	5.95 UJ
Carbon Disulfide	5.7 U	6.2 U	5.6 U	5.7 U	6.1 U	5.95 U
1,1-Dichloroethene	5.7 U	6.2 U	5.6 U	5.7 U	6.1 U	5.95 U
1,1-Dichloroethane	5.7 U	6.2 U	5.6 U	5.7 U	6.1 U	5.95 U
1,2-Dichloroethene(total)	5.7 U	6.2 U	5.6 U	5.7 U	6.1 U	5.95 U
Chloroform	5.7 U	6.2 U	5.6 U	5.7 U	6.1 U	5.95 U
1,2-Dichloroethane	5.7 U	6.2 U	5.6 U	5.7 U	6.1 U	5.95 U
2-Butanone	5.7 U	6.2 U	5.6 U	5.7 U	6.1 U	5.95 U
1,1,1-Trichloroethane	5.7 U	6.2 U	5.6 U	5.7 U	6.1 UJ	5.95 U
Carbon tetrachloride	5.7 U	6.2 U	5.6 U	5.7 U	6.1 UJ	5.95 U
Bromodichloromethane	5.7 U	6.2 U	5.6 U	5.7 U	6.1 UJ	5.95 U
1,2-Dichloropropane	5.7 U	6.2 U	5.6 U	5.7 U	6.1 UJ	5.95 U
cis-1,3-Dichloropropene	5.7 U	6.2 U	5.6 U	5.7 U	6.1 UJ	5.95 U
Trichloroethene	5.7 U	6.2 U	5.6 U	2 J	6.1 UJ	8 J
Dibromochloromethane	5.7 U	6.2 U	5.6 U	5.7 U	6.1 UJ	5.95 U
1,1,2-Trichloroethane	5.7 U	6.2 U	5.6 U	5.7 U	6.1 UJ	5.95 U
Benzene	5.7 U	6.2 U	5.6 U	5.7 U	6.1 UJ	5.95 U
trans-1,3-Dichloropropene	5.7 U	6.2 U	5.6 U	5.7 U	6.1 UJ	5.95 U
Bromoform	5.7 U	6.2 U	5.6 U	5.7 U	6.1 UJ	5.95 U
4-Methyl-2-pentanone	5.7 U	6.2 U	5.6 U	5.7 U	6.1 UJ	5.95 U
2-Hexanone	5.7 U	6.2 U	5.6 U	5.7 U	6.1 UJ	5.95 U
Tetrachloroethene	5.7 U	6.2 U	5.6 U	5.7 U	6.1 UJ	5.95 U
1,1,2,2-Tetrachloroethane	5.7 U	6.2 U	5.6 U	5.7 U	6.1 UJ	5.95 U
Toluene	3 J	6.2 U	5.6 U	5.7 U	6.1 UJ	5.95 U
Chlorobenzene	5.7 U	6.2 U	5.6 U	5.7 U	6.1 UJ	5.95 U
Ethylbenzene	5.7 U	6.2 U	5.6 U	5.7 U	6.1 UJ	5.95 U
Styrene	5.7 U	6.2 U	5.6 U	5.7 U	6.1 UJ	5.95 U
Xylenes (total)	3 J	6.2 U	5.6 U	5.7 U	6.1 UJ	5.95 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB13-00	74-FDA-SB14-00	74-FDA-SB15-00	74-FDA-SB16-00	74-FDA-SB17-00	74-FDA-SB18-00
Laboratory Sample ID:	9401121-08A	9401121-11A	9401132-02	9401132-05	9401132-08	9401132-11
Date Sampled:	34355	34356	34356	34356	34356	34356
Percent Solids	87.5	81	89.4	88.4	81.6	83.5
PESTICIDE/PCBS						
alpha-BHC	UG/KG	0.98 UJ	1.045 UJ	0.95 UJ	0.97 UJ	1.035 UJ
beta-BHC	UG/KG	0.98 U	1.045 U	0.95 U	0.97 U	1.035 U
delta-BHC	UG/KG	0.98 UJ	1.045 UJ	0.95 UJ	0.97 UJ	1.035 UJ
Lindane (gamma-BHC)	UG/KG	0.98 U	1.045 U	0.95 U	0.97 U	1.035 U
Heptachlor	UG/KG	0.98 U	1.045 U	0.95 U	0.97 U	2.07 NJ
Aldrin	UG/KG	0.98 U	1.045 U	0.95 U	0.97 U	1.035 U
Heptachlor epoxide	UG/KG	0.98 U	1.045 U	0.95 U	0.97 U	0.69 J
Endosulfan I	UG/KG	0.98 U	1.045 U	0.95 U	0.97 U	1.035 U
Dieldrin	UG/KG	1.9 U	2.03 U	1.85 U	1.88 U	2.015 U
4,4'-DDE	UG/KG	1.9 U	1.68 J	1.66 J	1.88 U	2.015 U
Endrin	UG/KG	1.9 U	2.03 U	0.42 J	1.88 U	2.015 U
Endosulfan II	UG/KG	1.9 U	2.03 U	1.85 U	1.88 U	2.015 U
4,4'-DDD	UG/KG	1.9 U	2.03 U	1.85 U	1.88 U	2.015 U
Endosulfan sulfate	UG/KG	1.9 U	2.03 U	1.85 U	1.88 U	2.015 U
4,4'-DDT	UG/KG	1.9 U	2.03 U	1.85 U	1.88 U	2.015 U
Methoxychlor	UG/KG	9.8 U	10.45 U	9.5 U	9.7 U	10.35 U
Endrin ketone	UG/KG	1.9 U	2.03 U	1.85 U	1.88 U	2.015 U
Endrin aldehyde	UG/KG	1.9 U	2.03 U	1.85 U	1.88 U	2.015 U
alpha-Chlordane	UG/KG	0.98 U	1.045 U	0.39 J	0.97 U	1.035 U
gamma-Chlordane	UG/KG	0.98 U	1.045 U	0.45 J	0.97 U	1.035 U
Toxaphene	UG/KG	98 U	104.5 U	95 U	97 U	103.5 U
Aroclor 1016	UG/KG	19 U	20.3 U	18.5 U	18.8 U	20.15 U
Aroclor 1221	UG/KG	38.5 U	41.2 U	37.5 U	38.2 U	40.85 U
Aroclor 1232	UG/KG	19 U	20.3 U	18.5 U	18.8 U	20.15 U
Aroclor 1242	UG/KG	19 U	20.3 U	18.5 U	18.8 U	20.15 U
Aroclor 1248	UG/KG	19 U	20.3 U	18.5 U	18.8 U	20.15 U
Aroclor 1254	UG/KG	19 U	20.3 U	18.5 U	18.8 U	20.15 U
Aroclor 1260	UG/KG	19 U	20.3 U	18.5 U	18.8 U	20.15 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	74-FDA-SB13-00	74-FDA-SB14-00	74-FDA-SB15-00	74-FDA-SB16-00	74-FDA-SB17-00	74-FDA-SB18-00
Laboratory Sample ID:	9401121-08A	9401121-11A	9401132-02	9401132-05	9401132-08	9401132-11
Date Sampled:	34355	34356	34356	34356	34356	34356
Percent Solids	87.5	81	89.4	88.4	81.6	83.5

CHEMICAL SURETY

Acetophenone	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Chloroacetophenone	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
Hydroxyacetophenone	UG/KG	935 U	1020 U	925 U	940 U	1005 U	990 U
Bis(2'-chloroethyl)disulfide	UG/KG	935 U	1020 U	925 U	940 U	1005 U	990 U
Bis(2'-chloroethyl)trisulfide	UG/KG	935 U	1020 U	925 U	940 U	1005 U	990 U
1,4-Dithiane	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U
1,4-Oxathiane	UG/KG	187.5 U	204 U	185 U	188 U	201.5 U	198 U

THIODIGLYCOL

Thiodiglycol	MG/KG	3.56 U	3.845 U	3.5 U	3.53 U	3.845 U	3.75 U
--------------	-------	--------	---------	-------	--------	---------	--------

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB19-00	74-FDA-SB20-00	74-FDA-SB21-00	74-FDA-SB22-00	74-FDA-SB23-00	74-FDA-SB24-00
Laboratory Sample ID:	9401132-14	9401132-17	9401138-03	9401138-06	9401138-10	9401140-01
Date Sampled:	34356	34356	34357	34357	34357	34358
Percent Solids	87.7	90.6	89.8	86.6	86.6	89.1
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
1,2,4-Trichlorobenzene	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
1,3-Dichlorobenzene	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
1,4-Dichlorobenzene	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
2-Chloronaphthalene	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
2-Chlorophenol	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
2-Methylnaphthalene	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
2-Methylphenol	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
2-Nitroaniline	UG/KG	456 U	444.5 U	444.5 U	460 U	449.5 U
2-Nitrophenol	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
2,2'-oxybis-(1-chloropropane)	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
2,4-Dichlorophenol	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
2,4-Dimethylphenol	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
2,4-Dinitrophenol	UG/KG	456 U	444.5 U	444.5 U	460 U	449.5 U
2,4-Dinitrotoluene	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
2,4,5-Trichlorophenol	UG/KG	456 U	444.5 U	444.5 U	460 U	449.5 U
2,4,6-Trichlorophenol	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
2,6-Dinitrotoluene	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
3-Nitroaniline	UG/KG	456 U	444.5 U	444.5 U	460 U	449.5 U
3,3'-Dichlorobenzidine	UG/KG	190 U	185 U	183.5 U	190 U	185.5 U
4-Bromophenyl-phenylether	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
4-Chloro-3-methylphenol	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
4-Chloroaniline	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
4-Chlorophenyl phenyl ether	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
4-Methylphenol	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
4-Nitroaniline	UG/KG	456 U	444.5 U	444.5 U	460 U	449.5 U
4-Nitrophenol	UG/KG	456 U	444.5 U	444.5 U	460 U	449.5 U
4,6-Dinitro-2-methylphenol	UG/KG	456 U	444.5 U	444.5 U	460 U	449.5 U
Acenaphthene	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
Acenaphthylene	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
Anthracene	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
Benzo[a]anthracene	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
Benzo[a]pyrene	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB19-00	74-FDA-SB20-00	74-FDA-SB21-00	74-FDA-SB22-00	74-FDA-SB23-00	74-FDA-SB24-00
Laboratory Sample ID:	9401132-14	9401132-17	9401138-03	9401138-06	9401138-10	9401140-01
Date Sampled:	34356	34356	34357	34357	34357	34358
Percent Solids	87.7	90.6	89.8	86.6	86.6	89.1

SEMIVOLATILES Cont.

	74-FDA-SB19-00	74-FDA-SB20-00	74-FDA-SB21-00	74-FDA-SB22-00	74-FDA-SB23-00	74-FDA-SB24-00
Benzo[b]fluoranthene	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 UJ	185.5 U
Benzo[g,h,i]perylene	UG/KG 188 U	183.5 U	183.5 U	190 U	61 J	185.5 U
Benzo[k]fluoranthene	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 UJ	185.5 U
bis(2-Chloroethoxy) methane	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 U	185.5 U
bis(2-Chloroethyl) ether	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 U	185.5 U
bis(2-Ethylhexyl)phthalate	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 UJ	185.5 U
Butyl benzyl phthalate	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 UJ	185.5 U
Carbazole	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 U	185.5 U
Chrysene	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 UJ	185.5 U
Dibenzofuran	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 U	185.5 U
Dibenz[a,h]anthracene	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 UJ	185.5 U
Diethylphthalate	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 U	185.5 U
Dimethyl phthalate	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 U	185.5 U
di-n-Butylphthalate	UG/KG 188 U	183.5 U	183.5 U	103 J	39 J	185 U
di-n-Octylphthalate	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 UJ	185.5 U
Fluoranthene	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 U	185.5 U
Fluorene	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 U	185.5 U
Hexachlorobenzene	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 U	185.5 U
Hexachlorobutadiene	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 U	185.5 U
Hexachlorocyclopentadiene	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 U	185.5 U
Hexachloroethane	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 U	185.5 U
Indeno[1,2,3-cd]pyrene	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 UJ	185.5 U
Isophorone	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 U	185.5 U
Naphthalene	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 U	185.5 U
Nitrobenzene	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 U	185.5 U
N-Nitroso-di-n-propylamine	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 U	185.5 U
N-nitrosodiphenylamine	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 U	185.5 U
Pentachlorophenol	UG/KG 456 U	444.5 U	444.5 U	460 U	472 U	449.5 U
Phenanthrene	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 U	185.5 U
Phenol	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 U	185.5 U
Pyrene	UG/KG 188 U	183.5 U	183.5 U	190 U	194.5 UJ	185.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB19-00	74-FDA-SB20-00	74-FDA-SB21-00	74-FDA-SB22-00	74-FDA-SB23-00	74-FDA-SB24-00
Laboratory Sample ID:	9401132-14	9401132-17	9401138-03	9401138-06	9401138-10	9401140-01
Date Sampled:	34356	34356	34357	34357	34357	34358
Percent Solids	87.7	90.6	89.8	86.6	86.6	89.1
VOLATILES						
Chloromethane	UG/KG	5.7 U	5.5 U	5.55 U	5.75 U	5.5 UJ
Bromomethane	UG/KG	5.7 U	5.5 U	5.55 U	5.75 U	5.5 UJ
Vinyl chloride	UG/KG	5.7 U	5.5 U	5.55 U	5.75 U	5.5 UJ
Chloroethane	UG/KG	5.7 U	5.5 U	5.55 U	5.75 U	5.5 UJ
Methylene chloride	UG/KG	5 J	7 J	5.5 U	7 J	5.5 UJ
Acetone	UG/KG	5.7 UJ	5.5 UJ	5.5 UJ	5.75 UJ	39 UJ
Carbon Disulfide	UG/KG	5.7 U	5.5 U	5.55 U	5.75 U	5.5 UJ
1,1-Dichloroethene	UG/KG	5.7 U	5.5 U	5.55 U	5.75 U	5.5 UJ
1,1-Dichloroethane	UG/KG	5.7 U	5.5 U	5.55 U	5.75 U	5.5 UJ
1,2-Dichloroethene(total)	UG/KG	5.7 U	5.5 U	5.55 U	5.75 U	5.5 UJ
Chloroform	UG/KG	5.7 U	5.5 U	5.55 U	5.75 U	5.5 UJ
1,2-Dichloroethane	UG/KG	5.7 U	5.5 U	5.55 U	5.75 U	5.5 UJ
2-Butanone	UG/KG	5.7 U	5.5 U	5.55 U	5.75 U	5.5 UJ
1,1,1-Trichloroethane	UG/KG	5.7 U	5.5 U	5.55 U	5.75 U	5.5 U
Carbon tetrachloride	UG/KG	5.7 U	5.5 U	5.55 U	5.75 U	5.5 U
Bromodichloromethane	UG/KG	5.7 U	5.5 U	5.55 U	5.75 U	5.5 U
1,2-Dichloropropane	UG/KG	5.7 U	5.5 U	5.55 U	5.75 U	5.5 U
cis-1,3-Dichloropropene	UG/KG	5.7 U	5.5 U	5.55 U	5.75 U	5.5 U
Trichloroethene	UG/KG	5.7 U	3 J	5.55 U	5.75 U	5.5 U
Dibromochloromethane	UG/KG	5.7 U	5.5 U	5.55 U	5.75 U	5.5 U
1,1,2-Trichloroethane	UG/KG	5.7 U	5.5 U	5.55 U	5.75 U	5.5 U
Benzene	UG/KG	5.7 U	5.5 U	5.55 U	5.75 U	5.5 U
trans-1,3-Dichloropropene	UG/KG	5.7 U	5.5 U	5.55 U	5.75 U	5.5 U
Bromoform	UG/KG	5.7 U	5.5 U	5.55 U	5.75 U	5.5 U
4-Methyl-2-pentanone	UG/KG	5.7 U	5.5 U	5.55 UJ	5.75 UJ	5.5 UJ
2-Hexanone	UG/KG	5.7 U	5.5 U	5.55 UJ	5.75 UJ	5.5 UJ
Tetrachloroethene	UG/KG	5.7 U	5.5 U	5.55 UJ	5.75 UJ	5.5 UJ
1,1,2,2-Tetrachloroethane	UG/KG	5.7 U	5.5 U	5.55 UJ	5.75 UJ	5.5 UJ
Toluene	UG/KG	5.7 U	5.5 U	5.55 UJ	5.75 UJ	5.5 UJ
Chlorobenzene	UG/KG	5.7 U	5.5 U	5.55 UJ	5.75 UJ	5.5 UJ
Ethylbenzene	UG/KG	5.7 U	5.5 U	5.55 UJ	5.75 UJ	5.5 UJ
Styrene	UG/KG	5.7 U	5.5 U	5.55 UJ	5.75 UJ	5.5 UJ
Xylenes (total)	UG/KG	5.7 U	5.5 U	5.55 UJ	5.75 UJ	5.5 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB19-00	74-FDA-SB20-00	74-FDA-SB21-00	74-FDA-SB22-00	74-FDA-SB23-00	74-FDA-SB24-00
Laboratory Sample ID:	9401132-14	9401132-17	9401138-03	9401138-06	9401138-10	9401140-01
Date Sampled:	34356	34356	34357	34357	34357	34358
Percent Solids	87.7	90.6	89.8	86.6	86.6	89.1
<u>PESTICIDE/PCBS</u>						
alpha-BHC	UG/KG	0.97 UJ	0.935 UJ	0.945 UJ	0.98 UJ	0.955 UJ
beta-BHC	UG/KG	0.97 U	0.935 U	0.945 U	0.98 U	0.955 U
delta-BHC	UG/KG	0.97 UJ	0.935 UJ	0.945 UJ	0.98 UJ	0.955 UJ
Lindane (gamma-BHC)	UG/KG	0.97 U	0.935 U	0.945 U	0.98 U	0.955 U
Heptachlor	UG/KG	0.97 U	0.935 U	0.945 U	0.98 U	0.955 U
Aldrin	UG/KG	0.97 U	0.935 U	0.945 U	0.98 U	0.955 U
Heptachlor epoxide	UG/KG	0.97 U	0.935 U	0.945 U	0.98 U	0.955 U
Endosulfan I	UG/KG	0.97 U	0.935 U	0.945 U	0.98 U	0.955 U
Dieldrin	UG/KG	1.88 U	1.815 U	1.83 U	1.9 U	1.855 U
4,4'-DDE	UG/KG	1.88 U	2.39 J	1.83 U	1.9 U	3.47 J
Endrin	UG/KG	1.88 U	1.815 U	1.83 U	1.9 U	1.855 U
Endosulfan II	UG/KG	1.88 U	1.815 U	1.83 U	1.9 U	1.855 U
4,4'-DDD	UG/KG	1.88 U	0.37 NJ	1.83 U	1.9 U	67.3 J
Endosulfan sulfate	UG/KG	1.88 U	1.815 U	1.83 U	1.9 U	1.855 U
4,4'-DDT	UG/KG	1.88 U	1.82 J	1.83 U	1.9 U	1.03 J
Methoxychlor	UG/KG	9.7 U	9.35 U	9.45 U	9.8 U	9.55 U
Endrin ketone	UG/KG	1.88 U	1.815 U	1.83 U	1.9 U	1.855 U
Endrin aldehyde	UG/KG	1.88 U	1.815 U	1.07 NJ	1.9 U	1.855 U
alpha-Chlordane	UG/KG	0.97 U	0.935 U	0.945 U	0.98 U	16.3 J
gamma-Chlordane	UG/KG	0.97 U	0.935 U	0.945 U	0.98 U	15.3 J
Toxaphene	UG/KG	97 U	93.5 U	94.5 U	98 U	95.5 U
Aroclor 1016	UG/KG	18.8 U	18.15 U	18.3 U	19 U	18.55 U
Aroclor 1221	UG/KG	38.2 U	36.85 U	37.2 U	38.5 U	37.65 U
Aroclor 1232	UG/KG	18.8 U	18.15 U	18.3 U	19 U	18.55 U
Aroclor 1242	UG/KG	18.8 U	18.15 U	18.3 U	19 U	18.55 U
Aroclor 1248	UG/KG	18.8 U	18.15 U	18.3 U	19 U	18.55 U
Aroclor 1254	UG/KG	18.8 U	18.15 U	18.3 U	19 U	18.55 U
Aroclor 1260	UG/KG	18.8 U	18.15 U	18.3 U	19 U	18.55 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	74-FDA-SB19-00	74-FDA-SB20-00	74-FDA-SB21-00	74-FDA-SB22-00	74-FDA-SB23-00	74-FDA-SB24-00
Laboratory Sample ID:	9401132-14	9401132-17	9401138-03	9401138-06	9401138-10	9401140-01
Date Sampled:	34356	34356	34357	34357	34357	34358
Percent Solids	87.7	90.6	89.8	86.6	86.6	89.1
CHEMICAL SURETY						
Acetophenone	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
Chloroacetophenone	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
Hydroxyacetophenone	UG/KG	940 U	915 U	915 U	950 U	925 U
Bis(2'-chloroethyl)disulfide	UG/KG	940 U	915 U	915 U	950 U	925 U
Bis(2'-chloroethyl)trisulfide	UG/KG	940 U	915 U	915 U	950 U	925 U
1,4-Dithiane	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
1,4-Oxathiane	UG/KG	188 U	183.5 U	183.5 U	190 U	185.5 U
THIODIGLYCOL						
Thiodiglycol	MG/KG	3.56 U	3.44 U	3.47 U	3.595 U	3.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB25-00	74-FDA-SB26-00	74-FDA-SB27-00	74-FDA-SB28-00	74-FDA-SB29-00	74-FDA-SB30-00
Laboratory Sample ID:	9401140-04	9401135-01A	9401148-01A	9401148-07A	9401148-04A	9401148-10A
Date Sampled:	34358	34358	34358	34358	34359	34359
Percent Solids	84.8	88	88.1	88	87.4	91.3
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	194 U	187.5 U	188 U	188 U	190 U
1,2,4-Trichlorobenzene	UG/KG	194 U	187.5 U	188 U	188 U	190 U
1,3-Dichlorobenzene	UG/KG	194 U	187.5 U	188 U	188 U	190 U
1,4-Dichlorobenzene	UG/KG	194 U	187.5 U	188 U	188 U	190 U
2-Chloronaphthalene	UG/KG	194 U	187.5 U	188 U	188 U	190 U
2-Chlorophenol	UG/KG	194 U	187.5 U	188 U	188 U	190 U
2-Methylnaphthalene	UG/KG	194 U	187.5 U	188 U	188 U	190 U
2-Methylphenol	UG/KG	194 U	187.5 U	188 U	188 U	190 U
2-Nitroaniline	UG/KG	470.5 U	454.5 U	456 U	456 U	460 U
2-Nitrophenol	UG/KG	194 U	187.5 U	188 U	188 U	190 U
2,2'-oxybis-(1-chloropropane)	UG/KG	194 U	187.5 U	188 U	188 U	190 U
2,4-Dichlorophenol	UG/KG	194 U	187.5 U	188 U	188 U	190 U
2,4-Dimethylphenol	UG/KG	194 U	187.5 U	188 U	188 U	190 U
2,4-Dinitrophenol	UG/KG	470.5 U	454.5 U	456 UJ	456 UJ	460 UJ
2,4-Dinitrotoluene	UG/KG	194 U	187.5 U	188 U	188 U	190 U
2,4,5-Trichlorophenol	UG/KG	470.5 U	454.5 U	456 U	456 U	460 U
2,4,6-Trichlorophenol	UG/KG	194 U	187.5 U	188 U	188 U	190 U
2,6-Dinitrotoluene	UG/KG	194 U	187.5 U	188 U	188 U	190 U
3-Nitroaniline	UG/KG	470.5 U	454.5 UJ	456 U	456 U	460 U
3,3'-Dichlorobenzidine	UG/KG	194 U	187.5 U	190 U	188 U	190 U
4-Bromophenyl-phenylether	UG/KG	194 U	187.5 U	188 U	188 U	190 U
4-Chloro-3-methylphenol	UG/KG	194 U	187.5 U	188 U	188 U	190 U
4-Chloroaniline	UG/KG	194 U	187.5 U	188 U	188 U	190 U
4-Chlorophenyl phenyl ether	UG/KG	194 U	187.5 U	188 U	188 U	190 U
4-Methylphenol	UG/KG	194 U	187.5 U	188 U	188 U	190 U
4-Nitroaniline	UG/KG	470.5 U	454.5 U	456 U	456 U	460 U
4-Nitrophenol	UG/KG	470.5 U	454.5 U	456 U	456 U	460 U
4,6-Dinitro-2-methylphenol	UG/KG	470.5 U	454.5 U	456 U	456 U	460 U
Acenaphthene	UG/KG	194 U	187.5 U	188 U	188 U	190 U
Acenaphthylene	UG/KG	194 U	187.5 U	188 U	188 U	190 U
Anthracene	UG/KG	194 U	187.5 U	188 U	188 U	190 U
Benzo[a]anthracene	UG/KG	194 U	187.5 U	188 U	188 U	190 U
Benzo[a]pyrene	UG/KG	194 U	187.5 U	188 U	188 U	190 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB25-00	74-FDA-SB26-00	74-FDA-SB27-00	74-FDA-SB28-00	74-FDA-SB29-00	74-FDA-SB30-00
Laboratory Sample ID:	9401140-04	9401135-01A	9401148-01A	9401148-07A	9401148-04A	9401148-10A
Date Sampled:	34358	34358	34358	34358	34359	34359
Percent Solids	84.8	88	88.1	88	87.4	91.3

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
Benzo[g,h,i]perylene	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
Benzo[k]fluoranthene	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
bis(2-Chloroethoxy) methane	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
bis(2-Chloroethyl) ether	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
bis(2-Ethylhexyl)phthalate	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
Butyl benzyl phthalate	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
Carbazole	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
Chrysene	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
Dibenzofuran	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
Dibenz[a,h]anthracene	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
Diethylphthalate	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
Dimethyl phthalate	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
di-n-Butylphthalate	UG/KG	195 U	46 J	107 J	54 J	82 J	42 J
di-n-Octylphthalate	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
Fluoranthene	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
Fluorene	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
Hexachlorobenzene	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
Hexachlorobutadiene	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
Hexachlorocyclopentadiene	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
Hexachloroethane	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
Indeno[1,2,3-cd]pyrene	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
Isophorone	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
Naphthalene	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
Nitrobenzene	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
N-Nitroso-di-n-propylamine	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
N-nitrosodiphenylamine	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
Pentachlorophenol	UG/KG	470.5 U	454.5 U	456 U	456 U	460 U	444 U
Phenanthrene	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
Phenol	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
Pyrene	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB25-00	74-FDA-SB26-00	74-FDA-SB27-00	74-FDA-SB28-00	74-FDA-SB29-00	74-FDA-SB30-00
Laboratory Sample ID:	9401140-04	9401135-01A	9401148-01A	9401148-07A	9401148-04A	9401148-10A
Date Sampled:	34358	34358	34358	34358	34359	34359
Percent Solids	84.8	88	88.1	88	87.4	91.3

VOLATILES

	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
Chloromethane	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
Bromomethane	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
Vinyl chloride	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
Chloroethane	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
Methylene chloride	UG/KG	7.5 UJ	7 J	5 J	9 J	5.5 U	6 J
Acetone	UG/KG	44.5 UJ	5.5 UJ	5 J	6 J	12.5 UJ	6 J
Carbon Disulfide	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
1,1-Dichloroethene	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
1,1-Dichloroethane	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
1,2-Dichloroethene(total)	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
Chloroform	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
1,2-Dichloroethane	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
2-Butanone	UG/KG	6 UJ	5.5 U			5.75 U	
1,1,1-Trichloroethane	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
Carbon tetrachloride	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
Bromodichloromethane	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
1,2-Dichloropropane	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
cis-1,3-Dichloropropene	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
Trichloroethene	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
Dibromochloromethane	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
1,1,2-Trichloroethane	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
Benzene	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
trans-1,3-Dichloropropene	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
Bromoform	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
4-Methyl-2-pentanone	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
2-Hexanone	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
Tetrachloroethene	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
1,1,2,2-Tetrachloroethane	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
Toluene	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 UJ	5.75 U	5.5 UJ
Chlorobenzene	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
Ethylbenzene	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
Styrene	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U
Xylenes (total)	UG/KG	6 UJ	5.5 U	5.7 UJ	5.7 U	5.75 U	5.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB25-00	74-FDA-SB26-00	74-FDA-SB27-00	74-FDA-SB28-00	74-FDA-SB29-00	74-FDA-SB30-00
Laboratory Sample ID:	9401140-04	9401135-01A	9401148-01A	9401148-07A	9401148-04A	9401148-10A
Date Sampled:	34358	34358	34358	34358	34359	34359
Percent Solids	84.8	88	88.1	88	87.4	91.3

<u>PESTICIDE/PCBS</u>						
alpha-BHC	UG/KG	1 UJ	0.97 UJ	0.97 UJ	0.965 U	0.935 UJ
beta-BHC	UG/KG	1 U	0.97 U	0.97 UJ	0.965 U	0.935 U
delta-BHC	UG/KG	1 UJ	0.97 UJ	0.97 UJ	0.965 U	0.935 UJ
Lindane (gamma-BHC)	UG/KG	1 U	0.97 U	0.97 UJ	0.965 U	0.935 U
Heptachlor	UG/KG	1 U	0.97 U	0.97 UJ	0.965 U	0.935 U
Aldrin	UG/KG	1 U	0.97 U	0.97 UJ	0.965 U	0.935 U
Heptachlor epoxide	UG/KG	1 U	0.97 U	0.97 UJ	0.965 U	0.935 U
Endosulfan I	UG/KG	1 U	0.97 U	0.97 UJ	0.965 U	0.935 U
Dieldrin	UG/KG	1.94 U	1.88 U	1.88 UJ	1.875 U	1.815 U
4,4'-DDE	UG/KG	1.94 U	0.72 J	1.88 UJ	2.36 J	1.815 U
Endrin	UG/KG	1.94 U	1.88 U	1.88 UJ	1.875 U	1.815 U
Endosulfan II	UG/KG	1.94 U	1.88 U	1.88 UJ	0.44 NJ	1.815 U
4,4'-DDD	UG/KG	1.94 U	1.88 U	1.88 UJ	1.8 J	1.815 U
Endosulfan sulfate	UG/KG	1.94 U	1.88 U	1.88 UJ	1.875 U	1.815 U
4,4'-DDT	UG/KG	1.94 U	1.88 U	1.88 UJ		1.815 UJ
Methoxychlor	UG/KG	10 U	9.7 U	9.7 UJ	9.65 U	9.35 UJ
Endrin ketone	UG/KG	1.94 U	1.88 U	1.88 UJ	1.875 U	1.815 U
Endrin aldehyde	UG/KG	1.94 U	1.88 U	1.88 UJ	1.875 U	1.815 U
alpha-Chlordane	UG/KG	1 U	0.97 U	0.97 UJ	0.965 U	0.935 U
gamma-Chlordane	UG/KG	1 U	0.97 U	0.97 UJ	0.965 U	0.935 U
Toxaphene	UG/KG	100 U	97 U	97 UJ	96.5 U	93.5 U
Aroclor 1016	UG/KG	19.4 U	18.8 U	18.8 UJ	18.75 U	18.15 U
Aroclor 1221	UG/KG	39.4 U	38.2 U	38.2 UJ	38.05 U	36.85 U
Aroclor 1232	UG/KG	19.4 U	18.8 U	18.8 UJ	18.75 U	18.15 U
Aroclor 1242	UG/KG	19.4 U	18.8 U	18.8 UJ	18.75 U	18.15 U
Aroclor 1248	UG/KG	19.4 U	18.8 U	18.8 UJ	18.75 U	18.15 U
Aroclor 1254	UG/KG	19.4 U	18.8 U	18.8 UJ	18.75 U	18.15 U
Aroclor 1260	UG/KG	19.4 U	18.8 U	18.8 UJ	18.75 U	18.15 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	74-FDA-SB25-00	74-FDA-SB26-00	74-FDA-SB27-00	74-FDA-SB28-00	74-FDA-SB29-00	74-FDA-SB30-00
Laboratory Sample ID:	9401140-04	9401135-01A	9401148-01A	9401148-07A	9401148-04A	9401148-10A
Date Sampled:	34358	34358	34358	34358	34359	34359
Percent Solids	84.8	88	88.1	88	87.4	91.3

CHEMICAL SURETY

Acetophenone	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
Chloroacetophenone	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
Hydroxyacetophenone	UG/KG	190 J	935 U	940 U	940 U	950 U	915 U
Bis(2'-chloroethyl)disulfide	UG/KG	970 U	935 U	940 U	940 U	950 U	915 U
Bis(2'-chloroethyl)trisulfide	UG/KG	970 U	935 U	940 U	940 U	950 U	915 U
1,4-Dithiane	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U
1,4-Oxathiane	UG/KG	194 U	187.5 U	188 U	188 U	190 U	183 U

THIODIGLYCOL

Thiodiglycol	MG/KG	3.69 U	3.56 U	3.56 U	3.56 U	3.56 U	3.44 U
--------------	-------	--------	--------	--------	--------	--------	--------

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB31-00	74-FDA-SB32-00	74-FDA-SB33-00	74-FDA-SB34-00	74-FDA-SB35-00	74-FDA-SB36-00
Laboratory Sample ID:	9401148-13A	9401148-16A	9401108-04	9401108-06	9401108-07	9401108-08
Date Sampled:	34359	34359	01/19/94	01/19/94	01/19/94	01/19/94
Percent Solids	88	90	86.7	83.2	93.6	84.6
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U
1,2,4-Trichlorobenzene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U
1,3-Dichlorobenzene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U
1,4-Dichlorobenzene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U
2-Chloronaphthalene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U
2-Chlorophenol	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U
2-Methylnaphthalene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U
2-Methylphenol	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U
2-Nitroaniline	UG/KG	456 U	444.5 U	460.0 U	482.0 U	425.5 U
2-Nitrophenol	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U
2,2'-oxybis-(1-chloropropane)	UG/KG	188 UJ	183.5 UJ	189.5 U	199.0 U	175.5 U
2,4-Dichlorophenol	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U
2,4-Dimethylphenol	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U
2,4-Dinitrophenol	UG/KG	456 U	444.5 U	460.0 U	482.0 U	425.5 U
2,4-Dinitrotoluene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U
2,4,5-Trichlorophenol	UG/KG	456 U	444.5 U	460.0 U	482.0 U	425.5 U
2,4,6-Trichlorophenol	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U
2,6-Dinitrotoluene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U
3-Nitroaniline	UG/KG	456 U	444.5 U	460.0 U	482.0 U	425.5 U
3,3'-Dichlorobenzidine	UG/KG	188 U	185 U	189.5 U	199.0 U	175.5 U
4-Bromophenyl-phenylether	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U
4-Chloro-3-methylphenol	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U
4-Chloroaniline	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U
4-Chlorophenyl phenyl ether	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U
4-Methylphenol	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U
4-Nitroaniline	UG/KG	456 U	444.5 U	460.0 U	482.0 U	425.5 U
4-Nitrophenol	UG/KG	456 U	444.5 U	460.0 U	482.0 U	425.5 U
4,6-Dinitro-2-methylphenol	UG/KG	456 U	444.5 U	460.0 U	482.0 U	425.5 U
Acenaphthene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U
Acenaphthylene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U
Anthracene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U
Benzo[a]anthracene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U
Benzo[a]pyrene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB31-00	74-FDA-SB32-00	74-FDA-SB33-00	74-FDA-SB34-00	74-FDA-SB35-00	74-FDA-SB36-00
Laboratory Sample ID:	9401148-13A	9401148-16A	9401108-04	9401108-06	9401108-07	9401108-08
Date Sampled:	34359	34359	01/19/94	01/19/94	01/19/94	01/19/94
Percent Solids	88	90	86.7	83.2	93.6	84.6

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
Benzo[g,h,i]perylene	UG/KG	160 J	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
Benzo[k]fluoranthene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
bis(2-Chloroethoxy) methane	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
bis(2-Chloroethyl) ether	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
bis(2-Ethylhexyl)phthalate	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
Butyl benzyl phthalate	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
Carbazole	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
Chrysene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
Dibenzofuran	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
Dibenz[a,h]anthracene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
Diethylphthalate	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
Dimethyl phthalate	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
di-n-Butylphthalate	UG/KG	96 J	100 J	189.5 U	199.0 U	175.5 U	83.0 J
di-n-Octylphthalate	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
Fluoranthene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
Fluorene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
Hexachlorobenzene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
Hexachlorobutadiene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
Hexachlorocyclopentadiene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
Hexachloroethane	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
Indeno[1,2,3-cd]pyrene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
Isophorone	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
Naphthalene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
Nitrobenzene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
N-Nitroso-di-n-propylamine	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
N-nitrosodiphenylamine	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
Pentachlorophenol	UG/KG	456 U	444.5 U	460.0 U	482.0 U	425.5 U	470.5 U
Phenanthrene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
Phenol	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
Pyrene	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB31-00	74-FDA-SB32-00	74-FDA-SB33-00	74-FDA-SB34-00	74-FDA-SB35-00	74-FDA-SB36-00	
Laboratory Sample ID:	9401148-13A	9401148-16A	9401108-04	9401108-06	9401108-07	9401108-08	
Date Sampled:	34359	34359	01/19/94	01/19/94	01/19/94	01/19/94	
Percent Solids	88	90	86.7	83.2	93.6	84.6	
VOLATILES							
Chloromethane	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 U	5.9 UJ
Bromomethane	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 U	5.9 UJ
Vinyl chloride	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 U	5.9 UJ
Chloroethane	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 U	5.9 UJ
Methylene chloride	UG/KG	5.5 U	5.5 UJ	23.0 J	7.00 J	6.00 U	7.00 J
Acetone	UG/KG	5.5 UJ	5.55 UJ	53.0 J	25.0 J	6.00 UJ	49.0 J
Carbon Disulfide	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 U	5.9 UJ
1,1-Dichloroethene	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 U	5.9 UJ
1,1-Dichloroethane	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 U	5.9 UJ
1,2-Dichloroethene(total)	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 U	5.9 UJ
Chloroform	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 U	5.9 UJ
1,2-Dichloroethane	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 U	5.9 UJ
2-Butanone	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 U	5.9 UJ
1,1,1-Trichloroethane	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 U	5.9 UJ
Carbon tetrachloride	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 U	5.9 UJ
Bromodichloromethane	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 U	5.9 UJ
1,2-Dichloropropane	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 U	5.9 UJ
cis-1,3-Dichloropropene	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 U	5.9 UJ
Trichloroethene	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 U	5.9 UJ
Dibromochloromethane	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 U	5.9 UJ
1,1,2-Trichloroethane	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 U	5.9 UJ
Benzene	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 U	5.9 UJ
trans-1,3-Dichloropropene	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 U	5.9 UJ
Bromoform	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 U	5.9 UJ
4-Methyl-2-pentanone	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 UJ	5.9 UJ
2-Hexanone	UG/KG	5.7 U	5.55 UJ			5.3 UJ	
Tetrachloroethene	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 UJ	5.9 UJ
1,1,2,2-Tetrachloroethane	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 UJ	5.9 UJ
Toluene	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 UJ	5.9 UJ
Chlorobenzene	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 UJ	5.9 UJ
Ethylbenzene	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 UJ	5.9 UJ
Styrene	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 UJ	5.9 UJ
Xylenes (total)	UG/KG	5.7 U	5.55 UJ	5.8 UJ	6.0 UJ	5.3 UJ	5.9 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB31-00	74-FDA-SB32-00	74-FDA-SB33-00	74-FDA-SB34-00	74-FDA-SB35-00	74-FDA-SB36-00	
Laboratory Sample ID:	9401148-13A	9401148-16A	9401108-04	9401108-06	9401108-07	9401108-08	
Date Sampled:	34359	34359	01/19/94	01/19/94	01/19/94	01/19/94	
Percent Solids	88	90	86.7	83.2	93.6	84.6	
PESTICIDE/PCBS							
alpha-BHC	UG/KG	966.5 UJ	0.945 UJ	0.98 UJ	1.03 UJ	0.91 UJ	1.00 UJ
beta-BHC	UG/KG	966.5 UJ	0.945 U	0.98 UJ	1.03 UJ	0.91 UJ	
delta-BHC	UG/KG	966.5 UJ	0.945 UJ	0.98 UJ	1.03 UJ	0.91 UJ	1.00 UJ
Lindane (gamma-BHC)	UG/KG	966.5 UJ	0.945 U	0.98 UJ	1.03 UJ	0.91 UJ	1.00 UJ
Heptachlor	UG/KG	966.5 UJ	0.945 U	0.65 J	1.03 UJ	0.20 NJ	1.00 UJ
Aldrin	UG/KG	966.5 UJ	0.945 U	0.98 UJ	1.03 UJ	0.91 UJ	1.00 UJ
Heptachlor epoxide	UG/KG	966.5 UJ	0.945 U	1.15 NJ	1.03 UJ	0.91 UJ	1.00 UJ
Endosulfan I	UG/KG	966.5 UJ	0.945 U	0.98 UJ	1.03 UJ	0.91 UJ	1.00 UJ
Dieldrin	UG/KG	18.76 UJ	1.835 U	1.90 UJ	1.99 UJ	1.76 UJ	1.94 UJ
4,4'-DDE	UG/KG	18.76 UJ	1.835 U	1.90 UJ	11.01 J	1.410 J	0.720 NJ
Endrin	UG/KG	18.76 UJ	1.835 U	1.90 UJ	1.99 UJ	1.76 UJ	1.94 UJ
Endosulfan II	UG/KG	18.76 UJ	1.835 U	1.90 UJ	1.99 UJ	1.76 UJ	1.94 UJ
4,4'-DDD	UG/KG	18.76 UJ	1.835 U	1.90 UJ	0.92 J	0.41 J	1.94 UJ
Endosulfan sulfate	UG/KG	18.76 UJ	1.835 U	1.90 UJ	1.99 UJ	1.76 UJ	1.94 UJ
4,4'-DDT	UG/KG	18.76 UJ	1.835 UJ	1.90 UJ	6.23 J	1.76 UJ	1.94 UJ
Methoxychlor	UG/KG	96.65 UJ	9.45 UJ	9.8 UJ	10.3 UJ	9.1 UJ	10.0 UJ
Endrin ketone	UG/KG	1.88 UJ	1.835 U	1.90 UJ	1.99 UJ	1.76 UJ	1.94 UJ
Endrin aldehyde	UG/KG	18.76 UJ	1.835 U	1.90 UJ	1.99 UJ	1.76 UJ	1.94 U
alpha-Chlordane	UG/KG	9.665 UJ	0.945 U	0.98 UJ	1.03 UJ	0.91 UJ	1.00 UJ
gamma-Chlordane	UG/KG	9.665 UJ	0.945 U	0.98 UJ	1.03 UJ	0.91 UJ	1.00 UJ
Toxaphene	UG/KG	966 UJ	94.5 U	97.5 UJ	102.5 UJ	90.5 UJ	100.0 U
Aroclor 1016	UG/KG	187.6 UJ	18.35 U	19.0 UJ	19.9 UJ	17.6 UJ	19.4 U
Aroclor 1221	UG/KG	380.85 UJ	37.2 U	38.5 UJ	40.4 UJ	35.7 UJ	39.4 U
Aroclor 1232	UG/KG	187.6 UJ	18.35 U	19.0 UJ	19.9 UJ	17.6 UJ	19.4 U
Aroclor 1242	UG/KG	187.6 UJ	18.35 U	19.0 UJ	19.9 UJ	17.6 UJ	19.4 U
Aroclor 1248	UG/KG	187.6 UJ	18.35 U	19.0 UJ	19.9 UJ	17.6 UJ	19.4 U
Aroclor 1254	UG/KG	187.6 UJ	18.35 U	19.0 UJ	19.9 UJ	17.6 UJ	19.4 U
Aroclor 1260	UG/KG	187.6 UJ	18.35 U	19.0 UJ	19.9 UJ	17.6 UJ	19.4 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	74-FDA-SB31-00	74-FDA-SB32-00	74-FDA-SB33-00	74-FDA-SB34-00	74-FDA-SB35-00	74-FDA-SB36-00	
Laboratory Sample ID:	9401148-13A	9401148-16A	9401108-04	9401108-06	9401108-07	9401108-08	
Date Sampled:	34359	34359	01/19/94	01/19/94	01/19/94	01/19/94	
Percent Solids	88	90	86.7	83.2	93.6	84.6	
CHEMICAL SURETY							
Acetophenone	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
Chloroacetophenone	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
Hydroxyacetophenone	UG/KG	940 U	915 U	950.0 U	995.0 U	880.0 U	970.0 U
Bis(2'-chloroethyl)disulfide	UG/KG	940 U	915 U	950.0 U	995.0 U	880.0 U	970.0 U
Bis(2'-chloroethyl)trisulfide	UG/KG	940 U	915 U	950.0 U	995.0 U	880.0 U	970.0 U
1,4-Dithiane	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
1,4-Oxathiane	UG/KG	188 U	183.5 U	189.5 U	199.0 U	175.5 U	194.0 U
THIODIGLYCOL							
Thiodiglycol	MG/KG	3.56 U	3.47 U				

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB37-00	74-PDA-SB01-00	74-PDA-SB02-00	74-PDA-SB03-00	74-PDA-SB04-00	74-PDA-SB06-00
Laboratory Sample ID:	9401108-09	9402181-01	9402181-04	9402181-07	9402181-10	9402182-04
Date Sampled:	01/19/94	34384	34384	34384	34384	34384
Percent Solids	87.2	90.8	90.2	74.4	82.1	73

SEMIVOLATILES

1,2-Dichlorobenzene	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
1,2,4-Trichlorobenzene	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
1,3-Dichlorobenzene	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
1,4-Dichlorobenzene	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
2-Chloronaphthalene	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
2-Chlorophenol	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
2-Methylnaphthalene	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
2-Methylphenol	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
2-Nitroaniline	UG/KG	459.5 U	440 U	444.5 U	1080 U	976 U	1100 U
2-Nitrophenol	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
2,2'-oxybis-(1-chloropropane)	UG/KG	189.5 U	181.5 UJ	183.5 UJ	446 U	403 U	452 UJ
2,4-Dichlorophenol	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
2,4-Dimethylphenol	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
2,4-Dinitrophenol	UG/KG	459.5 U	440 U	444.5 U	1080 U	976 U	1100 U
2,4-Dinitrotoluene	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
2,4,5-Trichlorophenol	UG/KG	459.5 U	440 U	444.5 U	1080 U	976 U	1100 U
2,4,6-Trichlorophenol	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
2,6-Dinitrotoluene	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
3-Nitroaniline	UG/KG	459.5 U	440 U	444.5 U	1080 U	976 U	1100 U
3,3'-Dichlorobenzidine	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
4-Bromophenyl-phenylether	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
4-Chloro-3-methylphenol	UG/KG	189.5 U	54 J	183.5 U	446 U	403 U	452 U
4-Chloroaniline	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
4-Chlorophenyl phenyl ether	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
4-Methylphenol	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
4-Nitroaniline	UG/KG	459.5 U	440 U	444.5 U	1080 U	976 U	1100 U
4-Nitrophenol	UG/KG	459.5 U	440 U	444.5 U	1080 U	976 U	1100 U
4,6-Dinitro-2-methylphenol	UG/KG	459.5 U	440 U	444.5 U	1080 U	976 U	1100 U
Acenaphthene	UG/KG	189.5 U	39 J	183.5 U	446 U	403 U	452 U
Acenaphthylene	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
Anthracene	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
Benzo[a]anthracene	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
Benzo[a]pyrene	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB37-00	74-PDA-SB01-00	74-PDA-SB02-00	74-PDA-SB03-00	74-PDA-SB04-00	74-PDA-SB06-00
Laboratory Sample ID:	9401108-09	9402181-01	9402181-04	9402181-07	9402181-10	9402182-04
Date Sampled:	01/19/94	34384	34384	34384	34384	34384
Percent Solids	87.2	90.8	90.2	74.4	82.1	73

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
Benzo[g,h,i]perylene	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
Benzo[k]fluoranthene	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
bis(2-Chloroethoxy) methane	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
bis(2-Chloroethyl) ether	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
bis(2-Ethylhexyl)phthalate	UG/KG	189.5 U	185 UJ	185 U	446 U	403 U	452 U
Butyl benzyl phthalate	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
Carbazole	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
Chrysene	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
Dibenzofuran	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
Dibenz[a,h]anthracene	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
Diethylphthalate	UG/KG	189.5 U	181.5 U	183.5 U	446 U	866	452 U
Dimethyl phthalate	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
di-n-Butylphthalate	UG/KG	189.5 U	185 UJ	185 U	446 U	405 U	455 U
di-n-Octylphthalate	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
Fluoranthene	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
Fluorene	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
Hexachlorobenzene	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
Hexachlorobutadiene	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
Hexachlorocyclopentadiene	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
Hexachloroethane	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
Indeno[1,2,3-cd]pyrene	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
Isophorone	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
Naphthalene	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
Nitrobenzene	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
N-Nitroso-di-n-propylamine	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
N-nitrosodiphenylamine	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
Pentachlorophenol	UG/KG	459.5 U	440 U	444.5 U	1080 U	976 U	1100 U
Phenanthrene	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
Phenol	UG/KG	189.5 U	181.5 U	183.5 U	446 U	403 U	452 U
Pyrene	UG/KG	189.5 U	38 J	183.5 U	446 U	403 U	452 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB37-00	74-PDA-SB01-00	74-PDA-SB02-00	74-PDA-SB03-00	74-PDA-SB04-00	74-PDA-SB06-00
Laboratory Sample ID:	9401108-09	9402181-01	9402181-04	9402181-07	9402181-10	9402182-04
Date Sampled:	01/19/94	34384	34384	34384	34384	34384
Percent Solids	87.2	90.8	90.2	74.4	82.1	73

VOLATILES

Chloromethane	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
Bromomethane	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
Vinyl chloride	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
Chloroethane	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
Methylene chloride	UG/KG	9.00 J	5.5 U	5.5 U	7 U	7 U	7 U
Acetone	UG/KG	14.0 J	5.5 U	5.5 U	7 U	6 U	36
Carbon Disulfide	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
1,1-Dichloroethene	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
1,1-Dichloroethane	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
1,2-Dichloroethene(total)	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
Chloroform	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
1,2-Dichloroethane	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
2-Butanone	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
1,1,1-Trichloroethane	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
Carbon tetrachloride	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
Bromodichloromethane	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
1,2-Dichloropropane	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
cis-1,3-Dichloropropene	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
Trichloroethene	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
Dibromochloromethane	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
1,1,2-Trichloroethane	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
Benzene	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
trans-1,3-Dichloropropene	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
Bromoform	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
4-Methyl-2-pentanone	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
2-Hexanone	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
Tetrachloroethene	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
1,1,2,2-Tetrachloroethane	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
Toluene	UG/KG	2.0 J	5.5 U	5.5 U	7 U	6 U	6.85 U
Chlorobenzene	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
Ethylbenzene	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U
Styrene	UG/KG	1.0 J	5.5 U	5.5 U	7 U	6 U	6.85 U
Xylenes (total)	UG/KG	5.8 UJ	5.5 U	5.5 U	7 U	6 U	6.85 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FDA-SB37-00	74-PDA-SB01-00	74-PDA-SB02-00	74-PDA-SB03-00	74-PDA-SB04-00	74-PDA-SB06-00
Laboratory Sample ID:	9401108-09	9402181-01	9402181-04	9402181-07	9402181-10	9402182-04
Date Sampled:	01/19/94	34384	34384	34384	34384	34384
Percent Solids	87.2	90.8	90.2	74.4	82.1	73

PESTICIDE/PCBS						
alpha-BHC	UG/KG	0.98 UJ	0.935 UJ	0.945 UJ	1.15 UJ	1.165 UJ
beta-BHC	UG/KG	0.98 UJ	0.935 UJ	0.945 UJ	1.15 UJ	1.165 UJ
delta-BHC	UG/KG	0.98 UJ	0.935 UJ	0.945 UJ	1.15 UJ	1.165 UJ
Lindane (gamma-BHC)	UG/KG	0.98 UJ	0.935 UJ	0.945 UJ	1.15 UJ	1.165 UJ
Heptachlor	UG/KG	0.98 UJ	0.935 UJ	0.945 UJ	1.15 UJ	1.165 UJ
Aldrin	UG/KG	0.98 UJ	0.935 UJ	0.945 UJ	1.15 UJ	1.165 UJ
Heptachlor epoxide	UG/KG	0.98 UJ	0.935 UJ	0.945 UJ	1.15 UJ	1.165 UJ
Endosulfan I	UG/KG	0.98 UJ	0.935 UJ	0.945 UJ	1.15 UJ	1.165 UJ
Dieldrin	UG/KG	0.57 NJ	1.815 UJ	1.835 UJ	2.23 UJ	2.26 UJ
4,4'-DDE	UG/KG	1.190 J	1.815 UJ	1.835 UJ	2.23 UJ	523 J
Endrin	UG/KG	1.90 UJ	1.815 UJ	1.835 UJ	2.23 UJ	2.26 UJ
Endosulfan II	UG/KG	1.90 UJ	1.815 UJ	1.835 UJ	2.23 UJ	2.26 UJ
4,4'-DDD	UG/KG	1.90 UJ	1.815 UJ	1.835 UJ	2.23 UJ	3700 J
Endosulfan sulfate	UG/KG	1.90 UJ	1.815 UJ	1.835 UJ	2.23 UJ	2.26 UJ
4,4'-DDT	UG/KG	1.90 UJ	1.815 UJ	1.835 UJ	2.23 UJ	1119 J
Methoxychlor	UG/KG	9.8 UJ	9.35 UJ	9.45 UJ	11.5 UJ	11.65 UJ
Endrin ketone	UG/KG	1.90 UJ	1.815 UJ	1.835 UJ	2.23 UJ	2.26 UJ
Endrin aldehyde	UG/KG	1.90 UJ	1.815 UJ	1.835 UJ	2.23 UJ	2.26 UJ
alpha-Chlordane	UG/KG	0.98 UJ	0.935 UJ	0.945 UJ	1.15 UJ	1.165 UJ
gamma-Chlordane	UG/KG	0.98 UJ	0.935 UJ	0.945 UJ	1.15 UJ	1.165 UJ
Toxaphene	UG/KG	97.5 UJ	93.5 UJ	94.5 UJ	115 UJ	116.5 UJ
Aroclor 1016	UG/KG	19.0 UJ	18.15 UJ	18.35 UJ	22.3 UJ	22.6 UJ
Aroclor 1221	UG/KG	38.5 UJ	36.8 UJ	37.2 UJ	45.25 UJ	45.9 UJ
Aroclor 1232	UG/KG	19.0 UJ	18.15 UJ	18.35 UJ	22.3 UJ	22.6 UJ
Aroclor 1242	UG/KG	19.0 UJ	18.15 UJ	18.35 UJ	22.3 UJ	22.6 UJ
Aroclor 1248	UG/KG	19.0 UJ	18.15 UJ	18.35 UJ	22.3 UJ	22.6 UJ
Aroclor 1254	UG/KG	19.0 UJ	18.15 UJ	18.35 UJ	22.3 UJ	22.6 UJ
Aroclor 1260	UG/KG	19.0 UJ	18.15 UJ	18.35 UJ	22.3 UJ	22.6 UJ

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	74-FDA-SB37-00	74-PDA-SB01-00	74-PDA-SB02-00	74-PDA-SB03-00	74-PDA-SB04-00	74-PDA-SB06-00
Laboratory Sample ID:	9401108-09	9402181-01	9402181-04	9402181-07	9402181-10	9402182-04
Date Sampled:	01/19/94	34384	34384	34384	34384	34384
Percent Solids	87.2	90.8	90.2	74.4	82.1	73
CHEMICAL SURETY						
Acetophenone	UG/KG	189.5 U	N/A	N/A	N/A	N/A
Chloroacetophenone	UG/KG	189.5 U	N/A	N/A	N/A	N/A
Hydroxyacetophenone	UG/KG	950.0 U	N/A	N/A	N/A	N/A
Bis(2'-chloroethyl)disulfide	UG/KG	950.0 U	N/A	N/A	N/A	N/A
Bis(2'-chloroethyl)trisulfide	UG/KG	950.0 U	N/A	N/A	N/A	N/A
1,4-Dithiane	UG/KG	189.5 U	N/A	N/A	N/A	N/A
1,4-Oxathiane	UG/KG	189.5 U	N/A	N/A	N/A	N/A
THIODIGLYCOL						
Thiodiglycol	MG/KG		N/A	N/A	N/A	N/A

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SB07-00	74-PDA-SB08-00	74-PDA-SB09-00	74-PDA-SB10-00	74-PDA-SB11-00	74-PDA-SB12-00
Laboratory Sample ID:	9402179-03	9402182-08	9402179-06	9402179-09	9401133-02	9401133-03
Date Sampled:	34385	34384	34385	34385	34358	34358
Percent Solids	94.3	92.8	94.1	92.7	89.8	90
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	355 U	360 U	355 U	360 U	183.5 U
1,2,4-Trichlorobenzene	UG/KG	355 U	360 U	355 U	360 U	183.5 U
1,3-Dichlorobenzene	UG/KG	355 U	360 U	355 U	360 U	183.5 U
1,4-Dichlorobenzene	UG/KG	355 U	360 U	355 U	360 U	183.5 U
2-Chloronaphthalene	UG/KG	355 U	360 U	355 U	360 U	183.5 U
2-Chlorophenol	UG/KG	355 U	360 U	355 U	360 U	183.5 U
2-Methylnaphthalene	UG/KG	355 U	360 U	355 U	360 U	183.5 U
2-Methylphenol	UG/KG	355 U	360 U	355 U	360 U	183.5 U
2-Nitroaniline	UG/KG	900 U	900 U	900 U	900 U	444.5 U
2-Nitrophenol	UG/KG	355 U	360 U	355 U	360 U	183.5 U
2,2'-oxybis-(1-chloropropane)	UG/KG	355 U	360 U	355 UJ	360 U	183.5 U
2,4-Dichlorophenol	UG/KG	355 U	360 U	355 U	360 U	183.5 U
2,4-Dimethylphenol	UG/KG	355 U	360 U	355 U	360 U	183.5 U
2,4-Dinitrophenol	UG/KG	900 U	900 U	900 UJ	900 U	444.5 U
2,4-Dinitrotoluene	UG/KG	355 U	360 U	355 U	360 U	183.5 U
2,4,5-Trichlorophenol	UG/KG	900 U	900 U	900 U	900 U	444.5 U
2,4,6-Trichlorophenol	UG/KG	355 U	360 U	355 U	360 U	183.5 U
2,6-Dinitrotoluene	UG/KG	355 U	360 U	355 U	360 U	183.5 U
3-Nitroaniline	UG/KG	900 U	900 U	900 U	900 U	444.5 UJ
3,3'-Dichlorobenzidine	UG/KG	355 U	360 U	355 U	360 U	183.5 U
4-Bromophenyl-phenylether	UG/KG	355 U	360 U	355 U	360 U	183.5 U
4-Chloro-3-methylphenol	UG/KG	355 U	360 U	355 U	360 U	183.5 U
4-Chloroaniline	UG/KG	355 U	360 U	355 U	360 U	183.5 U
4-Chlorophenyl phenyl ether	UG/KG	355 U	360 U	355 U	360 U	183.5 U
4-Methylphenol	UG/KG	355 U	360 U	355 U	360 U	183.5 U
4-Nitroaniline	UG/KG	900 U	900 U	900 U	900 U	444.5 U
4-Nitrophenol	UG/KG	900 U	900 U	900 UJ	900 U	444.5 U
4,6-Dinitro-2-methylphenol	UG/KG	900 U	900 U	900 U	900 U	444.5 U
Acenaphthene	UG/KG	355 U	360 U	355 U	360 U	183.5 U
Acenaphthylene	UG/KG	355 U	360 U	355 U	360 U	183.5 U
Anthracene	UG/KG	355 U	360 U	355 U	360 U	183.5 U
Benzo[a]anthracene	UG/KG	355 U	360 U	355 U	360 U	183.5 U
Benzo[a]pyrene	UG/KG	355 U	360 U	355 U	360 U	183.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SB07-00	74-PDA-SB08-00	74-PDA-SB09-00	74-PDA-SB10-00	74-PDA-SB11-00	74-PDA-SB12-00
Laboratory Sample ID:	9402179-03	9402182-08	9402179-06	9402179-09	9401133-02	9401133-03
Date Sampled:	34385	34384	34385	34385	34358	34358
Percent Solids	94.3	92.8	94.1	92.7	89.8	90

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
Benzo[g,h,i]perylene	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
Benzo[k]fluoranthene	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
bis(2-Chloroethoxy) methane	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
bis(2-Chloroethyl) ether	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
bis(2-Ethylhexyl)phthalate	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
Butyl benzyl phthalate	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
Carbazole	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
Chrysene	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
Dibenzofuran	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
Dibenz[a,h]anthracene	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
Diethylphthalate	UG/KG	355 U	86 J	355 U	360 U	183.5 U	183.5 U
Dimethyl phthalate	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
di-n-Butylphthalate	UG/KG	355 U	360 U	355 U	360 U	185 U	183.5 U
di-n-Octylphthalate	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
Fluoranthene	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
Fluorene	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
Hexachlorobenzene	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
Hexachlorobutadiene	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
Hexachlorocyclopentadiene	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
Hexachloroethane	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
Indeno[1,2,3-cd]pyrene	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
Isophorone	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
Naphthalene	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
Nitrobenzene	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
N-Nitroso-di-n-propylamine	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
N-nitrosodiphenylamine	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
Pentachlorophenol	UG/KG	900 U	900 U	900 U	900 U	444.5 U	444.5 U
Phenanthrene	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
Phenol	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U
Pyrene	UG/KG	355 U	360 U	355 U	360 U	183.5 U	183.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SB07-00	74-PDA-SB08-00	74-PDA-SB09-00	74-PDA-SB10-00	74-PDA-SB11-00	74-PDA-SB12-00
Laboratory Sample ID:	9402179-03	9402182-08	9402179-06	9402179-09	9401133-02	9401133-03
Date Sampled:	34385	34384	34385	34385	34358	34358
Percent Solids	94.3	92.8	94.1	92.7	89.8	90
<u>VOLATILES</u>						
Chloromethane	UG/KG	5.5 U	5.4 U	5.5 U	5.5 U	5.55 U
Bromomethane	UG/KG	5.5 U	5.4 U	5.5 U	5.5 U	5.55 U
Vinyl chloride	UG/KG	5.5 U	5.4 U	5.5 U	5.5 U	5.55 U
Chloroethane	UG/KG	5.5 U	5.4 U	5.5 U	5.5 U	5.55 U
Methylene chloride	UG/KG	5.5 U	5.5 U	5.65 U	5.5 U	5.5 U
Acetone	UG/KG	5.5 U	9 J	16 J	5.5 U	5.5 UJ
Carbon Disulfide	UG/KG	5.5 U	5.4 U	5.5 U	5.5 U	5.55 U
1,1-Dichloroethene	UG/KG	5.5 U	5.4 U	5.5 U	5.5 U	5.55 U
1,1-Dichloroethane	UG/KG	5.5 U	5.4 U	5.5 U	5.5 U	5.55 U
1,2-Dichloroethene(total)	UG/KG	5.5 U	5.4 U	5.5 U	5.5 U	5.55 U
Chloroform	UG/KG	5.5 U	5.4 U	5.5 U	5.5 U	5.55 U
1,2-Dichloroethane	UG/KG	5.5 U	5.4 U	5.5 U	5.5 U	5.55 U
2-Butanone	UG/KG	5.5 U	5.4 U	5.5 U	5.5 U	5.55 U
1,1,1-Trichloroethane	UG/KG	5.5 U	5.4 U	5.5 U	5.5 U	5.55 U
Carbon tetrachloride	UG/KG	5.5 U	5.4 U	5.5 U	5.5 U	5.55 U
Bromodichloromethane	UG/KG	5.5 U	5.4 U	5.5 U	5.5 U	5.55 U
1,2-Dichloropropane	UG/KG	5.5 U	5.4 U	5.5 U	5.5 U	5.55 U
cis-1,3-Dichloropropene	UG/KG	5.5 U	5.4 U	5.5 U	5.5 U	5.55 U
Trichloroethene	UG/KG	5.5 U	5.4 U	5.5 U	5.5 U	3 J
Dibromochloromethane	UG/KG	5.5 U	5.4 U	5.5 U	5.5 U	5.55 U
1,1,2-Trichloroethane	UG/KG	5.5 U	5.4 U	5.5 U	5.5 U	5.55 U
Benzene	UG/KG	5.5 U	5.4 U	5.5 U	5.5 U	5.55 U
trans-1,3-Dichloropropene	UG/KG	5.5 U	5.4 U	5.5 U	5.5 U	5.55 U
Bromoform	UG/KG	5.5 U	5.4 U	5.5 U	5.5 U	5.55 U
4-Methyl-2-pentanone	UG/KG	5.5 UJ	5.4 U	5.5 U	5.5 U	5.55 U
2-Hexanone	UG/KG	5.5 UJ	5.4 U	5.5 U	5.5 U	5.55 U
Tetrachloroethene	UG/KG	5.5 UJ	5.4 U	5.5 U	5.5 U	5.55 U
1,1,2,2-Tetrachloroethane	UG/KG	5.5 UJ	5.4 U	5.5 U	5.5 U	5.55 U
Toluene	UG/KG	5.5 UJ	1 J	5.5 U	5.5 U	5.55 UJ
Chlorobenzene	UG/KG	5.5 UJ	5.4 U	5.5 U	5.5 U	5.55 U
Ethylbenzene	UG/KG	5.5 UJ	5.4 U	5.5 U	5.5 U	5.55 U
Styrene	UG/KG	5.5 UJ	5.4 U	5.5 U	5.5 U	5.55 U
Xylenes (total)	UG/KG	5.5 UJ	5.4 U	5.5 U	5.5 U	5.55 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SB07-00	74-PDA-SB08-00	74-PDA-SB09-00	74-PDA-SB10-00	74-PDA-SB11-00	74-PDA-SB12-00
Laboratory Sample ID:	9402179-03	9402182-08	9402179-06	9402179-09	9401133-02	9401133-03
Date Sampled:	34385	34384	34385	34385	34358	34358
Percent Solids	94.3	92.8	94.1	92.7	89.8	90

PESTICIDE/PCBS

alpha-BHC	UG/KG	0.905 UJ	0.915 UJ	0.905 UJ	0.915 UJ	0.945 UJ	0.945 UJ
beta-BHC	UG/KG	0.905 UJ	0.915 UJ	0.905 UJ	0.915 UJ	0.945 U	0.945 U
delta-BHC	UG/KG	0.905 UJ	0.915 UJ	0.905 UJ	0.915 UJ	0.945 UJ	0.945 UJ
Lindane (gamma-BHC)	UG/KG	0.905 UJ	0.915 UJ	0.905 UJ	0.915 UJ	0.945 U	0.945 U
Heptachlor	UG/KG	0.905 U	0.915 U	0.905 UJ	0.915 U	0.945 U	0.945 U
Aldrin	UG/KG	0.905 U	0.915 U	0.905 UJ	0.915 U	0.945 U	0.945 U
Heptachlor epoxide	UG/KG	0.905 U	0.915 U	0.905 UJ	0.915 U	0.945 U	0.945 U
Endosulfan I	UG/KG	0.905 U	0.915 U	0.905 UJ	0.915 U	0.945 U	0.945 U
Dieldrin	UG/KG	1.755 U	1.775 U	1.755 UJ	1.775 U	0.32 J	1.835 U
4,4'-DDE	UG/KG	8.36 J	2.28 J	1.755 UJ	1.775 U	1.56 J	1.835 U
Endrin	UG/KG	1.755 U	1.775 U	1.755 UJ	1.775 U	1.835 U	1.835 U
Endosulfan II	UG/KG	1.755 U	1.775 U	1.755 UJ	1.775 U	1.835 U	1.835 U
4,4'-DDD	UG/KG	1.755 UJ	1.67 J	1.755 UJ	1.775 UJ	0.98 NJ	1.835 U
Endosulfan sulfate	UG/KG	1.755 U	1.775 U	1.755 UJ	1.775 U	1.835 U	1.835 U
4,4'-DDT	UG/KG	4.86 J	3.03 J	1.755 UJ	1.775 UJ	1.02 NJ	1.835 UJ
Methoxychlor	UG/KG	9.05 U	9.15 U	9.05 UJ	9.15 U	9.45 UJ	9.45 UJ
Endrin ketone	UG/KG	1.755 U	1.775 U	1.755 UJ	1.775 U	1.835 U	1.835 U
Endrin aldehyde	UG/KG	1.755 U	1.775 U	1.755 UJ	1.775 U	0.5 NJ	1.835 U
alpha-Chlordane	UG/KG	0.905 U	0.915 U	0.905 UJ	0.915 U	0.44 J	0.945 U
gamma-Chlordane	UG/KG	0.905 U	0.915 U	0.905 UJ	0.915 U	0.79 J	0.945 U
Toxaphene	UG/KG	90.5 U	91.5 U	90.5 UJ	91.5 U	94.5 U	94.5 U
Aroclor 1016	UG/KG	17.55 U	17.75 U	17.55 UJ	17.75 U	18.35 U	18.35 U
Aroclor 1221	UG/KG	35.65 U	36 U	35.65 UJ	36 U	37.2 U	37.2 U
Aroclor 1232	UG/KG	17.55 U	17.75 U	17.55 UJ	17.75 U	18.35 U	18.35 U
Aroclor 1242	UG/KG	17.55 U	17.75 U	17.55 UJ	17.75 U	18.35 U	18.35 U
Aroclor 1248	UG/KG	17.55 U	17.75 U	17.55 UJ	17.75 U	18.35 U	18.35 U
Aroclor 1254	UG/KG	17.55 U	17.75 U	17.55 UJ	17.75 U	18.35 U	18.35 U
Aroclor 1260	UG/KG	17.55 U	17.75 U	17.55 UJ	17.75 U	18.35 U	18.35 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	74-PDA-SB07-00	74-PDA-SB08-00	74-PDA-SB09-00	74-PDA-SB10-00	74-PDA-SB11-00	74-PDA-SB12-00
Laboratory Sample ID:	9402179-03	9402182-08	9402179-06	9402179-09	9401133-02	9401133-03
Date Sampled:	34385	34384	34385	34385	34358	34358
Percent Solids	94.3	92.8	94.1	92.7	89.8	90
<u>CHEMICAL SURETY</u>						
Acetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Chloroacetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Hydroxyacetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Bis(2'-chloroethyl)disulfide	UG/KG	N/A	N/A	N/A	N/A	N/A
Bis(2'-chloroethyl)trisulfide	UG/KG	N/A	N/A	N/A	N/A	N/A
1,4-Dithiane	UG/KG	N/A	N/A	N/A	N/A	N/A
1,4-Oxathiane	UG/KG	N/A	N/A	N/A	N/A	N/A
<u>THIODIGLYCOL</u>						
Thiodiglycol	MG/KG	N/A	N/A	N/A	N/A	N/A

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SB13-00	74-PDA-SB14-00	74-PDA-SB15-00	74-FPA-SB01-00	74-FPA-SB02-00	74-FPA-SB03-00
Laboratory Sample ID:	9401133-01	9401134-01	9401134-02	9402179-12	9402179-15	9402180-02A
Date Sampled:	34358	34358	34358	34386	34386	34386
Percent Solids	86.3	88.6	83.1	89.7	92.5	87.5
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	191.5 U	186.5 U	198 U	370 U	187.5 U
1,2,4-Trichlorobenzene	UG/KG	191.5 U	186.5 U	198 U	370 U	187.5 U
1,3-Dichlorobenzene	UG/KG	191.5 U	186.5 U	198 U	370 U	187.5 U
1,4-Dichlorobenzene	UG/KG	191.5 U	186.5 U	198 U	370 U	187.5 U
2-Chloronaphthalene	UG/KG	191.5 U	186.5 U	198 U	950 U	187.5 U
2-Chlorophenol	UG/KG	191.5 U	186.5 U	198 U	370 U	187.5 U
2-Methylnaphthalene	UG/KG	191.5 U	186.5 U	198 U	370 U	187.5 U
2-Methylphenol	UG/KG	191.5 U	186.5 U	198 U	370 U	187.5 U
2-Nitroaniline	UG/KG	464 U	452 U	480 U	950 U	454.5 U
2-Nitrophenol	UG/KG	191.5 U	186.5 U	198 U	370 U	187.5 U
2,2'-oxybis-(1-chloropropane)	UG/KG	191.5 U	186.5 U	198 U	370 U	187.5 U
2,4-Dichlorophenol	UG/KG	191.5 U	186.5 U	198 U	370 U	187.5 U
2,4-Dimethylphenol	UG/KG	191.5 U	186.5 U	198 U	370 U	187.5 U
2,4-Dinitrophenol	UG/KG	464 U	452 U	480 U	950 U	454.5 U
2,4-Dinitrotoluene	UG/KG	191.5 U	186.5 U	198 U	370 U	187.5 U
2,4,5-Trichlorophenol	UG/KG	464 U	452 U	480 U	444.5 U	454.5 U
2,4,6-Trichlorophenol	UG/KG	191.5 U	186.5 U	198 U	370 U	187.5 U
2,6-Dinitrotoluene	UG/KG	191.5 U	186.5 U	198 U	370 U	187.5 U
3-Nitroaniline	UG/KG	464 UJ	452 UJ	480 UJ	950 U	454.5 U
3,3'-Dichlorobenzidine	UG/KG	195 U	186.5 U	198 U	370 U	187.5 U
4-Bromophenyl-phenylether	UG/KG	191.5 U	186.5 U	198 U	370 U	187.5 U
4-Chloro-3-methylphenol	UG/KG	191.5 U	186.5 U	198 U	370 U	187.5 U
4-Chloroaniline	UG/KG	191.5 U	186.5 U	198 U	370 U	187.5 U
4-Chlorophenyl phenyl ether	UG/KG	191.5 U	186.5 U	198 U	370 U	187.5 U
4-Methylphenol	UG/KG	191.5 U	186.5 U	198 U	370 U	187.5 U
4-Nitroaniline	UG/KG	464 U	452 U	480 U	950 U	454.5 U
4-Nitrophenol	UG/KG	464 U	452 U	480 U	950 U	454.5 U
4,6-Dinitro-2-methylphenol	UG/KG	464 U	452 U	480 U	950 U	454.5 U
Acenaphthene	UG/KG	191.5 U	186.5 U	198 U	370 U	187.5 U
Acenaphthylene	UG/KG	191.5 U	186.5 U	198 U	370 U	187.5 U
Anthracene	UG/KG	191.5 U	186.5 U	198 U	370 U	187.5 U
Benzo[a]anthracene	UG/KG	191.5 U	186.5 U	198 U	370 U	187.5 U
Benzo[a]pyrene	UG/KG	191.5 U	186.5 U	198 U	370 U	187.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SB13-00	74-PDA-SB14-00	74-PDA-SB15-00	74-FPA-SB01-00	74-FPA-SB02-00	74-FPA-SB03-00
Laboratory Sample ID:	9401133-01	9401134-01	9401134-02	9402179-12	9402179-15	9402180-02A
Date Sampled:	34358	34358	34358	34386	34386	34386
Percent Solids	86.3	88.6	83.1	89.7	92.5	87.5

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
Benzo[g,h,i]perylene	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
Benzo[k]fluoranthene	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
bis(2-Chloroethoxy) methane	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
bis(2-Chloroethyl) ether	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
bis(2-Ethylhexyl)phthalate	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
Butyl benzyl phthalate	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
Carbazole	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
Chrysene	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
Dibenzofuran	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
Dibenz[a,h]anthracene	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
Diethylphthalate	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
Dimethyl phthalate	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
di-n-Butylphthalate	UG/KG	191.5 U	186.5 U	198 U	370 U	126 J	187.5 U
di-n-Octylphthalate	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
Fluoranthene	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
Fluorene	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
Hexachlorobenzene	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
Hexachlorobutadiene	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
Hexachlorocyclopentadiene	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
Hexachloroethane	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
Indeno[1,2,3-cd]pyrene	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
Isophorone	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
Naphthalene	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
Nitrobenzene	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
N-Nitroso-di-n-propylamine	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
N-nitrosodiphenylamine	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
Pentachlorophenol	UG/KG	464 U	452 U	480 U	950 U	900 U	454.5 U
Phenanthrene	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
Phenol	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U
Pyrene	UG/KG	191.5 U	186.5 U	198 U	370 U	360 U	187.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SB13-00	74-PDA-SB14-00	74-PDA-SB15-00	74-FPA-SB01-00	74-FPA-SB02-00	74-FPA-SB03-00
Laboratory Sample ID:	9401133-01	9401134-01	9401134-02	9402179-12	9402179-15	9402180-02A
Date Sampled:	34358	34358	34358	34386	34386	34386
Percent Solids	86.3	88.6	83.1	89.7	92.5	87.5

VOLATILES

	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
Chloromethane	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
Bromomethane	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
Vinyl chloride	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
Chloroethane	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
Methylene chloride	6 U	5.5 U	6 U	5.55 U	5.5 U	6.5 U
Acetone	5.8 UJ	5.65 U	11 U	34 J	5.5 U	23 J
Carbon Disulfide	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
1,1-Dichloroethene	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
1,1-Dichloroethane	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
1,2-Dichloroethene(total)	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
Chloroform	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
1,2-Dichloroethane	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
2-Butanone	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
1,1,1-Trichloroethane	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
Carbon tetrachloride	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
Bromodichloromethane	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
1,2-Dichloropropane	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
cis-1,3-Dichloropropene	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
Trichloroethene	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
Dibromochloromethane	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
1,1,2-Trichloroethane	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
Benzene	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
trans-1,3-Dichloropropene	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
Bromoform	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
4-Methyl-2-pentanone	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
2-Hexanone	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
Tetrachloroethene	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
1,1,2,2-Tetrachloroethane	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
Toluene	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
Chlorobenzene	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
Ethylbenzene	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
Styrene	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U
Xylenes (total)	5.8 U	5.65 U	6 U	5.5 U	5.5 U	5.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SB13-00	74-PDA-SB14-00	74-PDA-SB15-00	74-FPA-SB01-00	74-FPA-SB02-00	74-FPA-SB03-00
Laboratory Sample ID:	9401133-01	9401134-01	9401134-02	9402179-12	9402179-15	9402180-02A
Date Sampled:	34358	34358	34358	34386	34386	34386
Percent Solids	86.3	86.6	83.1	89.7	92.5	87.5
PESTICIDE/PCBS						
alpha-BHC	UG/KG	9.9 UJ	0.955 UJ	1.025 UJ	0.945 UJ	0.925 UJ
beta-BHC	UG/KG	9.9 UJ	0.955 U	1.025 U	0.945 UJ	0.925 UJ
delta-BHC	UG/KG	9.9 UJ	0.955 UJ	1.025 UJ	0.945 UJ	0.925 UJ
Lindane (gamma-BHC)	UG/KG	9.9 UJ	0.955 U	1.025 U	0.945 UJ	0.925 UJ
Heptachlor	UG/KG	298 J	0.96 U	0.82 U	0.945 U	0.55 J
Aldrin	UG/KG	9.9 UJ	0.955 U	1.025 U	0.945 U	0.925 U
Heptachlor epoxide	UG/KG	9.9 UJ	0.955 U	1.025 U	0.945 U	1.43 J
Endosulfan I	UG/KG	9.9 UJ	0.955 U	1.025 U	0.945 U	0.925 U
Dieldrin	UG/KG	706 NJ	1.855 U	1.99 U	1.835 U	1.795 U
4,4'-DDE	UG/KG	1730 J	1.855 U	0.91 J	11.6 J	60.6 J
Endrin	UG/KG	19.2 UJ	1.855 U	1.99 U	1.835 U	1.795 U
Endosulfan II	UG/KG	19.2 UJ	0.76 NJ	1.99 U	1.835 U	1.795 U
4,4'-DDD	UG/KG	19.2 UJ	1.855 U	1.99 U	2.62 J	76.8 J
Endosulfan sulfate	UG/KG	19.2 UJ	1.855 U	1.99 U	1.835 U	1.795 U
4,4'-DDT	UG/KG	3840 J	1.855 UJ	4.22 J	7.2 J	540 J
Methoxychlor	UG/KG	166 J	9.55 UJ	10.25 UJ	9.45 U	9.25 U
Endrin ketone	UG/KG	19.2 U	1.855 U	1.99 U	1.835 U	1.795 U
Endrin aldehyde	UG/KG	19.2 UJ	2.29 NJ	1.99 U	1.835 U	1.795 U
alpha-Chlordane	UG/KG	1160 J	0.955 U	1.025 U	0.945 U	4.35 J
gamma-Chlordane	UG/KG	1680 J	0.955 U	1.025 U	0.945 U	3.74 J
Toxaphene	UG/KG	990 UJ	95.5 U	102.5 U	94.5 U	92.5 U
Aroclor 1016	UG/KG	192 UJ	18.55 U	19.9 U	18.35 U	17.95 U
Aroclor 1221	UG/KG	389.5 UJ	37.65 U	40.35 U	37.2 U	36.4 U
Aroclor 1232	UG/KG	192 UJ	18.55 U	19.9 U	18.35 U	17.95 U
Aroclor 1242	UG/KG	192 UJ	18.55 U	19.9 U	18.35 U	17.95 U
Aroclor 1248	UG/KG	192 UJ	18.55 U	19.9 U	18.35 U	17.95 U
Aroclor 1254	UG/KG	192 UJ	18.55 U	19.9 U	18.35 U	17.95 U
Aroclor 1260	UG/KG	192 UJ	18.55 U	19.9 U	18.35 U	17.95 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	74-PDA-SB13-00	74-PDA-SB14-00	74-PDA-SB15-00	74-FPA-SB01-00	74-FPA-SB02-00	74-FPA-SB03-00
Laboratory Sample ID:	9401133-01	9401134-01	9401134-02	9402179-12	9402179-15	9402180-02A
Date Sampled:	34358	34358	34358	34386	34386	34386
Percent Solids	86.3	88.6	83.1	89.7	92.5	87.5
CHEMICAL SURETY						
Acetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Chloroacetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Hydroxyacetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Bis(2'-chloroethyl)disulfide	UG/KG	N/A	N/A	N/A	N/A	N/A
Bis(2'-chloroethyl)trisulfide	UG/KG	N/A	N/A	N/A	N/A	N/A
1,4-Dithiane	UG/KG	N/A	N/A	N/A	N/A	N/A
1,4-Oxathiane	UG/KG	N/A	N/A	N/A	N/A	N/A
THIODIGLYCOL						
Thiodiglycol	MG/KG	N/A	N/A	N/A	N/A	N/A

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	74-FPA-SB04-00	74-FPA-SB05-00	74-FPA-SB06-00	74-FPA-SB07-00	74-FPA-SB08-00	74-FPA-SB09-00
Laboratory Sample ID:	9402179-18	9402180-05A	9402180-08A	9402180-12A	9402180-15A	9402180-18A
Date Sampled:	34386	34385	34385	34385	34385	34385
Percent Solids	95.2	93.9	90.9	93.7	89.1	90.4
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U
1,2,4-Trichlorobenzene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U
1,3-Dichlorobenzene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U
1,4-Dichlorobenzene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U
2-Chloronaphthalene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U
2-Chlorophenol	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U
2-Methylnaphthalene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U
2-Methylphenol	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U
2-Nitroaniline	UG/KG	900 U	425.5 U	439.5 U	425.5 U	449.5 U
2-Nitrophenol	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U
2,2'-oxybis-(1-chloropropane)	UG/KG			181.5 U	175.5 U	185.5 U
2,4-Dichlorophenol	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U
2,4-Dimethylphenol	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U
2,4-Dinitrophenol	UG/KG	900 U	425.5 U	439.5 U	425.5 U	449.5 U
2,4-Dinitrotoluene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U
2,4,5-Trichlorophenol	UG/KG	900 U	425.5 U	439.5 U	425.5 U	449.5 U
2,4,6-Trichlorophenol	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U
2,6-Dinitrotoluene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U
3-Nitroaniline	UG/KG	900 U	425.5 U	439.5 U	425.5 U	449.5 U
3,3'-Dichlorobenzidine	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U
4-Bromophenyl-phenylether	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U
4-Chloro-3-methylphenol	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U
4-Chloroaniline	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U
4-Chlorophenyl phenyl ether	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U
4-Methylphenol	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U
4-Nitroaniline	UG/KG	900 U	425.5 U	439.5 U	425.5 U	449.5 U
4-Nitrophenol	UG/KG	900 U	425.5 U	439.5 U	425.5 U	449.5 U
4,6-Dinitro-2-methylphenol	UG/KG	900 U	425.5 U	439.5 U	425.5 U	449.5 U
Acenaphthene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U
Acenaphthylene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U
Anthracene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U
Benzo[a]anthracene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U
Benzo[a]pyrene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FPA-SB04-00	74-FPA-SB05-00	74-FPA-SB06-00	74-FPA-SB07-00	74-FPA-SB08-00	74-FPA-SB09-00
Laboratory Sample ID:	9402179-18	9402180-05A	9402180-08A	9402180-12A	9402180-15A	9402180-18A
Date Sampled:	34386	34385	34385	34385	34385	34385
Percent Solids	95.2	93.9	90.9	93.7	69.1	90.4

SEMIVOLATILES Cont.

	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
Benzo[b]fluoranthene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
Benzo[g,h,i]perylene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
Benzo[k]fluoranthene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
bis(2-Chloroethoxy) methane	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
bis(2-Chloroethyl) ether	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
bis(2-Ethylhexyl)phthalate	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
Butyl benzyl phthalate	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
Carbazole	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
Chrysene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
Dibenzofuran	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
Dibenz[a,h]anthracene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
Diethylphthalate	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
Dimethyl phthalate	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
di-n-Butylphthalate	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
di-n-Octylphthalate	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
Fluoranthene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
Fluorene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
Hexachlorobenzene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
Hexachlorobutadiene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
Hexachlorocyclopentadiene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
Hexachloroethane	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
Indeno[1,2,3-cd]pyrene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
Isophorone	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
Naphthalene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
Nitrobenzene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
N-Nitroso-di-n-propylamine	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
N-nitrosodiphenylamine	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
Pentachlorophenol	UG/KG	900 U	425.5 U	439.5 U	425.5 U	449.5 U	444.5 U
Phenanthrene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
Phenol	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U
Pyrene	UG/KG	350 U	175.5 U	181.5 U	175.5 U	185.5 U	183.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FPA-SB04-00	74-FPA-SB05-00	74-FPA-SB06-00	74-FPA-SB07-00	74-FPA-SB08-00	74-FPA-SB09-00
Laboratory Sample ID:	9402179-18	9402180-05A	9402180-08A	9402180-12A	9402180-15A	9402180-18A
Date Sampled:	34386	34385	34385	34385	34385	34385
Percent Solids	95.2	93.9	90.9	93.7	89.1	90.4
<u>VOLATILES</u>						
Chloromethane	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
Bromomethane	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
Vinyl chloride	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
Chloroethane	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
Methylene chloride	UG/KG	5.5 U	5.5 UJ	5.5 U	6 UJ	5.5 U
Acetone	UG/KG	29	5.5 UJ	5.5 UJ	5.5 UJ	9 U
Carbon Disulfide	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
1,1-Dichloroethene	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
1,1-Dichloroethane	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
1,2-Dichloroethene(total)	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
Chloroform	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
1,2-Dichloroethane	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
2-Butanone	UG/KG	5.5 U			5.5 UJ	5.5 U
1,1,1-Trichloroethane	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
Carbon tetrachloride	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
Bromodichloromethane	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
1,2-Dichloropropane	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
cis-1,3-Dichloropropene	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
Trichloroethene	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
Dibromochloromethane	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
1,1,2-Trichloroethane	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
Benzene	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
trans-1,3-Dichloropropene	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
Bromoform	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
4-Methyl-2-pentanone	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
2-Hexanone	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
Tetrachloroethene	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
1,1,2,2-Tetrachloroethane	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
Toluene	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
Chlorobenzene	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
Ethylbenzene	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
Styrene	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U
Xylenes (total)	UG/KG	5.5 U	5.5 UJ	5.5 U	5.5 UJ	5.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FPA-SB04-00	74-FPA-SB05-00	74-FPA-SB06-00	74-FPA-SB07-00	74-FPA-SB08-00	74-FPA-SB09-00
Laboratory Sample ID:	9402179-18	9402180-05A	9402180-08A	9402180-12A	9402180-15A	9402180-18A
Date Sampled:	34386	34385	34385	34385	34385	34385
Percent Solids	95.2	93.9	90.9	93.7	89.1	90.4

<u>PESTICIDE/PCBS</u>							
alpha-BHC	UG/KG	0.895 UJ	0.905 UJ	0.935 UJ	0.905 UJ	0.955 UJ	0.945 UJ
beta-BHC	UG/KG	0.895 UJ	0.905 UJ	0.935 UJ	0.905 UJ	0.955 UJ	0.945 UJ
delta-BHC	UG/KG	0.895 UJ	0.905 UJ	0.935 UJ	0.905 UJ	0.955 UJ	0.945 UJ
Lindane (gamma-BHC)	UG/KG	0.895 UJ	0.905 UJ	0.935 UJ	0.905 UJ	0.955 UJ	0.945 UJ
Heptachlor	UG/KG	0.895 U	0.905 U	0.61 J	0.905 UJ	0.955 UJ	0.945 UJ
Aldrin	UG/KG	0.895 U	0.905 U	0.935 U	0.905 UJ	0.955 UJ	0.945 UJ
Heptachlor epoxide	UG/KG	0.895 U	0.905 U	0.935 U	0.905 UJ	0.955 UJ	0.945 UJ
Endosulfan I	UG/KG	0.895 U	0.905 U	0.935 U	0.905 UJ	0.955 UJ	0.945 UJ
Dieldrin	UG/KG	1.735 U	1.755 U	3.07 NJ	1.755 U	1.855 UJ	1.835 UJ
4,4'-DDE	UG/KG	1.735 U	1.755 U	107 J	0.67 J	1.855 UJ	1.835 UJ
Endrin	UG/KG	1.735 U	1.755 U	1.06 J	1.755 U	1.855 UJ	1.835 UJ
Endosulfan II	UG/KG	1.735 U	1.755 U	1.815 U	1.755 U	1.855 UJ	1.835 UJ
4,4'-DDD	UG/KG	1.735 UJ	1.755 UJ	9.4 NJ	1.755 U	1.855 UJ	1.835 UJ
Endosulfan sulfate	UG/KG	1.735 U	1.755 U	1.815 U	1.755 U	1.855 UJ	1.835 UJ
4,4'-DDT	UG/KG	1.735 UJ	1.755 UJ	212 J	0.81 J	1.855 UJ	1.835 UJ
Methoxychlor	UG/KG	8.95 U	9.05 U	9.35 U	9.05 U	9.55 UJ	9.45 UJ
Endrin ketone	UG/KG	1.735 U	1.755 U	1.815 U	1.755 U	1.855 UJ	1.835 UJ
Endrin aldehyde	UG/KG	1.735 U	1.755 U	2.13 J	1.755 U	1.855 UJ	1.835 UJ
alpha-Chlordane	UG/KG	0.895 U	0.905 U	2.55 J	0.905 UJ	0.955 UJ	0.945 UJ
gamma-Chlordane	UG/KG	0.895 U	0.905 U	2.18 J	0.905 UJ	0.955 UJ	0.945 UJ
Toxaphene	UG/KG	89.5 U	90.5 U	93.5 U	90.5 U	95.5 UJ	94.5 UJ
Aroclor 1016	UG/KG	17.35 U	17.55 U	18.15 U	17.55 U	18.55 UJ	18.35 UJ
Aroclor 1221	UG/KG	35.25 U	35.65 U	36.8 U	35.65 U	37.65 UJ	37.2 UJ
Aroclor 1232	UG/KG	17.35 U	17.55 U	18.15 U	17.55 U	18.55 UJ	18.35 UJ
Aroclor 1242	UG/KG	17.35 U	17.55 U	18.15 U	17.55 U	18.55 UJ	18.35 UJ
Aroclor 1248	UG/KG	17.35 U	17.55 U	18.15 U	17.55 U	18.55 UJ	18.35 UJ
Aroclor 1254	UG/KG	17.35 U	17.55 U	18.15 U	17.55 U	18.55 UJ	18.35 UJ
Aroclor 1260	UG/KG	17.35 U	17.55 U	18.15 U	17.55 U	18.55 UJ	18.35 UJ

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	74-FPA-SB04-00	74-FPA-SB05-00	74-FPA-SB06-00	74-FPA-SB07-00	74-FPA-SB08-00	74-FPA-SB09-00
Laboratory Sample ID:	9402179-18	9402180-05A	9402180-08A	9402180-12A	9402180-15A	9402180-18A
Date Sampled:	34386	34385	34385	34385	34385	34385
Percent Solids	95.2	93.9	90.9	93.7	89.1	90.4
CHEMICAL SURETY						
Acetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Chloroacetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Hydroxyacetophenone	UG/KG	N/A	N/A	N/A	N/A	N/A
Bis(2'-chloroethyl)disulfide	UG/KG	N/A	N/A	N/A	N/A	N/A
Bis(2'-chloroethyl)trisulfide	UG/KG	N/A	N/A	N/A	N/A	N/A
1,4-Dithiane	UG/KG	N/A	N/A	N/A	N/A	N/A
1,4-Oxathiane	UG/KG	N/A	N/A	N/A	N/A	N/A
THIODIGLYCOL						
Thiodiglycol	MG/KG	N/A	N/A	N/A	N/A	N/A

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled: Percent Solids		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	ND	NA	NA	NA	NA
1,2,4-Trichlorobenzene	UG/KG	ND	NA	NA	NA	NA
1,3-Dichlorobenzene	UG/KG	ND	NA	NA	NA	NA
1,4-Dichlorobenzene	UG/KG	ND	NA	NA	NA	NA
2-Chloronaphthalene	UG/KG	ND	NA	NA	NA	NA
2-Chlorophenol	UG/KG	ND	NA	NA	NA	NA
2-Methylnaphthalene	UG/KG	ND	NA	NA	NA	NA
2-Methylphenol	UG/KG	ND	NA	NA	NA	NA
2-Nitroaniline	UG/KG	ND	NA	NA	NA	NA
2-Nitrophenol	UG/KG	ND	NA	NA	NA	NA
2,2'-oxybis-(1-chloropropane)	UG/KG	700 R	NA	NA	NA	NA
2,4-Dichlorophenol	UG/KG	ND	NA	NA	NA	NA
2,4-Dimethylphenol	UG/KG	ND	NA	NA	NA	NA
2,4-Dinitrophenol	UG/KG	ND	NA	NA	NA	NA
2,4-Dinitrotoluene	UG/KG	ND	NA	NA	NA	NA
2,4,5-Trichlorophenol	UG/KG	ND	NA	NA	NA	NA
2,4,6-Trichlorophenol	UG/KG	ND	NA	NA	NA	NA
2,6-Dinitrotoluene	UG/KG	ND	NA	NA	NA	NA
3-Nitroaniline	UG/KG	ND	NA	NA	NA	NA
3,3'-Dichlorobenzidine	UG/KG	ND	NA	NA	NA	NA
4-Bromophenyl-phenylether	UG/KG	ND	NA	NA	NA	NA
4-Chloro-3-methylphenol	UG/KG	240 J	219.9	76.9	236.6	237.1
4-Chloroaniline	UG/KG	ND	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	UG/KG	ND	NA	NA	NA	NA
4-Methylphenol	UG/KG	ND	NA	NA	NA	NA
4-Nitroaniline	UG/KG	ND	NA	NA	NA	NA
4-Nitrophenol	UG/KG	ND	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	UG/KG	ND	NA	NA	NA	NA
Acenaphthene	UG/KG	39 J	219.0	77.4	235.8	238.5
Acenaphthylene	UG/KG	ND	NA	NA	NA	NA
Anthracene	UG/KG	ND	NA	NA	NA	NA
Benzo[a]anthracene	UG/KG	ND	NA	NA	NA	NA
Benzo[a]pyrene	UG/KG	130 J	220.3	74.8	236.6	233.4

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled: Percent Solids		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
<u>SEMIVOLATILES Cont.</u>						
	Benzo[b]fluoranthene	UG/KG ND	NA	NA	NA	NA
	Benzo[g,h,i]perylene	UG/KG 160 J	218.7	77.0	235.4	235.1
	Benzo[k]fluoranthene	UG/KG ND	NA	NA	NA	NA
	bis(2-Chloroethoxy) methane	UG/KG ND	NA	NA	NA	NA
	bis(2-Chloroethyl) ether	UG/KG 180 J	210.7	86.7	229.5	252.5
	bis(2-Ethylhexyl)phthalate	UG/KG 240 J	222.1	73.9	238.1	234.9
	Butyl benzyl phthalate	UG/KG ND	NA	NA	NA	NA
	Carbazole	UG/KG ND	NA	NA	NA	NA
	Chrysene	UG/KG ND	NA	NA	NA	NA
	Dibenzofuran	UG/KG ND	NA	NA	NA	NA
	Dibenz[a,h]anthracene	UG/KG ND	NA	NA	NA	NA
	Diethylphthalate	UG/KG 866	224.5	109.2	248.3	239.5
	Dimethyl phthalate	UG/KG ND	NA	NA	NA	NA
	di-n-Butylphthalate	UG/KG 126 J	195.2	93.9	215.6	228.0
	di-n-Octylphthalate	UG/KG ND	NA	NA	NA	NA
	Fluoranthene	UG/KG ND	NA	NA	NA	NA
	Fluorene	UG/KG ND	NA	NA	NA	NA
	Hexachlorobenzene	UG/KG ND	NA	NA	NA	NA
	Hexachlorobutadiene	UG/KG ND	NA	NA	NA	NA
	Hexachlorocyclopentadiene	UG/KG ND	NA	NA	NA	NA
	Hexachloroethane	UG/KG ND	NA	NA	NA	NA
	Indeno[1,2,3-cd]pyrene	UG/KG ND	NA	NA	NA	NA
	isophorone	UG/KG ND	NA	NA	NA	NA
	Naphthalene	UG/KG ND	NA	NA	NA	NA
	Nitrobenzene	UG/KG ND	NA	NA	NA	NA
	N-Nitroso-di-n-propylamine	UG/KG ND	NA	NA	NA	NA
	N-nitrosodiphenylamine	UG/KG ND	NA	NA	NA	NA
	Pentachlorophenol	UG/KG ND	NA	NA	NA	NA
	Phenanthrene	UG/KG ND	NA	NA	NA	NA
	Phenol	UG/KG ND	NA	NA	NA	NA
	Pyrene	UG/KG 38 J	219.0	77.5	235.8	238.7

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled: Percent Solids		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
VOLATILES						
Chloromethane	UG/KG	ND	NA	NA	NA	NA
Bromomethane	UG/KG	ND	NA	NA	NA	NA
Vinyl chloride	UG/KG	ND	NA	NA	NA	NA
Chloroethane	UG/KG	ND	NA	NA	NA	NA
Methylene chloride	UG/KG	23 J	7.3	3.5	8.0	7.8
Acetone	UG/KG	210 J	18.8	30.9	25.5	21.8
Carbon Disulfide	UG/KG	ND	NA	NA	NA	NA
1,1-Dichloroethene	UG/KG	ND	NA	NA	NA	NA
1,1-Dichloroethane	UG/KG	ND	NA	NA	NA	NA
1,2-Dichloroethene(total)	UG/KG	ND	NA	NA	NA	NA
Chloroform	UG/KG	ND	NA	NA	NA	NA
1,2-Dichloroethane	UG/KG	ND	NA	NA	NA	NA
2-Butanone	UG/KG	11.4 R	NA	NA	NA	NA
1,1,1-Trichloroethane	UG/KG	ND	NA	NA	NA	NA
Carbon tetrachloride	UG/KG	ND	NA	NA	NA	NA
Bromodichloromethane	UG/KG	ND	NA	NA	NA	NA
1,2-Dichloropropane	UG/KG	ND	NA	NA	NA	NA
cis-1,3-Dichloropropene	UG/KG	ND	NA	NA	NA	NA
Trichloroethene	UG/KG	8 J	5.6	0.8	5.8	5.9
Dibromochloromethane	UG/KG	ND	NA	NA	NA	NA
1,1,2-Trichloroethane	UG/KG	ND	NA	NA	NA	NA
Benzene	UG/KG	ND	NA	NA	NA	NA
trans-1,3-Dichloropropene	UG/KG	ND	NA	NA	NA	NA
Bromoform	UG/KG	ND	NA	NA	NA	NA
4-Methyl-2-pentanone	UG/KG	ND	NA	NA	NA	NA
2-Hexanone	UG/KG	13 R	NA	NA	NA	NA
Tetrachloroethene	UG/KG	ND	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	UG/KG	ND	NA	NA	NA	NA
Toluene	UG/KG	3 J	5.6	0.9	5.8	6.0
Chlorobenzene	UG/KG	ND	NA	NA	NA	NA
Ethylbenzene	UG/KG	ND	NA	NA	NA	NA
Styrene	UG/KG	1 J	5.7	0.7	5.8	6.0
Xylenes (total)	UG/KG	6 J	5.7	0.5	5.8	5.8

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled: Percent Solids		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
PESTICIDE/PCBS						
alpha-BHC	UG/KG	1.96 R	17.5	125.7	45.0	2.4
beta-BHC	UG/KG	2 R	NA	NA	NA	NA
delta-BHC	UG/KG	1.96 R	NA	NA	NA	NA
Lindane (gamma-BHC)	UG/KG	1.96 R	NA	NA	NA	NA
Heptachlor	UG/KG	298 J	22.3	130.9	51.0	3.5
Aldrin	UG/KG	1.96 R	17.5	125.7	45.0	2.4
Heptachlor epoxide	UG/KG	1.96 R	17.5	125.7	45.0	2.4
Endosulfan I	UG/KG	1.96 R	NA	NA	NA	NA
Dieldrin	UG/KG	706 NJ	14.1	91.7	34.2	4.0
4,4'-DDE	UG/KG	1730 J	45.6	233.7	96.8	21.2
Endrin	UG/KG	3.8 R	2.4	3.1	3.1	2.5
Endosulfan II	UG/KG	3.8 R	2.4	3.1	3.1	2.5
4,4'-DDD	UG/KG	3700 J	68.4	481.1	173.9	11.7
Endosulfan sulfate	UG/KG	3.8 R	NA	NA	NA	NA
4,4'-DDT	UG/KG	3840 J	102.4	525.4	218.6	30.5
Methoxychlor	UG/KG	166 J	13.9	23.1	18.9	13.4
Endrin ketone	UG/KG	3.8 R	NA	NA	NA	NA
Endrin aldehyde	UG/KG	3.8 R	2.4	3.1	3.1	2.5
alpha-Chlordane	UG/KG	1160 J	21.1	150.8	54.2	3.1
gamma-Chlordane	UG/KG	1680 J	29.9	218.5	77.8	3.2
Toxaphene	UG/KG	196 R	NA	NA	NA	NA
Aroclor 1016	UG/KG	38 R	NA	NA	NA	NA
Aroclor 1221	UG/KG	77 R	NA	NA	NA	NA
Aroclor 1232	UG/KG	38 R	NA	NA	NA	NA
Aroclor 1242	UG/KG	38 R	NA	NA	NA	NA
Aroclor 1248	UG/KG	38 R	NA	NA	NA	NA
Aroclor 1254	UG/KG	38 R	NA	NA	NA	NA
Aroclor 1260	UG/KG	38 R	NA	NA	NA	NA

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled: Percent Solids		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
CHEMICAL SURETY						
Acetophenone	UG/KG	ND	NA	NA	NA	NA
Chloroacetophenone	UG/KG	ND	NA	NA	NA	NA
Hydroxyacetophenone	UG/KG	190 J	934.7	130.7	971.2	1026.4
Bis(2'-chloroethyl)disulfide	UG/KG	ND	NA	NA	NA	NA
Bis(2'-chloroethyl)trisulfide	UG/KG	ND	NA	NA	NA	NA
1,4-Dithiane	UG/KG	ND	NA	NA	NA	NA
1,4-Oxathiane	UG/KG	ND	NA	NA	NA	NA
THIODIGLYCOL						
Thiodiglycol	MG/KG	7.5 R	3.6	0.1	3.7	NA

APPENDIX P.19
**SITE 74 FORMER DISPOSAL/POTENTIAL DISPOSAL/
FORMER PEST CONTROL AREA SURFACE SOIL INORGANICS**

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL INORGANICS

Client Sample ID:	74-FDA-SB01-00	74-FDA-SB02-00	74-FDA-SB03-00	74-FDA-SB04-00	74-FDA-SB05-00	74-FDA-SB06-00
Laboratory Sample ID:	9401109-01	9401109-04	9401108-01	9401108-10	9401108-13	9401116-01A
Date Sampled:			01/19/94	01/20/94	01/20/94	
Percent Solids	85.4	78.5	86.0	83.9	88.0	82.6

	UNITS					
Aluminum	MG/KG	2590	5210	5230.0	3500.0	6960.0
Antimony	MG/KG	0.925 U	1.005 U	0.92 UJ	0.94 UJ	0.90 UJ
Arsenic	MG/KG	0.3395 U	0.3695 U	0.337 UJ	0.346 UJ	0.330 UJ
Barium	MG/KG	1.605 U	6.38	7.62	5.12	6.53
Beryllium	MG/KG	0.151 U	0.1645 U	0.150 U	0.154 U	0.147 U
Cadmium	MG/KG	0.275 U	0.2995 U	0.588	0.280 U	0.686
Calcium	MG/KG	36.8	125	14.6 U	154.0	14.2 U
Chromium	MG/KG	3.11	4.38	3.89	4.36	6.32
Cobalt	MG/KG	2.27 U	2.47 U	2.26 U	2.31 U	2.21 U
Copper	MG/KG	1.895 U	2.065 U	1.89 U	1.93 U	1.84 U
Iron	MG/KG	489	649	870.0 J	1060.0 J	984.0 J
Lead	MG/KG	5.53	5.23	3.40 J	4.33 J	2.45 J
Magnesium	MG/KG	12 U	75.3	73.1	69.7	127.0
Manganese	MG/KG	1.44	2.96	1.81	2.85	3.70
Mercury	MG/KG	0.0295 UJ	0.32 UJ	0.050 U	0.043 U	0.050 U
Nickel	MG/KG	1.59 U	1.73 U	1.58 UJ	1.62 UJ	1.55 UJ
Potassium	MG/KG	89.5 U	97 U	34.9 U	35.8 U	98.6
Selenium	MG/KG	0.752	1.12	0.294 U	0.302 U	0.288 U
Silver	MG/KG	0.047 UJ	0.051 UJ	0.047 UJ	0.048 UJ	0.046 UJ
Sodium	MG/KG	42.05 U	45.75 U	22.1 UJ	22.7 UJ	21.6 UJ
Thallium	MG/KG	0.54 UJ	0.585 UJ	0.116 U	0.119 UJ	0.114 U
Vanadium	MG/KG	4.03	5.92	7.29	4.41	7.12
Zinc	MG/KG	1.575 U	1.35 U	1.88 U	3.18 U	1.91 U
Total Cyanide	MG/KG	1.17	1.27	1.16	1.19	1.14

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL INORGANICS

Client Sample ID:	74-FDA-SB07-00	74-FDA-SB08-00	74-FDA-SB09-00	74-FDA-SB10-00	74-FDA-SB11-00	74-FDA-SB12-00	
Laboratory Sample ID:	9401116-05A	9401116-08A	9401116-11A	9401116-14A	9401121-01A	9401121-05A	
Date Sampled:							
Percent Solids	89.2	84.4	83	82.7	90.1	84.3	
	<u>UNITS</u>						
Aluminum	MG/KG	8020	4810	5210	4240	4150	10600
Antimony	MG/KG	0.885 U	0.935 UJ	0.95 UJ	0.955 UJ	0.875 UJ	0.935 UJ
Arsenic	MG/KG	0.325 U	0.3435 U	0.3495 U	0.3505 U	0.897	1.16
Barium	MG/KG	7.48	6.86	10.3	5.11	4.67	10.1
Beryllium	MG/KG	0.1445 U	0.153 U	0.1555 U	0.156 U	0.143 U	0.153 U
Cadmium	MG/KG	0.2635 U	0.2785 U	0.283 U	0.284 U	0.261 U	0.279 U
Calcium	MG/KG	43.6	52.9	382	157	13.85 U	90.8
Chromium	MG/KG	7.71	9.86	4.11	3.42	8.36 J	10 J
Cobalt	MG/KG	2.175 U	2.3 U	2.335 U	2.345 U	2.155 U	2.3 U
Copper	MG/KG	1.815 U	5.56	1.95 U	1.96 U	1.8 U	1.92 U
Iron	MG/KG	2990	34200	754	490	1470 J	5790 J
Lead	MG/KG	4.03	4.73	4.68	4.62	2.75	3.85
Magnesium	MG/KG	183	78.2	107	65.7	40.2	178
Manganese	MG/KG	2.28	96.2	3.95	1.83	1.48	2.6
Mercury	MG/KG	0.03 U	0.04 U	0.05 U	0.06 U	0.015	0.0295 U
Nickel	MG/KG	1.525 U	4.78	1.64 U	1.645 U	1.51 U	1.615 U
Potassium	MG/KG	129	35.55 U	80.7	36.3 U	33.3 UJ	35.6 UJ
Selenium	MG/KG	0.2835 U	0.3 U	0.305 UJ	0.306 U	0.281 UJ	0.3 UJ
Silver	MG/KG	0.045 UJ	0.05 UJ	0.05 UJ	0.05 UJ	0.0445 UJ	0.0475 UJ
Sodium	MG/KG	21.3 UJ	22.5 UJ	22.9 UJ	22.95 UJ	21.1 U	22.55 U
Thallium	MG/KG	0.515 U	0.545 U	0.555 U	0.555 U	0.111 UJ	0.1185 UJ
Vanadium	MG/KG	9.47	11	6.72	2.005 U	4.95	13.2
Zinc	MG/KG	3.81	7.9	5.16	3.2	8.81	6.83
Total Cyanide	MG/KG	1.12	1.18	1.2	1.21	1.11	1.19

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL INORGANICS

Client Sample ID:	74-FDA-SB13-00	74-FDA-SB14-00	74-FDA-SB15-00	74-FDA-SB16-00	74-FDA-SB17-00	74-FDA-SB18-00
Laboratory Sample ID:	9401121-08A	9401121-11A	9401132-02	9401132-05	9401132-08	9401132-11
Date Sampled:						
Percent Solids	87.5	81	89.4	88.4	81.6	83.5

	<u>UNITS</u>						
Aluminum	MG/KG	5050	4220	8650	8580	4440	4830
Antimony	MG/KG	0.9 UJ	0.975 UJ	0.885 UJ	0.895 UJ	0.97 UJ	0.945 UJ
Arsenic	MG/KG	0.3315 U	0.358 U	1	0.33 U	0.355 U	0.345 U
Barium	MG/KG	5.43	4.69	9.39	8.85	6.05	4.03
Beryllium	MG/KG	0.1475 U	0.159 U	0.144 U	0.146 U	0.158 U	0.1545 U
Cadmium	MG/KG	0.2685 U	0.29 U	0.263 U	0.266 U	0.288 U	0.2815 U
Calcium	MG/KG	137	144	74.6	109	228	85
Chromium	MG/KG	2.34 J	2.96 J	9.82	8.94	4.91	3.99
Cobalt	MG/KG	2.215 U	2.395 U	2.17 U	2.195 U	2.375 U	2.325 U
Copper	MG/KG	1.85 U	2 U	1.81 U	1.83 U	1.985 U	1.94 U
Iron	MG/KG	833 J	435 J	4480	5400	701	830
Lead	MG/KG	4.86	4.44	5.51	2.8	4.63	3.7
Magnesium	MG/KG	74.2	67.3	151	135	70.5	63.7
Manganese	MG/KG	3.26	3.29	2.7	1.6	2.62	2.12
Mercury	MG/KG	0.068	0.075	0.028 U	0.028 U	0.09	0.067
Nickel	MG/KG	1.555 U	1.68 U	3.71	1.54 U	1.665 U	1.63 U
Potassium	MG/KG	34.3 UJ	37.05 UJ	155	81.8	36.75 U	35.9 U
Selenium	MG/KG	0.289 UJ	0.3125 UJ	0.726 J	0.609	1.2	0.909
Silver	MG/KG	0.0455 UJ	0.0495 UJ	0.0445 UJ	0.045 UJ	0.049 UJ	0.048 UJ
Sodium	MG/KG	21.7 U	23.45 U	21.25 U	21.5 U	23.3 U	22.75 U
Thallium	MG/KG	0.114 UJ	0.1235 UJ	0.515 U	0.52 U	0.565 U	0.55 U
Vanadium	MG/KG	4.23	2.05 U	11.4	10.5	2.035 U	5
Zinc	MG/KG	13.7	4.41	6.25	3.29	3.56	3.33
Total Cyanide	MG/KG	1.14	1.23	1.12	1.13	1.22	1.2

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL INORGANICS

Client Sample ID:	74-FDA-SB19-00	74-FDA-SB20-00	74-FDA-SB21-00	74-FDA-SB22-00	74-FDA-SB23-00	74-FDA-SB24-00
Laboratory Sample ID:	9401132-14	9401132-17	9401138-03	9401138-06	9401138-10	9401140-01
Date Sampled:						
Percent Solids	87.7	90.6	89.8	86.6	86.6	89.1
	UNITS					
Aluminum	MG/KG	6510	10900	4600	8910	5110
Antimony	MG/KG	0.9 UJ	0.87 UJ	0.88 UJ	0.91 UJ	0.885 U
Arsenic	MG/KG	0.33 U	0.32 U	0.323 U	0.335 U	0.764
Barium	MG/KG	5.51	13.3	4.14	10.5	6.08
Beryllium	MG/KG	0.1475 U	0.1425 U	0.1435 U	0.149 U	0.145 U
Cadmium	MG/KG	0.268 U	0.2595 U	0.2615 U	0.2715 U	0.2635 U
Calcium	MG/KG	111	342	51.7	138	51900
Chromium	MG/KG	6.26	9.32	4.4	7.68	5.57
Cobalt	MG/KG	2.21 U	2.14 U	2.16 U	2.24 U	2.175 U
Copper	MG/KG	1.845 U	1.79 U	1.805 U	5.07	1.82 U
Iron	MG/KG	3060	5040	1110	5400	2840
Lead	MG/KG	3.79	4.8	2.27 J	4.45 J	4.23
Magnesium	MG/KG	112	256	67.5	179	790
Manganese	MG/KG	2.9	6.44	1.99	2.62	46.9
Mercury	MG/KG	0.0285 U	0.064	0.0365 UJ	0.0305 UJ	0.028 UJ
Nickel	MG/KG	1.55 U	1.5 U	1.515 U	1.57 U	4.4
Potassium	MG/KG	34.2 U	226	85 U	88 U	85.5 U
Selenium	MG/KG	0.834	0.899	0.2815 UJ	0.292 UJ	0.284 U
Silver	MG/KG	0.0455 UJ	0.044 UJ	0.0445 UJ	0.046 UJ	0.045 UJ
Sodium	MG/KG	21.65 U	20.95 U	21.05 U	21.8 U	134
Thallium	MG/KG	0.525 U	0.51 U	0.51 U	0.53 U	0.515 UJ
Vanadium	MG/KG	7.13	15.1	6.03	12.4	11
Zinc	MG/KG	3.54	5.28	1.395 U	2.41 U	13.8
Total Cyanide	MG/KG	1.14	1.1	1.11	1.15	1.12

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL INORGANICS

Client Sample ID:	74-FDA-SB25-00	74-FDA-SB26-00	74-FDA-SB27-00	74-FDA-SB28-00	74-FDA-SB29-00	74-FDA-SB30-00
Laboratory Sample ID:	9401140-04	9401135-01A	9401148-01A	9401148-07A	9401148-04A	9401148-10A
Date Sampled:						
Percent Solids	84.8	88	88.1	88	87.4	91.3

	UNITS					
Aluminum	MG/KG	3530	707	5950	4050	5520
Antimony	MG/KG	0.93 U	0.9 U	0.895 UJ	0.9 UJ	0.905 UJ
Arsenic	MG/KG	0.342 U	0.3295 UJ	0.329 UJ	0.688 J	0.332 UJ
Barium	MG/KG	5.44	11	7.93	6.96	4.91
Beryllium	MG/KG	0.152 U	0.1465 U	0.125 U	0.125 U	0.126 U
Cadmium	MG/KG	0.277 U	0.267 U	0.4735 U	0.474 U	0.477 U
Calcium	MG/KG	251	288	527	77100	2460
Chromium	MG/KG	2.61	1.47 U	3.93	5.46	4.82
Cobalt	MG/KG	2.29 U	1.11 U	1.105 U	1.11 U	1.115 U
Copper	MG/KG	1.91 U	1.84 U	2.155 U	2.16 U	2.175 U
Iron	MG/KG	495	437	2050	2110	784
Lead	MG/KG	4.75	10.7	4.47	5.12	3.9
Magnesium	MG/KG	14.9 U	29.6	114	1180	154
Manganese	MG/KG	1.71	4.11	3.07	72.6	4.52
Mercury	MG/KG	0.0295 UJ	0.0285 U	0.0285 U	0.0285 U	0.0285 U
Nickel	MG/KG	1.605 U	3.15	1.545 U	3.2	1.555 U
Potassium	MG/KG	90 U	86.5 U	196	250	198
Selenium	MG/KG	0.2985 U	0.705 J	0.287 UJ	0.2875 UJ	0.2895 UJ
Silver	MG/KG	0.047 UJ	0.0455 U	0.0455 UJ	0.0455 UJ	0.046 UJ
Sodium	MG/KG	118	21.15 UJ	105 J	130 J	860
Thallium	MG/KG	0.54 UJ	0.52 U	0.52 U	0.52 U	0.525 U
Vanadium	MG/KG	1.96 U	1.885 U	4.09	8.29	6.28
Zinc	MG/KG	1.535 U	12.8	4.03	18.9	1.74 U
Total Cyanide	MG/KG	1.18	1.14	1.14	1.14	1.14

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL INORGANICS

Client Sample ID:	74-FDA-SB31-00	74-FDA-SB32-00	74-FDA-SB33-00	74-FDA-SB34-00	74-FDA-SB35-00	74-FDA-SB36-00	
Laboratory Sample ID:	9401148-13A	9401148-16A	9401108-04	9401108-06	9401108-07	9401108-08	
Date Sampled:			01/19/94	01/19/94	01/19/94	01/19/94	
Percent Solids	88	90	86.7	83.2	93.6	84.6	
	<u>UNITS</u>						
Aluminum	MG/KG	6000	7220	3210.0	997.0	36.3	298.0
Antimony	MG/KG	0.9 UJ	0.88 UJ	0.91 UJ	0.95 UJ	0.85 UJ	0.94 UJ
Arsenic	MG/KG	0.3295 UJ	0.322 UJ	0.335 UJ	0.349 UJ	0.310 UJ	0.343 UJ
Barium	MG/KG	9.26	8.98	4.58	4.20	1.47 U	12.8
Beryllium	MG/KG	0.125 U	0.122 U	0.149 U	0.155 U	0.138 U	0.153 U
Cadmium	MG/KG	0.474 U	0.4635 U	0.543	0.283 U	0.251 U	0.584
Calcium	MG/KG	955	2330	51.2	96.4	13.4 U	158.0
Chromium	MG/KG	4.98	5.15	2.85	2.02	2.03	0.87 U
Cobalt	MG/KG	1.11 U	1.085 U	2.24 U	2.33 U	2.07 U	2.30 U
Copper	MG/KG	2.16 U	2.11 U	1.87 U	22.0	1.73 U	1.92 U
Iron	MG/KG	1640	2610	895.0 J	148.0 J	31.2 J	118.0 J
Lead	MG/KG	15.4	4.43	6.47 J	4.43 J	0.878 J	3.39 J
Magnesium	MG/KG	185	148	64.5	23.4	6.3 U	49.0
Manganese	MG/KG	4.19	3.25	2.50	1.70	2.41	1.83
Mercury	MG/KG	0.064	0.028 U	0.048 U	0.046 U	0.042 U	0.049 U
Nickel	MG/KG	1.545 U	1.51 U	1.57 UJ	1.64 UJ	1.45 UJ	1.61 UJ
Potassium	MG/KG	170	140	165.0	36.1 U	32.1 U	35.5 U
Selenium	MG/KG	0.2875 UJ	0.281 UJ	0.292 U	0.304 U	0.270 U	0.299 U
Silver	MG/KG	0.0455 UJ	0.0445 UJ	0.046 UJ	0.048 UJ	0.043 UJ	0.047 UJ
Sodium	MG/KG	468	339 J	21.9 UJ	22.9 UJ	20.3 UJ	22.5 UJ
Thallium	MG/KG	0.52 U	0.51 U	0.116 UJ	0.120 U	0.107 U	0.118 U
Vanadium	MG/KG	7.82	8.19	4.42	2.00 U	1.78 U	1.96 U
Zinc	MG/KG	7.87	3.76	2.06 U	26.7	1.32 U	1.47 U
Total Cyanide	MG/KG	1.14	1.11	1.15	1.20	1.07	1.18

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL INORGANICS

Client Sample ID:	74-FDA-SB37-00	74-PDA-SB01-00	74-PDA-SB02-00	74-PDA-SB03-00	74-PDA-SB04-00	74-PDA-SB06-00
Laboratory Sample ID:	9401108-09	9402181-01	9402181-04	9402181-07	9402181-10	9402182-04
Date Sampled:	01/19/94					
Percent Solids	87.2	90.8	90.2	74.4	82.1	73

	UNITS	74-FDA-SB37-00	74-PDA-SB01-00	74-PDA-SB02-00	74-PDA-SB03-00	74-PDA-SB04-00	74-PDA-SB06-00
Aluminum	MG/KG	5700.0	4010	2190	1570	3030	1120
Antimony	MG/KG	0.91 UJ	0.835 U	1.72	1.02 U	0.925 U	1.04 U
Arsenic	MG/KG	0.333 UJ	0.242 U	0.244 U	0.2955 U	0.268 U	0.3015 U
Barium	MG/KG	4.06	3.54	1.375 U	4.41	7.67	3.89
Beryllium	MG/KG	0.148 U	0.0835 U	0.084 U	0.102 U	0.0925 U	0.104 U
Cadmium	MG/KG	0.270 U	0.3515 U	0.3535 U	0.429 U	0.3885 U	0.437 U
Calcium	MG/KG	14.4 U	442	137	333	433	91.8
Chromium	MG/KG	4.39	4.14	3.72	2.59	4.96	1.14 U
Cobalt	MG/KG	2.23 U	1.76 U	1.775 U	2.15 U	1.95 U	2.19 U
Copper	MG/KG	1.86 U	1.795 U	1.805 U	2.19 U	1.985 U	2.23 U
Iron	MG/KG	599.0 J	936	575	405	1630	330
Lead	MG/KG	4.17 J	2.93 J	2.83	2.39 J	4.18 J	3.07
Magnesium	MG/KG	48.0	65.2	38.1	37.6	81.1	9.85 U
Manganese	MG/KG	2.06	0.78 U	0.785 U	3.82	4.13	2.38
Mercury	MG/KG	0.043 U	0.0275 U	0.0275 U	0.0335 U	0.0305 U	0.035 UJ
Nickel	MG/KG	1.56 UJ	3.17 U	3.19 U	3.87 U	3.51 U	3.945 U
Potassium	MG/KG	34.4 U	84 U	84.5 U	102.5 U	93 U	104.5 U
Selenium	MG/KG	0.290 U	0.176 U	0.1775 U	0.215 U	0.195 U	0.219 U
Silver	MG/KG	0.046 UJ	0.176 U	0.1775 U	0.215 U	0.195 U	0.219 U
Sodium	MG/KG	21.8 UJ	40.5 U	40.8 U	49.45 U	44.8 U	50.5 UJ
Thallium	MG/KG	0.115 U	0.3305 U	0.3325 U	0.403 U	0.3655 U	0.411 U
Vanadium	MG/KG	6.84	2.245 U	2.26 U	2.74 U	2.485 U	2.795 U
Zinc	MG/KG	3.49	1.695 U	1.575 U	1.9 U	1.86 U	3.86
Total Cyanide	MG/KG	1.15	1.1	1.11	1.34	1.22	1.37

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL INORGANICS

Client Sample ID:	74-PDA-SB07-00	74-PDA-SB08-00	74-PDA-SB09-00	74-PDA-SB10-00	74-PDA-SB11-00	74-PDA-SB12-00	
Laboratory Sample ID:	9402179-03	9402182-08	9402179-06	9402179-09	9401133-02	9401133-03	
Date Sampled:							
Percent Solids	94.3	92.8	94.1	92.7	89.8	90	
	UNITS						
Aluminum	MG/KG	195	562	451	595	793	3030
Antimony	MG/KG	0.805 U	3.43	0.81 U	0.82 U	0.88 UJ	0.88 UJ
Arsenic	MG/KG	0.233 U	0.237 U	0.234 U	0.2375 U	0.3225 U	0.322 U
Barium	MG/KG	2.89	4.57	1.32 U	3.7	8.14	8
Beryllium	MG/KG	0.0805 U	0.082 U	0.081 U	0.082 U	0.1445 U	0.1445 U
Cadmium	MG/KG	0.338 U	0.344 U	0.339 U	0.344 U	0.267 U	0.2665 U
Calcium	MG/KG	102	390	44.4	62.2	136	112
Chromium	MG/KG	0.88 U	0.895 U	1.89	2.52	0.8 U	2.54
Cobalt	MG/KG	1.695 U	1.725 U	1.7 U	1.725 U	2.15 U	2.15 U
Copper	MG/KG	1.73 U	1.755 U	1.73 U	1.76 U	1.815 U	1.81 U
Iron	MG/KG	111	368	454	414	420	1530
Lead	MG/KG	1.58	5.46	1.69	4.12	7.6 J	4.7 J
Magnesium	MG/KG	7.6 U	19.8	17.4	16.3	21	57.8
Manganese	MG/KG	1.91	3.6	2.16	1.97	2.5	5.03
Mercury	MG/KG	0.0265 U	0.025 UJ	0.0265 U	0.027 U	0.028 U	0.028 UJ
Nickel	MG/KG	3.055 U	3.105 U	3.06 U	3.105 U	1.5 U	1.5 U
Potassium	MG/KG	81 U	82 U	81 U	82.5 U	57 U	70 U
Selenium	MG/KG	0.1695 U	0.1725 UJ	0.17 U	0.1725 U	1.09	0.874
Silver	MG/KG	0.1695 U	0.1725 U	0.17 U	0.1725 U	0.0445 UJ	0.0445 UJ
Sodium	MG/KG	39 U	39.65 UJ	39.1 U	39.7 U	21.15 UJ	21.1 UJ
Thallium	MG/KG	0.318 U	0.323 U	0.319 U	0.3235 U	0.51 U	0.51 U
Vanadium	MG/KG	2.165 U	2.2 U	2.17 U	2.2 U	1.845 U	4.2
Zinc	MG/KG	2.27	4.22	2.94	3.28	1.1 U	1.26 U
Total Cyanide	MG/KG	1.06	1.08	1.06	1.08	1.11	1.11

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL INORGANICS

Client Sample ID:	74-PDA-SB13-00	74-PDA-SB14-00	74-PDA-SB15-00	74-FPA-SB01-00	74-FPA-SB02-00	74-FPA-SB03-00
Laboratory Sample ID:	9401133-01	9401134-01	9401134-02	9402179-12	9402179-15	9402180-02A
Date Sampled:						
Percent Solids	86.3	88.6	83.1	89.7	92.5	87.5

	UNITS	74-PDA-SB13-00	74-PDA-SB14-00	74-PDA-SB15-00	74-FPA-SB01-00	74-FPA-SB02-00	74-FPA-SB03-00
Aluminum	MG/KG	2860	740	3100	3070	2210	3640
Antimony	MG/KG	0.915 UJ	0.89 UJ	0.95 UJ	0.845 U	0.82 U	0.87 UJ
Arsenic	MG/KG	1.15	0.3275 U	0.349 U	0.245 U	0.649	0.2515 UJ
Barium	MG/KG	16.3	1.55 U	13	9.66	54.7	3.35
Beryllium	MG/KG	0.1505 U	0.145 U	0.155 U	0.0845 U	0.082 U	0.087 U
Cadmium	MG/KG	0.278 U	0.27 U	0.29 U	0.3555 U	0.345 U	0.3645 U
Calcium	MG/KG	1160	40.4	156	992	175000	17 U
Chromium	MG/KG	2.21	0.8 U	2.87	3.98	10.6	3.95
Cobalt	MG/KG	2.25 U	2.2 U	2.35 U	1.785 U	1.73 U	1.83 U
Copper	MG/KG	1.89 U	1.84 U	1.96 U	1.815 U	1.76 U	1.86 U
Iron	MG/KG	1540	416	1820	1240	2530	466
Lead	MG/KG	4.92 J	3.47 J	4.24 J	7.08	13.2	1.71
Magnesium	MG/KG	60.6	20.7	44.1	102	2790	83.7
Manganese	MG/KG	5.26	2.8	2.82	6.8	32.1	3.42
Mercury	MG/KG	0.029 UJ	0.028 UJ	0.025 UJ	0.028 U	0.027 U	0.0285 U
Nickel	MG/KG	1.6 U	1.535 U	1.635 U	3.21 U	3.115 U	3.29 U
Potassium	MG/KG	73 U	57.5 U	61.5 U	85 U	351	87 U
Selenium	MG/KG	1.14	0.857	0.615	0.1785 U	0.173 UJ	0.183 UJ
Silver	MG/KG	0.0465 UJ	0.045 UJ	0.048 UJ	0.1785 U	0.173 U	0.183 U
Sodium	MG/KG	22 UJ	21.45 UJ	22.85 UJ	41 U	219	42.05 UJ
Thallium	MG/KG	0.535 U	0.52 U	0.555 U	0.3345 U	0.3245 U	0.343 U
Vanadium	MG/KG	5.92	1.85 U	4.1	2.275 U	8.6	2.33 U
Zinc	MG/KG	2.59 U	1.05 U	2.13 U	7.1	33.9	1.885 U
Total Cyanide	MG/KG	1.16	1.13	1.2	1.11	1.08	1.14

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL INORGANICS

Client Sample ID:	74-FPA-SB04-00	74-FPA-SB05-00	74-FPA-SB06-00	74-FPA-SB07-00	74-FPA-SB08-00	74-FPA-SB09-00
Laboratory Sample ID:	9402179-18	9402180-05A	9402180-08A	9402180-12A	9402180-15A	9402180-18A
Date Sampled:						
Percent Solids	95.2	93.9	90.9	93.7	89.1	90.4

	UNITS					
Aluminum	MG/KG	308	290	2780	257	4620
Antimony	MG/KG	0.8 U	0.81 UJ	0.835 UJ	0.81 UJ	0.85 UJ
Arsenic	MG/KG	0.231 U	0.234 UJ	0.621 J	0.235 UJ	0.247 UJ
Barium	MG/KG	1.3 U	8.68	8.45	3.93	3.75
Beryllium	MG/KG	0.08 U	0.081 U	0.0835 U	0.081 U	0.085 U
Cadmium	MG/KG	0.335 U	0.3395 U	0.351 U	0.3405 U	0.358 U
Calcium	MG/KG	34.9	70.6	22000	111	16.7 U
Chromium	MG/KG	0.87 U	0.885 U	4.7	0.885 U	2.95
Cobalt	MG/KG	1.68 U	1.705 U	1.76 U	1.71 U	1.795 U
Copper	MG/KG	1.71 U	1.735 U	1.795 U	1.74 U	1.83 U
Iron	MG/KG	265	146	1500	155	1960
Lead	MG/KG	0.946	0.983	5.98	1.91	2.03
Magnesium	MG/KG	7.55 U	7.65 U	442	7.65 U	52.6
Manganese	MG/KG	2.5	2.69	9.77	4.42	3.76
Mercury	MG/KG	0.092	0.0265 U	0.0275 U	0.0265 U	0.028 U
Nickel	MG/KG	3.025 U	3.065 U	3.17 U	3.075 U	3.23 U
Potassium	MG/KG	80 U	81 U	84 U	81.5 U	85.5 U
Selenium	MG/KG	0.168 UJ	0.1705 UJ	0.176 UJ	0.171 UJ	0.1795 UJ
Silver	MG/KG	0.168 U	0.1705 U	0.176 U	0.171 U	0.1795 U
Sodium	MG/KG	38.65 U	39.2 UJ	40.5 UJ	39.25 UJ	41.3 UJ
Thallium	MG/KG	0.315 U	0.3195 U	0.33 U	0.32 U	0.3365 U
Vanadium	MG/KG	2.14 U	2.17 U	6.09	2.175 U	5.75
Zinc	MG/KG	1.11 U	2.07 U	11.6	1.375 U	1.895 U
Total Cyanide	MG/KG	1.05	1.06	1.1	1.07	1.12

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL INORGANICS

Client Sample ID:				NORMAL	LOG-NORMAL	
Laboratory Sample ID:				UPPER 95%	UPPER 95%	
Date Sampled:	MAXIMUM	ARITHMETIC	STANDARD	CONFIDENCE	CONFIDENCE	
Percent Solids	DETECTED	MEAN	DEVIATION	INTERVAL	INTERVAL	
	<u>UNITS</u>					
Aluminum	MG/KG	10900	3954.3	2742.6	4550.6	7683.0
Antimony	MG/KG	3.43	1.0	0.3	1.0	1.0
Arsenic	MG/KG	1.16	0.39	0.21	0.44	0.42
Barium	MG/KG	54.7	7.2	7.0	8.7	8.4
Beryllium	MG/KG	ND	NA	NA	NA NA	
Cadmium	MG/KG	0.686	0.34	0.10	0.36	0.36
Calcium	MG/KG	175000	5731.6	25312.0	11234.5	4548.2
Chromium	MG/KG	10.6	4.2	2.6	4.7	5.3
Cobalt	MG/KG	ND	NA	NA	NA NA	
Copper	MG/KG	22	2.4	2.7	3.0	2.5
Iron	MG/KG	34200	1919.4	4463.0	2889.7	2591.6
Lead	MG/KG	15.4	4.5	2.7	5.1	5.2
Magnesium	MG/KG	2790	157.2	391.0	242.2	202.6
Manganese	MG/KG	96.2	7.1	16.2	10.6	6.6
Mercury	MG/KG	0.092	0.04	0.04	0.05	0.05
Nickel	MG/KG	4.78	2.3	0.9	2.5	2.5
Potassium	MG/KG	351	94.8	61.9	108.3	110.2
Selenium	MG/KG	1.2	0.40	0.29	0.46	0.45
Silver	MG/KG	0.116 J	0.09	0.06	0.10	0.10
Sodium	MG/KG	860	68.2	128.9	96.2	70.3
Thallium	MG/KG	ND	NA	NA	NA NA	
Vanadium	MG/KG	15.1	5.2	3.5	6.0	6.2
Zinc	MG/KG	33.9	5.2	6.2	6.5	6.2
Total Cyanide	MG/KG	1.37	1.1	0.1	1.2	1.2

APPENDIX P.20
**SITE 74 FORMER DISPOSAL/POTENTIAL DISPOSAL/
FORMER PEST CONTROL AREA SUBSURFACE SOIL ORGANICS**

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	74-PDA-SB01-01	74-PDA-SB01-02	74-PDA-SB02-01	74-PDA-SB02-03	74-PDA-SB03-02	74-PDA-SB03-04
Laboratory Sample ID:	9402181-02	9402181-03	9402181-05	9402181-06	9402181-08	9402181-09
Date Sampled:	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94
Percent Solids	89.8	84.9	89.3	85.4	89.0	81.6
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U
1,2,4-Trichlorobenzene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U
1,3-Dichlorobenzene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U
1,4-Dichlorobenzene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U
2-Chloronaphthalene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U
2-Chlorophenol	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U
2-Methylnaphthalene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U
2-Methylphenol	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U
2-Nitroaniline	UG/KG	444.5 U	470.5 U	896 U	470.5 U	899 U
2-Nitrophenol	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U
2,2'-oxybis-(1-chloropropane)	UG/KG	183.5 UJ	194.0 UJ		194.0 UJ	371 U
2,4-Dichlorophenol	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U
2,4-Dimethylphenol	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U
2,4-Dinitrophenol	UG/KG	444.5 U	470.5 U	896 UJ	470.5 U	899 U
2,4-Dinitrotoluene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U
2,4,5-Trichlorophenol	UG/KG	444.5 U	470.5 U	896 U	470.5 U	899 U
2,4,6-Trichlorophenol	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U
2,6-Dinitrotoluene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U
3-Nitroaniline	UG/KG	444.5 U	470.5 U	896 U	470.5 U	899 U
3,3'-Dichlorobenzidine	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U
4-Bromophenyl-phenylether	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U
4-Chloro-3-methylphenol	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U
4-Chloroaniline	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U
4-Chlorophenyl phenyl ether	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U
4-Methylphenol	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U
4-Nitroaniline	UG/KG	444.5 U	470.5 U	896 U	470.5 U	899 U
4-Nitrophenol	UG/KG	444.5 U	470.5 U	896 U	470.5 U	899 U
4,6-Dinitro-2-methylphenol	UG/KG	444.5 U	470.5 U	896 U	470.5 U	899 U
Acenaphthene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U
Acenaphthylene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U
Anthracene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U
Benzo[a]anthracene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U
Benzo[a]pyrene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SB01-01	74-PDA-SB01-02	74-PDA-SB02-01	74-PDA-SB02-03	74-PDA-SB03-02	74-PDA-SB03-04
Laboratory Sample ID:	9402181-02	9402181-03	9402181-05	9402181-06	9402181-08	9402181-09
Date Sampled:	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94
Percent Solids	89.8	84.9	89.3	85.4	89.0	81.6

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
Benzo[g,h,i]perylene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
Benzo[k]fluoranthene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
bis(2-Chloroethoxy) methane	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
bis(2-Chloroethyl) ether	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
bis(2-Ethylhexyl)phthalate	UG/KG	185.0 U	195.0 U	375 U	195.0 U	371 U	403 U
Butyl benzyl phthalate	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
Carbazole	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
Chrysene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
Dibenzofuran	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
Dibenz[a,h]anthracene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
Diethylphthalate	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
Dimethyl phthalate	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
di-n-Butylphthalate	UG/KG	185.0 U	195.0 U	375 U	195.0 U	375 U	403 U
di-n-Octylphthalate	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
Fluoranthene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
Fluorene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
Hexachlorobenzene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
Hexachlorobutadiene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
Hexachlorocyclopentadiene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
Hexachloroethane	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
Indeno[1,2,3-cd]pyrene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
Isophorone	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
Naphthalene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
Nitrobenzene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
N-Nitroso-di-n-propylamine	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
N-nitrosodiphenylamine	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
Pentachlorophenol	UG/KG	444.5 U	470.5 U	896 U	470.5 U	899 U	976 U
Phenanthrene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
Phenol	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U
Pyrene	UG/KG	183.5 U	194.0 U	370 U	194.0 U	371 U	403 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SB01-01	74-PDA-SB01-02	74-PDA-SB02-01	74-PDA-SB02-03	74-PDA-SB03-02	74-PDA-SB03-04
Laboratory Sample ID:	9402181-02	9402181-03	9402181-05	9402181-06	9402181-08	9402181-09
Date Sampled:	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94
Percent Solids	89.8	84.9	89.3	85.4	89.0	81.6

<u>VOLATILES</u>							
Chloromethane	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
Bromomethane	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
Vinyl chloride	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
Chloroethane	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
Methylene chloride	UG/KG	5.50 U	6.00 U	5.50 U	6.00 U	5.50 U	6.00 U
Acetone	UG/KG	93.0	130.0	580.0	20.0	92.0	37.0
Carbon Disulfide	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
1,1-Dichloroethene	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
1,1-Dichloroethane	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
1,2-Dichloroethene(total)	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
Chloroform	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
1,2-Dichloroethane	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
2-Butanone	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
1,1,1-Trichloroethane	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
Carbon tetrachloride	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
Bromodichloromethane	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
1,2-Dichloropropane	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
cis-1,3-Dichloropropene	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
Trichloroethene	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
Dibromochloromethane	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
1,1,2-Trichloroethane	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
Benzene	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
trans-1,3-Dichloropropene	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
Bromoform	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
4-Methyl-2-pentanone	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
2-Hexanone	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
Tetrachloroethene	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
1,1,2,2-Tetrachloroethane	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
Toluene	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
Chlorobenzene	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
Ethylbenzene	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
Styrene	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U
Xylenes (total)	UG/KG	5.5 U	6.0 U	5.5 U	6.0 U	5.5 U	6.0 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	74-PDA-SB01-01	74-PDA-SB01-02	74-PDA-SB02-01	74-PDA-SB02-03	74-PDA-SB03-02	74-PDA-SB03-04	
Laboratory Sample ID:	9402181-02	9402181-03	9402181-05	9402181-06	9402181-08	9402181-09	
Date Sampled:	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94	
Percent Solids	89.8	84.9	89.3	85.4	89.0	81.6	
PESTICIDE/PCBS							
alpha-BHC	UG/KG	0.95 UJ	1.00 UJ	0.96 UJ	1.00 UJ	0.96 UJ	1.04 UJ
beta-BHC	UG/KG	0.95 UJ	1.00 UJ	0.96 UJ	1.00 UJ	0.96 UJ	1.04 UJ
delta-BHC	UG/KG	0.95 UJ	1.00 UJ	0.96 UJ	1.00 UJ	0.96 UJ	1.04 UJ
Lindane (gamma-BHC)	UG/KG	0.95 UJ	1.00 UJ	0.96 UJ	1.00 UJ	0.96 UJ	1.04 UJ
Heptachlor	UG/KG	0.95 U	1.00 U	0.96 UJ	1.00 UJ	0.96 UJ	1.04 UJ
Aldrin	UG/KG	0.95 U	1.00 U	0.96 UJ	1.00 UJ	0.96 UJ	1.04 UJ
Heptachlor epoxide	UG/KG	0.95 U	1.00 U	0.96 UJ	1.00 UJ	0.96 UJ	1.04 UJ
Endosulfan I	UG/KG	0.95 U	1.00 U	0.96 UJ	1.00 UJ	0.96 UJ	1.04 UJ
Dieldrin	UG/KG	1.84 U	1.94 U	1.86 UJ	1.94 UJ	1.86 UJ	2.01 UJ
4,4'-DDE	UG/KG	1.84 U	1.94 U	1.86 UJ	1.94 UJ	1.86 UJ	2.01 UJ
Endrin	UG/KG	1.84 U	1.94 U	1.86 UJ	1.94 UJ	1.86 UJ	2.01 UJ
Endosulfan II	UG/KG	1.84 U	1.94 U	1.86 UJ	1.94 UJ	1.86 UJ	2.01 UJ
4,4'-DDD	UG/KG	1.84 UJ	1.94 UJ	1.86 UJ	1.94 UJ	1.86 UJ	2.01 UJ
Endosulfan sulfate	UG/KG	1.84 U	1.94 U	1.86 UJ	1.94 UJ	1.86 UJ	2.01 UJ
4,4'-DDT	UG/KG	1.84 UJ	1.94 UJ	1.86 UJ	1.94 UJ	1.86 UJ	2.01 UJ
Methoxychlor	UG/KG	9.5 U	10.0 U	9.6 UJ	10.0 UJ	9.6 UJ	10.4 UJ
Endrin ketone	UG/KG	1.84 U	1.94 U	1.86 UJ	1.94 UJ	1.86 UJ	2.01 UJ
Endrin aldehyde	UG/KG	1.84 U	1.94 U	1.86 UJ	1.94 UJ	1.86 UJ	2.01 UJ
alpha-Chlordane	UG/KG	0.95 U	1.00 U	0.96 UJ	1.00 UJ	0.96 UJ	1.04 UJ
gamma-Chlordane	UG/KG	0.95 U	1.00 U	0.96 UJ	1.00 UJ	0.96 UJ	1.04 UJ
Toxaphene	UG/KG	94.5 U	100.0 U	95.5 UJ	100.0 UJ	95.5 UJ	103.5 UJ
Aroclor 1016	UG/KG	18.4 U	19.4 U	18.6 UJ	19.4 UJ	18.6 UJ	20.1 UJ
Aroclor 1221	UG/KG	37.2 U	39.4 U	37.7 UJ	39.4 UJ	37.7 UJ	40.9 UJ
Aroclor 1232	UG/KG	18.4 U	19.4 U	18.6 UJ	19.4 UJ	18.6 UJ	20.1 UJ
Aroclor 1242	UG/KG	18.4 U	19.4 U	18.6 UJ	19.4 UJ	18.6 UJ	20.1 UJ
Aroclor 1248	UG/KG	18.4 U	19.4 U	18.6 UJ	19.4 UJ	18.6 UJ	20.1 UJ
Aroclor 1254	UG/KG	18.4 U	19.4 U	18.6 UJ	19.4 UJ	18.6 UJ	20.1 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SB04-05	74-PDA-SB05-02	74-PDA-SB05-03	74-PDA-SB06-02	74-PDA-SB06-04	74-PDA-SB07-01
Laboratory Sample ID:	9402181-11	9402182-02	9402182-03	9402182-06	9402182-07	9402179-04
Date Sampled:	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94	02/20/94
Percent Solids	86.8	91.8	91.6	91.3	83.3	90.6
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U
1,2,4-Trichlorobenzene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U
1,3-Dichlorobenzene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U
1,4-Dichlorobenzene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U
2-Chloronaphthalene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U
2-Chlorophenol	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U
2-Methylnaphthalene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U
2-Methylphenol	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U
2-Nitroaniline	UG/KG	912 U	872 U	872 U	900.0 U	1000.0 U
2-Nitrophenol	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U
2,2'-oxybis-(1-chloropropane)	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U
2,4-Dichlorophenol	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U
2,4-Dimethylphenol	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U
2,4-Dinitrophenol	UG/KG	912 U	872 U	872 U	900.0 U	1000.0 U
2,4-Dinitrotoluene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U
2,4,5-Trichlorophenol	UG/KG	912 U	872 U	872 U	900.0 U	1000.0 U
2,4,6-Trichlorophenol	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U
2,6-Dinitrotoluene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U
3-Nitroaniline	UG/KG	912 U	872 U	872 U	900.0 U	1000.0 U
3,3'-Dichlorobenzidine	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U
4-Bromophenyl-phenylether	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U
4-Chloro-3-methylphenol	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U
4-Chloroaniline	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U
4-Chlorophenyl phenyl ether	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U
4-Methylphenol	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U
4-Nitroaniline	UG/KG	912 U	872 U	872 U	900.0 U	1000.0 U
4-Nitrophenol	UG/KG	912 U	872 U	872 U	900.0 U	1000.0 U
4,6-Dinitro-2-methylphenol	UG/KG	912 U	872 U	872 U	900.0 U	1000.0 U
Acenaphthene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U
Acenaphthylene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U
Anthracene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U
Benzo[a]anthracene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U
Benzo[a]pyrene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SB04-05	74-PDA-SB05-02	74-PDA-SB05-03	74-PDA-SB06-02	74-PDA-SB06-04	74-PDA-SB07-01
Laboratory Sample ID:	9402181-11	9402182-02	9402182-03	9402182-06	9402182-07	9402179-04
Date Sampled:	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94	02/20/94
Percent Solids	86.8	91.8	91.6	91.3	83.3	90.6

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U
Benzo[g,h,i]perylene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U
Benzo[k]fluoranthene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U
bis(2-Chloroethoxy) methane	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U
bis(2-Chloroethyl) ether	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U
bis(2-Ethylhexyl)phthalate	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	159.0 J
Butyl benzyl phthalate	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U
Carbazole	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U
Chrysene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U
Dibenzofuran	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U
Dibenz[a,h]anthracene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U
Diethylphthalate	UG/KG	376 U	360 U	360 U	365.0 U	874.0	365.0 U
Dimethyl phthalate	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U
di-n-Butylphthalate	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	95.0 J
di-n-Octylphthalate	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U
Fluoranthene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U
Fluorene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U
Hexachlorobenzene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U
Hexachlorobutadiene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U
Hexachlorocyclopentadiene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U
Hexachloroethane	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U
Indeno[1,2,3-cd]pyrene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U
Isophorone	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U
Naphthalene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U
Nitrobenzene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U
N-Nitroso-di-n-propylamine	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U
N-nitrosodiphenylamine	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U
Pentachlorophenol	UG/KG	912 U	872 U	872 U	900.0 U	1000.0 U	900.0 U
Phenanthrene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U
Phenol	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U
Pyrene	UG/KG	376 U	360 U	360 U	365.0 U	400.0 U	365.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SB04-05	74-PDA-SB05-02	74-PDA-SB05-03	74-PDA-SB06-02	74-PDA-SB06-04	74-PDA-SB07-01	
Laboratory Sample ID:	9402181-11	9402182-02	9402182-03	9402182-06	9402182-07	9402179-04	
Date Sampled:	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94	02/20/94	
Percent Solids	86.8	91.8	91.6	91.3	83.3	90.6	
VOLATILES							
Chloromethane	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Bromomethane	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Vinyl chloride	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Chloroethane	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Methylene chloride	UG/KG	5.50 U	5.50 U	7.0 U	5.50 U	6.00 U	5.50 U
Acetone	UG/KG	50.0	5.5 U	37.0	80.0 U	18.0	360.0
Carbon Disulfide	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
1,1-Dichloroethene	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
1,1-Dichloroethane	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
1,2-Dichloroethene(total)	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Chloroform	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
1,2-Dichloroethane	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
2-Butanone	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
1,1,1-Trichloroethane	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Carbon tetrachloride	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Bromodichloromethane	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
1,2-Dichloropropane	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
cis-1,3-Dichloropropene	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Trichloroethene	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Dibromochloromethane	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
1,1,2-Trichloroethane	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Benzene	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
trans-1,3-Dichloropropene	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Bromoform	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
4-Methyl-2-pentanone	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
2-Hexanone	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Tetrachloroethene	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
1,1,2,2-Tetrachloroethane	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Toluene	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Chlorobenzene	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Ethylbenzene	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Styrene	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Xylenes (total)	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SB04-05	74-PDA-SB05-02	74-PDA-SB05-03	74-PDA-SB06-02	74-PDA-SB06-04	74-PDA-SB07-01	
Laboratory Sample ID:	9402181-11	9402182-02	9402182-03	9402182-06	9402182-07	9402179-04	
Date Sampled:	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94	02/20/94	
Percent Solids	86.8	91.8	91.6	91.3	83.3	90.6	
PESTICIDE/PCBS							
alpha-BHC	UG/KG	0.98 UJ	0.93 UJ	0.93 UJ	0.94 UJ	1.03 UJ	0.91 UJ
beta-BHC	UG/KG	0.98 UJ	0.93 UJ	0.93 UJ	0.94 UJ	1.03 UJ	0.91 UJ
delta-BHC	UG/KG	0.98 UJ	0.93 UJ	0.93 UJ	0.94 UJ	1.03 UJ	0.91 UJ
Lindane (gamma-BHC)	UG/KG	0.98 UJ	0.93 UJ	0.93 UJ	0.94 UJ	1.03 U	0.91 UJ
Heptachlor	UG/KG	0.98 UJ	0.93 UJ	0.93 UJ	0.94 UJ	1.03 U	0.91 U
Aldrin	UG/KG	0.98 UJ	0.93 UJ	0.93 UJ	0.94 UJ	1.03 U	0.91 U
Heptachlor epoxide	UG/KG	0.98 UJ	0.93 UJ	0.93 UJ	0.94 UJ	1.03 U	0.91 U
Endosulfan I	UG/KG	0.98 UJ	0.93 UJ	0.93 UJ	0.94 UJ	1.03 U	0.91 U
Dieldrin	UG/KG	1.90 UJ	1.80 UJ	1.80 UJ	1.82 UJ	1.99 U	1.76 U
4,4'-DDE	UG/KG	1.90 UJ	1.38 J	1.80 UJ	2.20 J	1.99 U	1.76 U
Endrin	UG/KG	1.90 UJ	1.80 UJ	1.80 UJ	1.82 UJ	1.99 U	1.76 U
Endosulfan II	UG/KG	1.90 UJ	1.80 UJ	1.80 UJ	1.82 UJ	1.99 U	1.76 U
4,4'-DDD	UG/KG	0.720 J	0.590 J	1.80 UJ	1.82 UJ	3.61 J	1.76 UJ
Endosulfan sulfate	UG/KG	1.90 UJ	1.80 UJ	1.80 UJ	1.82 UJ	1.99 U	1.76 U
4,4'-DDT	UG/KG	0.340 NJ	1.66 J	0.860 J	21.4 J	1.99 UJ	1.76 UJ
Methoxychlor	UG/KG	9.8 UJ	9.3 UJ	9.3 UJ	9.4 UJ	10.3 U	9.1 U
Endrin ketone	UG/KG	1.90 UJ	1.80 UJ	1.80 UJ	1.82 UJ	1.99 U	1.76 U
Endrin aldehyde	UG/KG	1.90 UJ	1.80 UJ	1.80 UJ	1.82 UJ	1.99 U	1.76 U
alpha-Chlordane	UG/KG	0.98 UJ	0.93 UJ	0.93 UJ	0.94 UJ	1.03 U	0.91 U
gamma-Chlordane	UG/KG	0.98 UJ	0.93 UJ	0.93 UJ	0.94 UJ	1.03 U	0.91 U
Toxaphene	UG/KG	97.5 UJ	92.5 UJ	92.5 UJ	93.5 UJ	102.5 U	90.5 U
Aroclor 1016	UG/KG	19.0 UJ	18.0 UJ	18.0 UJ	18.2 UJ	19.9 U	17.6 U
Aroclor 1221	UG/KG	38.5 UJ	36.4 UJ	36.4 UJ	36.8 UJ	40.4 U	35.7 U
Aroclor 1232	UG/KG	19.0 UJ	18.0 UJ	18.0 UJ	18.2 UJ	19.9 U	17.6 U
Aroclor 1242	UG/KG	19.0 UJ	18.0 UJ	18.0 UJ	18.2 UJ	19.9 U	17.6 U
Aroclor 1248	UG/KG	19.0 UJ	18.0 UJ	18.0 UJ	18.2 UJ	19.9 U	17.6 U
Aroclor 1254	UG/KG	19.0 UJ	18.0 UJ	18.0 UJ	18.2 UJ	19.9 U	17.6 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SB07-05	74-PDA-SB08-02	74-PDA-SB08-04	74-PDA-SB09-03	74-PDA-SB09-06	74-PDA-SB10-04
Laboratory Sample ID:	9402179-05	9402182-09	9402182-10	9402179-07	9402179-08	9402179-10
Date Sampled:	02/20/94	02/19/94	02/19/94	02/20/94	02/20/94	02/20/94
Percent Solids	91.4	94.6	89.0	95.5	87.9	91.4
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ
1,2,4-Trichlorobenzene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ
1,3-Dichlorobenzene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ
1,4-Dichlorobenzene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ
2-Chloronaphthalene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ
2-Chlorophenol	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ
2-Methylnaphthalene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ
2-Methylphenol	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ
2-Nitroaniline	UG/KG	900.0 U	900.0 U	950.0 U	850.0 U	950.0 UJ
2-Nitrophenol	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ
2,2'-oxybis-(1-chloropropane)	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	
2,4-Dichlorophenol	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ
2,4-Dimethylphenol	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ
2,4-Dinitrophenol	UG/KG	900.0 U	900.0 U	950.0 UJ	850.0 U	950.0 UJ
2,4-Dinitrotoluene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ
2,4,5-Trichlorophenol	UG/KG	900.0 U	900.0 U	950.0 U	850.0 U	950.0 UJ
2,4,6-Trichlorophenol	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ
2,6-Dinitrotoluene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ
3-Nitroaniline	UG/KG	900.0 U	900.0 U	950.0 U	850.0 U	950.0 UJ
3,3'-Dichlorobenzidine	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ
4-Bromophenyl-phenylether	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ
4-Chloro-3-methylphenol	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ
4-Chloroaniline	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ
4-Chlorophenyl phenyl ether	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ
4-Methylphenol	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ
4-Nitroaniline	UG/KG	900.0 U	900.0 U	950.0 U	850.0 U	950.0 UJ
4-Nitrophenol	UG/KG	900.0 U	900.0 U	950.0 UJ	850.0 U	950.0 UJ
4,6-Dinitro-2-methylphenol	UG/KG	900.0 U	900.0 U	950.0 U	850.0 U	950.0 UJ
Acenaphthene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ
Acenaphthylene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ
Anthracene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ
Benzo[a]anthracene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ
Benzo[a]pyrene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SB07-05	74-PDA-SB08-02	74-PDA-SB08-04	74-PDA-SB09-03	74-PDA-SB09-06	74-PDA-SB10-04
Laboratory Sample ID:	9402179-05	9402182-09	9402182-10	9402179-07	9402179-08	9402179-10
Date Sampled:	02/20/94	02/19/94	02/19/94	02/20/94	02/20/94	02/20/94
Percent Solids	91.4	94.6	89.0	95.5	87.9	91.4

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
Benzo[g,h,i]perylene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
Benzo[k]fluoranthene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
bis(2-Chloroethoxy) methane	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
bis(2-Chloroethyl) ether	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
bis(2-Ethylhexyl)phthalate	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
Butyl benzyl phthalate	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
Carbazole	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
Chrysene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
Dibenzofuran	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
Dibenz[a,h]anthracene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
Diethylphthalate	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
Dimethyl phthalate	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
di-n-Butylphthalate	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	106.0 J
di-n-Octylphthalate	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
Fluoranthene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
Fluorene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
Hexachlorobenzene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
Hexachlorobutadiene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
Hexachlorocyclopentadiene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
Hexachloroethane	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
Indeno[1,2,3-cd]pyrene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
Isophorone	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
Naphthalene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
Nitrobenzene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
N-Nitroso-di-n-propylamine	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
N-nitrosodiphenylamine	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
Pentachlorophenol	UG/KG	900.0 U	900.0 U	950.0 U	850.0 U	950.0 UJ	900.0 U
Phenanthrene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
Phenol	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U
Pyrene	UG/KG	365.0 U	350.0 U	375.0 U	345.0 U	380.0 UJ	365.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SB07-05	74-PDA-SB08-02	74-PDA-SB08-04	74-PDA-SB09-03	74-PDA-SB09-06	74-PDA-SB10-04
Laboratory Sample ID:	9402179-05	9402182-09	9402182-10	9402179-07	9402179-08	9402179-10
Date Sampled:	02/20/94	02/19/94	02/19/94	02/20/94	02/20/94	02/20/94
Percent Solids	91.4	94.6	89.0	95.5	87.9	91.4
VOLATILES						
Chloromethane	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
Bromomethane	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
Vinyl chloride	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
Chloroethane	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
Methylene chloride	UG/KG	5.50 U	5.50 U	5.50 U	5.00 U	6.0 U
Acetone	UG/KG	31.0	820.0	9.00 J	8.00 J	5.5 U
Carbon Disulfide	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
1,1-Dichloroethene	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
1,1-Dichloroethane	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
1,2-Dichloroethene(total)	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
Chloroform	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
1,2-Dichloroethane	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
2-Butanone	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
1,1,1-Trichloroethane	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
Carbon tetrachloride	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
Bromodichloromethane	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
1,2-Dichloropropane	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
cis-1,3-Dichloropropene	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
Trichloroethene	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
Dibromochloromethane	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
1,1,2-Trichloroethane	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
Benzene	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
trans-1,3-Dichloropropene	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
Bromoform	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
4-Methyl-2-pentanone	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
2-Hexanone	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
Tetrachloroethene	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
1,1,2,2-Tetrachloroethane	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
Toluene	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
Chlorobenzene	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
Ethylbenzene	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
Styrene	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U
Xylenes (total)	UG/KG	5.5 U	5.3 U	5.6 U	5.0 U	5.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SB07-05	74-PDA-SB08-02	74-PDA-SB08-04	74-PDA-SB09-03	74-PDA-SB09-06	74-PDA-SB10-04
Laboratory Sample ID:	9402179-05	9402182-09	9402182-10	9402179-07	9402179-08	9402179-10
Date Sampled:	02/20/94	02/19/94	02/19/94	02/20/94	02/20/94	02/20/94
Percent Solids	91.4	94.6	89.0	95.5	87.9	91.4
PESTICIDE/PCBS						
alpha-BHC	UG/KG	0.91 UJ	0.90 UJ	0.96 UJ	0.90 UJ	0.94 UJ
beta-BHC	UG/KG	0.91 UJ	0.90 UJ	0.96 UJ	0.90 UJ	0.94 UJ
delta-BHC	UG/KG	0.91 UJ	0.90 UJ	0.96 UJ	0.90 UJ	0.94 UJ
Lindane (gamma-BHC)	UG/KG	0.91 UJ	0.90 UJ	0.96 UJ	0.90 UJ	0.94 UJ
Heptachlor	UG/KG	0.91 UJ	0.90 U	0.96 U	0.90 U	0.94 U
Aldrin	UG/KG	0.91 UJ	0.90 U	0.96 U	0.90 U	0.94 U
Heptachlor epoxide	UG/KG	0.91 UJ	0.330 J	0.96 U	0.90 U	0.94 U
Endosulfan I	UG/KG	0.91 UJ	0.90 U	0.96 U	0.90 U	0.94 U
Dieldrin	UG/KG	1.76 UJ	1.74 U	1.86 U	1.74 U	1.82 U
4,4'-DDE	UG/KG	1.76 UJ	1.74 U	1.86 U	1.74 U	1.82 U
Endrin	UG/KG	1.76 UJ	1.74 U	1.86 U	1.74 U	1.82 U
Endosulfan II	UG/KG	1.76 UJ	1.74 U	1.86 U	1.74 U	1.82 U
4,4'-DDD	UG/KG	1.76 UJ	1.74 UJ	1.86 UJ	1.74 UJ	1.82 UJ
Endosulfan sulfate	UG/KG	1.76 UJ	1.74 U	1.86 U	1.74 U	1.82 U
4,4'-DDT	UG/KG	1.76 UJ	1.74 UJ	1.86 UJ	1.74 UJ	1.82 UJ
Methoxychlor	UG/KG	9.1 UJ	9.0 U	9.6 U	9.0 U	9.4 U
Endrin ketone	UG/KG	1.76 UJ	1.74 U	1.86 U	1.74 U	1.82 U
Endrin aldehyde	UG/KG	1.76 UJ	1.74 U	1.86 U	1.74 U	1.82 U
alpha-Chlordane	UG/KG	0.91 UJ	0.90 U	0.96 U	0.90 U	0.94 U
gamma-Chlordane	UG/KG	0.91 UJ	0.90 U	0.96 U	0.90 U	0.94 U
Toxaphene	UG/KG	90.5 UJ	89.5 U	95.5 U	89.5 U	93.5 U
Aroclor 1016	UG/KG	17.6 UJ	17.4 U	18.6 U	17.4 U	18.2 U
Aroclor 1221	UG/KG	35.7 UJ	35.3 U	37.7 U	35.3 U	36.8 U
Aroclor 1232	UG/KG	17.6 UJ	17.4 U	18.6 U	17.4 U	18.2 U
Aroclor 1242	UG/KG	17.6 UJ	17.4 U	18.6 U	17.4 U	18.2 U
Aroclor 1248	UG/KG	17.6 UJ	17.4 U	18.6 U	17.4 U	18.2 U
Aroclor 1254	UG/KG	17.6 UJ	17.4 U	18.6 U	17.4 U	18.2 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SB10-08	74-FPA-SB01-03	74-FPA-SB01-07	74-FPA-SB02-03	74-FPA-SB02-06	74-FPA-SB03-03
Laboratory Sample ID:	9402179-11	9402179-13	9402179-14	9402179-16	9402179-17	9402180-03A
Date Sampled:	02/20/94	02/21/94	02/21/94	02/21/94	02/21/94	02/21/94
Percent Solids	92.7	90.1	89.6	85.5	84.8	87.3
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
1,2,4-Trichlorobenzene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
1,3-Dichlorobenzene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
1,4-Dichlorobenzene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
2-Chloronaphthalene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
2-Chlorophenol	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
2-Methylnaphthalene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
2-Methylphenol	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
2-Nitroaniline	UG/KG	900.0 U	950.0 U	950.0 U	1000.0 U	460.0 U
2-Nitrophenol	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
2,2'-oxybis-(1-chloropropane)	UG/KG	360.0 UJ	370.0 U	370.0 U	390.0 U	390.0 U
2,4-Dichlorophenol	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
2,4-Dimethylphenol	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
2,4-Dinitrophenol	UG/KG	900.0 UJ	950.0 U	950.0 U	1000.0 U	460.0 U
2,4-Dinitrotoluene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
2,4,5-Trichlorophenol	UG/KG	900.0 U	950.0 U	950.0 U	1000.0 U	460.0 U
2,4,6-Trichlorophenol	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
2,6-Dinitrotoluene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
3-Nitroaniline	UG/KG	900.0 U	950.0 U	950.0 U	1000.0 U	460.0 U
3,3'-Dichlorobenzidine	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
4-Bromophenyl-phenylether	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
4-Chloro-3-methylphenol	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
4-Chloroaniline	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
4-Chlorophenyl phenyl ether	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
4-Methylphenol	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
4-Nitroaniline	UG/KG	900.0 U	950.0 U	950.0 U	1000.0 U	460.0 U
4-Nitrophenol	UG/KG	900.0 UJ	950.0 U	950.0 U	1000.0 U	460.0 U
4,6-Dinitro-2-methylphenol	UG/KG	900.0 U	950.0 U	950.0 U	1000.0 U	460.0 U
Acenaphthene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
Acenaphthylene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
Anthracene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
Benzo[a]anthracene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
Benzo[a]pyrene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SB10-08	74-FPA-SB01-03	74-FPA-SB01-07	74-FPA-SB02-03	74-FPA-SB02-06	74-FPA-SB03-03
Laboratory Sample ID:	9402179-11	9402179-13	9402179-14	9402179-16	9402179-17	9402180-03A
Date Sampled:	02/20/94	02/21/94	02/21/94	02/21/94	02/21/94	02/21/94
Percent Solids	92.7	90.1	89.6	85.5	84.8	87.3

<u>SEMIVOLATILES Cont.</u>						
Benzo[b]fluoranthene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
Benzo[g,h,i]perylene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
Benzo[k]fluoranthene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
bis(2-Chloroethoxy) methane	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
bis(2-Chloroethyl) ether	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
bis(2-Ethylhexyl)phthalate	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
Butyl benzyl phthalate	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
Carbazole	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
Chrysene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
Dibenzofuran	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
Dibenz[a,h]anthracene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
Diethylphthalate	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
Dimethyl phthalate	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
di-n-Butylphthalate	UG/KG	360.0 U	110.0 J	370.0 U	155.0 J	189.5 U
di-n-Octylphthalate	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
Fluoranthene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
Fluorene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
Hexachlorobenzene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
Hexachlorobutadiene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
Hexachlorocyclopentadiene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
Hexachloroethane	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
Indeno[1,2,3-cd]pyrene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
Isophorone	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
Naphthalene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
Nitrobenzene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
N-Nitroso-di-n-propylamine	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
N-nitrosodiphenylamine	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
Pentachlorophenol	UG/KG	900.0 U	950.0 U	950.0 U	1000.0 U	460.0 U
Phenanthrene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
Phenol	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U
Pyrene	UG/KG	360.0 U	370.0 U	370.0 U	390.0 U	189.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SB10-08	74-FPA-SB01-03	74-FPA-SB01-07	74-FPA-SB02-03	74-FPA-SB02-06	74-FPA-SB03-03
Laboratory Sample ID:	9402179-11	9402179-13	9402179-14	9402179-16	9402179-17	9402180-03A
Date Sampled:	02/20/94	02/21/94	02/21/94	02/21/94	02/21/94	02/21/94
Percent Solids	92.7	90.1	89.6	85.5	84.8	87.3
VOLATILES						
Chloromethane	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Bromomethane	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Vinyl chloride	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Chloroethane	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Methylene chloride	UG/KG	5.50 U	5.50 U	5.50 U	7.5 U	5.50 U
Acetone	UG/KG	43.0	10.8 J	5.5 U	44.0 J	220.0 J
Carbon Disulfide	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
1,1-Dichloroethene	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
1,1-Dichloroethane	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
1,2-Dichloroethene(total)	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Chloroform	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
1,2-Dichloroethane	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
2-Butanone	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
1,1,1-Trichloroethane	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Carbon tetrachloride	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Bromodichloromethane	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
1,2-Dichloropropane	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
cis-1,3-Dichloropropene	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Trichloroethene	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Dibromochloromethane	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
1,1,2-Trichloroethane	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Benzene	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
trans-1,3-Dichloropropene	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Bromoform	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
4-Methyl-2-pentanone	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
2-Hexanone	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Tetrachloroethene	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
1,1,2,2-Tetrachloroethane	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Toluene	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Chlorobenzene	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Ethylbenzene	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Styrene	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U
Xylenes (total)	UG/KG	5.5 U	5.5 U	5.5 U	6.0 U	5.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SB10-08	74-FPA-SB01-03	74-FPA-SB01-07	74-FPA-SB02-03	74-FPA-SB02-06	74-FPA-SB03-03	
Laboratory Sample ID:	9402179-11	9402179-13	9402179-14	9402179-16	9402179-17	9402180-03A	
Date Sampled:	02/20/94	02/21/94	02/21/94	02/21/94	02/21/94	02/21/94	
Percent Solids	92.7	90.1	89.6	85.5	84.8	87.3	
PESTICIDE/PCBS							
alpha-BHC	UG/KG	0.92 UJ	0.95 UJ	0.95 UJ	1.00 UJ	1.00 UJ	0.98 UJ
beta-BHC	UG/KG	0.92 UJ	0.95 UJ	0.95 UJ	1.00 UJ	1.00 UJ	0.98 UJ
delta-BHC	UG/KG	0.92 UJ	0.95 UJ	0.95 UJ	1.00 UJ	1.00 UJ	0.98 UJ
Lindane (gamma-BHC)	UG/KG	0.92 UJ	0.95 UJ	0.95 UJ	1.00 UJ	1.00 UJ	0.98 UJ
Heptachlor	UG/KG	0.92 U	0.95 UJ	0.95 U	1.00 U	1.00 U	0.240 J
Aldrin	UG/KG	0.92 U	0.95 UJ	0.95 U	1.00 U	1.00 U	0.98 U
Heptachlor epoxide	UG/KG	0.92 U	0.95 UJ	0.95 U	1.00 U	1.00 U	0.98 U
Endosulfan I	UG/KG	0.92 U	0.95 UJ	0.95 U	1.00 U	1.00 U	0.98 U
Dieldrin	UG/KG	1.78 U	1.84 UJ	1.84 U	1.94 U	1.94 U	1.90 U
4,4'-DDE	UG/KG	1.78 U	1.84 UJ	1.84 U	1.94 U	1.94 U	21.3 J
Endrin	UG/KG	1.78 U	1.84 UJ	1.84 U	1.94 U	1.94 U	1.90 U
Endosulfan II	UG/KG	1.78 U	1.84 UJ	1.84 U	1.94 U	1.94 U	1.90 U
4,4'-DDD	UG/KG	1.78 UJ	1.84 UJ	1.84 UJ	1.94 UJ	1.94 UJ	1.85 NJ
Endosulfan sulfate	UG/KG	1.78 U	1.84 UJ	1.84 U	1.94 U	1.94 U	1.90 U
4,4'-DDT	UG/KG	1.78 UJ	1.84 UJ	1.84 UJ	1.44 J	0.460 NJ	5.83 J
Methoxychlor	UG/KG	9.2 U	7.06 J	9.5 U	10.0 U	10.0 U	9.8 U
Endrin ketone	UG/KG	1.78 U	1.84 UJ	1.84 U	1.94 U	1.94 U	1.90 U
Endrin aldehyde	UG/KG	1.78 U	1.84 UJ	1.84 U	1.94 U	1.94 U	1.90 U
alpha-Chlordane	UG/KG	0.92 U	0.95 UJ	0.95 U	1.00 U	1.00 U	0.98 U
gamma-Chlordane	UG/KG	0.92 U	0.95 UJ	0.95 U	1.00 U	1.00 U	0.98 U
Toxaphene	UG/KG	91.5 U	94.5 UJ	94.5 U	100.0 U	100.0 U	97.5 U
Aroclor 1016	UG/KG	17.8 U	18.4 UJ	18.4 U	19.4 U	19.4 U	19.0 U
Aroclor 1221	UG/KG	36.0 U	37.2 UJ	37.2 U	39.4 U	39.4 U	38.5 U
Aroclor 1232	UG/KG	17.8 U	18.4 UJ	18.4 U	19.4 U	19.4 U	19.0 U
Aroclor 1242	UG/KG	17.8 U	18.4 UJ	18.4 U	19.4 U	19.4 U	19.0 U
Aroclor 1248	UG/KG	17.8 U	18.4 UJ	18.4 U	19.4 U	19.4 U	19.0 U
Aroclor 1254	UG/KG	17.8 U	18.4 UJ	18.4 U	19.4 U	19.4 U	19.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FPA-SB03-06	74-FPA-SB04-04	74-FPA-SB04-08	74-FPA-SB05-03	74-FPA-SB05-06	74-FPA-SB06-03
Laboratory Sample ID:	9402180-04A	9402179-19	9402180-01A	9402180-06A	9402180-07A	9402180-10A
Date Sampled:	34386	02/21/94	02/21/94	02/20/94	02/21/94	02/20/94
Percent Solids	83	94.5	88.8	95.4	87.9	86.5
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	189.5 U
1,2,4-Trichlorobenzene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	189.5 U
1,3-Dichlorobenzene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	189.5 U
1,4-Dichlorobenzene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	189.5 U
2-Chloronaphthalene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	189.5 U
2-Chlorophenol	UG/KG	199 U	355.0 U	185.5 U	173.5 U	189.5 U
2-Methylnaphthalene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	189.5 U
2-Methylphenol	UG/KG	199 U	355.0 U	185.5 U	173.5 U	189.5 U
2-Nitroaniline	UG/KG	482 U	900.0 U	449.5 U	421.0 U	460.0 U
2-Nitrophenol	UG/KG	199 U	355.0 U	185.5 U	173.5 U	189.5 U
2,2'-oxybis-(1-chloropropane)	UG/KG				173.5 U	189.5 U
2,4-Dichlorophenol	UG/KG	199 U	355.0 U	185.5 U	173.5 U	189.5 U
2,4-Dimethylphenol	UG/KG	199 U	355.0 U	185.5 U	173.5 U	189.5 U
2,4-Dinitrophenol	UG/KG	482 U	900.0 U	449.5 U	421.0 U	460.0 U
2,4-Dinitrotoluene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	189.5 U
2,4,5-Trichlorophenol	UG/KG	482 U	900.0 U	449.5 U	421.0 U	460.0 U
2,4,6-Trichlorophenol	UG/KG	199 U	355.0 U	185.5 U	173.5 U	189.5 U
2,6-Dinitrotoluene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	189.5 U
3-Nitroaniline	UG/KG	482 U	900.0 U	449.5 U	421.0 U	460.0 U
3,3'-Dichlorobenzidine	UG/KG	199 U	355.0 U	185.5 U	173.5 U	189.5 U
4-Bromophenyl-phenylether	UG/KG	199 U	355.0 U	185.5 U	173.5 U	189.5 U
4-Chloro-3-methylphenol	UG/KG	199 U	355.0 U	185.5 U	173.5 U	189.5 U
4-Chloroaniline	UG/KG	199 U	355.0 U	185.5 U	173.5 U	189.5 U
4-Chlorophenyl phenyl ether	UG/KG	199 U	355.0 U	185.5 U	173.5 U	189.5 U
4-Methylphenol	UG/KG	199 U	355.0 U	185.5 U	173.5 U	189.5 U
4-Nitroaniline	UG/KG	482 U	900.0 U	449.5 U	421.0 U	460.0 U
4-Nitrophenol	UG/KG	482 U	900.0 U	449.5 U	421.0 U	460.0 U
4,6-Dinitro-2-methylphenol	UG/KG	482 U	900.0 U	449.5 U	421.0 U	460.0 U
Acenaphthene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	189.5 U
Acenaphthylene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	189.5 U
Anthracene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	189.5 U
Benzo[a]anthracene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	189.5 U
Benzo[a]pyrene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	189.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FPA-SB03-06	74-FPA-SB04-04	74-FPA-SB04-08	74-FPA-SB05-03	74-FPA-SB05-06	74-FPA-SB06-03
Laboratory Sample ID:	9402180-04A	9402179-19	9402180-01A	9402180-06A	9402180-07A	9402180-10A
Date Sampled:	34386	02/21/94	02/21/94	02/20/94	02/21/94	02/20/94
Percent Solids	83	94.5	88.8	95.4	87.9	86.5

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
Benzo[g,h,i]perylene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
Benzo[k]fluoranthene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
bis(2-Chloroethoxy) methane	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
bis(2-Chloroethyl) ether	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
bis(2-Ethylhexyl)phthalate	UG/KG	199 U	355.0 U	51.0 J	173.5 U	187.5 U	189.5 U
Butyl benzyl phthalate	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
Carbazole	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
Chrysene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
Dibenzofuran	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
Dibenz[a,h]anthracene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
Diethylphthalate	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
Dimethyl phthalate	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
di-n-Butylphthalate	UG/KG	199 U	145.0 J	185.5 U	173.5 U	187.5 U	189.5 U
di-n-Octylphthalate	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
Fluoranthene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
Fluorene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
Hexachlorobenzene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
Hexachlorobutadiene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
Hexachlorocyclopentadiene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
Hexachloroethane	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
Indeno[1,2,3-cd]pyrene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
Isophorone	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
Naphthalene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
Nitrobenzene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
N-Nitroso-di-n-propylamine	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
N-nitrosodiphenylamine	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
Pentachlorophenol	UG/KG	482 U	900.0 U	449.5 U	421.0 U	454.5 U	460.0 U
Phenanthrene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
Phenol	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U
Pyrene	UG/KG	199 U	355.0 U	185.5 U	173.5 U	187.5 U	189.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FPA-SB03-06	74-FPA-SB04-04	74-FPA-SB04-08	74-FPA-SB05-03	74-FPA-SB05-06	74-FPA-SB06-03
Laboratory Sample ID:	9402180-04A	9402179-19	9402180-01A	9402180-06A	9402180-07A	9402180-10A
Date Sampled:	34386	02/21/94	02/21/94	02/20/94	02/21/94	02/20/94
Percent Solids	83	94.5	88.8	95.4	87.9	86.5
VOLATILES						
Chloromethane	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
Bromomethane	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
Vinyl chloride	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
Chloroethane	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
Methylene chloride	UG/KG	6 U	190.0	5.5 U	5.50 U	6.00 U
Acetone	UG/KG	6 U	91.0 J	30.0 J	50.0 J	82.0 J
Carbon Disulfide	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
1,1-Dichloroethene	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
1,1-Dichloroethane	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
1,2-Dichloroethene(total)	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
Chloroform	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
1,2-Dichloroethane	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
2-Butanone	UG/KG	6 U			5.5 U	6.0 U
1,1,1-Trichloroethane	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
Carbon tetrachloride	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
Bromodichloromethane	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
1,2-Dichloropropane	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
cis-1,3-Dichloropropene	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
Trichloroethene	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
Dibromochloromethane	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
1,1,2-Trichloroethane	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
Benzene	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
trans-1,3-Dichloropropene	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
Bromoform	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
4-Methyl-2-pentanone	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
2-Hexanone	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
Tetrachloroethene	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
1,1,2,2-Tetrachloroethane	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
Toluene	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
Chlorobenzene	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
Ethylbenzene	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
Styrene	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U
Xylenes (total)	UG/KG	6 U	5.5 U	5.5 U	5.5 U	6.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FPA-SB03-06	74-FPA-SB04-04	74-FPA-SB04-08	74-FPA-SB05-03	74-FPA-SB05-06	74-FPA-SB06-03
Laboratory Sample ID:	9402180-04A	9402179-19	9402180-01A	9402180-06A	9402180-07A	9402180-10A
Date Sampled:	34386	02/21/94	02/21/94	02/20/94	02/21/94	02/20/94
Percent Solids	83	94.5	88.8	95.4	87.9	86.5
<u>PESTICIDE/PCBS</u>						
alpha-BHC	UG/KG	1.025 U	0.91 UJ	0.96 UJ	0.90 UJ	0.97 UJ
beta-BHC	UG/KG	1.025 U	0.91 UJ	0.96 U	0.90 U	0.97 UJ
delta-BHC	UG/KG	1.025 U	0.91 UJ	0.96 U	0.90 U	0.97 UJ
Lindane (gamma-BHC)	UG/KG	1.025 U	0.91 UJ	0.96 UJ	0.90 UJ	0.97 UJ
Heptachlor	UG/KG	1.025 U	0.91 U	0.96 U	0.90 U	0.97 U
Aldrin	UG/KG	1.025 U	0.91 U	0.96 U	0.90 U	0.97 U
Heptachlor epoxide	UG/KG	1.025 U	0.91 U	0.96 U	0.90 U	0.97 U
Endosulfan I	UG/KG	1.025 U	0.91 U	0.96 U	0.90 U	0.97 U
Dieldrin	UG/KG	1.99 U	1.76 U	1.86 U	1.74 U	1.88 U
4,4'-DDE	UG/KG	1.99 U	1.76 U	1.86 U	1.74 U	1.88 U
Endrin	UG/KG	1.99 U	1.76 U	1.86 U	1.74 U	1.88 U
Endosulfan II	UG/KG	1.99 U	1.76 U	1.86 U	1.74 U	1.88 U
4,4'-DDD	UG/KG	1.99 U	1.76 UJ	1.86 UJ	1.74 UJ	1.88 UJ
Endosulfan sulfate	UG/KG	1.99 U	1.76 U	1.86 U	1.74 U	1.88 U
4,4'-DDT	UG/KG	1.99 U	1.76 UJ	1.86 UJ	1.74 UJ	1.88 UJ
Methoxychlor	UG/KG	10.25 U	9.1 U	9.6 U	9.0 U	9.7 U
Endrin ketone	UG/KG	1.99 U	1.76 U	1.86 U	1.74 U	1.88 U
Endrin aldehyde	UG/KG	1.99 U	1.76 U	1.86 U	1.74 U	1.88 U
alpha-Chlordane	UG/KG	1.025 U	0.91 U	0.96 UJ	0.90 UJ	0.97 U
gamma-Chlordane	UG/KG	1.025 U	0.91 U	0.96 UJ	0.90 UJ	0.97 U
Toxaphene	UG/KG	102.5 U	90.5 U	95.5 U	89.5 U	96.5 U
Aroclor 1016	UG/KG	19.9 U	17.6 U	18.6 U	17.4 U	18.8 U
Aroclor 1221	UG/KG	40.35 U	35.7 U	37.7 U	35.3 U	38.1 U
Aroclor 1232	UG/KG	19.9 U	17.6 U	18.6 U	17.4 U	18.8 U
Aroclor 1242	UG/KG	19.9 U	17.6 U	18.6 U	17.4 U	18.8 U
Aroclor 1248	UG/KG	19.9 U	17.6 U	18.6 U	17.4 U	18.8 U
Aroclor 1254	UG/KG	19.9 U	17.6 U	18.6 U	17.4 U	18.8 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FPA-SB06-05	74-FPA-SB07-03	74-FPA-SB07-07	74-FPA-SB08-03	74-FPA-SB08-07	74-FPA-SB09-04
Laboratory Sample ID:	9402180-11A	9402180-13A	9402180-14A	9402180-16A	9402180-17A	9402180-19A
Date Sampled:	02/20/94	02/20/94	02/20/94	02/20/94	02/20/94	02/20/94
Percent Solids	89.0	95.5	91.3	94.4	86.8	85.6
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U
1,2,4-Trichlorobenzene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U
1,3-Dichlorobenzene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U
1,4-Dichlorobenzene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U
2-Chloronaphthalene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U
2-Chlorophenol	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U
2-Methylnaphthalene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U
2-Methylphenol	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U
2-Nitroaniline	UG/KG	449.5 U	421.0 U	439.5 U	425.5 U	459.5 U
2-Nitrophenol	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U
2,2'-oxybis-(1-chloropropane)	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U
2,4-Dichlorophenol	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U
2,4-Dimethylphenol	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U
2,4-Dinitrophenol	UG/KG	449.5 U	421.0 U	439.5 U	425.5 U	459.5 U
2,4-Dinitrotoluene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U
2,4,5-Trichlorophenol	UG/KG	449.5 U	421.0 U	439.5 U	425.5 U	459.5 U
2,4,6-Trichlorophenol	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U
2,6-Dinitrotoluene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U
3-Nitroaniline	UG/KG	449.5 U	421.0 U	439.5 U	425.5 U	459.5 U
3,3'-Dichlorobenzidine	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U
4-Bromophenyl-phenylether	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U
4-Chloro-3-methylphenol	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U
4-Chloroaniline	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U
4-Chlorophenyl phenyl ether	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U
4-Methylphenol	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U
4-Nitroaniline	UG/KG	449.5 U	421.0 U	439.5 U	425.5 U	459.5 U
4-Nitrophenol	UG/KG	449.5 U	421.0 U	439.5 U	425.5 U	459.5 U
4,6-Dinitro-2-methylphenol	UG/KG	449.5 U	421.0 U	439.5 U	425.5 U	459.5 U
Acenaphthene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U
Acenaphthylene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U
Anthracene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U
Benzo[a]anthracene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U
Benzo[a]pyrene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FPA-SB06-05	74-FPA-SB07-03	74-FPA-SB07-07	74-FPA-SB08-03	74-FPA-SB08-07	74-FPA-SB09-04
Laboratory Sample ID:	9402180-11A	9402180-13A	9402180-14A	9402180-16A	9402180-17A	9402180-19A
Date Sampled:	02/20/94	02/20/94	02/20/94	02/20/94	02/20/94	02/20/94
Percent Solids	89.0	95.5	91.3	94.4	86.8	85.6

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
Benzo[g,h,i]perylene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
Benzo[k]fluoranthene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
bis(2-Chloroethoxy) methane	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
bis(2-Chloroethyl) ether	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
bis(2-Ethylhexyl)phthalate	UG/KG	185.5 U	173.5 U	37.0 J	175.5 U	189.5 U	192.0 U
Butyl benzyl phthalate	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
Carbazole	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
Chrysene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
Dibenzofuran	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
Dibenz[a,h]anthracene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
Diethylphthalate	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
Dimethyl phthalate	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
di-n-Butylphthalate	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
di-n-Octylphthalate	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
Fluoranthene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
Fluorene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
Hexachlorobenzene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
Hexachlorobutadiene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
Hexachlorocyclopentadiene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
Hexachloroethane	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
Indeno[1,2,3-cd]pyrene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
Isophorone	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
Naphthalene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
Nitrobenzene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
N-Nitroso-di-n-propylamine	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
N-nitrosodiphenylamine	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
Pentachlorophenol	UG/KG	449.5 U	421.0 U	439.5 U	425.5 U	459.5 U	465.0 U
Phenanthrene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
Phenol	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U
Pyrene	UG/KG	185.5 U	173.5 U	181.5 U	175.5 U	189.5 U	192.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FPA-SB06-05	74-FPA-SB07-03	74-FPA-SB07-07	74-FPA-SB08-03	74-FPA-SB08-07	74-FPA-SB09-04	
Laboratory Sample ID:	9402180-11A	9402180-13A	9402180-14A	9402180-16A	9402180-17A	9402180-19A	
Date Sampled:	02/20/94	02/20/94	02/20/94	02/20/94	02/20/94	02/20/94	
Percent Solids	89.0	95.5	91.3	94.4	86.8	85.6	
VOLATILES							
Chloromethane	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	
Bromomethane	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	
Vinyl chloride	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	
Chloroethane	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U	
Methylene chloride	UG/KG	5.50 U	6.0 U	5.5 U	5.50 U	6.0 U	
Acetone	UG/KG	5.5 U	88.0 J	61.0 J	21.0 U	93.0 J	500.0 J
Carbon Disulfide	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U
1,1-Dichloroethene	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U
1,1-Dichloroethane	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U
1,2-Dichloroethene(total)	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U
Chloroform	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U
1,2-Dichloroethane	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U
2-Butanone	UG/KG	5.5 U			5.5 U		
1,1,1-Trichloroethane	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U
Carbon tetrachloride	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U
Bromodichloromethane	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U
1,2-Dichloropropane	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U
cis-1,3-Dichloropropene	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U
Trichloroethene	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U
Dibromochloromethane	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U
1,1,2-Trichloroethane	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U
Benzene	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U
trans-1,3-Dichloropropene	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U
Bromoform	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U
4-Methyl-2-pentanone	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U
2-Hexanone	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U
Tetrachloroethene	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U
1,1,2,2-Tetrachloroethane	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U
Toluene	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U
Chlorobenzene	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U
Ethylbenzene	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U
Styrene	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U
Xylenes (total)	UG/KG	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	6.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FPA-SB06-05	74-FPA-SB07-03	74-FPA-SB07-07	74-FPA-SB08-03	74-FPA-SB08-07	74-FPA-SB09-04
Laboratory Sample ID:	9402180-11A	9402180-13A	9402180-14A	9402180-16A	9402180-17A	9402180-19A
Date Sampled:	02/20/94	02/20/94	02/20/94	02/20/94	02/20/94	02/20/94
Percent Solids	89.0	95.5	91.3	94.4	86.8	85.6
PESTICIDE/PCBS						
alpha-BHC	UG/KG	0.96 UJ	0.90 UJ	0.94 UJ	0.91 UJ	0.98 UJ
beta-BHC	UG/KG	0.96 UJ	0.90 UJ	0.94 UJ	0.91 UJ	0.98 UJ
delta-BHC	UG/KG	0.96 UJ	0.90 UJ	0.94 UJ	0.91 UJ	0.98 UJ
Lindane (gamma-BHC)	UG/KG	0.96 UJ	0.90 UJ	0.94 UJ	0.91 UJ	0.98 UJ
Heptachlor	UG/KG	0.96 UJ	0.90 UJ	0.94 UJ	0.91 UJ	0.98 UJ
Aldrin	UG/KG	0.96 UJ	0.90 UJ	0.94 UJ	0.91 UJ	0.98 UJ
Heptachlor epoxide	UG/KG	0.96 UJ	0.90 UJ	0.94 UJ	0.91 UJ	0.98 UJ
Endosulfan I	UG/KG	0.96 UJ	0.90 UJ	0.94 UJ	0.91 UJ	0.98 UJ
Dieldrin	UG/KG	1.86 UJ	1.74 UJ	1.82 UJ	1.76 UJ	1.90 UJ
4,4'-DDE	UG/KG	1.86 UJ	1.74 UJ	1.82 UJ	1.76 UJ	1.90 UJ
Endrin	UG/KG	1.86 UJ	1.74 UJ	1.82 UJ	1.76 UJ	1.90 UJ
Endosulfan II	UG/KG	1.86 UJ	1.74 UJ	1.82 UJ	1.76 UJ	1.90 UJ
4,4'-DDD	UG/KG	1.86 UJ	1.74 UJ	1.82 UJ	1.76 UJ	1.90 UJ
Endosulfan sulfate	UG/KG	1.86 UJ	1.74 UJ	1.82 UJ	1.76 UJ	1.90 UJ
4,4'-DDT	UG/KG	1.86 UJ	1.74 UJ	1.82 UJ	1.76 UJ	1.90 UJ
Methoxychlor	UG/KG	9.6 UJ	9.0 UJ	9.4 UJ	9.1 UJ	9.8 UJ
Endrin ketone	UG/KG	1.86 UJ	1.74 UJ	1.82 UJ	1.76 UJ	1.90 UJ
Endrin aldehyde	UG/KG	1.86 UJ	1.74 UJ	0.480 NJ	1.76 UJ	1.90 UJ
alpha-Chlordane	UG/KG	0.96 UJ	0.90 UJ	0.94 UJ	0.91 UJ	0.98 UJ
gamma-Chlordane	UG/KG	0.96 UJ	0.90 UJ	0.94 UJ	0.91 UJ	0.98 UJ
Toxaphene	UG/KG	95.5 UJ	89.5 UJ	93.5 UJ	90.5 UJ	97.5 UJ
Aroclor 1016	UG/KG	18.6 UJ	17.4 UJ	18.2 UJ	17.6 UJ	19.0 UJ
Aroclor 1221	UG/KG	37.7 UJ	35.3 UJ	36.8 UJ	35.7 UJ	38.5 UJ
Aroclor 1232	UG/KG	18.6 UJ	17.4 UJ	18.2 UJ	17.6 UJ	19.0 UJ
Aroclor 1242	UG/KG	18.6 UJ	17.4 UJ	18.2 UJ	17.6 UJ	19.0 UJ
Aroclor 1248	UG/KG	18.6 UJ	17.4 UJ	18.2 UJ	17.6 UJ	19.0 UJ
Aroclor 1254	UG/KG	18.6 UJ	17.4 UJ	18.2 UJ	17.6 UJ	19.0 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FPA-SB09-07	74-GW03A-03	74-GW03A-04	74-GW04-03	74-GW04-05	74-GW05-01
Laboratory Sample ID:	9402180-20A	9401110-01	9401110-02	9401101-01	9401101-02	9401066-04
Date Sampled:	02/20/94	01/18/94	01/18/94	01/18/94	01/18/94	01/11/94
Percent Solids	84.8	90.4	83.4	87.8	88.8	91.0
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	183.5 U
1,2,4-Trichlorobenzene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	183.5 U
1,3-Dichlorobenzene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	183.5 U
1,4-Dichlorobenzene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	183.5 U
2-Chloronaphthalene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	183.5 U
2-Chlorophenol	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	183.5 U
2-Methylnaphthalene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	183.5 U
2-Methylphenol	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	183.5 U
2-Nitroaniline	UG/KG	470.5 U	444.5 U	480.0 U	456.0 U	444.5 U
2-Nitrophenol	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	183.5 U
2,2'-oxybis-(1-chloropropane)	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	183.5 U
2,4-Dichlorophenol	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	183.5 U
2,4-Dimethylphenol	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	183.5 U
2,4-Dinitrophenol	UG/KG	470.5 U	444.5 U	480.0 U	456.0 U	444.5 U
2,4-Dinitrotoluene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	183.5 U
2,4,5-Trichlorophenol	UG/KG	470.5 U	444.5 U	480.0 U	456.0 U	444.5 U
2,4,6-Trichlorophenol	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	183.5 U
2,6-Dinitrotoluene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	183.5 U
3-Nitroaniline	UG/KG	470.5 U	444.5 U	480.0 U	456.0 U	444.5 U
3,3'-Dichlorobenzidine	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	183.5 U
4-Bromophenyl-phenylether	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	183.5 U
4-Chloro-3-methylphenol	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	183.5 U
4-Chloroaniline	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	183.5 U
4-Chlorophenyl phenyl ether	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	183.5 U
4-Methylphenol	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	183.5 U
4-Nitroaniline	UG/KG	470.5 U	444.5 U	480.0 U	456.0 U	444.5 U
4-Nitrophenol	UG/KG	470.5 U	444.5 U	480.0 U	456.0 U	444.5 U
4,6-Dinitro-2-methylphenol	UG/KG	470.5 U	444.5 U	480.0 U	456.0 U	444.5 U
Acenaphthene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	183.5 U
Acenaphthylene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	183.5 U
Anthracene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	183.5 U
Benzo[a]anthracene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	183.5 U
Benzo[a]pyrene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	183.5 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	74-FPA-SB09-07	74-GW03A-03	74-GW03A-04	74-GW04-03	74-GW04-05	74-GW05-01
Laboratory Sample ID:	9402180-20A	9401110-01	9401110-02	9401101-01	9401101-02	9401066-04
Date Sampled:	02/20/94	01/18/94	01/18/94	01/18/94	01/18/94	01/11/94
Percent Solids	84.8	90.4	83.4	87.8	88.8	91.0

SEMIVOLATILES Cont.						
Benzo[b]fluoranthene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
Benzo[g,h,i]perylene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
Benzo[k]fluoranthene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
bis(2-Chloroethoxy) methane	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
bis(2-Chloroethyl) ether	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
bis(2-Ethylhexyl)phthalate	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	46.0 J
Butyl benzyl phthalate	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
Carbazole	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
Chrysene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
Dibenzofuran	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
Dibenz[a,h]anthracene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
Diethylphthalate	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
Dimethyl phthalate	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
di-n-Butylphthalate	UG/KG	194.0 U	183.5 U	200.0 U	65.0 J	78.0 J
di-n-Octylphthalate	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
Fluoranthene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
Fluorene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
Hexachlorobenzene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
Hexachlorobutadiene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
Hexachlorocyclopentadiene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
Hexachloroethane	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
Indeno[1,2,3-cd]pyrene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
Isophorone	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
Naphthalene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
Nitrobenzene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
N-Nitroso-di-n-propylamine	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
N-nitrosodiphenylamine	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
Pentachlorophenol	UG/KG	470.5 U	444.5 U	480.0 U	456.0 U	452.0 U
Phenanthrene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
Phenol	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U
Pyrene	UG/KG	194.0 U	183.5 U	198.0 U	188.0 U	186.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FPA-SB09-07	74-GW03A-03	74-GW03A-04	74-GW04-03	74-GW04-05	74-GW05-01
Laboratory Sample ID:	9402180-20A	9401110-01	9401110-02	9401101-01	9401101-02	9401066-04
Date Sampled:	02/20/94	01/18/94	01/18/94	01/18/94	01/18/94	01/11/94
Percent Solids	84.8	90.4	83.4	87.8	88.8	91.0
VOLATILES						
Chloromethane	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
Bromomethane	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
Vinyl chloride	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
Chloroethane	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
Methylene chloride	UG/KG	6.0 U	5.5 U	5.0 U	5.50 U	6.0 U
Acetone	UG/KG	6.0 UJ	5.6 U	5.4 UJ	5.7 U	420.0 J
Carbon Disulfide	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
1,1-Dichloroethene	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
1,1-Dichloroethane	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
1,2-Dichloroethene(total)	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
Chloroform	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
1,2-Dichloroethane	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
2-Butanone	UG/KG		5.6 U	5.4 U	5.7 U	5.5 U
1,1,1-Trichloroethane	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
Carbon tetrachloride	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
Bromodichloromethane	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
1,2-Dichloropropane	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
cis-1,3-Dichloropropene	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
Trichloroethene	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
Dibromochloromethane	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
1,1,2-Trichloroethane	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
Benzene	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
trans-1,3-Dichloropropene	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
Bromoform	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
4-Methyl-2-pentanone	UG/KG	6.0 U	5.6 U	5.4 UJ	5.7 U	5.5 U
2-Hexanone	UG/KG	6.0 U	5.6 UJ		5.7 UJ	5.5 U
Tetrachloroethene	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
1,1,2,2-Tetrachloroethane	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
Toluene	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
Chlorobenzene	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
Ethylbenzene	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
Styrene	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U
Xylenes (total)	UG/KG	6.0 U	5.6 U	5.4 U	5.7 U	5.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-FPA-SB09-07	74-GW03A-03	74-GW03A-04	74-GW04-03	74-GW04-05	74-GW05-01	
Laboratory Sample ID:	9402180-20A	9401110-01	9401110-02	9401101-01	9401101-02	9401066-04	
Date Sampled:	02/20/94	01/18/94	01/18/94	01/18/94	01/18/94	01/11/94	
Percent Solids	84.8	90.4	83.4	87.8	88.8	91.0	
PESTICIDE/PCBS							
alpha-BHC	UG/KG	1.00 UJ	0.95 UJ	1.03 UJ	0.97 UJ	0.96 UJ	0.94 UJ
beta-BHC	UG/KG	1.00 UJ	0.95 U	1.03 U	0.97 UJ	0.96 U	0.94 UJ
delta-BHC	UG/KG	1.00 UJ	0.95 UJ	1.03 UJ	0.97 UJ	0.96 UJ	0.94 UJ
Lindane (gamma-BHC)	UG/KG	1.00 UJ	0.95 U	1.03 U	0.97 UJ	0.96 U	0.94 UJ
Heptachlor	UG/KG	1.00 UJ	1.25 J	1.59 J	0.97 UJ	0.96 U	0.94 UJ
Aldrin	UG/KG	1.00 UJ	0.95 U	1.03 U	0.97 UJ	0.96 U	0.94 UJ
Heptachlor epoxide	UG/KG	1.00 UJ	0.95 U	1.03 U	0.97 UJ	0.96 U	0.94 UJ
Endosulfan I	UG/KG	1.00 UJ	0.95 U	1.03 U	0.97 UJ	0.96 U	0.94 UJ
Dieldrin	UG/KG	1.94 UJ	1.84 U	1.99 U	1.88 UJ	1.86 U	1.82 UJ
4,4'-DDE	UG/KG	1.94 UJ	1.84 U	1.99 U	1.88 UJ	1.86 U	1.05 NJ
Endrin	UG/KG	1.94 UJ	1.84 U	1.99 U	1.88 UJ	1.86 U	1.82 UJ
Endosulfan II	UG/KG	1.94 UJ	1.84 U	1.99 U	1.88 UJ	1.86 U	1.82 UJ
4,4'-DDD	UG/KG	1.94 UJ	1.84 U	1.99 U	1.88 UJ	1.86 U	1.82 UJ
Endosulfan sulfate	UG/KG	1.94 UJ	1.84 U	1.99 U	1.88 UJ	1.86 U	1.82 UJ
4,4'-DDT	UG/KG	1.94 UJ	1.84 UJ	1.99 UJ	1.88 UJ	0.780 NJ	1.82 UJ
Methoxychlor	UG/KG	10.0 UJ	9.5 UJ	10.3 UJ	9.7 UJ	9.6 UJ	9.4 UJ
Endrin ketone	UG/KG	1.94 UJ	1.84 U	1.99 U	1.88 UJ	1.86 U	1.82 UJ
Endrin aldehyde	UG/KG	1.94 UJ	0.770 NJ	1.99 U	1.88 UJ	1.86 U	1.82 UJ
alpha-Chlordane	UG/KG	1.00 UJ	0.95 U	1.03 U	0.97 UJ	0.96 U	0.94 UJ
gamma-Chlordane	UG/KG	1.00 UJ	0.95 U	1.03 U	0.97 UJ	0.96 U	0.94 UJ
Toxaphene	UG/KG	100.0 UJ	94.5 U	102.5 U	96.5 UJ	95.5 U	93.5 UJ
Aroclor 1016	UG/KG	19.4 UJ	18.4 U	19.9 U	18.8 UJ	18.6 U	18.2 UJ
Aroclor 1221	UG/KG	39.4 UJ	37.2 U	40.4 U	38.1 UJ	37.7 U	36.8 UJ
Aroclor 1232	UG/KG	19.4 UJ	18.4 U	19.9 U	18.8 UJ	18.6 U	18.2 UJ
Aroclor 1242	UG/KG	19.4 UJ	18.4 U	19.9 U	18.8 UJ	18.6 U	18.2 UJ
Aroclor 1248	UG/KG	19.4 UJ	18.4 U	19.9 U	18.8 UJ	18.6 U	18.2 UJ
Aroclor 1254	UG/KG	19.4 UJ	18.4 U	19.9 U	18.8 UJ	18.6 U	18.2 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-GW05-04	74-GW07-01	74-GW07-02	74-GW08-03	74-GW08-06	
Laboratory Sample ID:	9401066-05	9402151-03A	9402151-04A	9402151-01A	9402151-02A	
Date Sampled:	01/11/94	02/18/94	02/18/94	02/18/94	02/18/94	
Percent Solids	91.2	81.7	82.8	80.1	86.2	
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
1,2,4-Trichlorobenzene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
1,3-Dichlorobenzene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
1,4-Dichlorobenzene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
2-Chloronaphthalene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
2-Chlorophenol	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
2-Methylnaphthalene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
2-Methylphenol	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
2-Nitroaniline	UG/KG	444.5 U	488.0 U	480.0 U	500.0 U	464.0 U
2-Nitrophenol	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
2,2'-oxybis-(1-chloropropane)	UG/KG	183.5 U			206.0 U	
2,4-Dichlorophenol	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
2,4-Dimethylphenol	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
2,4-Dinitrophenol	UG/KG	444.5 U	488.0 U	480.0 U	500.0 U	464.0 U
2,4-Dinitrotoluene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
2,4,5-Trichlorophenol	UG/KG	444.5 U	488.0 U	480.0 U	500.0 U	464.0 U
2,4,6-Trichlorophenol	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
2,6-Dinitrotoluene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
3-Nitroaniline	UG/KG	444.5 U	488.0 U	480.0 U	500.0 U	464.0 U
3,3'-Dichlorobenzidine	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
4-Bromophenyl-phenylether	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
4-Chloro-3-methylphenol	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
4-Chloroaniline	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
4-Chlorophenyl phenyl ether	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
4-Methylphenol	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
4-Nitroaniline	UG/KG	444.5 U	488.0 U	480.0 U	500.0 U	464.0 U
4-Nitrophenol	UG/KG	444.5 U	488.0 U	480.0 U	500.0 U	464.0 U
4,6-Dinitro-2-methylphenol	UG/KG	444.5 U	488.0 U	480.0 U	500.0 U	464.0 U
Acenaphthene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
Acenaphthylene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
Anthracene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
Benzo[a]anthracene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
Benzo[a]pyrene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-GW05-04	74-GW07-01	74-GW07-02	74-GW08-03	74-GW08-06
Laboratory Sample ID:	9401066-05	9402151-03A	9402151-04A	9402151-01A	9402151-02A
Date Sampled:	01/11/94	02/18/94	02/18/94	02/18/94	02/18/94
Percent Solids	91.2	81.7	82.8	80.1	86.2

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
Benzo[g,h,i]perylene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
Benzo[k]fluoranthene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
bis(2-Chloroethoxy) methane	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
bis(2-Chloroethyl) ether	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
bis(2-Ethylhexyl)phthalate	UG/KG	183.5 U	56.0 J	54.0 J	240.0 J	46.0 J
Butyl benzyl phthalate	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
Carbazole	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
Chrysene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
Dibenzofuran	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
Dibenz[a,h]anthracene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
Diethylphthalate	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
Dimethyl phthalate	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
di-n-Butylphthalate	UG/KG	185.0 U	44.0 J	198.0 U	43.0 J	191.5 U
di-n-Octylphthalate	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
Fluoranthene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
Fluorene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
Hexachlorobenzene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
Hexachlorobutadiene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
Hexachlorocyclopentadiene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
Hexachloroethane	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
Indeno[1,2,3-cd]pyrene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
Isophorone	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
Naphthalene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
Nitrobenzene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
N-Nitroso-di-n-propylamine	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
N-nitrosodiphenylamine	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
Pentachlorophenol	UG/KG	444.5 U	488.0 U	480.0 U	500.0 U	464.0 U
Phenanthrene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
Phenol	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U
Pyrene	UG/KG	183.5 U	201.5 U	198.0 U	206.0 U	191.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-GW05-04	74-GW07-01	74-GW07-02	74-GW08-03	74-GW08-06
Laboratory Sample ID:	9401066-05	9402151-03A	9402151-04A	9402151-01A	9402151-02A
Date Sampled:	01/11/94	02/18/94	02/18/94	02/18/94	02/18/94
Percent Solids	91.2	81.7	82.8	80.1	86.2
<u>VOLATILES</u>					
Chloromethane	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
Bromomethane	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
Vinyl chloride	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
Chloroethane	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
Methylene chloride	UG/KG	5.5 U	6.00 U	6.00 U	6.00 U
Acetone	UG/KG	5.5 U	6.0 U	13.0 U	6.00 J
Carbon Disulfide	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
1,1-Dichloroethene	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
1,1-Dichloroethane	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
1,2-Dichloroethene(total)	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
Chloroform	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
1,2-Dichloroethane	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
2-Butanone	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
1,1,1-Trichloroethane	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
Carbon tetrachloride	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
Bromodichloromethane	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
1,2-Dichloropropane	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
cis-1,3-Dichloropropene	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
Trichloroethene	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
Dibromochloromethane	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
1,1,2-Trichloroethane	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
Benzene	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
trans-1,3-Dichloropropene	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
Bromoform	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
4-Methyl-2-pentanone	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
2-Hexanone	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
Tetrachloroethene	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
1,1,2,2-Tetrachloroethane	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
Toluene	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
Chlorobenzene	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
Ethylbenzene	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
Styrene	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U
Xylenes (total)	UG/KG	5.5 U	6.0 U	6.0 U	6.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-GW05-04	74-GW07-01	74-GW07-02	74-GW08-03	74-GW08-06	
Laboratory Sample ID:	9401066-05	9402151-03A	9402151-04A	9402151-01A	9402151-02A	
Date Sampled:	01/11/94	02/18/94	02/18/94	02/18/94	02/18/94	
Percent Solids	91.2	81.7	82.8	80.1	86.2	
<u>PESTICIDE/PCBS</u>						
alpha-BHC	UG/KG	0.94 UJ	1.04 UJ	1.02 UJ	1.06 UJ	0.99 UJ
beta-BHC	UG/KG	0.94 UJ	1.04 UJ	1.02 UJ	1.06 UJ	0.99 UJ
delta-BHC	UG/KG	0.94 UJ	1.04 UJ	1.02 UJ	1.06 UJ	0.99 UJ
Lindane (gamma-BHC)	UG/KG	0.94 UJ	1.04 UJ	1.02 UJ	1.06 UJ	0.99 UJ
Heptachlor	UG/KG	0.94 UJ	1.04 UJ	1.02 UJ	1.06 UJ	0.99 UJ
Aldrin	UG/KG	0.94 UJ	1.04 UJ	1.02 UJ	1.06 UJ	0.99 UJ
Heptachlor epoxide	UG/KG	0.94 UJ	1.04 UJ	1.02 UJ	1.06 UJ	0.99 UJ
Endosulfan I	UG/KG	0.94 UJ	1.04 UJ	1.02 UJ	1.06 UJ	0.99 UJ
Dieldrin	UG/KG	1.82 UJ	2.02 UJ	1.98 UJ	2.06 UJ	1.92 UJ
4,4'-DDE	UG/KG	1.82 UJ	2.02 UJ	1.98 UJ	2.06 UJ	1.92 UJ
Endrin	UG/KG	1.82 UJ	2.02 UJ	1.98 UJ	2.06 UJ	1.92 UJ
Endosulfan II	UG/KG	1.82 UJ	2.02 UJ	1.98 UJ	2.06 UJ	1.92 UJ
4,4'-DDD	UG/KG	1.82 UJ	2.02 UJ	1.98 UJ	1.20 J	1.92 UJ
Endosulfan sulfate	UG/KG	1.82 UJ	2.02 UJ	1.98 UJ	2.06 UJ	1.92 UJ
4,4'-DDT	UG/KG	1.82 UJ	2.02 UJ	1.98 UJ	2.06 UJ	1.92 UJ
Methoxychlor	UG/KG	9.4 UJ	10.4 UJ	10.2 UJ	10.6 UJ	9.9 UJ
Endrin ketone	UG/KG	1.82 UJ	2.02 UJ	1.98 UJ	2.06 UJ	1.92 UJ
Endrin aldehyde	UG/KG	1.82 UJ	2.02 UJ	1.98 UJ	2.06 UJ	1.92 UJ
alpha-Chlordane	UG/KG	0.94 UJ	1.04 UJ	1.02 UJ	1.06 UJ	0.99 UJ
gamma-Chlordane	UG/KG	0.94 UJ	1.04 UJ	1.02 UJ	1.06 UJ	0.99 UJ
Toxaphene	UG/KG	93.5 UJ	103.5 UJ	102.0 UJ	106.0 UJ	98.5 UJ
Aroclor 1016	UG/KG	18.2 UJ	20.2 UJ	19.8 UJ	20.6 UJ	19.2 UJ
Aroclor 1221	UG/KG	36.8 UJ	40.9 UJ	40.2 UJ	41.9 UJ	38.9 UJ
Aroclor 1232	UG/KG	18.2 UJ	20.2 UJ	19.8 UJ	20.6 UJ	19.2 UJ
Aroclor 1242	UG/KG	18.2 UJ	20.2 UJ	19.8 UJ	20.6 UJ	19.2 UJ
Aroclor 1248	UG/KG	18.2 UJ	20.2 UJ	19.8 UJ	20.6 UJ	19.2 UJ
Aroclor 1254	UG/KG	18.2 UJ	20.2 UJ	19.8 UJ	20.6 UJ	19.2 UJ

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled: Percent Solids	MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG-NORMAL UPPER 95% CONFIDENCE INTERVAL
SEMIVOLATILES					
1,2-Dichlorobenzene	UG/KG	ND	NA	NA	NA
1,2,4-Trichlorobenzene	UG/KG	ND	NA	NA	NA
1,3-Dichlorobenzene	UG/KG	ND	NA	NA	NA
1,4-Dichlorobenzene	UG/KG	ND	NA	NA	NA
2-Chloronaphthalene	UG/KG	ND	NA	NA	NA
2-Chlorophenol	UG/KG	ND	NA	NA	NA
2-Methylnaphthalene	UG/KG	ND	NA	NA	NA
2-Methylphenol	UG/KG	ND	NA	NA	NA
2-Nitroaniline	UG/KG	ND	NA	NA	NA
2-Nitrophenol	UG/KG	ND	NA	NA	NA
2,2'-oxybis-(1-chloropropane)	UG/KG	760 R	NA	NA	NA
2,4-Dichlorophenol	UG/KG	ND	NA	NA	NA
2,4-Dimethylphenol	UG/KG	ND	NA	NA	NA
2,4-Dinitrophenol	UG/KG	ND	NA	NA	NA
2,4-Dinitrotoluene	UG/KG	ND	NA	NA	NA
2,4,5-Trichlorophenol	UG/KG	ND	NA	NA	NA
2,4,6-Trichlorophenol	UG/KG	ND	NA	NA	NA
2,6-Dinitrotoluene	UG/KG	ND	NA	NA	NA
3-Nitroaniline	UG/KG	ND	NA	NA	NA
3,3'-Dichlorobenzidine	UG/KG	ND	NA	NA	NA
4-Bromophenyl-phenylether	UG/KG	ND	NA	NA	NA
4-Chloro-3-methylphenol	UG/KG	ND	NA	NA	NA
4-Chloroaniline	UG/KG	ND	NA	NA	NA
4-Chlorophenyl phenyl ether	UG/KG	ND	NA	NA	NA
4-Methylphenol	UG/KG	ND	NA	NA	NA
4-Nitroaniline	UG/KG	ND	NA	NA	NA
4-Nitrophenol	UG/KG	ND	NA	NA	NA
4,6-Dinitro-2-methylphenol	UG/KG	ND	NA	NA	NA
Acenaphthene	UG/KG	ND	NA	NA	NA
Acenaphthylene	UG/KG	ND	NA	NA	NA
Anthracene	UG/KG	ND	NA	NA	NA
Benzo[a]anthracene	UG/KG	ND	NA	NA	NA
Benzo[a]pyrene	UG/KG	ND	NA	NA	NA

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled: Percent Solids	MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG-NORMAL UPPER 95% CONFIDENCE INTERVAL
SEMIVOLATILES Cont.					
Benzo[b]fluoranthene	UG/KG	ND	NA	NA	NA
Benzo[g,h,i]perylene	UG/KG	ND	NA	NA	NA
Benzo[k]fluoranthene	UG/KG	ND	NA	NA	NA
bis(2-Chloroethoxy) methane	UG/KG	ND	NA	NA	NA
bis(2-Chloroethyl) ether	UG/KG	ND	NA	NA	NA
bis(2-Ethylhexyl)phthalate	UG/KG	240 J	248.4	116.7	277.1
Butyl benzyl phthalate	UG/KG	ND	NA	NA	322.0
Carbazole	UG/KG	ND	NA	NA	NA
Chrysene	UG/KG	ND	NA	NA	NA
Dibenzofuran	UG/KG	ND	NA	NA	NA
Dibenz[a,h]anthracene	UG/KG	ND	NA	NA	NA
Diethylphthalate	UG/KG	874	280.1	126.3	311.2
Dimethyl phthalate	UG/KG	ND	NA	NA	309.4
di-n-Butylphthalate	UG/KG	155 J	227.3	107.0	253.6
di-n-Octylphthalate	UG/KG	ND	NA	NA	NA
Fluoranthene	UG/KG	ND	NA	NA	NA
Fluorene	UG/KG	ND	NA	NA	NA
Hexachlorobenzene	UG/KG	ND	NA	NA	NA
Hexachlorobutadiene	UG/KG	ND	NA	NA	NA
Hexachlorocyclopentadiene	UG/KG	ND	NA	NA	NA
Hexachloroethane	UG/KG	ND	NA	NA	NA
Indeno[1,2,3-cd]pyrene	UG/KG	ND	NA	NA	NA
Isophorone	UG/KG	ND	NA	NA	NA
Naphthalene	UG/KG	ND	NA	NA	NA
Nitrobenzene	UG/KG	ND	NA	NA	NA
N-Nitroso-di-n-propylamine	UG/KG	ND	NA	NA	NA
N-nitrosodiphenylamine	UG/KG	ND	NA	NA	NA
Pentachlorophenol	UG/KG	ND	NA	NA	NA
Phenanthrene	UG/KG	ND	NA	NA	NA
Phenol	UG/KG	ND	NA	NA	NA
Pyrene	UG/KG	ND	NA	NA	NA

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:					NORMAL	LOG-NORMAL
Laboratory Sample ID:					UPPER 95%	UPPER 95%
Date Sampled:		MAXIMUM	ARITHMETIC	STANDARD	CONFIDENCE	CONFIDENCE
Percent Solids		DETECTED	MEAN	DEVIATION	INTERVAL	INTERVAL
<u>VOLATILES</u>						
Chloromethane	UG/KG	ND	NA	NA	NA	NA
Bromomethane	UG/KG	ND	NA	NA	NA	NA
Vinyl chloride	UG/KG	ND	NA	NA	NA	NA
Chloroethane	UG/KG	ND	NA	NA	NA	NA
Methylene chloride	UG/KG	190	9.7	26.9	16.3	8.2
Acetone	UG/KG	820	92.9	168.5	134.3	177.1
Carbon Disulfide	UG/KG	ND	NA	NA	NA	NA
1,1-Dichloroethene	UG/KG	ND	NA	NA	NA	NA
1,1-Dichloroethane	UG/KG	ND	NA	NA	NA	NA
1,2-Dichloroethene(total)	UG/KG	ND	NA	NA	NA	NA
Chloroform	UG/KG	ND	NA	NA	NA	NA
1,2-Dichloroethane	UG/KG	ND	NA	NA	NA	NA
2-Butanone	UG/KG	12 R	NA	NA	NA	NA
1,1,1-Trichloroethane	UG/KG	ND	NA	NA	NA	NA
Carbon tetrachloride	UG/KG	ND	NA	NA	NA	NA
Bromodichloromethane	UG/KG	ND	NA	NA	NA	NA
1,2-Dichloropropane	UG/KG	ND	NA	NA	NA	NA
cis-1,3-Dichloropropene	UG/KG	ND	NA	NA	NA	NA
Trichloroethene	UG/KG	ND	NA	NA	NA	NA
Dibromochloromethane	UG/KG	ND	NA	NA	NA	NA
1,1,2-Trichloroethane	UG/KG	ND	NA	NA	NA	NA
Benzene	UG/KG	ND	NA	NA	NA	NA
trans-1,3-Dichloropropene	UG/KG	ND	NA	NA	NA	NA
Bromoform	UG/KG	ND	NA	NA	NA	NA
4-Methyl-2-pentanone	UG/KG	ND	NA	NA	NA	NA
2-Hexanone	UG/KG	10.7 R	NA	NA	NA	NA
Tetrachloroethene	UG/KG	ND	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	UG/KG	ND	NA	NA	NA	NA
Toluene	UG/KG	ND	NA	NA	NA	NA
Chlorobenzene	UG/KG	ND	NA	NA	NA	NA
Ethylbenzene	UG/KG	ND	NA	NA	NA	NA
Styrene	UG/KG	ND	NA	NA	NA	NA
Xylenes (total)	UG/KG	ND	NA	NA	NA	NA

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:					NORMAL	LOG-NORMAL
Laboratory Sample ID:					UPPER 95%	UPPER 95%
Date Sampled:					CONFIDENCE	CONFIDENCE
Percent Solids	MAXIMUM	ARITHMETIC	STANDARD		INTERVAL	INTERVAL
	DETECTED	MEAN	DEVIATION			
PESTICIDE/PCBS						
alpha-BHC	UG/KG	ND	NA	NA	NA	NA
beta-BHC	UG/KG	ND	NA	NA	NA	NA
delta-BHC	UG/KG	ND	NA	NA	NA	NA
Lindane (gamma-BHC)	UG/KG	ND	NA	NA	NA	NA
Heptachlor	UG/KG	1.59 J	0.96	0.15	1.00	1.03
Aldrin	UG/KG	0.4 J	0.95	0.09	0.97	0.98
Heptachlor epoxide	UG/KG	0.33 J	0.95	0.10	0.97	0.99
Endosulfan I	UG/KG	ND	NA	NA	NA	NA
Dieldrin	UG/KG	ND	NA	NA	NA	NA
4,4'-DDE	UG/KG	21.3 J	2.3	2.9	3.0	2.4
Endrin	UG/KG	ND	NA	NA	NA	NA
Endosulfan II	UG/KG	ND	NA	NA	NA	NA
4,4'-DDD	UG/KG	3.61 J	1.8	0.4	1.9	2.0
Endosulfan sulfate	UG/KG	ND	NA	NA	NA	NA
4,4'-DDT	UG/KG	21.37 J	2.3	2.9	3.0	2.5
Methoxychlor	UG/KG	7.06 J	9.6	0.6	9.7	9.7
Endrin ketone	UG/KG	ND	NA	NA	NA	NA
Endrin aldehyde	UG/KG	0.77 NJ	1.8	0.3	1.9	1.9
alpha-Chlordane	UG/KG	ND	NA	NA	NA	NA
gamma-Chlordane	UG/KG	ND	NA	NA	NA	NA
Toxaphene	UG/KG	ND	NA	NA	NA	NA
Aroclor 1016	UG/KG	ND	NA	NA	NA	NA
Aroclor 1221	UG/KG	ND	NA	NA	NA	NA
Aroclor 1232	UG/KG	ND	NA	NA	NA	NA
Aroclor 1242	UG/KG	ND	NA	NA	NA	NA
Aroclor 1248	UG/KG	ND	NA	NA	NA	NA
Aroclor 1254	UG/KG	ND	NA	NA	NA	NA

APPENDIX P.21
**SITE 74 FORMER DISPOSAL/POTENTIAL DISPOSAL/
FORMER PEST CONTROL AREA SUBSURFACE SOIL INORGANICS**

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL INORGANICS

Client Sample ID:	74-PDA-SB01-01	74-PDA-SB01-02	74-PDA-SB02-01	74-PDA-SB02-03	74-PDA-SB03-02	74-PDA-SB03-04
Laboratory Sample ID:	9402181-02	9402181-03	9402181-05	9402181-06	9402181-08	9402181-09
Date Sampled:	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94
Percent Solids	89.8	84.9	89.3	85.4	89.0	81.6

	UNITS	74-PDA-SB01-01	74-PDA-SB01-02	74-PDA-SB02-01	74-PDA-SB02-03	74-PDA-SB03-02	74-PDA-SB03-04
Aluminum	MG/KG	5000.0	2470.0	7780.0	3440.0	6390.0	1690.0
Antimony	MG/KG	0.85 U	0.90 U	0.85 U	0.89 U	0.86 U	1.90
Arsenic	MG/KG	0.245 U	0.259 U	0.606 J	2.76	1.46	0.270 U
Barium	MG/KG	5.82	1.46 U	9.58	3.47	6.80	1.52 U
Beryllium	MG/KG	0.085 U	0.090 U	0.085 U	0.089 U	0.086 U	0.093 U
Cadmium	MG/KG	0.355 U	0.376 U	0.357 U	0.374 U	0.359 U	0.391 U
Calcium	MG/KG	172.0	17.6 U	54.6	38.6	83.5	18.3 U
Chromium	MG/KG	6.06	3.79	8.55	3.75	6.17	2.60
Cobalt	MG/KG	1.78 U	1.89 U	1.79 U	1.88 U	1.80 U	1.96 U
Copper	MG/KG	1.82 U	1.92 U	1.83 U	1.91 U	1.83 U	2.00 U
Iron	MG/KG	1970.0	497.0	3090.0	1420.0	1860.0	455.0
Lead	MG/KG	3.38 J	2.54 J	5.08 J	2.61 J	4.15 J	2.05 J
Magnesium	MG/KG	94.5	61.6	204.0	77.6	143.0	40.0
Manganese	MG/KG	0.79 U	0.84 U	2.92	0.83 U	2.18	1.83
Mercury	MG/KG	0.028 U	0.030 U	0.028 U	0.029 U	0.028 U	0.031 U
Nickel	MG/KG	3.21 U	3.39 U	3.23 U	3.37 U	3.24 U	3.53 U
Potassium	MG/KG	85.0 U	90.0 U	85.5 U	89.5 U	85.5 U	93.5 U
Selenium	MG/KG	0.178 U	0.189 U	0.179 U	0.188 U	0.180 U	0.196 U
Silver	MG/KG	0.178 U	0.189 U	0.179 U	0.188 U	0.180 U	0.196 U
Sodium	MG/KG	41.0 U	43.4 U	41.2 U	43.1 U	41.4 U	45.1 U
Thallium	MG/KG	0.334 U	0.354 U	0.336 U	0.351 U	0.337 U	0.368 U
Vanadium	MG/KG	4.79	2.40 U	8.44	2.39 U	2.29 U	2.50 U
Zinc	MG/KG	1.35 U	1.42 U	1.65 U	1.24 U	1.92 U	1.30 U
Total Cyanide	MG/KG	1.11	1.18	1.12	1.17	1.12	1.22

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL INORGANICS

	Client Sample ID:	74-PDA-SB04-05	74-PDA-SB05-02	74-PDA-SB05-03	74-PDA-SB06-02	74-PDA-SB06-04	74-PDA-SB07-01
	Laboratory Sample ID:	9402181-11	9402182-02	9402182-03	9402182-06	9402182-07	9402179-04
	Date Sampled:	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94	02/20/94
	Percent Solids	86.8	91.8	91.6	91.3	83.3	90.6
	<u>UNITS</u>						
Aluminum	MG/KG	2110.0	887.0	2780.0	5450.0	896.0	7670.0
Antimony	MG/KG	1.97	0.83 U	0.83 U	0.83 U	0.91 U	0.84 U
Arsenic	MG/KG	0.254 U	0.240 U	1.74	0.241 U	0.264 U	0.778
Barium	MG/KG	1.43 U	4.34	1.36 U	5.06	1.49 U	17.5
Beryllium	MG/KG	0.088 U	0.083 U	0.083 U	0.083 U	0.091 U	0.084 U
Cadmium	MG/KG	0.368 U	0.348 U	0.348 U	0.350 U	0.383 U	0.352 U
Calcium	MG/KG	17.2 U	783.0	16.3 U	125.0	17.9 U	104.0
Chromium	MG/KG	3.21	0.91 U	0.91 U	4.88	1.00 U	8.97
Cobalt	MG/KG	1.85 U	1.74 U	1.75 U	1.75 U	1.92 U	1.77 U
Copper	MG/KG	1.88 U	1.78 U	1.78 U	1.79 U	1.96 U	1.80 U
Iron	MG/KG	382.0	326.0	1600.0	845.0	147.0	4060.0
Lead	MG/KG	1.34 J	6.95	1.79	1.91	1.58	3.88
Magnesium	MG/KG	50.9	29.2	47.1	98.1	8.7 U	223.0
Manganese	MG/KG	0.82 U	21.7	0.77 U	2.15	0.85 U	3.75
Mercury	MG/KG	0.029 U	0.025 UJ	0.025 UJ	0.025 UJ	0.030 UJ	0.028 U
Nickel	MG/KG	3.32 U	3.14 U	3.15 U	3.16 U	3.46 U	3.18 U
Potassium	MG/KG	88.0 U	83.0 U	83.0 U	83.5 U	91.5 U	210.0
Selenium	MG/KG	0.185 U	0.174 U	0.175 U	0.175 U	0.192 U	0.177 U
Silver	MG/KG	0.185 U	0.174 U	0.175 U	0.175 U	0.192 U	0.177 U
Sodium	MG/KG	42.4 U	40.1 UJ	40.2 UJ	40.3 UJ	44.2 UJ	40.6 U
Thallium	MG/KG	0.346 U	0.327 U	0.328 U	0.329 U	0.360 U	0.331 U
Vanadium	MG/KG	2.35 U	2.22 U	5.09	2.24 U	2.45 U	9.15
Zinc	MG/KG	1.22 U	6.30	2.73	3.81	1.27 U	3.78
Total Cyanide	MG/KG	1.15	1.09	1.09	1.10	1.20	1.10

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL INORGANICS

Client Sample ID:	74-PDA-SB07-05	74-PDA-SB08-02	74-PDA-SB08-04	74-PDA-SB09-03	74-PDA-SB09-06	74-PDA-SB10-04
Laboratory Sample ID:	9402179-05	9402182-09	9402182-10	9402179-07	9402179-08	9402179-10
Date Sampled:	02/20/94	02/19/94	02/19/94	02/20/94	02/20/94	02/20/94
Percent Solids	91.4	94.6	89.0	95.5	87.9	91.4

	UNITS					
Aluminum	MG/KG	2300.0	2810.0	2840.0	349.0	1000.0
Antimony	MG/KG	0.83 U	0.81 U	0.86 U	0.80 U	0.87 U
Arsenic	MG/KG	0.241 U	0.233 U	0.247 U	0.231 U	0.250 U
Barium	MG/KG	3.24	4.69	1.40 U	1.30 U	1.41 U
Beryllium	MG/KG	0.083 U	0.081 U	0.086 U	0.080 U	0.087 U
Cadmium	MG/KG	0.349 U	0.337 U	0.359 U	0.334 U	0.363 U
Calcium	MG/KG	34.0	15.8 U	16.8 U	15.6 U	17.0 U
Chromium	MG/KG	3.25	2.03	3.78	2.94	2.35
Cobalt	MG/KG	1.75 U	1.69 U	1.80 U	1.68 U	1.82 U
Copper	MG/KG	1.79 U	1.73 U	1.83 U	1.71 U	1.86 U
Iron	MG/KG	380.0	676.0	400.0	208.0	254.0
Lead	MG/KG	1.60	1.82	0.796	1.03	1.05
Magnesium	MG/KG	58.8	49.5	45.2	19.0	26.1
Manganese	MG/KG	0.78 U	0.75 U	0.80 U	1.55	0.81 U
Mercury	MG/KG	0.028 U	0.025 UJ	0.030 UJ	0.026 U	0.029 U
Nickel	MG/KG	3.15 U	3.05 U	3.24 U	3.02 U	3.28 U
Potassium	MG/KG	83.5 U	80.5 U	85.5 U	80.0 U	87.0 U
Selenium	MG/KG	0.175 U	0.169 U	0.180 U	0.168 UJ	0.182 U
Silver	MG/KG	0.175 U	0.169 U	0.180 U	0.168 U	0.182 U
Sodium	MG/KG	40.3 U	38.9 UJ	41.4 UJ	38.6 U	41.9 U
Thallium	MG/KG	0.328 U	0.317 U	0.337 U	0.314 U	0.341 U
Vanadium	MG/KG	2.23 U	2.16 U	2.29 U	2.14 U	2.32 U
Zinc	MG/KG	4.08	2.54	2.97	1.11 U	1.21 U
Total Cyanide	MG/KG	1.09	1.06	1.12	1.05	1.14

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL INORGANICS

Client Sample ID:	74-PDA-SB10-08	74-FPA-SB01-03	74-FPA-SB01-07	74-FPA-SB02-03	74-FPA-SB02-06	74-FPA-SB03-03
Laboratory Sample ID:	9402179-11	9402179-13	9402179-14	9402179-16	9402179-17	9402180-03A
Date Sampled:	02/20/94	02/21/94	02/21/94	02/21/94	02/21/94	02/21/94
Percent Solids	92.7	90.1	89.6	85.5	84.8	87.3

	UNITS						
Aluminum	MG/KG	7560.0	5120.0	4160.0	8610.0	4850.0	8480.0
Antimony	MG/KG	0.82 U	0.85 U	0.85 U	0.89 U	0.90 U	0.87 UJ
Arsenic	MG/KG	0.238 U	0.874	0.246 U	0.258 U	0.260 U	0.564 J
Barium	MG/KG	8.96	5.26	5.08	13.1	5.24	11.1
Beryllium	MG/KG	0.082 U	0.085 U	0.085 U	0.089 U	0.090 U	0.087 U
Cadmium	MG/KG	0.344 U	0.354 U	0.356 U	0.373 U	0.376 U	0.366 U
Calcium	MG/KG	44.2	102.0	208.0	714.0	260.0	496.0
Chromium	MG/KG	6.66	5.17	5.00	9.91	6.11	7.62
Cobalt	MG/KG	1.73 U	1.78 U	1.79 U	1.87 U	1.89 U	1.83 U
Copper	MG/KG	1.76 U	1.81 U	1.82 U	1.91 U	1.92 U	1.87 U
Iron	MG/KG	1320.0	1210.0	653.0	2770.0	952.0	3100.0
Lead	MG/KG	1.02	3.08	2.43	5.06	1.85	3.13
Magnesium	MG/KG	207.0	131.0	102.0	191.0	103.0	215.0
Manganese	MG/KG	4.14	2.50	2.94	4.06	2.16	4.34
Mercury	MG/KG	0.027 U	0.028 U	0.028 U	0.029 U	0.030 U	0.029 U
Nickel	MG/KG	3.11 U	3.20 U	3.22 U	3.37 U	3.40 U	3.30 U
Potassium	MG/KG	302.0	84.5 U	85.0 U	89.0 U	90.0 U	191.0
Selenium	MG/KG	0.173 U	0.178 U	0.179 UJ	0.187 UJ	0.189 UJ	0.183 UJ
Silver	MG/KG	0.173 U	0.178 U	0.179 U	0.187 U	0.189 U	0.183 U
Sodium	MG/KG	39.7 U	40.9 U	41.1 U	43.1 U	43.4 U	42.2 UJ
Thallium	MG/KG	0.324 U	0.333 U	0.335 U	0.351 U	0.354 U	0.344 U
Vanadium	MG/KG	2.20 U	2.27 U	2.28 U	11.0	5.98	10.1
Zinc	MG/KG	4.08	3.55	3.19	3.86	3.25	2.46 U
Total Cyanide	MG/KG	1.08	1.11	1.12	1.17	1.18	1.14

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL INORGANICS

	74-FPA-SB03-06	74-FPA-SB04-04	74-FPA-SB04-08	74-FPA-SB05-03	74-FPA-SB05-06	74-FPA-SB06-03	
Client Sample ID:	74-FPA-SB03-06	74-FPA-SB04-04	74-FPA-SB04-08	74-FPA-SB05-03	74-FPA-SB05-06	74-FPA-SB06-03	
Laboratory Sample ID:	9402180-04A	9402179-19	9402180-01A	9402180-06A	9402180-07A	9402180-10A	
Date Sampled:	34386	02/21/94	02/21/94	02/20/94	02/21/94	02/20/94	
Percent Solids	83	94.5	88.8	95.4	87.9	86.5	
	<u>UNITS</u>						
Aluminum	MG/KG	5380	5030.0	3510.0	432.0	3720.0	8540.0
Antimony	MG/KG	0.915 UJ	0.81 U	0.86 UJ	0.80 UJ	0.87 UJ	0.88 UJ
Arsenic	MG/KG	0.265 UJ	1.23	0.248 UJ	0.231 UJ	0.250 UJ	0.861 J
Barium	MG/KG	4.05	6.88	10.0	1.30 U	2.92	14.1
Beryllium	MG/KG	0.0915 U	0.081 U	0.086 U	0.080 U	0.087 U	0.088 U
Cadmium	MG/KG	0.3845 U	0.338 U	0.359 U	0.335 U	0.363 U	0.369 U
Calcium	MG/KG	338	49.8	2250.0	15.6 U	17.0 U	745.0
Chromium	MG/KG	4.85	4.88	3.85	0.87 U	3.88	8.09
Cobalt	MG/KG	1.93 U	1.70 U	1.80 U	1.68 U	1.82 U	1.85 U
Copper	MG/KG	1.965 U	1.73 U	1.84 U	1.71 U	1.86 U	1.89 U
Iron	MG/KG	869	1400.0	1750.0	123.0	570.0	4940.0
Lead	MG/KG	2.35	2.19	7.42	1.20	1.45	4.62
Magnesium	MG/KG	114	135.0	133.0	15.4	85.9	184.0
Manganese	MG/KG	3.58	2.29	6.78	1.58	2.73	3.42
Mercury	MG/KG	0.03 U	0.027 U	0.028 U	0.026 U	0.029 U	0.029 U
Nickel	MG/KG	3.47 U	3.05 U	3.25 U	3.02 U	3.28 U	3.33 U
Potassium	MG/KG	92 U	80.5 U	86.0 U	80.0 U	87.0 U	88.0 U
Selenium	MG/KG	0.193 UJ	0.170 U	0.180 UJ	0.168 UJ	0.182 UJ	0.185 UJ
Silver	MG/KG	0.193 U	0.170 U	0.180 U	0.168 U	0.182 U	0.185 U
Sodium	MG/KG	44.35 UJ	39.0 U	41.5 UJ	38.6 UJ	41.9 UJ	42.6 UJ
Thallium	MG/KG	0.3615 U	0.318 U	0.338 U	0.315 U	0.341 U	0.347 U
Vanadium	MG/KG	2.46 U	4.53	5.00	2.14 U	2.32 U	14.2
Zinc	MG/KG	1.76 U	3.04	11.9	1.42 U	1.94 U	2.29 U
Total Cyanide	MG/KG	1.2	1.06	1.13	1.05	1.14	1.16

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL INORGANICS

Client Sample ID:	74-FPA-SB06-05	74-FPA-SB07-03	74-FPA-SB07-07	74-FPA-SB08-03	74-FPA-SB08-07	74-FPA-SB09-04
Laboratory Sample ID:	9402180-11A	9402180-13A	9402180-14A	9402180-16A	9402180-17A	9402180-19A
Date Sampled:	02/20/94	02/20/94	02/20/94	02/20/94	02/20/94	02/20/94
Percent Solids	89.0	95.5	91.3	94.4	86.8	85.6

	UNITS					
Aluminum	MG/KG	3810.0	905.0	3110.0	1070.0	2760.0
Antimony	MG/KG	0.86 UJ	0.80 UJ	0.83 UJ	0.81 UJ	0.88 UJ
Arsenic	MG/KG	0.247 UJ	0.231 UJ	0.241 UJ	0.233 UJ	0.254 UJ
Barium	MG/KG	5.48	1.30 U	2.77	1.32 U	1.43 U
Beryllium	MG/KG	0.086 U	0.080 U	0.083 U	0.081 U	0.088 U
Cadmium	MG/KG	0.359 U	0.334 U	0.350 U	0.338 U	0.368 U
Calcium	MG/KG	264.0	15.6 U	16.3 U	15.8 U	17.2 U
Chromium	MG/KG	5.82	2.17	3.49	1.92	4.40
Cobalt	MG/KG	1.80 U	1.68 U	1.75 U	1.70 U	1.85 U
Copper	MG/KG	1.83 U	1.71 U	1.79 U	1.73 U	1.88 U
Iron	MG/KG	700.0	326.0	534.0	266.0	451.0
Lead	MG/KG	2.63	0.751	1.33	1.50	2.13
Magnesium	MG/KG	102.0	26.7	78.4	29.8	75.0
Manganese	MG/KG	3.42	2.06	3.42	2.44	4.23
Mercury	MG/KG	0.056	0.026 U	0.028 U	0.027 U	0.029 U
Nickel	MG/KG	3.24 U	3.02 U	3.16 U	3.05 U	3.32 U
Potassium	MG/KG	85.5 U	80.0 U	83.5 U	81.0 U	88.0 U
Selenium	MG/KG	0.180 UJ	0.168 UJ	0.175 UJ	0.170 UJ	0.185 UJ
Silver	MG/KG	0.180 U	0.168 U	0.175 U	0.170 U	0.185 U
Sodium	MG/KG	41.4 UJ	38.6 UJ	40.3 UJ	39.0 UJ	42.4 UJ
Thallium	MG/KG	0.337 U	0.314 U	0.329 U	0.318 U	0.346 U
Vanadium	MG/KG	2.29 U	2.14 U	2.24 U	2.16 U	2.35 U
Zinc	MG/KG	2.12 U	1.34 U	1.39 U	1.35 U	1.84 U
Total Cyanide	MG/KG	1.12	1.05	1.10	1.06	1.15

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL INORGANICS

Client Sample ID:	74-FPA-SB09-07	74-GW03A-03	74-GW03A-04	74-GW04-03	74-GW04-05	74-GW05-01
Laboratory Sample ID:	9402180-20A	9401110-01	9401110-02	9401101-01	9401101-02	9401066-04
Date Sampled:	02/20/94	01/18/94	01/18/94	01/18/94	01/18/94	01/11/94
Percent Solids	84.8	90.4	83.4	87.8	88.8	91.0

	UNITS	74-FPA-SB09-07	74-GW03A-03	74-GW03A-04	74-GW04-03	74-GW04-05	74-GW05-01
Aluminum	MG/KG	9380.0	3630.0	1840.0	5310.0	2760.0	3260.0
Antimony	MG/KG	0.90 UJ	0.88 UJ	0.95 UJ	0.90 UJ	0.89 UJ	0.87 UJ
Arsenic	MG/KG	0.538 J	0.321 U	0.348 U	0.330 U	0.327 U	0.319 U
Barium	MG/KG	8.59	5.07	1.64 U	5.02	1.54 U	1.51 U
Beryllium	MG/KG	0.090 U	0.143 U	0.155 U	0.147 U	0.145 U	0.142 U
Cadmium	MG/KG	0.376 U	0.260 U	0.282 U	0.268 U	0.265 U	0.258 U
Calcium	MG/KG	40.7	13.8 U	15.0 U	14.3 U	14.1 U	111.0
Chromium	MG/KG	9.26	3.54	0.88 U	4.54	4.73	3.33
Cobalt	MG/KG	1.89 U	2.15 U	2.33 U	2.21 U	2.19 U	2.13 U
Copper	MG/KG	1.92 U	1.79 U	1.94 U	1.85 U	1.83 U	1.78 U
Iron	MG/KG	1630.0	393.0	243.0	1620.0	1020.0	370.0
Lead	MG/KG	2.74	2.02 J	1.18 J	3.18 J	2.71 J	2.99 J
Magnesium	MG/KG	250.0	76.9	29.0	94.4	51.2	31.0
Manganese	MG/KG	4.21	2.27	2.34	1.72	3.22	2.56
Mercury	MG/KG	0.030 U	0.028 UJ	0.030 UJ	0.029 UJ	0.028 UJ	
Nickel	MG/KG	3.40 U	1.51 U	1.63 U	1.55 U	1.53 U	1.50 U
Potassium	MG/KG	197.0	63.5 U	69.0 U	161.0 U	108.5 U	33.0 U
Selenium	MG/KG	0.189 UJ	0.280 U	0.304 U	0.288 U	0.285 U	0.278 U
Silver	MG/KG	0.189 U	0.044 UJ	0.048 UJ	0.046 UJ	0.045 UJ	0.044 UJ
Sodium	MG/KG	43.4 UJ	21.0 UJ	22.8 UJ	21.7 UJ	21.4 UJ	20.9 UJ
Thallium	MG/KG	0.354 U	0.51 U	0.55 U	0.53 U	0.52 U	0.51 UJ
Vanadium	MG/KG	7.90	3.93	1.99 U	4.62	1.87 U	4.10
Zinc	MG/KG	3.00 U	1.30 U	1.12 U	1.58 U	1.45 U	1.63 U
Total Cyanide	MG/KG	1.18	1.11	1.20	1.14	1.13	1.10

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL INORGANICS

Client Sample ID:	74-GW05-04	74-GW07-01	74-GW07-02	74-GW08-03	74-GW08-06	
Laboratory Sample ID:	9401066-05	9402151-03A	9402151-04A	9402151-01A	9402151-02A	
Date Sampled:	01/11/94	02/18/94	02/18/94	02/18/94	02/18/94	
Percent Solids	91.2	81.7	82.8	80.1	86.2	
	UNITS					
Aluminum	MG/KG	2250.0	5640.0	4690.0	720.0	4410.0
Antimony	MG/KG	0.87 UJ	0.93 UJ	0.92 UJ	0.95 UJ	0.88 U
Arsenic	MG/KG	0.318 U	0.270 U	0.265 U	0.275 U	0.255 U
Barium	MG/KG	1.50 U	4.48	6.48	1.55 U	5.40
Beryllium	MG/KG	0.142 U	0.093 U	0.092 U	0.095 U	0.088 U
Cadmium	MG/KG	0.258 U	0.391 U	0.385 U	0.398 U	0.370 U
Calcium	MG/KG	13.7 U	96.3	18.0 U	18.6 U	17.3 U
Chromium	MG/KG	2.38	4.47	3.44	1.04 U	4.19
Cobalt	MG/KG	2.13 U	1.96 U	1.93 U	2.00 U	1.86 U
Copper	MG/KG	1.78 U	2.00 U	1.97 U	2.04 U	1.89 U
Iron	MG/KG	399.0	920.0	1060.0	246.0	609.0
Lead	MG/KG	1.68 J	5.48 J	2.90 J	1.43 J	1.52 J
Magnesium	MG/KG	30.2	55.3	81.1	9.0 U	89.2
Manganese	MG/KG	0.58 U	2.33	0.86 U	0.89 U	0.82 U
Mercury	MG/KG		0.030 UJ	0.030 UJ	0.030 UJ	0.030 UJ
Nickel	MG/KG	1.49 U	3.55 U	3.50 U	3.60 U	3.35 U
Potassium	MG/KG	32.9 U	93.5 U	92.0 U	95.0 U	88.5 U
Selenium	MG/KG	0.278 U	0.818	0.193 U	0.200 U	0.186 U
Silver	MG/KG	0.044 UJ	0.196 U	0.193 U	0.200 U	0.186 U
Sodium	MG/KG	20.9 UJ	45.1 U	44.5 U	46.0 U	42.7 U
Thallium	MG/KG	0.51 U	0.367 U	0.363 U	0.375 U	0.348 U
Vanadium	MG/KG	1.82 U	6.59	5.59	2.55 U	2.37 U
Zinc	MG/KG	1.23 U	5.02	4.47	1.32 U	3.00
Total Cyanide	MG/KG	1.10	1.22	1.21	1.25	1.16

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
FORMER DISPOSAL / POTENTIAL DISPOSAL / FORMER PEST CONTROL AREA SUBSURFACE SOIL
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL INORGANICS

Client Sample ID:					NORMAL	LOG NORMAL
Laboratory Sample ID:					UPPER 95%	UPPER 95%
Date Sampled:					CONFIDENCE	CONFIDENCE
Percent Solids		MAXIMUM	ARITHMETIC	STANDARD	INTERVAL	INTERVAL
	UNITS	DETECTED	MEAN	DEVIATION		
Aluminum	MG/KG	9380	3911.7	2439.4	4510.9	5527.0
Antimony	MG/KG	1.97	0.9	0.2	1.0	0.9
Arsenic	MG/KG	2.76	0.4	0.5	0.6	0.5
Barium	MG/KG	17.5	4.7	3.8	5.7	6.3
Beryllium	MG/KG	ND	NA	NA	NA	NA
Cadmium	MG/KG	ND	NA	NA	NA	NA
Calcium	MG/KG	2250	161.6	366.6	251.6	241.0
Chromium	MG/KG	9.91	4.3	2.3	4.8	5.4
Cobalt	MG/KG	ND	NA	NA	NA	NA
Copper	MG/KG	ND	NA	NA	NA	NA
Iron	MG/KG	4940	1070.1	1044.2	1326.6	1453.8
Lead	MG/KG	7.42	2.5	1.5	2.9	3.0
Magnesium	MG/KG	250	89.4	63.3	105.0	125.2
Manganese	MG/KG	21.7	2.7	3.1	3.5	3.3
Mercury	MG/KG	0.056	0.03	0.004	0.03	0.03
Nickel	MG/KG	ND	NA	NA	NA	NA
Potassium	MG/KG	302	97.1	44.9	108.1	106.6
Selenium	MG/KG	0.818	0.21	0.10	0.23	0.22
Silver	MG/KG	ND	NA	NA	NA	NA
Sodium	MG/KG	ND	NA	NA	NA	NA
Thallium	MG/KG	ND	NA	NA	NA	NA
Vanadium	MG/KG	14.2	3.9	2.8	4.5	4.4
Zinc	MG/KG	11.9	2.6	1.8	3.0	3.0
Total Cyanide	MG/KG	1.25	1.1	0.1	1.1	1.1

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-GW01-01	74-GW02-01	74-GW03A-01	74-GW03A-02	74-GW04-01	74-GW05-01
Laboratory Sample ID:	9402138-03	9402132-01	9402139-03	AB7973	9402138-01	9402137-01
Date Sampled:	02/16/94	02/16/94	02/16/94	08/25/94	02/16/94	02/16/94
	UNITS					
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U 6.3 U
1,2,4-Trichlorobenzene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U 6.3 U
1,3-Dichlorobenzene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U 6.3 U
1,4-Dichlorobenzene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U 6.3 U
2-Chloronaphthalene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U 6.3 U
2-Chlorophenol	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U 6.3 U
2-Methylnaphthalene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U 6.3 U
2-Methylphenol	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U 6.3 U
2-Nitroaniline	UG/L	14.6 U	14.7 U	16.0 U	NA	15.3 U 15.6 U
2-Nitrophenol	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U 6.3 U
2,2'-oxybis-(1-chloropropane)	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U 6.3 U
2,4-Dichlorophenol	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U 6.3 U
2,4-Dimethylphenol	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U 6.3 U
2,4-Dinitrophenol	UG/L	14.6 U	14.7 U	16.0 U	NA	15.3 U 15.6 U
2,4-Dinitrotoluene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U 6.3 U
2,4,5-Trichlorophenol	UG/L	14.6 U	14.7 U	16.0 U	NA	15.3 U 15.6 U
2,4,6-Trichlorophenol	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U 6.3 U
2,6-Dinitrotoluene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U 6.3 U
3-Nitroaniline	UG/L	14.6 UJ	14.7 UJ	16.0 UJ	NA	15.3 UJ 15.6 UJ
3,3'-Dichlorobenzidine	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U 6.3 U
4-Bromophenyl-phenylether	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U 6.3 U
4-Chloro-3-methylphenol	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U 6.3 U
4-Chloroaniline	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U 6.3 U
4-Chlorophenyl phenyl ether	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U 6.3 U
4-Methylphenol	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U 6.3 U
4-Nitroaniline	UG/L	14.6 U	14.7 U	16.0 U	NA	15.3 U 15.6 U
4-Nitrophenol	UG/L	14.6 U	14.7 U	16.0 U	NA	15.3 U 15.6 U
4,6-Dinitro-2-methylphenol	UG/L	14.6 U	14.7 U	16.0 U	NA	15.3 U 15.6 U
Acenaphthene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U 6.3 U
Acenaphthylene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U 6.3 U
Anthracene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U 6.3 U
Benzo[a]anthracene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U 6.3 U
Benzo[a]pyrene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U 6.3 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-GW01-01	74-GW02-01	74-GW03A-01	74-GW03A-02	74-GW04-01	74-GW05-01
Laboratory Sample ID:	9402138-03	9402132-01	9402139-03	AB7973	9402138-01	9402137-01
Date Sampled:	02/16/94	02/16/94	02/16/94	08/25/94	02/16/94	02/16/94
UNITS						
SEMIVOLATILES Cont.						
Benzo[b]fluoranthene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
Benzo[g,h,i]perylene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
Benzo[k]fluoranthene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
bis(2-Chloroethoxy) methane	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
bis(2-Chloroethyl) ether	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
bis(2-Ethylhexyl)phthalate	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
Butyl benzy phthalate	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
Carbazole	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
Chrysene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
Dibenzofuran	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
Dibenz[a,h]anthracene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
Diethylphthalate	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
Dimethyl phthalate	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
di-n-Butylphthalate	UG/L	5.8 U	5.9 U	6.4 U	NA	2.00 J
di-n-Octylphthalate	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
Fluoranthene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
Fluorene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
Hexachlorobenzene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
Hexachlorobutadiene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
Hexachlorocyclopentadiene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
Hexachloroethane	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
Indeno[1,2,3-cd]pyrene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
Isophorone	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
Naphthalene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
Nitrobenzene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
N-Nitroso-di-n-propylamine	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
N-nitrosodiphenylamine	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
Pentachlorophenol	UG/L	14.6 U	14.7 U	16.0 U	NA	15.3 U
Phenanthrene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
Phenol	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U
Pyrene	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-GW01-01	74-GW02-01	74-GW03A-01	74-GW03A-02	74-GW04-01	74-GW05-01
Laboratory Sample ID:	9402138-03	9402132-01	9402139-03	AB7973	9402138-01	9402137-01
Date Sampled:	02/16/94	02/16/94	02/16/94	08/25/94	02/16/94	02/16/94

UNITS

VOLATILES

	74-GW01-01	74-GW02-01	74-GW03A-01	74-GW03A-02	74-GW04-01	74-GW05-01
Chloromethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Bromomethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Vinyl chloride	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Chloroethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Methylene chloride	UG/L	5.0 U	5.0 U	5.00 U	NA	5.00 U
Acetone	UG/L	5.0 UJ	5.0 UJ	2.04 J	NA	5.0 UJ
Carbon Disulfide	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
1,1-Dichloroethene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
1,1-Dichloroethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
1,2-Dichloroethene(total)	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Chloroform	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
1,2-Dichloroethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
2-Butanone	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
1,1,1-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Carbon tetrachloride	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Bromodichloromethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
1,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
cis-1,3-Dichloropropene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Trichloroethene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Dibromochloromethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
1,1,2-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Benzene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
trans-1,3-Dichloropropene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Bromoform	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
4-Methyl-2-pentanone	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
2-Hexanone	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Tetrachloroethene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
1,1,2,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Toluene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Chlorobenzene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Ethylbenzene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Styrene	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U
Xylenes (total)	UG/L	5.0 U	5.0 U	5.0 U	NA	5.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-GW01-01	74-GW02-01	74-GW03A-01	74-GW03A-02	74-GW04-01	74-GW05-01	
Laboratory Sample ID:	9402138-03	9402132-01	9402139-03	AB7973	9402138-01	9402137-01	
Date Sampled:	02/16/94	02/16/94	02/16/94	08/25/94	02/16/94	02/16/94	
	UNITS						
PESTICIDE/PCBS							
alpha-BHC	UG/L	0.033 UJ	0.030 UJ	NA	0.025 U	0.030 UJ	0.065 R
beta-BHC	UG/L	0.033 UJ	0.030 UJ	NA	0.025 U	0.030 UJ	0.065 R
delta-BHC	UG/L	0.033 UJ	0.030 UJ	NA	0.025 U	0.030 UJ	0.065 R
Lindane (gamma-BHC)	UG/L	0.033 UJ	0.030 UJ	NA	0.025 U	0.030 UJ	0.065 R
Heptachlor	UG/L	0.010 NJ	0.030 UJ	NA	0.025 U	0.030 UJ	0.065 R
Aldrin	UG/L	0.033 UJ	0.030 UJ	NA	0.025 U	0.030 UJ	0.065 R
Heptachlor epoxide	UG/L	0.033 UJ	0.030 UJ	NA	0.025 U	0.030 UJ	0.065 R
Endosulfan I	UG/L	0.033 UJ	0.030 UJ	NA	0.025 U	0.030 UJ	0.065 R
Dieldrin	UG/L	0.065 UJ	0.060 UJ	NA	0.05 U	0.060 UJ	0.13 R
4,4'-DDE	UG/L	0.065 UJ	0.060 UJ	NA	0.05 U	0.060 UJ	0.13 R
Endrin	UG/L	0.065 UJ	0.060 UJ	NA	0.05 U	0.060 UJ	0.13 R
Endosulfan II	UG/L	0.065 UJ	0.060 UJ	NA	0.05 U	0.060 UJ	0.13 R
4,4'-DDD	UG/L	0.065 UJ	0.060 UJ	NA	0.05 U	0.060 UJ	0.13 R
Endosulfan sulfate	UG/L	0.065 UJ	0.060 UJ	NA	0.05 U	0.060 UJ	0.13 R
4,4'-DDT	UG/L	0.065 UJ	0.060 UJ	NA	0.05 U	0.060 UJ	0.13 R
Methoxychlor	UG/L	0.325 UJ	0.300 UJ	NA	0.25 U	0.300 UJ	0.65 R
Endrin ketone	UG/L	0.065 UJ	0.060 UJ	NA	0.05 U	0.060 UJ	0.13 R
Endrin aldehyde	UG/L	0.065 UJ	0.060 UJ	NA	0.05 U	0.060 UJ	0.13 R
alpha-Chlordane	UG/L	0.033 UJ	0.030 UJ	NA	0.025 U	0.030 UJ	0.065 R
gamma-Chlordane	UG/L	0.033 UJ	0.030 UJ	NA	0.025 U	0.030 UJ	0.065 R
Toxaphene	UG/L	3.25 UJ	3.00 UJ	NA	2.5 U	3.00 UJ	6.5 R
Aroclor 1016	UG/L	0.65 UJ	0.60 UJ	NA	0.5 U	0.60 UJ	1.3 R
Aroclor 1221	UG/L	1.30 UJ	1.20 UJ	NA	1 U	1.20 UJ	2.6 R
Aroclor 1232	UG/L	0.65 UJ	0.60 UJ	NA	0.5 U	0.60 UJ	1.3 R
Aroclor 1242	UG/L	0.65 UJ	0.60 UJ	NA	0.5 U	0.60 UJ	1.3 R
Aroclor 1248	UG/L	0.65 UJ	0.60 UJ	NA	0.5 U	0.60 UJ	1.3 R
Aroclor 1254	UG/L	0.65 UJ	0.60 UJ	NA	0.5 U	0.60 UJ	1.3 R
Aroclor 1260	UG/L	0.65 UJ	0.60 UJ	NA	0.5 U	0.60 UJ	1.3 R

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
GROUNDWATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	74-GW01-01	74-GW02-01	74-GW03A-01	74-GW03A-02	74-GW04-01	74-GW05-01	
Laboratory Sample ID:	9402138-03	9402132-01	9402139-03	AB7973	9402138-01	9402137-01	
Date Sampled:	02/16/94	02/16/94	02/16/94	08/25/94	02/16/94	02/16/94	
UNITS							
CHEMICAL SURETY							
Acetophenone	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U	6.3 U
Chloroacetophenone	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U	6.3 U
Hydroxyacetophenone	UG/L	29.1 U	29.4 U	32.1 U	NA	30.5 U	31.3 U
Bis(2'-chloroethyl)disulfide	UG/L	29.1 U	29.4 U	32.1 U	NA	30.5 U	31.3 U
Bis(2'-chloroethyl)trisulfide	UG/L	29.1 U	29.4 U	32.1 U	NA	30.5 U	31.3 U
1,4-Dithiane	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U	6.3 U
1,4-Oxathiane	UG/L	5.8 U	5.9 U	6.4 U	NA	6.1 U	6.3 U
THIODIGLYCOL							
Thiodiglycol	UG/L	12.5 U	12.5 U	12.5 U	NA	12.5 U	12.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-GW06-01	74-GW07-01	74-GW07-02	74-GW08-01	
Laboratory Sample ID:	9402140-01	9402198-01A	AB7979	9402198-03A	
Date Sampled:	02/16/94	02/22/94	08/26/94	02/22/94	
	UNITS				
<u>SEMIVOLATILES</u>					
1,2-Dichlorobenzene	UG/L	6.0 U	6.3 U	NA	6.3 U
1,2,4-Trichlorobenzene	UG/L	6.0 U	6.3 U	NA	6.3 U
1,3-Dichlorobenzene	UG/L	6.0 U	6.3 U	NA	6.3 U
1,4-Dichlorobenzene	UG/L	6.0 U	6.3 U	NA	6.3 U
2-Chloronaphthalene	UG/L	6.0 U	6.3 U	NA	6.3 U
2-Chlorophenol	UG/L	6.0 U	6.3 U	NA	6.3 U
2-Methylnaphthalene	UG/L	6.0 U	6.3 U	NA	6.3 U
2-Methylphenol	UG/L	6.0 U	6.3 U	NA	6.3 U
2-Nitroaniline	UG/L	14.9 U	15.5 U	NA	15.6 U
2-Nitrophenol	UG/L	6.0 U	6.3 U	NA	6.3 U
2,2'-oxybis-(1-chloropropane)	UG/L	6.0 U	6.3 U	NA	6.3 U
2,4-Dichlorophenol	UG/L	6.0 U	6.3 U	NA	6.3 U
2,4-Dimethylphenol	UG/L	6.0 U	6.3 U	NA	6.3 U
2,4-Dinitrophenol	UG/L	14.9 U	15.5 U	NA	15.6 U
2,4-Dinitrotoluene	UG/L	6.0 U	6.3 U	NA	6.3 U
2,4,5-Trichlorophenol	UG/L	14.9 U	15.5 U	NA	15.6 U
2,4,6-Trichlorophenol	UG/L	6.0 U	6.3 U	NA	6.3 U
2,6-Dinitrotoluene	UG/L	6.0 U	6.3 U	NA	6.3 U
3-Nitroaniline	UG/L	14.9 U	15.5 U	NA	15.6 U
3,3'-Dichlorobenzidine	UG/L	6.0 U	6.3 U	NA	6.3 U
4-Bromophenyl-phenylether	UG/L	6.0 U	6.3 U	NA	6.3 U
4-Chloro-3-methylphenol	UG/L	6.0 U	6.3 U	NA	6.3 U
4-Chloroaniline	UG/L	6.0 U	6.3 U	NA	6.3 U
4-Chlorophenyl phenyl ether	UG/L	6.0 U	6.3 U	NA	6.3 U
4-Methylphenol	UG/L	6.0 U	6.3 U	NA	6.3 U
4-Nitroaniline	UG/L	14.9 U	15.5 U	NA	15.6 U
4-Nitrophenol	UG/L	14.9 U	15.5 U	NA	15.6 U
4,6-Dinitro-2-methylphenol	UG/L	14.9 U	15.5 U	NA	15.6 U
Acenaphthene	UG/L	6.0 U	6.3 U	NA	6.3 U
Acenaphthylene	UG/L	6.0 U	6.3 U	NA	6.3 U
Anthracene	UG/L	6.0 U	6.3 U	NA	6.3 U
Benzo[a]anthracene	UG/L	6.0 U	6.3 U	NA	6.3 U
Benzo[a]pyrene	UG/L	6.0 U	6.3 U	NA	6.3 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-GW06-01	74-GW07-01	74-GW07-02	74-GW08-01
Laboratory Sample ID:	9402140-01	9402198-01A	AB7979	9402198-03A
Date Sampled:	02/16/94	02/22/94	08/26/94	02/22/94

UNITS

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/L	6.0 U	6.3 U	NA	6.3 U
Benzo[g,h,i]perylene	UG/L	6.0 U	6.3 U	NA	6.3 U
Benzo[k]fluoranthene	UG/L	6.0 U	6.3 U	NA	6.3 U
bis(2-Chloroethoxy) methane	UG/L	6.0 U	6.3 U	NA	6.3 U
bis(2-Chloroethyl) ether	UG/L	6.0 U	6.3 U	NA	6.3 U
bis(2-Ethylhexyl)phthalate	UG/L	6.0 U	6.3 U	NA	6.3 U
Butyl benzyl phthalate	UG/L	6.0 U	6.3 U	NA	6.3 U
Carbazole	UG/L	6.0 U	6.3 U	NA	6.3 U
Chrysene	UG/L	6.0 U	6.3 U	NA	6.3 U
Dibenzofuran	UG/L	6.0 U	6.3 U	NA	6.3 U
Dibenz[a,h]anthracene	UG/L	6.0 U	6.3 U	NA	6.3 U
Diethylphthalate	UG/L	6.0 U	6.3 U	NA	6.3 U
Dimethyl phthalate	UG/L	6.0 U	6.3 U	NA	6.3 U
di-n-Butylphthalate	UG/L	6.0 U	6.00 U	NA	6.00 U
di-n-Octylphthalate	UG/L	6.0 U	6.3 U	NA	6.3 U
Fluoranthene	UG/L	6.0 U	6.3 U	NA	6.3 U
Fluorene	UG/L	6.0 U	6.3 U	NA	6.3 U
Hexachlorobenzene	UG/L	6.0 U	6.3 U	NA	6.3 U
Hexachlorobutadiene	UG/L	6.0 U	6.3 U	NA	6.3 U
Hexachlorocyclopentadiene	UG/L	6.0 U	6.3 U	NA	6.3 U
Hexachloroethane	UG/L	6.0 U	6.3 U	NA	6.3 U
Indeno[1,2,3-cd]pyrene	UG/L	6.0 U	6.3 U	NA	6.3 U
Isophorone	UG/L	6.0 U	6.3 U	NA	6.3 U
Naphthalene	UG/L	6.0 U	6.3 U	NA	6.3 U
Nitrobenzene	UG/L	6.0 U	6.3 U	NA	6.3 U
N-Nitroso-di-n-propylamine	UG/L	6.0 U	6.3 U	NA	6.3 U
N-nitrosodiphenylamine	UG/L	6.0 U	6.3 U	NA	6.3 U
Pentachlorophenol	UG/L	14.9 U	15.5 U	NA	15.6 U
Phenanthrene	UG/L	6.0 U	6.3 U	NA	6.3 U
Phenol	UG/L	6.0 U	6.3 U	NA	6.3 U
Pyrene	UG/L	6.0 U	6.3 U	NA	6.3 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-GW06-01	74-GW07-01	74-GW07-02	74-GW08-01	
Laboratory Sample ID:	9402140-01	9402198-01A	AB7979	9402198-03A	
Date Sampled:	02/16/94	02/22/94	08/26/94	02/22/94	
	UNITS				
VOLATILES					
Chloromethane	UG/L	5.0 U	5.0 U	NA	5.0 U
Bromomethane	UG/L	5.0 U	5.0 U	NA	5.0 U
Vinyl chloride	UG/L	5.0 U	5.0 U	NA	5.0 U
Chloroethane	UG/L	5.0 U	5.0 U	NA	5.0 U
Methylene chloride	UG/L	5.00 U	5.00 U	NA	5.00 U
Acetone	UG/L	5.0 UJ	2.00 J	NA	5.00 U
Carbon Disulfide	UG/L	5.0 U	5.0 U	NA	5.0 U
1,1-Dichloroethene	UG/L	5.0 U	5.0 U	NA	5.0 U
1,1-Dichloroethane	UG/L	5.0 U	5.0 U	NA	5.0 U
1,2-Dichloroethene(total)	UG/L	5.0 U	5.0 U	NA	5.0 U
Chloroform	UG/L	5.0 U	5.0 U	NA	5.0 U
1,2-Dichloroethane	UG/L	5.0 U	5.0 U	NA	5.0 U
2-Butanone	UG/L	5.0 U	5.0 U	NA	5.0 U
1,1,1-Trichloroethane	UG/L	5.0 U	5.0 U	NA	5.0 U
Carbon tetrachloride	UG/L	5.0 U	5.0 U	NA	5.0 U
Bromodichloromethane	UG/L	5.0 U	5.0 U	NA	5.0 U
1,2-Dichloropropane	UG/L	5.0 U	5.0 U	NA	5.0 U
cis-1,3-Dichloropropene	UG/L	5.0 U	5.0 U	NA	5.0 U
Trichloroethene	UG/L	5.0 U	5.0 U	NA	5.0 U
Dibromochloromethane	UG/L	5.0 U	5.0 U	NA	5.0 U
1,1,2-Trichloroethane	UG/L	5.0 U	5.0 U	NA	5.0 U
Benzene	UG/L	5.0 U	5.0 U	NA	5.0 U
trans-1,3-Dichloropropene	UG/L	5.0 U	5.0 U	NA	5.0 U
Bromoform	UG/L	5.0 U	5.0 U	NA	5.0 U
4-Methyl-2-pentanone	UG/L	5.0 U	5.0 U	NA	5.0 U
2-Hexanone	UG/L	5.0 U	5.0 UJ	NA	5.0 U
Tetrachloroethene	UG/L	5.0 U	5.0 U	NA	5.0 U
1,1,2,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	NA	5.0 U
Toluene	UG/L	5.0 U	5.0 U	NA	5.0 U
Chlorobenzene	UG/L	5.0 U	5.0 U	NA	5.0 U
Ethylbenzene	UG/L	5.0 U	5.0 U	NA	5.0 U
Styrene	UG/L	5.0 U	5.0 U	NA	5.0 U
Xylenes (total)	UG/L	5.0 U	5.0 U	NA	5.0 U

STATISTICAL SUMMARY
 *DT708 858
 PERABLE UNIT NO. 6 (SITE 74)
 GROUNDWATER
 CAMP LEJEUNE NORTH CAROLINA
 MEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-GW06-01	74-GW07-02	74-GW08-01
Laboratory Sample ID:	9402140-01	9402198-01A	9402198-03A
Date Sampled:	02/16/94	02/20/94	02/22/94

	UNITS			
PESTICIDE/PCBS				
alpha-BHC	UG/L	0.028 UJ	NA025 U	0.030 UJ
beta-BHC	UG/L	0.028 UJ	NA025 U	0.030 UJ
delta-BHC	UG/L	0.028 UJ	NA025 U	0.030 UJ
Lindane (gamma-BHC)	UG/L	0.028 UJ	NA025 U	0.040 J
Heptachlor	UG/L	0.028 UJ	NA025 U	0.030 UJ
Aldrin	UG/L	0.028 UJ	NA025 U	0.030 UJ
Heptachlor epoxide	UG/L	0.028 UJ	NA025 U	0.030 UJ
Endosulfan I	UG/L	0.028 UJ	NA025 U	0.030 UJ
Dieldrin	UG/L	0.055 UJ	NA0.05 U	0.060 UJ
4,4'-DDE	UG/L	0.055 UJ	NA0.05 U	0.060 UJ
Endrin	UG/L	0.055 UJ	NA0.05 U	0.060 UJ
Endosulfan II	UG/L	0.055 UJ	NA0.05 U	0.020 J
4,4'-DDD	UG/L	0.055 UJ	NA0.05 U	0.060 UJ
Endosulfan sulfate	UG/L	0.055 UJ	NA0.05 U	0.060 UJ
4,4'-DDT	UG/L	0.055 UJ	NA0.05 U	0.060 UJ
Methoxychlor	UG/L	0.275 UJ	NA0.25 U	0.300 UJ
Endrin ketone	UG/L	0.055 UJ	NA0.05 U	0.060 UJ
Endrin aldehyde	UG/L	0.055 UJ	NA0.05 U	0.060 UJ
alpha-Chlordane	UG/L	0.028 UJ	NA025 U	0.020 NJ
gamma-Chlordane	UG/L	0.028 UJ	NA025 U	0.030 UJ
Toxaphene	UG/L	2.75 UJ	NA 2.5 U	3.00 UJ
Aroclor 1016	UG/L	0.55 UJ	NA 0.5 U	0.60 UJ
Aroclor 1221	UG/L	1.10 UJ	NA 1 U	1.20 UJ
Aroclor 1232	UG/L	0.55 UJ	NA 0.5 U	0.60 UJ
Aroclor 1242	UG/L	0.55 UJ	NA 0.5 U	0.60 UJ
Aroclor 1248	UG/L	0.55 UJ	NA 0.5 U	0.60 UJ
Aroclor 1254	UG/L	0.55 UJ	NA 0.5 U	0.60 UJ
Aroclor 1260	UG/L	0.55 UJ	NA 0.5 U	0.60 UJ

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
GROUNDWATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	74-GW06-01	74-GW07-01	74-GW07-02	74-GW08-01	
Laboratory Sample ID:	9402140-01	9402198-01A	AB7979	9402198-03A	
Date Sampled:	02/16/94	02/22/94	08/26/94	02/22/94	
	UNITS				
CHEMICAL SURETY					
Acetophenone	UG/L	6.0 U	6.3 U	NA	6.3 U
Chloroacetophenone	UG/L	6.0 U	6.3 U	NA	6.3 U
Hydroxyacetophenone	UG/L	29.8 U	31.0 U	NA	31.3 U
Bis(2'-chloroethyl)disulfide	UG/L	29.8 U	31.0 U	NA	31.3 U
Bis(2'-chloroethyl)trisulfide	UG/L	29.8 U	31.0 U	NA	31.3 U
1,4-Dithiane	UG/L	6.0 U	6.3 U	NA	6.3 U
1,4-Oxathiane	UG/L	6.0 U	6.3 UJ	NA	6.3 U
THIODIGLYCOL					
Thiodiglycol	UG/L	12.5 U	12.5 U	NA	12.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled:	MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
UNITS					
<u>SEMIVOLATILES</u>					
1,2-Dichlorobenzene	UG/L	ND	NA	NA	NA
1,2,4-Trichlorobenzene	UG/L	ND	NA	NA	NA
1,3-Dichlorobenzene	UG/L	ND	NA	NA	NA
1,4-Dichlorobenzene	UG/L	ND	NA	NA	NA
2-Chloronaphthalene	UG/L	ND	NA	NA	NA
2-Chlorophenol	UG/L	ND	NA	NA	NA
2-Methylnaphthalene	UG/L	ND	NA	NA	NA
2-Methylphenol	UG/L	ND	NA	NA	NA
2-Nitroaniline	UG/L	ND	NA	NA	NA
2-Nitrophenol	UG/L	ND	NA	NA	NA
2,2'-oxybis-(1-chloropropane)	UG/L	ND	NA	NA	NA
2,4-Dichlorophenol	UG/L	ND	NA	NA	NA
2,4-Dimethylphenol	UG/L	ND	NA	NA	NA
2,4-Dinitrophenol	UG/L	ND	NA	NA	NA
2,4-Dinitrotoluene	UG/L	ND	NA	NA	NA
2,4,5-Trichlorophenol	UG/L	ND	NA	NA	NA
2,4,6-Trichlorophenol	UG/L	ND	NA	NA	NA
2,6-Dinitrotoluene	UG/L	ND	NA	NA	NA
3-Nitroaniline	UG/L	ND	NA	NA	NA
3,3'-Dichlorobenzidine	UG/L	ND	NA	NA	NA
4-Bromophenyl-phenylether	UG/L	ND	NA	NA	NA
4-Chloro-3-methylphenol	UG/L	ND	NA	NA	NA
4-Chloroaniline	UG/L	ND	NA	NA	NA
4-Chlorophenyl phenyl ether	UG/L	ND	NA	NA	NA
4-Methylphenol	UG/L	ND	NA	NA	NA
4-Nitroaniline	UG/L	ND	NA	NA	NA
4-Nitrophenol	UG/L	ND	NA	NA	NA
4,6-Dinitro-2-methylphenol	UG/L	ND	NA	NA	NA
Acenaphthene	UG/L	ND	NA	NA	NA
Acenaphthylene	UG/L	ND	NA	NA	NA
Anthracene	UG/L	ND	NA	NA	NA
Benzo[a]anthracene	UG/L	ND	NA	NA	NA
Benzo[a]pyrene	UG/L	ND	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled:	MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
UNITS					
SEMIVOLATILES Cont.					
Benzo[b]fluoranthene	UG/L	ND	NA	NA	NA
Benzo[g,h,i]perylene	UG/L	ND	NA	NA	NA
Benzo[k]fluoranthene	UG/L	ND	NA	NA	NA
bis(2-Chloroethoxy) methane	UG/L	ND	NA	NA	NA
bis(2-Chloroethyl) ether	UG/L	ND	NA	NA	NA
bis(2-Ethylhexyl)phthalate	UG/L	ND	NA	NA	NA
Butyl benzyl phthalate	UG/L	ND	NA	NA	NA
Carbazole	UG/L	ND	NA	NA	NA
Chrysene	UG/L	ND	NA	NA	NA
Dibenzofuran	UG/L	ND	NA	NA	NA
Dibenz[a,h]anthracene	UG/L	ND	NA	NA	NA
Diethylphthalate	UG/L	ND	NA	NA	NA
Dimethyl phthalate	UG/L	ND	NA	NA	NA
di-n-Butylphthalate	UG/L	2 J	5.5	1.4	6.5
di-n-Octylphthalate	UG/L	ND	NA	NA	NA
Fluoranthene	UG/L	ND	NA	NA	NA
Fluorene	UG/L	ND	NA	NA	NA
Hexachlorobenzene	UG/L	ND	NA	NA	NA
Hexachlorobutadiene	UG/L	ND	NA	NA	NA
Hexachlorocyclopentadiene	UG/L	ND	NA	NA	NA
Hexachloroethane	UG/L	ND	NA	NA	NA
Indeno[1,2,3-cd]pyrene	UG/L	ND	NA	NA	NA
Isophorone	UG/L	ND	NA	NA	NA
Naphthalene	UG/L	ND	NA	NA	NA
Nitrobenzene	UG/L	ND	NA	NA	NA
N-Nitroso-di-n-propylamine	UG/L	ND	NA	NA	NA
N-nitrosodiphenylamine	UG/L	ND	NA	NA	NA
Pentachlorophenol	UG/L	ND	NA	NA	NA
Phenanthrene	UG/L	ND	NA	NA	NA
Phenol	UG/L	ND	NA	NA	NA
Pyrene	UG/L	ND	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled:	MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
UNITS					
<u>VOLATILES</u>					
Chloromethane	UG/L	ND	NA	NA	NA
Bromomethane	UG/L	ND	NA	NA	NA
Vinyl chloride	UG/L	ND	NA	NA	NA
Chloroethane	UG/L	ND	NA	NA	NA
Methylene chloride	UG/L	ND	NA	NA	NA
Acetone	UG/L	2.04 J	4.3	1.4	5.2
Carbon Disulfide	UG/L	ND	NA	NA	NA
1,1-Dichloroethene	UG/L	ND	NA	NA	NA
1,1-Dichloroethane	UG/L	ND	NA	NA	NA
1,2-Dichloroethene(total)	UG/L	ND	NA	NA	NA
Chloroform	UG/L	ND	NA	NA	NA
1,2-Dichloroethane	UG/L	ND	NA	NA	NA
2-Butanone	UG/L	ND	NA	NA	NA
1,1,1-Trichloroethane	UG/L	ND	NA	NA	NA
Carbon tetrachloride	UG/L	ND	NA	NA	NA
Bromodichloromethane	UG/L	ND	NA	NA	NA
1,2-Dichloropropane	UG/L	ND	NA	NA	NA
cis-1,3-Dichloropropene	UG/L	ND	NA	NA	NA
Trichloroethene	UG/L	ND	NA	NA	NA
Dibromochloromethane	UG/L	ND	NA	NA	NA
1,1,2-Trichloroethane	UG/L	ND	NA	NA	NA
Benzene	UG/L	ND	NA	NA	NA
trans-1,3-Dichloropropene	UG/L	ND	NA	NA	NA
Bromoform	UG/L	ND	NA	NA	NA
4-Methyl-2-pentanone	UG/L	ND	NA	NA	NA
2-Hexanone	UG/L	ND	NA	NA	NA
Tetrachloroethene	UG/L	ND	NA	NA	NA
1,1,2,2-Tetrachloroethane	UG/L	ND	NA	NA	NA
Toluene	UG/L	ND	NA	NA	NA
Chlorobenzene	UG/L	ND	NA	NA	NA
Ethylbenzene	UG/L	ND	NA	NA	NA
Styrene	UG/L	ND	NA	NA	NA
Xylenes (total)	UG/L	ND	NA	NA	NA

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
GROUNDWATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled:	MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
	UNITS				
PESTICIDE/PCBS					
alpha-BHC	UG/L	ND	NA	NA	NA
beta-BHC	UG/L	ND	NA	NA	NA
delta-BHC	UG/L	ND	NA	NA	NA
Lindane (gamma-BHC)	UG/L	0.04 J	0.03	0.01	0.03
Heptachlor	UG/L	0.01 NJ	0.03	0.01	0.03
Aldrin	UG/L	ND	NA	NA	NA
Heptachlor epoxide	UG/L	ND	NA	NA	NA
Endosulfan I	UG/L	ND	NA	NA	NA
Dieldrin	UG/L	ND	NA	NA	NA
4,4'-DDE	UG/L	ND	NA	NA	NA
Endrin	UG/L	ND	NA	NA	NA
Endosulfan II	UG/L	0.02 J	0.05	0.01	0.06
4,4'-DDD	UG/L	ND	NA	NA	NA
Endosulfan sulfate	UG/L	ND	NA	NA	NA
4,4'-DDT	UG/L	ND	NA	NA	NA
Methoxychlor	UG/L	ND	NA	NA	NA
Endrin ketone	UG/L	ND	NA	NA	NA
Endrin aldehyde	UG/L	ND	NA	NA	NA
alpha-Chlordane	UG/L	0.02 NJ	0.027	0.004	0.031
gamma-Chlordane	UG/L	ND	NA	NA	NA
Toxaphene	UG/L	ND	NA	NA	NA
Aroclor 1016	UG/L	ND	NA	NA	NA
Aroclor 1221	UG/L	ND	NA	NA	NA
Aroclor 1232	UG/L	ND	NA	NA	NA
Aroclor 1242	UG/L	ND	NA	NA	NA
Aroclor 1248	UG/L	ND	NA	NA	NA
Aroclor 1254	UG/L	ND	NA	NA	NA
Aroclor 1260	UG/L	ND	NA	NA	NA

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
GROUNDWATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled:	MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
UNITS					
CHEMICAL SURETY					
Acetophenone	UG/L	ND	NA	NA	NA
Chloroacetophenone	UG/L	ND	NA	NA	NA
Hydroxyacetophenone	UG/L	ND	NA	NA	NA
Bis(2'-chloroethyl)disulfide	UG/L	ND	NA	NA	NA
Bis(2'-chloroethyl)trisulfide	UG/L	ND	NA	NA	NA
1,4-Dithiane	UG/L	ND	NA	NA	NA
1,4-Oxathiane	UG/L	ND	NA	NA	NA
THIODIGLYCOL					
Thiodiglycol	UG/L	ND	NA	NA	NA

APPENDIX P.23
SITE 74 GROUNDWATER TOTAL METALS

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL TOTAL METALS

Client Sample ID:	74-GW01-01	74-GW02-01	74-GW03A-02	74-GW04-01	74-GW05-01	74-GW06-01
Laboratory Sample ID:	9402138-03	9402132-01	AB7974	9402138-01	9402137-01	9402140-01
Date Sampled:	02/16/94	02/16/94	08/25/94	02/16/94	02/16/94	02/16/94

	UNITS	74-GW01-01	74-GW02-01	74-GW03A-02	74-GW04-01	74-GW05-01	74-GW06-01
Aluminum	UG/L	64100.0 J	52800.0 J	1600	18800.0 J	18300.0 J	40200.0 J
Antimony	UG/L	3.80 UJ	3.80 UJ	25 U	3.80 UJ	3.80 UJ	3.80 UJ
Arsenic	UG/L	2.86 J	18.1	3.5	1.10 U	4.06	1.10 U
Barium	UG/L	110.0	117.0	28.2	61.6	80.7	63.8
Beryllium	UG/L	1.22	2.25	0.5 U	0.380 U	0.842	0.380 U
Cadmium	UG/L	1.60 U	1.60 U	2.5 U	1.60 U	1.60 U	1.60 U
Calcium	UG/L	815.0	3000.0	554	918.0	3860.0	7720.0
Chromium	UG/L	56.6	45.1	5 U	15.9	18.6	34.2
Cobalt	UG/L	8.0 U	8.0 U	5 U	8.0 U	8.0 U	8.0 U
Copper	UG/L	8.2 U	8.2 U	5 U	8.2 U	8.2 U	8.2 U
Iron	UG/L	10100.0 J	96100.0 J	821	4520.0 J	8550.0 J	4780.0 J
Lead	UG/L	15.3	9.67	1 U	7.71 J	10.8	6.11
Magnesium	UG/L	2160.0	2480.0	480	1900.0	1840.0	1130.0
Manganese	UG/L	19.2	115.0	17.2	8.47	39.9	34.1
Mercury	UG/L	0.244	0.164 U	0.1 U	0.096 U	0.097 U	0.105 U
Nickel	UG/L	14.4 U	14.4 U	10 U	14.4 U	14.4 U	14.4 U
Potassium	UG/L	3070	2000	500 U	1290	1170	2000
Selenium	UG/L	0.80 UJ	1.80 J	1 U	0.80 UJ	0.80 UJ	0.80 UJ
Silver	UG/L	0.80 U	0.80 U	2.5 U	0.80 U	0.80 U	0.80 U
Sodium	UG/L	3570	2140	3560	5220	7210	2580
Thallium	UG/L	1.50 U	1.50 U	1 U	1.50 U	1.50 U	1.50 U
Vanadium	UG/L	78.2	301.0	5 U	10.2 U	22.0	10.2 U
Zinc	UG/L		417.0 J	94.9		69.9 J	
Total Cyanide	UG/L	2.50 U	2.50 U	2.50 U	2.50 U	2.50 U	2.50 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
GROUNDWATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL TOTAL METALS

Client Sample ID:	74-GW07-02	74-GW08-01
Laboratory Sample ID:	AB7980	9402198-03A
Date Sampled:	08/26/94	02/22/94

	<u>UNITS</u>		
Aluminum	UG/L	10400	11400.0 J
Antimony	UG/L	25 U	3.80 U
Arsenic	UG/L	3.2	1.10 U
Barium	UG/L	80.1	38.9
Beryllium	UG/L	0.5 U	0.380 U
Cadmium	UG/L	2.5 U	1.60 U
Calcium	UG/L	686	3440.0
Chromium	UG/L	5 U	4.16 UJ
Cobalt	UG/L	5 U	8.0 U
Copper	UG/L	5 U	8.2 U
Iron	UG/L	5110	1380.0
Lead	UG/L	5.3	3.10 J
Magnesium	UG/L	1900	924.0
Manganese	UG/L	18	16.9
Mercury	UG/L	0.1 U	0.081 U
Nickel	UG/L	10 U	14.4 U
Potassium	UG/L	1660	381.500 U
Selenium	UG/L	1 U	0.80 U
Silver	UG/L	2.5 U	0.80 U
Sodium	UG/L	5520	2530.00
Thallium	UG/L	1 U	1.50 U
Vanadium	UG/L	14.3	10.2 U
Zinc	UG/L	154	19.1
Total Cyanide	UG/L	2.50 U	2.50 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
GROUNDWATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL TOTAL METALS

Client Sample ID: Laboratory Sample ID: Date Sampled:		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL
	UNITS					
Aluminum	UG/L	64100 J	27200.0	22434.0	42230.4	226384.1
Antimony	UG/L	ND	NA	NA	NA	NA
Arsenic	UG/L	18.1	4.4	5.7	8.2	15.1
Barium	UG/L	117	72.5	31.2	93.4	115.5
Beryllium	UG/L	2.25	0.8	0.7	1.2	1.6
Cadmium	UG/L	ND	NA	NA	NA	NA
Calcium	UG/L	7720	2624.1	2464.8	4275.5	10426.0
Chromium	UG/L	56.6	23.1	20.1	36.5	137.8
Cobalt	UG/L	ND	NA	NA	NA	NA
Copper	UG/L	ND	NA	NA	NA	NA
Iron	UG/L	96100 J	16420.1	32349.3	38093.6	217722.0
Lead	UG/L	15.3	7.4	4.5	10.4	24.0
Magnesium	UG/L	2480	1601.8	682.2	2058.8	2856.5
Manganese	UG/L	115	33.6	34.4	56.7	81.2
Mercury	UG/L	0.244	0.1	0.1	0.2	0.2
Nickel	UG/L	ND	NA	NA	NA	NA
Potassium	UG/L	3070	1508.9	877.8	2097.1	3633.4
Selenium	UG/L	1.8 J	1.0	0.3	1.2	1.2
Silver	UG/L	ND	NA	NA	NA	NA
Sodium	UG/L	7210	4041.3	1777.0	5231.8	6022.8
Thallium	UG/L	ND	NA	NA	NA	NA
Vanadium	UG/L	301	56.4	101.6	124.5	608.8
Zinc	UG/L	417 J	151.0	156.4	255.8	5346.5
Total Cyanide	UG/L	ND	NA	NA	NA	NA

APPENDIX P.24
SITE 74 GROUNDWATER DISSOLVED METALS

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 GROUNDWATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL DISSOLVED METALS

Client Sample ID:	74-GW01D-01	74-GW02D-01	74-GW03AD-02	74-GW04D-01	74-GW05D-01	74-GW06D-01
Laboratory Sample ID:	9402138-04	9402132-02	AB7986	9402138-02	9402137-02	9402140-02
Date Sampled:	02/16/94	02/16/94	08/25/94	02/16/94	02/16/94	02/16/94

	UNITS						
Aluminum	UG/L	215.0 J	437.0 J	1780	372.0 J	1130.0 J	69.5 UJ
Antimony	UG/L	3.80 UJ	3.80 UJ	25 U	3.80 UJ	3.80 UJ	3.80 UJ
Arsenic	UG/L	1.10 U	1.10 U	3.9	1.10 U	1.10 U	1.10 U
Barium	UG/L	15.9	28.5	32.8	27.5	45.6	6.2 U
Beryllium	UG/L	0.380 U	0.380 U	0.5 U	0.380 U	0.380 U	0.380 U
Cadmium	UG/L	1.60 U	1.60 U	2.5 U	1.60 U	1.60 U	1.60 U
Calcium	UG/L	806.0	2840.0	870	1060.0	4110.0	5700.0
Chromium	UG/L	4.16 U	4.16 U	5 U	4.16 U	4.16 U	4.16 U
Cobalt	UG/L	8.0 U	8.0 U	5 U	8.0 U	8.0 U	8.0 U
Copper	UG/L	8.2 U	8.2 U	18.4	8.2 U	8.2 U	8.2 U
Iron	UG/L	54.9 R	350.0 J	1040	54.9 R	380.0 J	54.9 R
Lead	UG/L	0.50 U	0.50 U	1 U	0.50 U	0.50 U	0.50 U
Magnesium	UG/L	1050.0	1670.0	692	1640.0	1460.0	499.0
Manganese	UG/L	3.54 U	3.54 U	25.4	3.54 U	20.9	17.7
Mercury	UG/L	0.080 U	0.086 U	1.4	0.091 U	0.099 U	0.085 U
Nickel	UG/L	14.4 U	14.4 U	10 U	14.4 U	14.4 U	14.4 U
Potassium	UG/L	382 U	382 U	500 U	382 U	382 U	382 U
Selenium	UG/L	0.80 UJ	0.80 UJ	1 U	0.80 UJ	0.80 UJ	0.80 UJ
Silver	UG/L	24.2	0.80 U	2.5 U	0.80 U	0.80 U	0.80 U
Sodium	UG/L	3460	2140	4470	5550	7540	2800
Thallium	UG/L	1.50 U	1.50 U	1 U	1.50 U	1.50 U	1.50 U
Vanadium	UG/L	10.2 U	10.2 U	5 U	10.2 U	10.2 U	10.2 U
Zinc	UG/L		64.2 J	93.9	14.2 R		

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
GROUNDWATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL DISSOLVED METALS

Client Sample ID:	74-GW07D-02	74-GW08D-01
Laboratory Sample ID:	AB7998	9402188-04A
Date Sampled:	08/26/94	02/22/94

	UNITS		
Aluminum	UG/L	153	69.5 U
Antimony	UG/L	25 U	8.26
Arsenic	UG/L	1 U	1.10 U
Barium	UG/L	63.8	6.2 U
Beryllium	UG/L	0.5 U	0.380 U
Cadmium	UG/L	5.6	1.60 U
Calcium	UG/L	835	3720.0
Chromium	UG/L	5 U	4.16 U
Cobalt	UG/L	5 U	8.0 U
Copper	UG/L	20.3	8.2 U
Iron	UG/L	749	27.5 U
Lead	UG/L	1 U	0.50 U
Magnesium	UG/L	1730	730.0
Manganese	UG/L	11.8	16.0
Mercury	UG/L	0.1 U	0.166
Nickel	UG/L	10 U	14.4 U
Potassium	UG/L	1020	381.500 U
Selenium	UG/L	1 U	0.80 U
Silver	UG/L	2.5 U	0.80 U
Sodium	UG/L	6320	3120.00
Thallium	UG/L	1 U	1.50 U
Vanadium	UG/L	5 U	10.2 U
Zinc	UG/L	27.4	5.3 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
GROUNDWATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL DISSOLVED METAL

Client Sample ID: Laboratory Sample ID: Date Sampled:	MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG NORMAL UPPER 95% CONFIDENCE INTERVAL	
	<u>UNITS</u>					
Aluminum	UG/L	1780	528.3	612.0	938.3	3873.6
Antimony	UG/L	8.26	9.7	9.6	16.1	27.6
Arsenic	UG/L	3.9	1.4	1.0	2.1	2.1
Barium	UG/L	63.8	28.3	19.7	41.5	90.6
Beryllium	UG/L	ND	NA	NA	NA	NA
Cadmium	UG/L	5.6	2.2	1.4	3.2	3.3
Calcium	UG/L	5700	2492.6	1882.6	3753.9	7273.7
Chromium	UG/L	ND	NA	NA	NA	NA
Cobalt	UG/L	ND	NA	NA	NA	NA
Copper	UG/L	20.3	11.0	5.2	14.4	15.7
Iron	UG/L	1040	509.3	391.6	2257.6	139667.9
Lead	UG/L	ND	NA	NA	NA	NA
Magnesium	UG/L	1730	1183.9	500.5	1519.2	1869.9
Manganese	UG/L	25.4	12.8	8.6	18.6	40.6
Mercury	UG/L	1.4	0.3	0.5	0.6	0.8
Nickel	UG/L	ND	NA	NA	NA	NA
Potassium	UG/L	1020	476.1	223.6	626.0	634.1
Selenium	UG/L	ND	NA	NA	NA	NA
Silver	UG/L	24.2	4.2	8.1	9.6	22.5
Sodium	UG/L	7540	4425.0	1892.0	5692.6	6639.3
Thallium	UG/L	ND	NA	NA	NA	NA
Vanadium	UG/L	ND	NA	NA	NA	NA
Zinc	UG/L	93.9	47.7	39.2	80.0	350336.8

APPENDIX P.25
SITE 74 PESTICIDE DISPOSAL AREA SURFACE WATER ORGANICS

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 PESTICIDE DISPOSAL AREA SURFACE WATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SW01	74-PDA-SW02	74-PDA-SW03
Laboratory Sample ID:	9401136-01	9401136-02	9401136-03
Date Sampled:	01/24/94	01/24/94	01/24/94

	UNITS			
SEMIVOLATILES				
1,2-Dichlorobenzene	UG/L	6.0 U	5.5 U	5.5 U
1,2,4-Trichlorobenzene	UG/L	6.0 U	5.5 U	5.5 U
1,3-Dichlorobenzene	UG/L	6.0 U	5.5 U	5.5 U
1,4-Dichlorobenzene	UG/L	6.0 U	5.5 U	5.5 U
2-Chloronaphthalene	UG/L	6.0 U	5.5 U	5.5 U
2-Chlorophenol	UG/L	6.0 U	5.5 U	5.5 U
2-Methylnaphthalene	UG/L	6.0 U	5.5 U	5.5 U
2-Methylphenol	UG/L	6.0 U	5.5 U	5.5 U
2-Nitroaniline	UG/L	15.0 U	13.8 U	13.8 U
2-Nitrophenol	UG/L	6.0 U	5.5 U	5.5 U
2,2'-oxybis-(1-chloropropane)	UG/L	6.0 U	5.5 U	5.5 U
2,4-Dichlorophenol	UG/L	6.0 U	5.5 U	5.5 U
2,4-Dimethylphenol	UG/L	6.0 U	5.5 U	5.5 U
2,4-Dinitrophenol	UG/L	15.0 U	13.8 U	13.8 U
2,4-Dinitrotoluene	UG/L	6.0 U	5.5 U	5.5 U
2,4,5-Trichlorophenol	UG/L	15.0 U	13.8 U	13.8 U
2,4,6-Trichlorophenol	UG/L	6.0 U	5.5 U	5.5 U
2,6-Dinitrotoluene	UG/L	6.0 U	5.5 U	5.5 U
3-Nitroaniline	UG/L	15.0 U	13.8 U	13.8 U
3,3'-Dichlorobenzidine	UG/L	6.0 U	5.5 U	5.5 U
4-Bromophenyl-phenylether	UG/L	6.0 U	5.5 U	5.5 U
4-Chloro-3-methylphenol	UG/L	6.0 U	5.5 U	5.5 U
4-Chloroaniline	UG/L	6.0 U	5.5 U	5.5 U
4-Chlorophenyl phenyl ether	UG/L	6.0 U	5.5 U	5.5 U
4-Methylphenol	UG/L	6.0 U	5.5 U	5.5 U
4-Nitroaniline	UG/L	15.0 U	13.8 U	13.8 U
4-Nitrophenol	UG/L	15.0 U	13.8 U	13.8 U
4,6-Dinitro-2-methylphenol	UG/L	15.0 U	13.8 U	13.8 U
Acenaphthene \	UG/L	6.0 U	5.5 U	5.5 U
Acenaphthylene	UG/L	6.0 U	5.5 U	5.5 U
Anthracene	UG/L	6.0 U	5.5 U	5.5 U
Benzo[a]anthracene	UG/L	6.0 U	5.5 U	5.5 U
Benzo[a]pyrene	UG/L	6.0 U	5.5 U	5.5 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 PESTICIDE DISPOSAL AREA SURFACE WATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SW01	74-PDA-SW02	74-PDA-SW03
Laboratory Sample ID:	9401136-01	9401136-02	9401136-03
Date Sampled:	01/24/94	01/24/94	01/24/94

UNITS

<u>SEMIVOLATILES Cont.</u>				
Benzo[b]fluoranthene	UG/L	6.0 U	5.5 U	5.5 U
Benzo[g,h,i]perylene	UG/L	6.0 U	5.5 U	5.5 U
Benzo[k]fluoranthene	UG/L	6.0 U	5.5 U	5.5 U
bis(2-Chloroethoxy) methane	UG/L	6.0 U	5.5 U	5.5 U
bis(2-Chloroethyl) ether	UG/L	6.0 U	5.5 U	5.5 U
bis(2-Ethylhexyl)phthalate	UG/L	6.0 U	5.5 U	5.5 U
Butyl benzyl phthalate	UG/L	6.0 U	5.5 U	5.5 U
Carbazole	UG/L	6.0 U	5.5 U	5.5 U
Chrysene	UG/L	6.0 U	5.5 U	5.5 U
Dibenzofuran	UG/L	6.0 U	5.5 U	5.5 U
Dibenz[a,h]anthracene	UG/L	6.0 U	5.5 U	5.5 U
Diethylphthalate	UG/L	6.0 U	5.5 U	5.5 U
Dimethyl phthalate	UG/L	6.0 U	5.5 U	5.5 U
di-n-Butylphthalate	UG/L	6.0 U	5.5 U	5.50 U
di-n-Octylphthalate	UG/L	6.0 U	5.5 U	5.5 U
Fluoranthene	UG/L	6.0 U	5.5 U	5.5 U
Fluorene	UG/L	6.0 U	5.5 U	5.5 U
Hexachlorobenzene	UG/L	6.0 U	5.5 U	5.5 U
Hexachlorobutadiene	UG/L	6.0 U	5.5 U	5.5 U
Hexachlorocyclopentadiene	UG/L	6.0 U	5.5 U	5.5 U
Hexachloroethane	UG/L	6.0 U	5.5 U	5.5 U
Indeno[1,2,3-cd]pyrene	UG/L	6.0 U	5.5 U	5.5 U
Isophorone	UG/L	6.0 U	5.5 U	5.5 U
Naphthalene	UG/L	6.0 U	5.5 U	5.5 U
Nitrobenzene	UG/L	6.0 U	5.5 U	5.5 U
N-Nitroso-di-n-propylamine	UG/L	6.0 U	5.5 U	5.5 U
N-nitrosodiphenylamine	UG/L	6.0 U	5.5 U	5.5 U
Pentachlorophenol	UG/L	15.0 U	13.8 U	13.8 U
Phenanthrene	UG/L	6.0 U	5.5 U	5.5 U
Phenol	UG/L	6.0 U	5.5 U	5.5 U
Pyrene	UG/L	6.0 U	5.5 U	5.5 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
PESTICIDE DISPOSAL AREA SURFACE WATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	74-PDA-SW01	74-PDA-SW02	74-PDA-SW03
Laboratory Sample ID:	9401136-01	9401136-02	9401136-03
Date Sampled:	01/24/94	01/24/94	01/24/94

UNITS

VOLATILES

	UG/L	5.0 U	5.0 U	5.0 U
Chloromethane	UG/L	5.0 U	5.0 U	5.0 U
Bromomethane	UG/L	5.0 U	5.0 U	5.0 U
Vinyl chloride	UG/L	5.0 U	5.0 U	5.0 U
Chloroethane	UG/L	5.0 U	5.0 U	5.0 U
Methylene chloride	UG/L	8.50 U	5.00 U	5.00 U
Acetone	UG/L	5.00 U	5.00 U	5.0 U
Carbon Disulfide	UG/L	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	UG/L	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	UG/L	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene(total)	UG/L	5.0 U	5.0 U	5.0 U
Chloroform	UG/L	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	UG/L	5.0 U	5.0 U	5.0 U
2-Butanone	UG/L	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	UG/L	5.0 U	5.0 U	5.0 U
Bromodichloromethane	UG/L	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	UG/L	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	UG/L	5.0 U	5.0 U	5.0 U
Trichloroethene	UG/L	5.0 U	5.0 U	5.0 U
Dibromochloromethane	UG/L	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	UG/L	5.0 U	5.0 U	5.0 U
Benzene	UG/L	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	UG/L	5.0 U	5.0 U	5.0 U
Bromoform	UG/L	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	UG/L	5.0 U	5.0 U	5.0 U
2-Hexanone	UG/L	5.0 U	5.0 U	5.0 U
Tetrachloroethene	UG/L	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	UG/L	5.0 U	5.0 U	5.0 U
Toluene	UG/L	5.0 U	5.0 U	5.0 U
Chlorobenzene	UG/L	5.0 U	5.0 U	5.0 U
Ethylbenzene	UG/L	5.0 U	5.0 U	5.0 U
Styrene	UG/L	5.0 U	5.0 U	5.0 U
Xylenes (total)	UG/L	5.0 U	5.0 U	5.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 PESTICIDE DISPOSAL AREA SURFACE WATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SW01	74-PDA-SW02	74-PDA-SW03
Laboratory Sample ID:	9401136-01	9401136-02	9401136-03
Date Sampled:	01/24/94	01/24/94	01/24/94

UNITS

PESTICIDE/PCBS

	UG/L	0.030 UJ	0.027 UJ	0.029 UJ
alpha-BHC	UG/L	0.030 UJ	0.027 UJ	0.029 UJ
beta-BHC	UG/L	0.030 UJ	0.027 UJ	0.029 UJ
delta-BHC	UG/L	0.030 UJ	0.027 UJ	0.029 UJ
Lindane (gamma-BHC)	UG/L	0.030 UJ	0.027 UJ	0.029 UJ
Heptachlor	UG/L	0.015 UJ	0.005 UJ	0.005 UJ
Aldrin	UG/L	0.030 UJ	0.027 UJ	0.029 UJ
Heptachlor epoxide	UG/L	0.030 UJ	0.027 UJ	0.029 UJ
Endosulfan I	UG/L	0.030 UJ	0.027 UJ	0.029 UJ
Dieldrin	UG/L	0.059 UJ	0.053 UJ	0.058 UJ
4,4'-DDE	UG/L	0.059 UJ	0.053 UJ	0.058 UJ
Endrin	UG/L	0.059 UJ	0.053 UJ	0.058 UJ
Endosulfan II	UG/L	0.059 UJ	0.053 UJ	0.058 UJ
4,4'-DDD	UG/L	0.059 UJ	0.053 UJ	0.058 UJ
Endosulfan sulfate	UG/L	0.059 UJ	0.053 UJ	0.058 UJ
4,4'-DDT	UG/L	0.059 UJ	0.053 UJ	0.058 UJ
Methoxychlor	UG/L	0.294 UJ	0.266 UJ	0.288 UJ
Endrin ketone	UG/L	0.059 UJ	0.053 UJ	0.058 UJ
Endrin aldehyde	UG/L	0.059 UJ	0.053 UJ	0.058 UJ
alpha-Chlordane	UG/L	0.030 UJ	0.027 UJ	0.029 UJ
gamma-Chlordane	UG/L	0.030 UJ	0.027 UJ	0.029 UJ
Toxaphene	UG/L	2.94 UJ	2.66 UJ	2.88 UJ
Aroclor 1016	UG/L	0.59 UJ	0.53 UJ	0.58 UJ
Aroclor 1221	UG/L	1.18 UJ	1.07 UJ	1.15 UJ
Aroclor 1232	UG/L	0.59 UJ	0.53 UJ	0.58 UJ
Aroclor 1242	UG/L	0.59 UJ	0.53 UJ	0.58 UJ
Aroclor 1248	UG/L	0.59 UJ	0.53 UJ	0.58 UJ
Aroclor 1254	UG/L	0.59 UJ	0.53 UJ	0.58 UJ
Aroclor 1260	UG/L	0.59 UJ	0.53 UJ	0.58 UJ

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 PESTICIDE DISPOSAL AREA SURFACE WATER
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled:	UNITS	MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG-NORMAL UPPER 95% CONFIDENCE INTERVAL
SEMIVOLATILES						
	1,2-Dichlorobenzene	UG/L	ND	NA	NA	NA
	1,2,4-Trichlorobenzene	UG/L	ND	NA	NA	NA
	1,3-Dichlorobenzene	UG/L	ND	NA	NA	NA
	1,4-Dichlorobenzene	UG/L	ND	NA	NA	NA
	2-Chloronaphthalene	UG/L	ND	NA	NA	NA
	2-Chlorophenol	UG/L	ND	NA	NA	NA
	2-Methylnaphthalene	UG/L	ND	NA	NA	NA
	2-Methylphenol	UG/L	ND	NA	NA	NA
	2-Nitroaniline	UG/L	ND	NA	NA	NA
	2-Nitrophenol	UG/L	ND	NA	NA	NA
	2,2'-oxybis-(1-chloropropane)	UG/L	ND	NA	NA	NA
	2,4-Dichlorophenol	UG/L	ND	NA	NA	NA
	2,4-Dimethylphenol	UG/L	ND	NA	NA	NA
	2,4-Dinitrophenol	UG/L	ND	NA	NA	NA
	2,4-Dinitrotoluene	UG/L	ND	NA	NA	NA
	2,4,5-Trichlorophenol	UG/L	ND	NA	NA	NA
	2,4,6-Trichlorophenol	UG/L	ND	NA	NA	NA
	2,6-Dinitrotoluene	UG/L	ND	NA	NA	NA
	3-Nitroaniline	UG/L	ND	NA	NA	NA
	3,3'-Dichlorobenzidine	UG/L	ND	NA	NA	NA
	4-Bromophenyl-phenylether	UG/L	ND	NA	NA	NA
	4-Chloro-3-methylphenol	UG/L	ND	NA	NA	NA
	4-Chloroaniline	UG/L	ND	NA	NA	NA
	4-Chlorophenyl phenyl ether	UG/L	ND	NA	NA	NA
	4-Methylphenol	UG/L	ND	NA	NA	NA
	4-Nitroaniline	UG/L	ND	NA	NA	NA
	4-Nitrophenol	UG/L	ND	NA	NA	NA
	4,6-Dinitro-2-methylphenol	UG/L	ND	NA	NA	NA
	Acenaphthene	UG/L	ND	NA	NA	NA
	Acenaphthylene	UG/L	ND	NA	NA	NA
	Anthracene	UG/L	ND	NA	NA	NA
	Benzo[a]anthracene	UG/L	ND	NA	NA	NA
	Benzo[a]pyrene	UG/L	ND	NA	NA	NA

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
PESTICIDE DISPOSAL AREA SURFACE WATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled:	MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG-NORMAL UPPER 95% CONFIDENCE INTERVAL
<u>UNITS</u>					
SEMIVOLATILES Cont.					
Benzo[b]fluoranthene	UG/L	ND	NA	NA	NA
Benzo[g,h,i]perylene	UG/L	ND	NA	NA	NA
Benzo[k]fluoranthene	UG/L	ND	NA	NA	NA
bis(2-Chloroethoxy) methane	UG/L	ND	NA	NA	NA
bis(2-Chloroethyl) ether	UG/L	ND	NA	NA	NA
bis(2-Ethylhexyl)phthalate	UG/L	ND	NA	NA	NA
Butyl benzyl phthalate	UG/L	ND	NA	NA	NA
Carbazole	UG/L	ND	NA	NA	NA
Chrysene	UG/L	ND	NA	NA	NA
Dibenzofuran	UG/L	ND	NA	NA	NA
Dibenz[a,h]anthracene	UG/L	ND	NA	NA	NA
Diethylphthalate	UG/L	ND	NA	NA	NA
Dimethyl phthalate	UG/L	ND	NA	NA	NA
di-n-Butylphthalate	UG/L	ND	NA	NA	NA
di-n-Octylphthalate	UG/L	ND	NA	NA	NA
Fluoranthene	UG/L	ND	NA	NA	NA
Fluorene	UG/L	ND	NA	NA	NA
Hexachlorobenzene	UG/L	ND	NA	NA	NA
Hexachlorobutadiene	UG/L	ND	NA	NA	NA
Hexachlorocyclopentadiene	UG/L	ND	NA	NA	NA
Hexachloroethane	UG/L	ND	NA	NA	NA
Indeno[1,2,3-cd]pyrene	UG/L	ND	NA	NA	NA
Isophorone	UG/L	ND	NA	NA	NA
Naphthalene	UG/L	ND	NA	NA	NA
Nitrobenzene	UG/L	ND	NA	NA	NA
N-Nitroso-di-n-propylamine	UG/L	ND	NA	NA	NA
N-nitrosodiphenylamine	UG/L	ND	NA	NA	NA
Pentachlorophenol	UG/L	ND	NA	NA	NA
Phenanthrene	UG/L	ND	NA	NA	NA
Phenol	UG/L	ND	NA	NA	NA
Pyrene	UG/L	ND	NA	NA	NA

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
PESTICIDE DISPOSAL AREA SURFACE WATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled:		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG-NORMAL UPPER 95% CONFIDENCE INTERVAL
	<u>UNITS</u>					
	<u>VOLATILES</u>					
	Chloromethane	UG/L	ND	NA	NA	NA
	Bromomethane	UG/L	ND	NA	NA	NA
	Vinyl chloride	UG/L	ND	NA	NA	NA
	Chloroethane	UG/L	ND	NA	NA	NA
	Methylene chloride	UG/L	ND	NA	NA	NA
	Acetone	UG/L	ND	NA	NA	NA
	Carbon Disulfide	UG/L	ND	NA	NA	NA
	1,1-Dichloroethene	UG/L	ND	NA	NA	NA
	1,1-Dichloroethane	UG/L	ND	NA	NA	NA
	1,2-Dichloroethene(total)	UG/L	ND	NA	NA	NA
	Chloroform	UG/L	ND	NA	NA	NA
	1,2-Dichloroethane	UG/L	ND	NA	NA	NA
	2-Butanone	UG/L	ND	NA	NA	NA
	1,1,1-Trichloroethane	UG/L	ND	NA	NA	NA
	Carbon tetrachloride	UG/L	ND	NA	NA	NA
	Bromodichloromethane	UG/L	ND	NA	NA	NA
	1,2-Dichloropropane	UG/L	ND	NA	NA	NA
	cis-1,3-Dichloropropene	UG/L	ND	NA	NA	NA
	Trichloroethene	UG/L	ND	NA	NA	NA
	Dibromochloromethane	UG/L	ND	NA	NA	NA
	1,1,2-Trichloroethane	UG/L	ND	NA	NA	NA
	Benzene	UG/L	ND	NA	NA	NA
	trans-1,3-Dichloropropene	UG/L	ND	NA	NA	NA
	Bromoform	UG/L	ND	NA	NA	NA
	4-Methyl-2-pentanone	UG/L	ND	NA	NA	NA
	2-Hexanone	UG/L	ND	NA	NA	NA
	Tetrachloroethene	UG/L	ND	NA	NA	NA
	1,1,2,2-Tetrachloroethane	UG/L	ND	NA	NA	NA
	Toluene	UG/L	ND	NA	NA	NA
	Chlorobenzene	UG/L	ND	NA	NA	NA
	Ethylbenzene	UG/L	ND	NA	NA	NA
	Styrene	UG/L	ND	NA	NA	NA
	Xylenes (total)	UG/L	ND	NA	NA	NA

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
PESTICIDE DISPOSAL AREA SURFACE WATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled:		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG-NORMAL UPPER 95% CONFIDENCE INTERVAL
	<u>UNITS</u>					
	<u>PESTICIDE/PCBS</u>					
	alpha-BHC	UG/L	ND	NA	NA	NA
	beta-BHC	UG/L	ND	NA	NA	NA
	delta-BHC	UG/L	ND	NA	NA	NA
	Lindane (gamma-BHC)	UG/L	ND	NA	NA	NA
	Heptachlor	UG/L	ND	NA	NA	NA
	Aldrin	UG/L	ND	NA	NA	NA
	Heptachlor epoxide	UG/L	ND	NA	NA	NA
	Endosulfan I	UG/L	ND	NA	NA	NA
	Dieldrin	UG/L	ND	NA	NA	NA
	4,4'-DDE	UG/L	ND	NA	NA	NA
	Endrin	UG/L	ND	NA	NA	NA
	Endosulfan II	UG/L	ND	NA	NA	NA
	4,4'-DDD	UG/L	ND	NA	NA	NA
	Endosulfan sulfate	UG/L	ND	NA	NA	NA
	4,4'-DDT	UG/L	ND	NA	NA	NA
	Methoxychlor	UG/L	ND	NA	NA	NA
	Endrin ketone	UG/L	ND	NA	NA	NA
	Endrin aldehyde	UG/L	ND	NA	NA	NA
	alpha-Chlordane	UG/L	ND	NA	NA	NA
	gamma-Chlordane	UG/L	ND	NA	NA	NA
	Toxaphene	UG/L	ND	NA	NA	NA
	Aroclor 1016	UG/L	ND	NA	NA	NA
	Aroclor 1221	UG/L	ND	NA	NA	NA
	Aroclor 1232	UG/L	ND	NA	NA	NA
	Aroclor 1242	UG/L	ND	NA	NA	NA
	Aroclor 1248	UG/L	ND	NA	NA	NA
	Aroclor 1254	UG/L	ND	NA	NA	NA
	Aroclor 1260	UG/L	ND	NA	NA	NA

APPENDIX P.26
SITE 74 PESTICIDE DISPOSAL AREA
SURFACE WATER INORGANICS

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
PESTICIDE DISPOSAL AREA SURFACE WATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL METALS

Client Sample ID:	74-PDA-SW01	74-PDA-SW02	74-PDA-SW03
Laboratory Sample ID:	9401136-01	9401136-02	9401136-03
Date Sampled:	01/24/94	01/24/94	01/24/94

	UNITS			
Aluminum	UG/L	492.0 J	309.0 J	127.0 J
Antimony	UG/L	3.95 U	3.95 U	3.95 U
Arsenic	UG/L	1.45 U	1.45 U	1.45 U
Barium	UG/L	6.9 U	6.9 U	6.9 U
Beryllium	UG/L	0.65 U	0.65 U	0.65 U
Cadmium	UG/L	1.18 U	1.18 U	1.18 U
Calcium	UG/L	11500.0	11700.0	10400.0
Chromium	UG/L	3.68 U	3.68 U	3.68 U
Cobalt	UG/L	9.7 U	9.7 U	9.7 U
Copper	UG/L	8.1 U	8.1 U	8.1 U
Iron	UG/L	273.0	274.0	138.0
Lead	UG/L	5.84 N	6.04 J	1.62 J
Magnesium	UG/L	856.0	881.0	782.0
Manganese	UG/L	2.63 U	2.63 U	2.63 U
Mercury	UG/L	0.050 U	0.050 U	0.050 U
Nickel	UG/L	6.8 U	6.8 U	6.8 U
Potassium	UG/L	719	448	150 U
Selenium	UG/L	1.27 U	1.27 U	1.27 U
Silver	UG/L	0.200 UJ	0.200 UJ	0.200 UJ
Sodium	UG/L	19800	21700	13400
Thallium	UG/L	2.30 U	2.30 U	2.30 U
Vanadium	UG/L	8.3 U	8.3 U	8.3 U
Zinc	UG/L	9.3 U	5.6 U	4.98 U
Total Cyanide	UG/L	2.50 U	2.50 U	2.50 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
PESTICIDE DISPOSAL AREA SURFACE WATER
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
TAL METALS

Client Sample ID: Laboratory Sample ID: Date Sampled:	MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG-NORMAL UPPER 95% CONFIDENCE INTERVAL
	<u>UNITS</u>				
Aluminum	UG/L 492 J	309.3	182.5	617.0	28747.7
Antimony	UG/L ND	NA	NA	NA	NA
Arsenic	UG/L ND	NA	NA	NA	NA
Barium	UG/L ND	NA	NA	NA	NA
Beryllium	UG/L ND	NA	NA	NA	NA
Cadmium	UG/L ND	NA	NA	NA	NA
Calcium	UG/L 11700	11200.0	700.0	12380.1	12683.5
Chromium	UG/L ND	NA	NA	NA	NA
Cobalt	UG/L ND	NA	NA	NA	NA
Copper	UG/L ND	NA	NA	NA	NA
Iron	UG/L 274	228.3	78.2	360.2	1011.3
Lead	UG/L 6.04 J	4.5	2.5	8.7	1290.9
Magnesium	UG/L 881	839.7	51.5	926.5	948.2
Manganese	UG/L ND	NA	NA	NA	NA
Mercury	UG/L ND	NA	NA	NA	NA
Nickel	UG/L ND	NA	NA	NA	NA
Potassium	UG/L 719	439.0	284.6	918.8	397947.3
Selenium	UG/L ND	NA	NA	NA	NA
Silver	UG/L ND	NA	NA	NA	NA
Sodium	UG/L 21700	18300.0	4348.6	25631.1	38964.5
Thallium	UG/L ND	NA	NA	NA	NA
Vanadium	UG/L ND	NA	NA	NA	NA
Zinc	UG/L ND	NA	NA	NA	NA
Total Cyanide	UG/L ND	NA	NA	NA	NA

APPENDIX P.27

SITE 74 PESTICIDE DISPOSAL AREA SEDIMENT ORGANICS

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 PESTICIDE DISPOSAL AREA SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SD01-06	74-PDA-SD02-06	74-PDA-SD03-06	
Laboratory Sample ID:	9401137-01	9401137-02	9401137-03	
Date Sampled:	01/24/94	01/24/94	01/24/94	
Percent Solids	78.8	63.5	80.0	
SEMIVOLATILES				
1,2-Dichlorobenzene	UG/KG	209.0 U	262.5 U	206.0 U
1,2,4-Trichlorobenzene	UG/KG	209.0 U	262.5 U	206.0 U
1,3-Dichlorobenzene	UG/KG	209.0 U	262.5 U	206.0 U
1,4-Dichlorobenzene	UG/KG	209.0 U	262.5 U	206.0 U
2-Chloronaphthalene	UG/KG	209.0 U	262.5 U	206.0 U
2-Chlorophenol	UG/KG	209.0 U	262.5 U	206.0 U
2-Methylnaphthalene	UG/KG	209.0 U	262.5 U	206.0 U
2-Methylphenol	UG/KG	209.0 U	262.5 U	206.0 U
2-Nitroaniline	UG/KG	505.0 U	635.0 U	500.0 U
2-Nitrophenol	UG/KG	209.0 U	262.5 U	206.0 U
2,2'-oxybis-(1-chloropropane)	UG/KG	209.0 U	262.5 U	206.0 U
2,4-Dichlorophenol	UG/KG	209.0 U	262.5 U	206.0 U
2,4-Dimethylphenol	UG/KG	209.0 U	262.5 U	206.0 U
2,4-Dinitrophenol	UG/KG	505.0 U	635.0 U	500.0 U
2,4-Dinitrotoluene	UG/KG	209.0 U	262.5 U	206.0 U
2,4,5-Trichlorophenol	UG/KG	505.0 U	635.0 U	500.0 U
2,4,6-Trichlorophenol	UG/KG	209.0 U	262.5 U	206.0 U
2,6-Dinitrotoluene	UG/KG	209.0 U	262.5 U	206.0 U
3-Nitroaniline	UG/KG	505.0 U	635.0 U	500.0 U
3,3'-Dichlorobenzidine	UG/KG	209.0 U	262.5 U	140.0 J
4-Bromophenyl-phenylether	UG/KG	209.0 U	262.5 U	206.0 U
4-Chloro-3-methylphenol	UG/KG	209.0 U	262.5 U	206.0 U
4-Chloroaniline	UG/KG	209.0 U	262.5 U	206.0 U
4-Chlorophenyl phenyl ether	UG/KG	209.0 U	262.5 U	206.0 U
4-Methylphenol	UG/KG	209.0 U	262.5 U	206.0 U
4-Nitroaniline	UG/KG	505.0 U	635.0 U	500.0 U
4-Nitrophenol	UG/KG	505.0 U	635.0 U	500.0 U
4,6-Dinitro-2-methylphenol	UG/KG	505.0 U	635.0 U	500.0 U
Acenaphthene	UG/KG	209.0 U	262.5 U	206.0 U
Acenaphthylene	UG/KG	209.0 U	262.5 U	206.0 U
Anthracene	UG/KG	209.0 U	262.5 U	206.0 U
Benzo[a]anthracene	UG/KG	209.0 U	262.5 U	206.0 U
Benzo[a]pyrene	UG/KG	209.0 U	262.5 U	206.0 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 PESTICIDE DISPOSAL AREA SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SD01-06	74-PDA-SD02-06	74-PDA-SD03-06
Laboratory Sample ID:	9401137-01	9401137-02	9401137-03
Date Sampled:	01/24/94	01/24/94	01/24/94
Percent Solids	78.8	63.5	80.0

SEMIVOLATILES Cont.

Benzo[b]fluoranthene	UG/KG	209.0 U	262.5 U	206.0 U
Benzo[g,h,i]perylene	UG/KG	209.0 U	262.5 U	206.0 U
Benzo[k]fluoranthene	UG/KG	209.0 U	262.5 U	206.0 U
bis(2-Chloroethoxy) methane	UG/KG	209.0 U	262.5 U	206.0 U
bis(2-Chloroethyl) ether	UG/KG	209.0 U	262.5 U	206.0 U
bis(2-Ethylhexyl)phthalate	UG/KG	209.0 U	262.5 U	206.0 U
Butyl benzyl phthalate	UG/KG	209.0 U	262.5 U	206.0 U
Carbazole	UG/KG	209.0 U	262.5 U	206.0 U
Chrysene	UG/KG	209.0 U	262.5 U	206.0 U
Dibenzofuran	UG/KG	209.0 U	262.5 U	206.0 U
Dibenz[a,h]anthracene	UG/KG	209.0 U	262.5 U	206.0 U
Diethylphthalate	UG/KG	209.0 U	262.5 U	206.0 U
Dimethyl phthalate	UG/KG	209.0 U	262.5 U	206.0 U
di-n-Butylphthalate	UG/KG	210.0 U	265.0 U	210.0 U
di-n-Octylphthalate	UG/KG	209.0 U	262.5 U	206.0 U
Fluoranthene	UG/KG	209.0 U	262.5 U	206.0 U
Fluorene	UG/KG	209.0 U	262.5 U	206.0 U
Hexachlorobenzene	UG/KG	209.0 U	262.5 U	206.0 U
Hexachlorobutadiene	UG/KG	209.0 U	262.5 U	206.0 U
Hexachlorocyclopentadiene	UG/KG	209.0 U	262.5 U	206.0 U
Hexachloroethane	UG/KG	209.0 U	262.5 U	206.0 U
Indeno[1,2,3-cd]pyrene	UG/KG	209.0 U	262.5 U	206.0 U
Isophorone	UG/KG	209.0 U	262.5 U	206.0 U
Naphthalene	UG/KG	209.0 U	262.5 U	206.0 U
Nitrobenzene	UG/KG	209.0 U	262.5 U	206.0 U
N-Nitroso-di-n-propylamine	UG/KG	209.0 U	262.5 U	206.0 U
N-nitrosodiphenylamine	UG/KG	209.0 U	262.5 U	206.0 U
Pentachlorophenol	UG/KG	505.0 U	635.0 U	500.0 U
Phenanthrene	UG/KG	209.0 U	262.5 U	206.0 U
Phenol	UG/KG	209.0 U	262.5 U	206.0 U
Pyrene	UG/KG	209.0 U	262.5 U	206.0 U

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
PESTICIDE DISPOSAL AREA SEDIMENT
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID:	74-PDA-SD01-06	74-PDA-SD02-06	74-PDA-SD03-06	
Laboratory Sample ID:	9401137-01	9401137-02	9401137-03	
Date Sampled:	01/24/94	01/24/94	01/24/94	
Percent Solids	78.8	63.5	80.0	
<u>VOLATILES</u>				
Chloromethane	UG/KG	6.4 U	7.9 U	6.3 U
Bromomethane	UG/KG	6.4 U	7.9 U	6.3 U
Vinyl chloride	UG/KG	6.4 U	7.9 U	6.3 U
Chloroethane	UG/KG	6.4 U	7.9 U	6.3 U
Methylene chloride	UG/KG	6.50 U	8.0 U	6.0 U
Acetone	UG/KG	6.4 UJ	7.9 UJ	6.00 UJ
Carbon Disulfide	UG/KG	6.4 U	7.9 U	6.3 U
1,1-Dichloroethene	UG/KG	6.4 U	7.9 U	6.3 U
1,1-Dichloroethane	UG/KG	6.4 U	7.9 U	6.3 U
1,2-Dichloroethene(total)	UG/KG	6.4 U	7.9 U	6.3 U
Chloroform	UG/KG	6.4 U	7.9 U	6.3 U
1,2-Dichloroethane	UG/KG	6.4 U	7.9 U	6.3 U
2-Butanone	UG/KG	6.4 U	7.9 U	6.3 U
1,1,1-Trichloroethane	UG/KG	6.4 U	7.9 U	6.3 U
Carbon tetrachloride	UG/KG	6.4 U	7.9 U	6.3 U
Bromodichloromethane	UG/KG	6.4 U	7.9 U	6.3 U
1,2-Dichloropropane	UG/KG	6.4 U	7.9 U	6.3 U
cis-1,3-Dichloropropene	UG/KG	6.4 U	7.9 U	6.3 U
Trichloroethene	UG/KG	8.00 J	7.9 U	6.3 U
Dibromochloromethane	UG/KG	6.4 U	7.9 U	6.3 U
1,1,2-Trichloroethane	UG/KG	6.4 U	7.9 U	6.3 U
Benzene	UG/KG	6.4 U	7.9 U	6.3 U
trans-1,3-Dichloropropene	UG/KG	6.4 U	7.9 U	6.3 U
Bromoform	UG/KG	6.4 U	7.9 U	6.3 U
4-Methyl-2-pentanone	UG/KG	6.4 U	7.9 U	6.3 U
2-Hexanone	UG/KG	6.4 U	7.9 U	6.3 U
Tetrachloroethene	UG/KG	6.4 U	7.9 U	6.3 U
1,1,2,2-Tetrachloroethane	UG/KG	6.4 U	7.9 U	6.3 U
Toluene	UG/KG	6.4 U	7.9 U	6.3 U
Chlorobenzene	UG/KG	6.4 U	7.9 U	6.3 U
Ethylbenzene	UG/KG	6.4 U	7.9 U	6.3 U
Styrene	UG/KG	6.4 U	7.9 U	6.3 U
Xylenes (total)	UG/KG	6.4 U	7.9 U	6.3 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 PESTICIDE DISPOSAL AREA SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID:	74-PDA-SD01-06	74-PDA-SD02-06	74-PDA-SD03-06
Laboratory Sample ID:	9401137-01	9401137-02	9401137-03
Date Sampled:	01/24/94	01/24/94	01/24/94
Percent Solids	78.8	63.5	80.0
PESTICIDE/PCBS			
alpha-BHC	UG/KG 1.08 UJ	1.35 UJ	1.06 UJ
beta-BHC	UG/KG 1.08 U	1.35 UJ	1.06 UJ
delta-BHC	UG/KG 1.08 UJ	1.35 UJ	1.06 UJ
Lindane (gamma-BHC)	UG/KG 1.08 U	1.35 UJ	1.06 UJ
Heptachlor	UG/KG 1.08 U	1.35 UJ	1.06 UJ
Aldrin	UG/KG 1.08 U	1.35 UJ	1.06 UJ
Heptachlor epoxide	UG/KG 1.08 U	1.35 UJ	1.06 UJ
Endosulfan I	UG/KG 1.08 U	1.35 UJ	1.06 UJ
Dieldrin	UG/KG 2.09 U	2.62 UJ	2.06 UJ
4,4'-DDE	UG/KG 1.85 J	0.900 J	2.06 UJ
Endrin	UG/KG 2.09 U	2.62 UJ	2.06 UJ
Endosulfan II	UG/KG 0.630 J	2.62 UJ	0.800 JP
4,4'-DDD	UG/KG 2.10 U	2.62 UJ	2.06 UJ
Endosulfan sulfate	UG/KG 2.09 U	2.62 UJ	2.06 UJ
4,4'-DDT	UG/KG 2.09 UJ	0.820 NJ	2.06 UJ
Methoxychlor	UG/KG 10.8 UJ	0.830 J	10.6 UJ
Endrin ketone	UG/KG 2.09 U	2.62 UJ	2.06 UJ
Endrin aldehyde	UG/KG 2.09 U	2.62 UJ	1.35 NJ
alpha-Chlordane	UG/KG 1.08 U	1.35 UJ	1.06 UJ
gamma-Chlordane	UG/KG 1.08 U	1.35 UJ	1.06 UJ
Toxaphene	UG/KG 107.5 U	135.0 UJ	106.0 UJ
Aroclor 1016	UG/KG 20.9 U	26.2 UJ	20.6 UJ
Aroclor 1221	UG/KG 42.4 U	53.0 UJ	41.9 UJ
Aroclor 1232	UG/KG 20.9 U	26.2 UJ	20.6 UJ
Aroclor 1242	UG/KG 20.9 U	26.2 UJ	20.6 UJ
Aroclor 1248	UG/KG 20.9 U	26.2 UJ	20.6 UJ
Aroclor 1254	UG/KG 20.9 U	26.2 UJ	20.6 UJ
Aroclor 1260	UG/KG 20.9 U	26.2 UJ	20.6 UJ

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
PESTICIDE DISPOSAL AREA SEDIMENT
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled: Percent Solids		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG-NORMAL UPPER 95% CONFIDENCE INTERVAL
SEMIVOLATILES						
1,2-Dichlorobenzene	UG/KG	ND	NA	NA	NA	NA
1,2,4-Trichlorobenzene	UG/KG	ND	NA	NA	NA	NA
1,3-Dichlorobenzene	UG/KG	ND	NA	NA	NA	NA
1,4-Dichlorobenzene	UG/KG	ND	NA	NA	NA	NA
2-Chloronaphthalene	UG/KG	ND	NA	NA	NA	NA
2-Chlorophenol	UG/KG	ND	NA	NA	NA	NA
2-Methylnaphthalene	UG/KG	ND	NA	NA	NA	NA
2-Methylphenol	UG/KG	ND	NA	NA	NA	NA
2-Nitroaniline	UG/KG	ND	NA	NA	NA	NA
2-Nitrophenol	UG/KG	ND	NA	NA	NA	NA
2,2'-oxybis-(1-chloropropane)	UG/KG	ND	NA	NA	NA	NA
2,4-Dichlorophenol	UG/KG	ND	NA	NA	NA	NA
2,4-Dimethylphenol	UG/KG	ND	NA	NA	NA	NA
2,4-Dinitrophenol	UG/KG	ND	NA	NA	NA	NA
2,4-Dinitrotoluene	UG/KG	ND	NA	NA	NA	NA
2,4,5-Trichlorophenol	UG/KG	ND	NA	NA	NA	NA
2,4,6-Trichlorophenol	UG/KG	ND	NA	NA	NA	NA
2,6-Dinitrotoluene	UG/KG	ND	NA	NA	NA	NA
3-Nitroaniline	UG/KG	ND	NA	NA	NA	NA
3,3'-Dichlorobenzidine	UG/KG	140 J	361.0	198.7	696.0	671.8
4-Bromophenyl-phenylether	UG/KG	ND	NA	NA	NA	NA
4-Chloro-3-methylphenol	UG/KG	ND	NA	NA	NA	NA
4-Chloroaniline	UG/KG	ND	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	UG/KG	ND	NA	NA	NA	NA
4-Methylphenol	UG/KG	ND	NA	NA	NA	NA
4-Nitroaniline	UG/KG	ND	NA	NA	NA	NA
4-Nitrophenol	UG/KG	ND	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	UG/KG	ND	NA	NA	NA	NA
Acenaphthene	UG/KG	ND	NA	NA	NA	NA
Acenaphthylene	UG/KG	ND	NA	NA	NA	NA
Anthracene	UG/KG	ND	NA	NA	NA	NA
Benzo[a]anthracene	UG/KG	ND	NA	NA	NA	NA
Benzo[a]pyrene	UG/KG	ND	NA	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 PESTICIDE DISPOSAL AREA SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled: Percent Solids		MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG-NORMAL UPPER 95% CONFIDENCE INTERVAL
<u>SEMIVOLATILES Cont.</u>						
Benzo[b]fluoranthene	UG/KG	ND	NA	NA	NA	NA
Benzo[g,h,i]perylene	UG/KG	ND	NA	NA	NA	NA
Benzo[k]fluoranthene	UG/KG	ND	NA	NA	NA	NA
bis(2-Chloroethoxy) methane	UG/KG	ND	NA	NA	NA	NA
bis(2-Chloroethyl) ether	UG/KG	ND	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	UG/KG	ND	NA	NA	NA	NA
Butyl benzyl phthalate	UG/KG	ND	NA	NA	NA	NA
Carbazole	UG/KG	ND	NA	NA	NA	NA
Chrysene	UG/KG	ND	NA	NA	NA	NA
Dibenzofuran	UG/KG	ND	NA	NA	NA	NA
Dibenz[a,h]anthracene	UG/KG	ND	NA	NA	NA	NA
Diethylphthalate	UG/KG	ND	NA	NA	NA	NA
Dimethyl phthalate	UG/KG	ND	NA	NA	NA	NA
di-n-Butylphthalate	UG/KG	ND	NA	NA	NA	NA
di-n-Octylphthalate	UG/KG	ND	NA	NA	NA	NA
Fluoranthene	UG/KG	ND	NA	NA	NA	NA
Fluorene	UG/KG	ND	NA	NA	NA	NA
Hexachlorobenzene	UG/KG	ND	NA	NA	NA	NA
Hexachlorobutadiene	UG/KG	ND	NA	NA	NA	NA
Hexachlorocyclopentadiene	UG/KG	ND	NA	NA	NA	NA
Hexachloroethane	UG/KG	ND	NA	NA	NA	NA
Indeno[1,2,3-cd]pyrene	UG/KG	ND	NA	NA	NA	NA
Isophorone	UG/KG	ND	NA	NA	NA	NA
Naphthalene	UG/KG	ND	NA	NA	NA	NA
Nitrobenzene	UG/KG	ND	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	UG/KG	ND	NA	NA	NA	NA
N-nitrosodiphenylamine	UG/KG	ND	NA	NA	NA	NA
Pentachlorophenol	UG/KG	ND	NA	NA	NA	NA
Phenanthrene	UG/KG	ND	NA	NA	NA	NA
Phenol	UG/KG	ND	NA	NA	NA	NA
Pyrene	UG/KG	ND	NA	NA	NA	NA

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 PESTICIDE DISPOSAL AREA SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled: Percent Solids	MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG-NORMAL UPPER 95% CONFIDENCE INTERVAL
VOLATILES					
Chloromethane	UG/KG	ND	NA	NA	NA
Bromomethane	UG/KG	ND	NA	NA	NA
Vinyl chloride	UG/KG	ND	NA	NA	NA
Chloroethane	UG/KG	ND	NA	NA	NA
Methylene chloride	UG/KG	ND	NA	NA	NA
Acetone	UG/KG	ND	NA	NA	NA
Carbon Disulfide	UG/KG	ND	NA	NA	NA
1,1-Dichloroethene	UG/KG	ND	NA	NA	NA
1,1-Dichloroethane	UG/KG	ND	NA	NA	NA
1,2-Dichloroethene(total)	UG/KG	ND	NA	NA	NA
Chloroform	UG/KG	ND	NA	NA	NA
1,2-Dichloroethane	UG/KG	ND	NA	NA	NA
2-Butanone	UG/KG	ND	NA	NA	NA
1,1,1-Trichloroethane	UG/KG	ND	NA	NA	NA
Carbon tetrachloride	UG/KG	ND	NA	NA	NA
Bromodichloromethane	UG/KG	ND	NA	NA	NA
1,2-Dichloropropane	UG/KG	ND	NA	NA	NA
cis-1,3-Dichloropropene	UG/KG	ND	NA	NA	NA
Trichloroethene	UG/KG	8 J	12.1	3.9	18.7
Dibromochloromethane	UG/KG	ND	NA	NA	NA
1,1,2-Trichloroethane	UG/KG	ND	NA	NA	NA
Benzene	UG/KG	ND	NA	NA	NA
trans-1,3-Dichloropropene	UG/KG	ND	NA	NA	NA
Bromoform	UG/KG	ND	NA	NA	NA
4-Methyl-2-pentanone	UG/KG	ND	NA	NA	NA
2-Hexanone	UG/KG	ND	NA	NA	NA
Tetrachloroethene	UG/KG	ND	NA	NA	NA
1,1,2,2-Tetrachloroethane	UG/KG	ND	NA	NA	NA
Toluene	UG/KG	ND	NA	NA	NA
Chlorobenzene	UG/KG	ND	NA	NA	NA
Ethylbenzene	UG/KG	ND	NA	NA	NA
Styrene	UG/KG	ND	NA	NA	NA
Xylenes (total)	UG/KG	ND	NA	NA	NA

STATISTICAL SUMMARY
OPERABLE UNIT NO. 4 (SITE 74)
PESTICIDE DISPOSAL AREA SEDIMENT
MCB CAMP LEJEUNE, NORTH CAROLINA
REMEDIAL INVESTIGATION - CTO-0212
ORGANICS

Client Sample ID: Laboratory Sample ID: Date Sampled: Percent Solids	MAXIMUM DETECTED	ARITHMETIC MEAN	STANDARD DEVIATION	NORMAL UPPER 95% CONFIDENCE INTERVAL	LOG-NORMAL UPPER 95% CONFIDENCE INTERVAL
PESTICIDE/PCBS					
alpha-BHC	UG/KG	ND	NA	NA	NA
beta-BHC	UG/KG	ND	NA	NA	NA
delta-BHC	UG/KG	ND	NA	NA	NA
Lindane (gamma-BHC)	UG/KG	ND	NA	NA	NA
Heptachlor	UG/KG	ND	NA	NA	NA
Aldrin	UG/KG	ND	NA	NA	NA
Heptachlor epoxide	UG/KG	ND	NA	NA	NA
Endosulfan I	UG/KG	ND	NA	NA	NA
Dieldrin	UG/KG	ND	NA	NA	NA
4,4'-DDE	UG/KG	1.85 J	2.3	1.7	5.1 13.2
Endrin	UG/KG	ND	NA	NA	NA
Endosulfan II	UG/KG	0.8 JP	2.2	2.6	6.6 408.8
4,4'-DDD	UG/KG	ND	NA	NA	NA
Endosulfan sulfate	UG/KG	ND	NA	NA	NA
4,4'-DDT	UG/KG	0.82 NJ	3.0	1.9	6.3 33.9
Methoxychlor	UG/KG	0.83 J	14.5	11.8	34.5 10162766946.4
Endrin ketone	UG/KG	ND	NA	NA	NA
Endrin aldehyde	UG/KG	1.35 NJ	3.6	2.0	7.0 7.2
alpha-Chlordane	UG/KG	ND	NA	NA	NA
gamma-Chlordane	UG/KG	ND	NA	NA	NA
Toxaphene	UG/KG	ND	NA	NA	NA
Aroclor 1016	UG/KG	ND	NA	NA	NA
Aroclor 1221	UG/KG	ND	NA	NA	NA
Aroclor 1232	UG/KG	ND	NA	NA	NA
Aroclor 1242	UG/KG	ND	NA	NA	NA
Aroclor 1248	UG/KG	ND	NA	NA	NA
Aroclor 1254	UG/KG	ND	NA	NA	NA
Aroclor 1260	UG/KG	ND	NA	NA	NA

APPENDIX P.28
SITE 74 PESTICIDE DISPOSAL AREA SEDIMENT INORGANICS

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 PESTICIDE DISPOSAL AREA SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL METALS

Client Sample ID:	74-PDA-SD01-06	74-PDA-SD02-06	74-PDA-SD03-06
Laboratory Sample ID:	9401137-01	9401137-02	9401137-03
Date Sampled:	01/24/94	01/24/94	01/24/94
Percent Solids	78.8	63.5	80.0

	UNITS			
Aluminum	MG/KG	584.0	3320.0	2160.0
Antimony	MG/KG	1.00 UJ	1.25 UJ	0.99 UJ
Arsenic	MG/KG	0.368 U	0.457 U	0.363 U
Barium	MG/KG	1.75 U	13.0	5.73
Beryllium	MG/KG	0.165 U	0.205 U	0.160 U
Cadmium	MG/KG	0.305 U	0.380 U	0.300 U
Calcium	MG/KG	178.0	725.0	208.0
Chromium	MG/KG	0.90 U	3.13	1.80
Cobalt	MG/KG	2.45 U	3.05 U	2.40 U
Copper	MG/KG	2.07 U	2.57 U	2.04 U
Iron	MG/KG	199.0	1530.0	1300.0
Lead	MG/KG	4.00 J	6.06 J	2.67 J
Magnesium	MG/KG	19.3	102.0	48.9
Manganese	MG/KG	3.32	5.27	2.76
Mercury	MG/KG	0.032 UJ	0.040 UJ	0.032 U
Nickel	MG/KG	1.75 U	2.15 U	1.70 U
Potassium	MG/KG	38.1 U	99.0 U	78.5 U
Selenium	MG/KG	0.321 U	0.399 U	1.02
Silver	MG/KG	0.051 UJ	0.063 UJ	0.050 UJ
Sodium	MG/KG	24.1 UJ	29.9 UJ	23.8 UJ
Thallium	MG/KG	0.59 U	0.73 U	0.58 U
Vanadium	MG/KG	2.10 U	2.95 U	4.40
Zinc	MG/KG	1.46 U	12.6	1.36 U

STATISTICAL SUMMARY
 OPERABLE UNIT NO. 4 (SITE 74)
 PESTICIDE DISPOSAL AREA SEDIMENT
 MCB CAMP LEJEUNE, NORTH CAROLINA
 REMEDIAL INVESTIGATION - CTO-0212
 TAL METALS

Client Sample ID:					NORMAL	LOG-NORMAL
Laboratory Sample ID:					UPPER 95%	UPPER 95%
Date Sampled:		MAXIMUM	ARITHMETIC	STANDARD	CONFIDENCE	CONFIDENCE
Percent Solids		DETECTED	MEAN	DEVIATION	INTERVAL	INTERVAL
	<u>UNITS</u>					
Aluminum	MG/KG	3320	2021.3	1373.3	4336.5	10294242.1
Antimony	MG/KG	ND	NA	NA	NA	NA
Arsenic	MG/KG	ND	NA	NA	NA	NA
Barium	MG/KG	13	6.8	5.7	16.4	959297.3
Beryllium	MG/KG	ND	NA	NA	NA	NA
Cadmium	MG/KG	ND	NA	NA	NA	NA
Calcium	MG/KG	725	370.3	307.5	888.8	117663.6
Chromium	MG/KG	3.13	1.9	1.1	3.8	117.2
Cobalt	MG/KG	ND	NA	NA	NA	NA
Copper	MG/KG	ND	NA	NA	NA	NA
Iron	MG/KG	1530	1009.7	711.4	2209.0	675029599.5
Lead	MG/KG	6.06 J	4.2	1.7	7.1	28.7
Magnesium	MG/KG	102	56.7	41.9	127.4	66111.2
Manganese	MG/KG	5.27	3.8	1.3	6.0	13.2
Mercury	MG/KG	ND	NA	NA	NA	NA
Nickel	MG/KG	ND	NA	NA	NA	NA
Potassium	MG/KG	ND	NA	NA	NA	NA
Selenium	MG/KG	1.02	0.6	0.4	1.2	32.3
Silver	MG/KG	ND	NA	NA	NA	NA
Sodium	MG/KG	ND	NA	NA	NA	NA
Thallium	MG/KG	ND	NA	NA	NA	NA
Vanadium	MG/KG	4.4	3.2	1.2	5.1	12.6
Zinc	MG/KG	12.6	5.1	6.5	16.0	272534930.5

APPENDIX Q
CHRONIC DAILY INTAKE ESTIMATIONS

EXAMPLE SOIL INGESTION CALCULATIONS
OPERABLE UNIT NO. 4
CONTRACT TASK ORDER 0212

Purpose: Estimate intake/risk from ingestion of soil

$$\text{Intake (mg/kg-day)} = \frac{C \times CF \times EF \times ED \times IR}{BW \times AT}$$

Where:

C	=	Contaminant concentration in soil (mg/kg)
CF	=	Conversion factor (kg/mg)
EF	=	Exposure frequency (days/year)
ED	=	Exposure duration (years)
IR	=	Ingestion rate (mg/day)
BW	=	Body weight (kg)
AT _c	=	Averaging time carcinogen (days)
AT _{nc}	=	Averaging time noncarcinogen (days)

Risks:

$$\text{Carcinogens} = \text{Intake (mg/kgday)} \times \text{CSF (mg/kgday)}^{-1}$$

$$\text{Noncarcinogens} = \text{Intake (mg/kgday)} / \text{RfD (mg/kgday)}$$

Example Carcinogen: 4,4'-DDD

$$\text{Intake (mg/kg-day)} = \frac{0.0108 \text{ mg/kg} \times 100 \text{ mg/day} \times 350 \text{ days/yr} \times 24 \text{ yrs} \times 1.0\text{E-}6 \text{ kg/mg}}{70 \text{ kg} \times 25,550 \text{ days}}$$

$$= 5\text{E-}09$$

$$\text{Risk} = 5\text{E-}09 \text{ mg/kgday} \times 2.4\text{E-}01 \text{ mg/kgday}^{-1} = 1\text{E-}09$$

Example Noncarcinogen: 4,4'-DDT

$$\text{Intake (mg/kg-day)} = \frac{0.0134 \text{ mg/kg} \times 100 \text{ mg/day} \times 350 \text{ days/yr} \times 24 \text{ yrs} \times 1.0\text{E-}6 \text{ kg/mg}}{70 \text{ kg} \times 8,760 \text{ days}}$$

$$= 2\text{E-}08$$

$$\text{Risk} = \frac{2\text{E-}08 \text{ mg/kg-day}}{5\text{E-}04 \text{ mg/kg-day}} = 0.00004$$

Re: Site 41 Future Residential Adult

SOIL INGESTION RISK ASSESSMENT
 OPERABLE UNIT (ITE 41)
 REMEDIAL INVESTIGATION CTO-0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 FUTURE RESIDENTIAL CHILD

Intake from ingestion of soil is calculated as follows:

$$\text{Intake (mg/kg-day)} = C \cdot CF \cdot EF \cdot ED \cdot IR / BW \cdot \text{ATc or ATnc} \cdot \text{DY}$$

$$\text{Risk} = \text{Intake} \cdot \text{CSF or RfD}$$

Where:

INPUTS

C = contaminant concentration in soil (mg/kg)	
CF = conversion for kg to mg	1E-06
EF = child exposure frequency (days/yr)	360
ED = child exposure duration (yr)	6
IR = child soil ingestion rate (mg/day)	200
BW = child body weight (kg)	16
ATc = averaging time for carcinogen (yr)	70
ATnc = averaging time for noncarcinogen (yr)	6
DY = days per year (days/year)	365
CSF = cancer slope factor (mg/kg-day) ⁻¹	specific
RfD = reference dose (mg/kg-day)	specific

Note: Inputs are scenario and site specific

Contaminant	Concentration Carcinogen (mg/kg)	Exposure Frequency (days/yr) Child	Exposure Duration (yr) Child	Conversion Factor (kg/mg)	Ingestion Rate (mg/day) Child	Body Weight (kg) Child	Average Care Time (years)	Days per year (days/yr)	Care Dose (mg/kg/day) Child	Slope Factor (mg/kg/day) ⁻¹	Carcinogenic Risk Child	Percent Carcinogenic Risk Child
Benz(a)anthracene	0.345	360	6	1E-06	200	16	70	365	3.78E-07	7.30E-01	2.76E-07	4.40
Benzo(a)pyrene	0.345	360	6	1E-06	200	16	70	365	3.78E-07	7.30E+00	2.76E-06	44.01
Benzo(b)fluoranthene	0.356	360	6	1E-06	200	16	70	365	3.80E-07	7.30E-01	2.85E-07	4.54
Benzo(k)fluoranthene	0.339	360	6	1E-06	200	16	70	365	3.72E-07	7.30E-01	2.71E-07	4.32
Chrysene	0.356	360	6	1E-06	200	16	70	365	3.80E-07	7.30E-02	2.84E-06	0.45
Heptachlor	0.0018	360	6	1E-06	200	16	70	365	1.84E-06	4.55E+00	7.48E-09	0.12
4,4'-DDE	0.0208	360	6	1E-06	200	16	70	365	2.28E-06	3.40E-01	7.75E-09	0.12
4,4'-DDD	0.0108	360	6	1E-06	200	16	70	365	1.18E-06	2.40E-01	2.84E-09	0.06
4,4'-DDT	0.0134	360	6	1E-06	200	16	70	365	1.47E-06	3.40E-01	4.99E-09	0.08
Dieldrin	0.0031	360	6	1E-06	200	16	70	365	3.40E-06	1.90E+00	5.44E-09	0.09
alpha-Chlordane	0.0025	360	6	1E-06	200	16	70	365	2.74E-06	1.30E+00	3.56E-09	0.06
gamma-Chlordane	0.0024	360	6	1E-06	200	16	70	365	2.63E-06	1.30E+00	3.42E-09	0.06
Arsenic	1.05	360	6	1E-06	200	16	70	365	1.18E-06	1.70E+00	1.96E-06	31.19
Baryum	0.14	360	6	1E-06	200	16	70	365	1.63E-07	4.30E+00	6.90E-07	10.52
TOTAL											6.27E-06	100.00

Contaminant	Concentration Noncarcinogen (mg/kg)	Exposure Frequency (days/yr) Child	Exposure Duration (yr) Child	Conversion Factor (kg/mg)	Ingestion Rate (mg/day) Child	Body Weight (kg) Child	Average Noncare Time (years)	Days per year (days/yr)	NonRfD Dose (mg/kg/day) Child	Reference Dose (mg/kg/day)	Noncarcinogenic Risk Child	Percent Noncarcinogenic Risk Child
Anthracene	0.306	360	6	1E-06	200	16	6	365	3.71E-06	3.00E-01	1.30E-06	0.01
Fluoranthene	0.002	360	6	1E-06	200	16	6	365	2.56E-06	4.00E-02	6.39E-07	0.00
Phenanthrene	0.296	360	6	1E-06	200	16	6	365	3.77E-06	3.00E-02	1.39E-04	0.08
Pyrene	0.284	360	6	1E-06	200	16	6	365	3.38E-06	3.00E-02	1.13E-04	0.07
Heptachlor	0.0018	360	6	1E-06	200	16	6	365	1.82E-06	6.00E-04	3.84E-06	0.03
Dieldrin	0.0031	360	6	1E-06	200	16	6	365	3.98E-06	6.00E-06	7.93E-04	0.52
4,4'-DDT	0.0134	360	6	1E-06	200	16	6	365	1.71E-07	6.00E-04	3.43E-04	0.23
alpha-Chlordane	0.0025	360	6	1E-06	200	16	6	365	3.20E-06	6.00E-06	5.33E-04	0.35
gamma-Chlordane	0.0024	360	6	1E-06	200	16	6	365	3.07E-06	6.00E-06	5.11E-04	0.34
Arsenic	1.05	360	6	1E-06	200	16	6	365	1.34E-06	3.00E-04	4.47E-02	28.52
Barium	0.22	360	6	1E-06	200	16	6	365	1.05E-03	7.00E-02	1.50E-02	9.00
Beryllium	0.14	360	6	1E-06	200	16	6	365	1.79E-06	6.00E-03	3.68E-04	0.24
Cadmium	0.82	360	6	1E-06	200	16	6	365	7.93E-06	1.00E-03	7.93E-03	5.23
Chromium	9	360	6	1E-06	200	16	6	365	1.18E-04	6.00E-03	2.30E-02	15.16
Manganese	51.7	360	6	1E-06	200	16	6	365	6.81E-04	1.40E-01	4.72E-03	3.11
Mercury	0.11	360	6	1E-06	200	16	6	365	1.41E-06	3.00E-04	4.69E-03	3.09
Nickel	38.3	360	6	1E-06	200	16	6	365	4.81E-04	2.00E-02	2.28E-02	14.69
Vanadium	11.3	360	6	1E-06	200	16	6	365	1.44E-04	7.00E-03	2.06E-02	13.62
Zinc	127.5	360	6	1E-06	200	16	6	365	1.63E-03	3.00E-01	5.43E-03	3.58
TOTAL											1.52E-01	100.00

SOIL INGESTION EXPOSURE, ELEMENT
 OPERABLE UNIT NO. 4 (SITE 41)
 REMEDIAL INVESTIGATION CTO-0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 FUTURE ADULT RESIDENT

Intake from ingestion of soil is calculated as follows:

$$\text{Intake (mg/kg-day)} = C * CF * EF * ED * IR / BW * ATc \text{ or } ATnc * DY$$

$$\text{Risk} = \text{Intake} * CSF \text{ or } /RID$$

Where:

C = contaminant concentration in soil (mg/kg)	INPUTS
CF = conversion for kg to mg	1E-06
EF = adult exposure frequency (days/yr)	365
ED = adult exposure duration (yr)	24
IR = adult soil ingestion rate (mg/day)	100
BW = adult body weight (kg)	70
ATc = averaging time for carcinogen (yr)	70
ATnc = averaging time for noncarcinogen (yr)	24
DY = days per year (days/year)	365
CSF = cancer slope factor (mg/kg-day) ⁻¹	specific
RID = reference dose (mg/kg-day)	specific

Note: Inputs are scenario and site specific

Contaminant	Concentration Carcinogen (mg/kg)	Exposure Frequency (days/yr) Adult	Exposure Duration (yr) Adult	Conversion Factor (kg/mg)	Ingestion Rate (mg/day) Adult	Body Weight (kg) Adult	Average Caro Time (years)	Days per year (days/yr)	Caro Dose (mg/kg/day) Adult	Slope Factor (mg/kg/day) ⁻¹	Carcinogenic Risk Child	Percent Carcinogenic Risk Child
Benzo(a)anthracene	0.345	365	24	1E-06	100	70	70	365	1.62E-07	7.30E-01	1.18E-07	4.40
Benzo(a)pyrene	0.345	365	24	1E-06	100	70	70	365	1.62E-07	7.30E+00	1.18E-06	44.01
Benzo(b)fluoranthene	0.365	365	24	1E-06	100	70	70	365	1.67E-07	7.30E-01	1.22E-07	4.54
Benzo(k)fluoranthene	0.339	365	24	1E-06	100	70	70	365	1.66E-07	7.30E-01	1.16E-07	4.32
Chrysene	0.365	365	24	1E-06	100	70	70	365	1.67E-07	7.30E+02	1.22E-06	0.45
Heptachlor	0.0015	365	24	1E-06	100	70	70	365	7.05E-10	4.65E+00	3.21E-09	0.12
4,4'-DDE	0.0206	365	24	1E-06	100	70	70	365	9.77E-09	3.40E-01	3.32E-09	0.12
4,4'-DDD	0.0106	365	24	1E-06	100	70	70	365	5.07E-09	2.40E-01	1.22E-09	0.05
4,4'-DDT	0.0134	365	24	1E-06	100	70	70	365	6.29E-09	3.40E-01	2.14E-09	0.08
Dieldrin	0.0031	365	24	1E-06	100	70	70	365	1.46E-09	1.80E+00	2.33E-09	0.09
alpha-Chlordane	0.0025	365	24	1E-06	100	70	70	365	1.17E-09	1.30E+00	1.63E-09	0.06
gamma-Chlordane	0.0024	365	24	1E-06	100	70	70	365	1.15E-09	1.30E+00	1.47E-09	0.05
Arsenic	1.05	365	24	1E-06	100	70	70	365	4.93E-07	1.70E+00	8.36E-07	31.19
Beryllium	0.14	365	24	1E-06	100	70	70	365	6.66E-06	4.30E+00	2.65E-07	10.62
TOTAL											2.69E-06	100.00

Contaminant	Concentration Noncarcinogen (mg/kg)	Exposure Frequency (days/yr) Child	Exposure Duration (yr) Child	Conversion Factor (kg/mg)	Ingestion Rate (mg/day) Child	Body Weight (kg) Child	Average Noncaro Time (years)	Days per year (days/yr)	Noncaro Dose (mg/kg/day) Child	Reference Dose (mg/kg/day)	Noncarcinogenic Risk Child	Percent Noncarcinogenic Risk Child
Anthracene	0.308	365	24	1E-06	100	70	24	365	4.19E-07	3.00E-01	1.40E-06	0.01
Fluoranthene	0.002	365	24	1E-06	100	70	24	365	2.74E-09	4.00E-02	6.65E-08	0.00
Phenanthrene	0.295	365	24	1E-06	100	70	24	365	4.04E-07	3.00E-02	1.35E-05	0.06
Pyrene	0.264	365	24	1E-06	100	70	24	365	3.62E-07	3.00E-02	1.21E-05	0.07
Heptachlor	0.0015	365	24	1E-06	100	70	24	365	2.06E-09	5.00E-04	4.11E-06	0.03
Dieldrin	0.0031	365	24	1E-06	100	70	24	365	4.25E-09	5.00E-05	8.49E-05	0.52
4,4'-DDT	0.0134	365	24	1E-06	100	70	24	365	1.84E-08	5.00E-04	3.67E-05	0.23
alpha-Chlordane	0.0025	365	24	1E-06	100	70	24	365	3.42E-09	6.00E-05	5.71E-05	0.35
gamma-Chlordane	0.0024	365	24	1E-06	100	70	24	365	3.29E-09	6.00E-05	5.48E-05	0.34
Arsenic	1.05	365	24	1E-06	100	70	24	365	1.44E-06	3.00E-04	4.79E-03	29.62
Barium	82.2	365	24	1E-06	100	70	24	365	1.13E-04	7.00E-02	1.61E-03	9.90
Beryllium	0.14	365	24	1E-06	100	70	24	365	1.92E-07	5.00E-03	3.84E-05	0.24
Cadmium	0.62	365	24	1E-06	100	70	24	365	8.49E-07	1.00E-03	8.49E-04	5.23
Chromium	9	365	24	1E-06	100	70	24	365	1.23E-05	5.00E-03	2.47E-03	15.16
Manganese	51.7	365	24	1E-06	100	70	24	365	7.06E-05	1.40E-01	5.06E-04	3.11
Mercury	0.11	365	24	1E-06	100	70	24	365	1.51E-07	3.00E-04	5.02E-04	3.09
Nickel	35.3	365	24	1E-06	100	70	24	365	4.84E-05	2.00E-02	2.42E-03	14.89
Vanadium	11.3	365	24	1E-06	100	70	24	365	1.56E-05	7.00E-03	2.21E-03	13.62
Zinc	127.5	365	24	1E-06	100	70	24	365	1.75E-04	3.00E-01	5.62E-04	3.58
TOTAL											1.82E-02	100.00

SOIL INGESTION EXPOSURE ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 41)
 REMEDIAL INVESTIGATION CTO-0212
 MOB CAMP LEJEUNE, NORTH CAROLINA
 CURRENT MILITARY PERSONNEL

Intake from ingestion of soil is calculated as follows:

$$\text{Intake (mg/kg-day)} = C * CF * EF * ED * IR/BW * ATc \text{ or } ATnc * DY$$

$$\text{Risk} = \text{Intake} * CSF \text{ or } /RID$$

Where:	INPUTS
C = contaminant concentration in soil (mg/kg)	
CF = conversion for kg to mg	1E-06
EF = adult exposure frequency (days/yr)	350
ED = adult exposure duration (yr)	4
IR = adult soil ingestion rate (mg/day)	100
BW = adult body weight (kg)	70
ATc = averaging time for carcinogen (yr)	70
ATnc = averaging time for noncarcinogen (yr)	4
DY = days per year (days/year)	365
CSF = cancer slope factor (mg/kg-day) ⁻¹	specific
RID = reference dose (mg/kg-day)	specific

Note: Inputs are scenario and site specific

Contaminant	Concentration Carcinogen (mg/kg)	Exposure Frequency (days/yr) Child	Exposure Duration (yr) Child	Conversion Factor (kg/mg)	Ingestion Rate (mg/day) Child	Body Weight (kg) Child	Average Carc Time (years)	Days per year (days/yr)	Carc Dose (mg/kg/day) Child	Slope Factor (mg/kg/day) ⁻¹	Carcinogenic Risk Child	Percent Carcinogenic Risk Child
Benzo(a)anthracene	0.345	350	4	1E-06	100	70	70	365	2.70E-08	7.30E+01	1.97E-08	4.40
Benzo(a)pyrene	0.345	350	4	1E-06	100	70	70	365	2.70E-08	7.30E+00	1.97E-07	44.01
Benzo(b)fluoranthene	0.358	350	4	1E-06	100	70	70	365	2.70E-08	7.30E-01	2.03E-08	4.54
Benzo(k)fluoranthene	0.339	350	4	1E-06	100	70	70	365	2.65E-08	7.30E-01	1.94E-08	4.32
Chrysene	0.355	350	4	1E-06	100	70	70	365	2.70E-08	7.30E-02	2.03E-09	0.45
Heptachlor	0.0015	350	4	1E-06	100	70	70	365	1.17E-10	4.65E+00	5.34E-10	0.12
4,4'-DDE	0.0208	350	4	1E-06	100	70	70	365	1.63E-09	3.40E-01	5.64E-10	0.12
4,4'-DDD	0.0108	350	4	1E-06	100	70	70	365	8.45E-10	2.40E-01	2.03E-10	0.05
4,4'-DDT	0.0134	350	4	1E-06	100	70	70	365	1.05E-09	3.40E-01	3.67E-10	0.08
Dieldrin	0.0031	350	4	1E-06	100	70	70	365	2.43E-10	1.60E+00	3.88E-10	0.09
alpha-Chlordane	0.0025	350	4	1E-06	100	70	70	365	1.90E-10	1.30E+00	2.54E-10	0.06
gamma-Chlordane	0.0024	350	4	1E-06	100	70	70	365	1.88E-10	1.30E+00	2.44E-10	0.06
Arsenic	1.05	350	4	1E-06	100	70	70	365	8.22E-06	1.70E+00	1.40E-07	31.19
Beryllium	0.14	350	4	1E-06	100	70	70	365	1.10E-06	4.30E+00	4.71E-06	10.52
TOTAL											4.48E-07	100.00

Contaminant	Concentration Noncarcinogen (mg/kg)	Exposure Frequency (days/yr) Child	Exposure Duration (yr) Child	Conversion Factor (kg/mg)	Ingestion Rate (mg/day) Child	Body Weight (kg) Child	Average Noncarc Time (years)	Days per year (days/yr)	Noncarc Dose (mg/kg/day) Child	Reference Dose (mg/kg/day)	Noncarcinogenic Risk Child	Percent Noncarcinogenic Risk Child
Anthracene	0.308	350	4	1E-06	100	70	4	365	4.19E-07	3.00E-01	1.40E-06	0.01
Fluoranthene	0.002	350	4	1E-06	100	70	4	365	2.74E-09	4.00E-02	6.85E-06	0.00
Phenanthrene	0.295	350	4	1E-06	100	70	4	365	4.04E-07	3.00E-02	1.35E-05	0.08
Pyrene	0.284	350	4	1E-06	100	70	4	365	3.62E-07	3.00E-02	1.21E-05	0.07
Heptachlor	0.0015	350	4	1E-06	100	70	4	365	2.06E-09	5.00E-04	4.11E-06	0.03
Dieldrin	0.0031	350	4	1E-06	100	70	4	365	4.25E-09	5.00E-05	6.49E-06	0.52
4,4'-DDT	0.0134	350	4	1E-06	100	70	4	365	1.84E-08	5.00E-04	3.67E-05	0.23
alpha-Chlordane	0.0025	350	4	1E-06	100	70	4	365	3.42E-09	6.00E-05	5.71E-05	0.35
gamma-Chlordane	0.0024	350	4	1E-06	100	70	4	365	3.29E-09	6.00E-05	5.48E-05	0.34
Arsenic	1.05	350	4	1E-06	100	70	4	365	1.44E-06	3.00E-04	4.79E-03	29.52
Barium	82.2	350	4	1E-06	100	70	4	365	1.13E-04	7.00E-02	1.61E-03	9.90
Beryllium	0.14	350	4	1E-06	100	70	4	365	1.92E-07	5.00E-03	3.64E-05	0.24
Cadmium	0.62	350	4	1E-06	100	70	4	365	8.49E-07	1.00E-03	8.49E-04	5.23
Chromium	9	350	4	1E-06	100	70	4	365	1.23E-05	5.00E-03	2.47E-03	15.16
Manganese	51.7	350	4	1E-06	100	70	4	365	7.08E-05	1.40E-01	5.06E-04	3.11
Mercury	0.11	350	4	1E-06	100	70	4	365	1.51E-07	3.00E-04	6.02E-04	3.09
Nickel	35.3	350	4	1E-06	100	70	4	365	4.84E-05	2.00E-02	2.42E-03	14.89
Vanadium	11.3	350	4	1E-06	100	70	4	365	1.55E-05	7.00E-03	2.21E-03	13.62
Zinc	127.5	350	4	1E-06	100	70	4	365	1.76E-04	3.00E-01	5.82E-04	3.68
TOTAL											1.62E-02	100.00

SOIL INGESTION EXPOSURE ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 41)
 REMEDIAL INVESTIGATION GTQ-0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 FUTURE CONSTRUCTION WORKER

Intake from ingestion of soil is calculated as follows:

$$\text{Intake (mg/kg-day)} = C * CF * EF * ED * IR / BW * ATc \text{ or } ATnc * DY$$

$$\text{Risk} = \text{Intake} * CSF \text{ or } RfD$$

Where:

	INPUTS
C = contaminant concentration in soil (mg/kg)	
CF = conversion for kg to mg	1E-06
EF = adult exposure frequency (days/yr)	90
ED = adult exposure duration (yr)	1
IR = adult soil ingestion rate (mg/day)	480
BW = adult body weight (kg)	70
ATc = averaging time for carcinogen (yr)	70
ATnc = averaging time for noncarcinogen (yr)	1
DY = days per year (days/year)	365
CSF = cancer slope factor (mg/kg-day) ⁻¹	specific
RfD = reference dose (mg/kg-day)	specific

Note: Inputs are scenario and site specific

Contaminant	Concentration Carcinogen (mg/kg)	Exposure Frequency (days/yr) Adult	Exposure Duration (yr) Adult	Conversion Factor (kg/mg)	Ingestion Rate (mg/day) Adult	Body Weight (kg) Adult	Average Care Time (years)	Days per year (days/yr)	Nonhazardous Dose (mg/kg/day) Adult	Hazardous Dose (mg/kg/day)-1	Carcinogenic Risk Child	Percent Carcinogenic Risk Child
Benzo(a)pyrene	0.2608	90	1	1E-06	480	70	70	365	8.29E-08	7.30E+00	4.60E-08	48.68
Heptachlor	0.0018	90	1	1E-06	480	70	70	365	3.66E-11	4.60E+00	1.74E-10	0.18
Aldrin	0.0014	90	1	1E-06	480	70	70	365	3.36E-11	1.70E+00	6.78E-11	0.06
Dieldrin	0.004	90	1	1E-06	480	70	70	365	9.66E-11	1.60E+01	1.55E-09	1.67
4,4'-DDE	0.0066	90	1	1E-06	480	70	70	365	1.36E-10	3.40E-01	4.60E-11	0.06
4,4'-DDD	0.0066	90	1	1E-06	480	70	70	365	2.57E-10	2.40E-01	6.66E-11	0.06
4,4'-DDT	0.0066	90	1	1E-06	480	70	70	365	1.35E-10	3.40E-01	4.60E-11	0.06
Alpha-Chlordane	0.0021	90	1	1E-06	480	70	70	365	5.07E-11	1.30E+00	6.66E-11	0.07
Gamma-Chlordane	0.0018	90	1	1E-06	480	70	70	365	4.35E-11	1.30E+00	6.66E-11	0.06
PCB-1264	0.0267	90	1	1E-06	480	70	70	365	6.45E-10	7.70E+00	4.97E-09	6.36
PCB-1260	0.0261	90	1	1E-06	480	70	70	365	6.30E-10	7.70E+00	4.65E-09	6.24
Arsenic	0.85	90	1	1E-06	480	70	70	365	2.05E-08	1.70E+00	3.49E-08	37.64
TOTAL											2.27E-06	100.00

Contaminant	Concentration Noncarcinogen (mg/kg)	Exposure Frequency (days/yr) Child	Exposure Duration (yr) Child	Conversion Factor (kg/mg)	Ingestion Rate (mg/day) Child	Body Weight (kg) Child	Average Noncare Time (years)	Days per year (days/yr)	Nonhazardous Dose (mg/kg/day) Child	Hazardous Dose (mg/kg/day)	Noncarcinogenic Risk Child	Percent Noncarcinogenic Risk Child
Fluoranthene	0.26	90	1	1E-06	480	70	1	365	4.40E-07	4.00E-02	1.10E-06	0.08
Naphthalene	0.13	90	1	1E-06	480	70	1	365	2.20E-07	4.00E-02	6.60E-06	0.03
Phenanthrene	0.26	90	1	1E-06	480	70	1	365	4.40E-07	3.00E-02	1.47E-06	0.06
Pyrene	0.19	90	1	1E-06	480	70	1	365	3.21E-07	3.00E-02	1.07E-06	0.06
Chlorobenzene	0.0077	90	1	1E-06	480	70	1	365	1.30E-08	2.00E-02	6.51E-07	0.00
Heptachlor	0.0018	90	1	1E-06	480	70	1	365	2.71E-09	5.00E-04	5.41E-09	0.03
Aldrin	0.0014	90	1	1E-06	480	70	1	365	2.37E-09	3.00E-05	7.89E-06	0.42
Heptachlor Epoxide	0.0014	90	1	1E-06	480	70	1	365	2.37E-09	5.00E-03	4.73E-07	0.00
Dieldrin	0.004	90	1	1E-06	480	70	1	365	6.76E-09	5.00E-05	1.35E-04	0.71
Endrin	0.0028	90	1	1E-06	480	70	1	365	4.73E-09	3.00E-04	1.58E-05	0.06
4,4'-DDT	0.0066	90	1	1E-06	480	70	1	365	9.47E-09	5.00E-04	1.89E-05	0.10
Alpha Chlordane	0.0021	90	1	1E-06	480	70	1	365	3.65E-09	6.00E-05	6.92E-05	0.31
Gamma Chlordane	0.0018	90	1	1E-06	480	70	1	365	3.04E-09	6.00E-05	6.07E-06	0.27
PCB 1264	0.0267	90	1	1E-06	480	70	1	365	4.81E-08	7.70E-05	5.66E-04	3.09
PCB 1260	0.0261	90	1	1E-06	480	70	1	365	4.41E-08	7.70E-05	5.73E-04	3.03
Arsenic	0.85	90	1	1E-06	480	70	1	365	1.44E-06	3.00E-04	4.79E-03	25.29
Barium	21.1	90	1	1E-06	480	70	1	365	3.87E-05	7.00E-02	5.10E-04	2.69
Chromium	8.6	90	1	1E-06	480	70	1	365	1.48E-05	5.00E-03	2.91E-03	15.35
Cyanide	1.2	90	1	1E-06	480	70	1	365	2.03E-06	2.00E-02	1.01E-04	0.54
Manganese	18.9	90	1	1E-06	480	70	1	365	3.20E-05	6.00E-03	6.36E-03	33.73
Vanadium	10.2	90	1	1E-06	480	70	1	365	1.72E-05	7.00E-03	2.46E-03	13.00
Zinc	36	90	1	1E-06	480	70	1	365	6.43E-05	3.00E-01	2.14E-04	1.13
TOTAL											1.89E-02	100.00

SOIL INGESTION EXPOSURE ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 74)
 REMEDIAL INVESTIGATION GTO-0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 FUTURE RESIDENTIAL CHILD

Intake from ingestion of soil is calculated as follows:

$$\text{Intake (mg/kg-day)} = C * CF * EF * ED * IR / BW * ATc \text{ or } ATnc * DY$$

$$\text{Risk} = \text{Intake} * CSF \text{ or } /RID$$

Where:	INPUTS
C = contaminant concentration in soil (mg/kg)	
CF = conversion for kg to mg	1E-06
EF = child exposure frequency (days/yr)	350
ED = child exposure duration (yr)	6
IR = child soil ingestion rate (mg/day)	200
BW = child body weight (kg)	15
ATc = averaging time for carcinogen (yr)	70
ATnc = averaging time for noncarcinogen (yr)	6
DY = days per year (days/year)	365
CSF = cancer slope factor (mg/kg-day) ⁻¹	specific
RID = reference dose (mg/kg-day)	specific

Note: Inputs are scenario and site specific

Contaminant	Concentration Carcinogen (mg/kg)	Exposure Frequency (days/yr) Child	Exposure Duration (yr) Child	Conversion Factor (kg/mg)	Ingestion Rate (mg/day) Child	Body Weight (kg) Child	Average Carc Time (years)	Days per year (days/yr)	Carc Dose (mg/kg/day) Child	Slope Factor (mg/kg/day) ⁻¹	Carcinogenic Risk Child	Percent Carcinogenic Risk Child
Trichloroethane	0.0059	350	6	1E-06	200	15	70	365	6.47E-09	1.10E-02	7.11E-11	0.01
Heptachlor	0.0035	350	6	1E-06	200	15	70	365	3.84E-09	4.60E+00	1.73E-06	1.89
Heptachlor Epoxide	0.00143	350	6	1E-06	200	15	70	365	1.57E-09	9.10E+00	1.43E-06	1.66
Dieldrin	0.004	350	6	1E-06	200	15	70	365	4.36E-09	1.80E+01	7.01E-06	7.66
1,4'-DDE	0.0212	350	6	1E-06	200	15	70	365	2.32E-08	3.40E-01	7.90E-09	0.86
1,4'-DDD	0.0117	350	6	1E-06	200	15	70	365	1.28E-08	2.40E-01	3.08E-09	0.34
1,4'-DDT	0.0305	350	6	1E-06	200	15	70	365	3.34E-08	3.40E-01	1.14E-06	1.24
Alpha-Chlordane	0.0031	350	6	1E-06	200	15	70	365	3.40E-09	1.30E+00	4.42E-09	0.48
Gamma-Chlordane	0.0032	350	6	1E-06	200	15	70	365	3.51E-09	1.30E+00	4.56E-09	0.50
Arsenic	0.42	350	6	1E-06	200	15	70	365	4.60E-07	1.70E+00	7.82E-07	85.47
TOTAL											9.16E-07	100.00

Contaminant	Concentration Noncarcinogen (mg/kg)	Exposure Frequency (days/yr) Child	Exposure Duration (yr) Child	Conversion Factor (kg/mg)	Ingestion Rate (mg/day) Child	Body Weight (kg) Child	Average Noncarc Time (years)	Days per year (days/yr)	Noncarc Dose (mg/kg/day) Child	Reference Dose (mg/kg/day)	Noncarcinogenic Risk Child	Percent Noncarcinogenic Risk Child
Trichloroethane	0.0059	350	6	1E-06	200	15	6	365	7.54E-08	6.00E-03	1.26E-05	0.02
Toluene	0.003	350	6	1E-06	200	15	6	365	3.84E-08	2.00E-01	1.92E-07	0.00
Heptachlor	0.0035	350	6	1E-06	200	15	6	365	4.47E-08	5.00E-04	8.95E-05	0.17
Heptachlor Epoxide	0.00143	350	6	1E-06	200	15	6	365	1.83E-08	1.30E-05	1.41E-09	2.81
1,4'-DDT	0.0305	350	6	1E-06	200	15	6	365	3.90E-07	5.00E-04	7.80E-04	1.45
Alpha-chlordane	0.0031	350	6	1E-06	200	15	6	365	3.96E-08	6.00E-05	6.61E-04	1.23
Gamma-chlordane	0.0032	350	6	1E-06	200	15	6	365	4.09E-08	6.00E-05	6.82E-04	1.26
Arsenic	0.42	350	6	1E-06	200	15	6	365	5.37E-06	3.00E-04	1.79E-02	33.19
Barium	6.4	350	6	1E-06	200	15	6	365	1.07E-04	7.00E-02	1.53E-03	2.85
Chromium	5.3	350	6	1E-06	200	15	6	365	8.78E-05	5.00E-03	1.36E-02	25.13
Manganese	6.6	350	6	1E-06	200	15	6	365	8.44E-05	1.40E-01	6.03E-04	1.12
Mercury	0.05	350	6	1E-06	200	15	6	365	6.39E-07	3.00E-04	2.13E-03	3.95
Nickel	2.5	350	6	1E-06	200	15	6	365	3.20E-05	3.00E-02	1.07E-03	1.98
Selenium	0.45	350	6	1E-06	200	15	6	365	5.75E-06	5.00E-03	1.15E-03	2.13
Vanadium	6.2	350	6	1E-06	200	15	6	365	7.93E-05	7.00E-03	1.13E-02	21.00
Zinc	6.2	350	6	1E-06	200	15	6	365	7.93E-05	3.00E-01	2.84E-04	0.49
Cyanide	1.2	350	6	1E-06	200	15	6	365	1.53E-05	2.00E-02	7.87E-04	1.42
TOTAL											6.39E-02	100.00

SOIL INGESTION EXPOSURE ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 74)
 REMEDIAL INVESTIGATION GTO-0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 FUTURE RESIDENTIAL ADULT

Intake from ingestion of soil is calculated as follows:

$$\text{Intake (mg/kg-day)} = C * CF * EF * ED * IR / BW * ATc \text{ or } ATnc * DY$$

$$\text{Risk} = \text{Intake} * CSF \text{ or } RID$$

Where:	INPUTS
C = contaminant concentration in soil (mg/kg)	
CF = conversion for kg to mg	1E-06
EF = adult exposure frequency (days/yr)	365
ED = adult exposure duration (yr)	24
IR = adult soil ingestion rate (mg/day)	100
BW = adult body weight (kg)	70
ATc = averaging time for carcinogen (yr)	70
ATnc = averaging time for noncarcinogen (yr)	24
DY = days per year (days/year)	365
CSF = cancer slope factor (mg/kg-day) ⁻¹	specific
RID = reference dose (mg/kg-day)	specific

Note: Inputs are scenario and site specific

Contaminant	Concentration Carcinogen (mg/kg)	Exposure Frequency (days/yr) Adult	Exposure Duration (yr) Adult	Conversion Factor (kg/mg)	Ingestion Rate (mg/day) Adult	Body Weight (kg) Adult	Average Care Time (years)	Days per year (days/yr)	Care Dose (mg/kg/day) Adult	Slope Factor (mg/kg/day) ⁻¹	Carcinogenic Risk Adult	Percent Carcinogenic Risk Adult
trichloroethene	0.0059	365	24	1E-06	100	70	70	365	2.77E-09	1.10E-02	3.05E-11	0.01
Heptachlor	0.0035	365	24	1E-06	100	70	70	365	1.84E-09	4.50E+00	7.40E-09	1.89
Heptachlor Epoxide	0.00143	365	24	1E-06	100	70	70	365	8.72E-10	9.10E+00	6.11E-09	1.58
Dieldrin	0.004	365	24	1E-06	100	70	70	365	1.88E-09	1.60E+01	3.01E-08	7.66
4,4'-DDE	0.0212	365	24	1E-06	100	70	70	365	9.98E-09	3.40E-01	3.39E-09	0.86
4,4'-DDD	0.0117	365	24	1E-06	100	70	70	365	8.50E-09	2.40E-01	1.32E-09	0.34
4,4'-DDT	0.0305	365	24	1E-06	100	70	70	365	1.43E-08	3.40E-01	4.97E-09	1.24
alpha-Chlordane	0.0031	365	24	1E-06	100	70	70	365	1.48E-09	1.30E+00	1.89E-09	0.48
gamma-Chlordane	0.0032	365	24	1E-06	100	70	70	365	1.50E-09	1.30E+00	1.95E-09	0.50
Arsenic	0.42	365	24	1E-06	100	70	70	365	1.87E-07	1.70E+00	3.85E-07	89.47
TOTAL											3.82E-07	100.00

Contaminant	Concentration Noncarcinogen (mg/kg)	Exposure Frequency (days/yr) Adult	Exposure Duration (yr) Adult	Conversion Factor (kg/mg)	Ingestion Rate (mg/day) Adult	Body Weight (kg) Adult	Average Noncare Time (years)	Days per year (days/yr)	Noncare Dose (mg/kg/day) Adult	Reference Dose (mg/kg/day)	Noncarcinogenic Risk Adult	Percent Noncarcinogenic Risk Adult
trichloroethene	0.0059	365	24	1E-06	100	70	24	365	8.08E-09	8.00E-03	1.35E-08	0.02
Toluene	0.003	365	24	1E-06	100	70	24	365	4.11E-09	2.00E-01	2.05E-08	0.00
Heptachlor	0.0035	365	24	1E-06	100	70	24	365	4.78E-09	5.00E-04	9.59E-08	0.17
Heptachlor Epoxide	0.00143	365	24	1E-06	100	70	24	365	1.86E-09	1.30E-05	1.61E-04	2.61
4,4'-DDT	0.0305	365	24	1E-06	100	70	24	365	4.18E-08	5.00E-04	8.36E-05	1.45
Alpha-chlordane	0.0031	365	24	1E-06	100	70	24	365	4.25E-09	8.00E-05	7.08E-05	1.23
gamma-chlordane	0.0032	365	24	1E-06	100	70	24	365	4.38E-09	8.00E-05	7.31E-05	1.26
Arsenic	0.42	365	24	1E-06	100	70	24	365	5.75E-07	3.00E-04	1.92E-03	33.19
Barium	8.4	365	24	1E-06	100	70	24	365	1.15E-05	7.00E-02	1.64E-04	2.85
Chromium	5.3	365	24	1E-06	100	70	24	365	7.26E-06	5.00E-03	1.45E-03	25.13
Manganese	6.6	365	24	1E-06	100	70	24	365	9.04E-06	1.40E-01	6.48E-06	1.12
Mercury	0.05	365	24	1E-06	100	70	24	365	8.85E-08	3.00E-04	2.28E-04	3.95
Nickel	2.5	365	24	1E-06	100	70	24	365	3.42E-08	3.00E-02	1.14E-04	1.98
Selenium	0.45	365	24	1E-06	100	70	24	365	8.18E-07	8.00E-03	1.28E-04	2.13
Vanadium	6.2	365	24	1E-06	100	70	24	365	8.49E-08	7.00E-03	1.21E-03	21.00
Zinc	6.2	365	24	1E-06	100	70	24	365	8.49E-08	3.00E-01	2.83E-05	0.49
Cyanide	1.2	365	24	1E-06	100	70	24	365	1.84E-08	2.00E-02	8.22E-05	1.42
TOTAL											5.78E-03	100.00

SOIL INGESTION EXPOSURE ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 74)
 REMEDIAL INVESTIGATION CTO-0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 CURRENT MILITARY PERSONNEL

Intake from ingestion of soil is calculated as follows:

$$\text{Intake (mg/kg-day)} = C * CF * EF * ED * IR / BW * ATc \text{ or } ATnc * DY$$

$$\text{Risk} = \text{Intake} * CSF \text{ or } /RID$$

Where:

	INPUTS
C = contaminant concentration in soil (mg/kg)	
CF = conversion for kg to mg	1E-06
EF = adult exposure frequency (days/yr)	350
ED = adult exposure duration (yr)	4
IR = adult soil ingestion rate (mg/day)	100
BW = adult body weight (kg)	70
ATc = averaging time for carcinogen (yr)	70
ATnc = averaging time for noncarcinogen (yr)	4
DY = days per year (days/year)	365
CSF = cancer slope factor (mg/kg-day) ⁻¹	specific
RID = reference dose (mg/kg-day)	specific

Note: Inputs are scenario and site specific

Contaminant	Concentration Carcinogen (mg/kg)	Exposure Frequency (days/yr) Adult	Exposure Duration (yr) Adult	Conversion Factor (kg/mg)	Ingestion Rate (mg/day) Adult	Body Weight (kg) Adult	Average Carc Time (years)	Days per year (days/yr)	Carc Dose (mg/kg/day) Adult	Slope Factor (mg/kg/day) ⁻¹	Carcinogenic Risk Adult	Percent Carcinogenic Risk Adult
Trichloroethene	0.0059	350	4	1E-06	100	70	70	365	4.82E-10	1.10E-02	5.08E-12	0.01
Heptachlor	0.0035	350	4	1E-06	100	70	70	365	2.74E-10	4.50E+00	1.23E-09	1.89
Heptachlor Epoxide	0.00143	350	4	1E-06	100	70	70	365	1.12E-10	9.10E+00	1.02E-09	1.56
Dieldrin	0.004	350	4	1E-06	100	70	70	365	3.13E-10	1.80E+01	5.01E-09	7.86
4,4'-DDE	0.0212	350	4	1E-06	100	70	70	365	1.66E-09	3.40E-01	5.64E-10	0.86
4,4'-DDD	0.0117	350	4	1E-06	100	70	70	365	9.18E-10	2.40E-01	2.20E-10	0.34
4,4'-DDT	0.0305	350	4	1E-06	100	70	70	365	2.36E-09	3.40E-01	8.12E-10	1.24
alpha-Chlordane	0.0031	350	4	1E-06	100	70	70	365	2.43E-10	1.30E+00	3.18E-10	0.48
gamma-Chlordane	0.0032	350	4	1E-06	100	70	70	365	2.50E-10	1.30E+00	3.26E-10	0.50
Arsenic	0.42	350	4	1E-06	100	70	70	365	3.29E-08	1.70E+00	5.59E-08	85.47
TOTAL											6.64E-08	100.00

Contaminant	Concentration Noncarcinogen (mg/kg)	Exposure Frequency (days/yr) Adult	Exposure Duration (yr) Adult	Conversion Factor (kg/mg)	Ingestion Rate (mg/day) Adult	Body Weight (kg) Adult	Average Noncarc Time (years)	Days per year (days/yr)	Noncarc Dose (mg/kg/day) Adult	Reference Dose (mg/kg/day)	Noncarcinogenic Risk Adult	Percent Noncarcinogenic Risk Adult
Trichloroethene	0.0059	350	4	1E-06	100	70	4	365	8.08E-09	8.00E-03	1.38E-06	0.02
Toluene	0.003	350	4	1E-06	100	70	4	365	4.11E-09	2.00E-01	2.05E-06	0.00
Heptachlor	0.0035	350	4	1E-06	100	70	4	365	4.79E-09	5.00E-04	9.59E-06	0.17
Heptachlor Epoxide	0.00143	350	4	1E-06	100	70	4	365	1.96E-09	1.30E-05	1.61E-04	2.61
4,4'-DDT	0.0305	350	4	1E-06	100	70	4	365	4.18E-08	6.00E-04	6.96E-05	1.45
alpha-chlordane	0.0031	350	4	1E-06	100	70	4	365	4.25E-09	6.00E-05	7.09E-05	1.23
gamma-chlordane	0.0032	350	4	1E-06	100	70	4	365	4.39E-09	6.00E-05	7.31E-05	1.26
Arsenic	0.42	350	4	1E-06	100	70	4	365	5.76E-07	3.00E-04	1.92E-03	33.19
Barium	8.4	350	4	1E-06	100	70	4	365	1.16E-05	7.00E-02	1.64E-04	2.85
Chromium	5.3	350	4	1E-06	100	70	4	365	7.28E-06	5.00E-03	1.45E-03	25.13
Manganese	8.6	350	4	1E-06	100	70	4	365	9.04E-06	1.40E-01	6.48E-06	1.12
Mercury	0.05	350	4	1E-06	100	70	4	365	6.85E-06	3.00E-04	2.28E-04	3.95
Nickel	2.5	350	4	1E-06	100	70	4	365	3.42E-06	3.00E-02	1.14E-04	1.89
Selenium	0.45	350	4	1E-06	100	70	4	365	6.16E-07	5.00E-03	1.23E-04	2.13
Vanadium	0.2	350	4	1E-06	100	70	4	365	8.49E-06	7.00E-03	1.21E-03	21.00
Zinc	6.2	350	4	1E-06	100	70	4	365	8.49E-06	3.00E-01	2.83E-05	0.49
Cyanide	1.2	350	4	1E-06	100	70	4	365	1.64E-06	2.00E-02	8.22E-05	1.42
TOTAL											5.78E-03	100.00

SOIL INGESTION EXPOSURE ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 74)
 REMEDIAL INVESTIGATION CTO-0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 FUTURE CONSTRUCTION WORKER

Intake from ingestion of soil is calculated as follows:

$$\text{Intake (mg/kg-day)} = C * CF * EF * ED * IR/BW * ATc \text{ or } ATnc * DY$$

$$\text{Risk} = \text{Intake} * \text{CSF or /RfD}$$

Where:	INPUTS
C = contaminant concentration in soil (mg/kg)	
CF = conversion for kg to mg	1E-06
EF = adult exposure frequency (days/yr)	90
ED = adult exposure duration (yr)	1
IR = adult soil ingestion rate (mg/day)	480
BW = adult body weight (kg)	70
ATc = averaging time for carcinogen (yr)	70
ATnc = averaging time for noncarcinogen (yr)	1
DY = days per year (days/year)	365
CSF = cancer slope factor (mg/kg-day) ⁻¹	specific
RfD = reference dose (mg/kg-day)	specific

Note: Inputs are scenario and site specific

Contaminant	Concentration Carcinogen (mg/kg)	Exposure Frequency (days/yr) Adult	Exposure Duration (yr) Adult	Conversion Factor (kg/mg)	Ingestion Rate (mg/day) Adult	Body Weight (kg) Adult	Average Carc Time (years)	Days per year (days/yr)	Carc Dose (mg/kg/day) Adult	Slope Factor (mg/kg/day) ⁻¹	Carcinogenic Risk Adult	Percent Carcinogenic Risk Adult
Heptachlor	0.00103	90	1	1E-06	480	70	70	365	2.49E-11	4.50E+00	1.12E-10	0.54
4,4'-DDE	0.0024	90	1	1E-06	480	70	70	365	5.80E-11	3.40E-01	1.97E-11	0.10
4,4'-DDD	0.002	90	1	1E-06	480	70	70	365	4.83E-11	2.40E-01	1.16E-11	0.06
4,4'-DDT	0.0025	90	1	1E-06	480	70	70	365	6.04E-11	3.40E-01	2.05E-11	0.10
Arsenic	0.5	90	1	1E-06	480	70	70	365	1.21E-08	1.70E+00	2.05E-08	99.21
TOTAL											2.07E-08	100.00

Contaminant	Concentration Noncarcinogen (mg/kg)	Exposure Frequency (days/yr) Adult	Exposure Duration (yr) Adult	Conversion Factor (kg/mg)	Ingestion Rate (mg/day) Adult	Body Weight (kg) Adult	Average Noncarc Time (years)	Days per year (days/yr)	Noncarc Dose (mg/kg/day) Adult	Reference Dose (mg/kg/day)	Noncarcinogenic Risk Adult	Percent Noncarcinogenic Risk Adult
Heptachlor	0.00103	90	1	1E-06	480	70	1	365	1.74E-09	5.00E-04	3.48E-06	0.06
4,4'-DDT	0.0025	90	1	1E-06	480	70	1	365	4.23E-09	5.00E-04	8.45E-06	0.14
Arsenic	0.5	90	1	1E-06	480	70	1	365	8.45E-07	3.00E-04	2.82E-03	46.81
Barium	6.3	90	1	1E-06	480	70	1	365	1.07E-05	7.00E-02	1.52E-04	2.53
Chromium	5.4	90	1	1E-06	480	70	1	365	9.13E-06	5.00E-03	1.83E-03	30.33
Manganese	3.3	90	1	1E-06	480	70	1	365	5.58E-06	1.40E-01	3.99E-05	0.66
Vanadium	4.4	90	1	1E-06	480	70	1	365	7.44E-06	7.00E-03	1.06E-03	17.65
Zinc	3	90	1	1E-06	480	70	1	365	5.07E-06	3.00E-01	1.69E-05	0.28
Cyanide	1.1	90	1	1E-06	480	70	1	365	1.86E-06	2.00E-02	9.30E-05	1.54
TOTAL											6.02E-03	100.00

**EXAMPLE DERMAL CONTACT WITH SOIL CALCULATIONS
OPERABLE UNIT NO. 4
CONTRACT TASK ORDER 0212**

Purpose: Estimate intake/risk from dermal contact with soil

$$\text{Intake (mg/kg-day)} = \frac{C \times CF \times SA \times AF \times Abs \times EF \times ED}{BW \times AT}$$

Where:

C	=	Contaminant concentration in soil (mg/kg)
CF	=	Conversion factor (kg/mg)
SA	=	Surface available for contact (cm ² /event)
AF	=	Soil to skin adherence factor (mg/cm ²)
Abs	=	Fraction absorbed (percent)
EF	=	Exposure frequency (days/year)
ED	=	Exposure duration (years)
IR	=	Ingestion rate (mg/day)
BW	=	Body weight (kg)
AT _c	=	Averaging time carcinogen (days)
AT _{nc}	=	Averaging time noncarcinogen (days)

Risks:

$$\text{Carcinogens} = \text{Intake (mg/kgday)} \times \text{CSF (mg/kgday)}^{-1}$$

$$\text{Noncarcinogens} = \text{Intake (mg/kgday)} / \text{RfD (mg/kgday)}$$

Example Carcinogen: 4,4'-DDD

$$\text{Intake (mg/kg-day)} = \frac{0.0108 \text{ mg/kg} \times 1.0\text{E-}06 \text{ kg/mg} \times 5,800 \text{ cm}^2/\text{event} \times 1\% \times 1 \text{ mg/cm}^2 \times 350}{70 \text{ kg} \times 25,550 \text{ days}}$$

$$= 3\text{E-}04$$

$$\text{Risk} = 3\text{E-}04 \text{ mg/kgday} \times 2.4\text{E-}01 \text{ mg/kgday}^{-1} = 7\text{E-}10$$

Example Noncarcinogen: 4,4'-DDT

$$\text{Intake (mg/kg-day)} = \frac{0.0134 \text{ mg/kg} \times 1.0\text{E-}06 \text{ kg/mg} \times 5,800 \text{ cm}^2/\text{event} \times 1 \text{ mg/cm}^2 \times 1\% \times 350}{70 \text{ kg} \times 8,760 \text{ days}}$$

=

$$\text{Risk} = \frac{1\text{E-}08 \text{ mg/kg-day}}{5\text{E-}04 \text{ mg/kg-day}} = 0.00002$$

SOIL DERMAL CONTACT EXPOSURE ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 41),
 REMEDIAL INVESTIGATION CTO-0212
 MOB CAMP LEJEUNE, NORTH CAROLINA
 FUTURE RESIDENTIAL CHILD

Dermal contact with soil is calculated as follows:

$$\text{Intake (mg/kg-day)} = C * CF * SA * AF * Abs * EF * ED/BW * ATc \text{ or } ATnc * DY$$

$$\text{Risk} = \text{Intake} * CSF \text{ or } RID$$

Where:

C = contaminant concentration in soil (mg/kg)	INPUTS
CF = conversion factor (kg/mg)	1E-08
SA = child exposed skin surface area (cm ²)	2300
AF = soil to skin adherence factor (mg/cm ²)	1
Abs = fraction absorbed (unitless)	Specific
EF = child exposure frequency (events/yr)	365
ED = child exposure duration (years)	6
BW = child body weight (kg)	15
ATc = averaging time for carcinogen (yr)	70
ATnc = averaging time for noncarcinogen (yr)	6
DY = day per year (day/yr)	365
CSF = cancer slope factor (mg/kg-day) ⁻¹	specific
RID = reference dose (mg/kg-day)	specific

Note: Inputs are scenario and site specific

Contaminant	Concentration Carcinogen (mg/kg)	Conversion Factor (kg/mg)	Surface Area (cm ²) Child	Adherence Factor (mg/cm ²)	Fraction Absorbed (%)	Exposure Frequency (events/yr) Child	Exposure Duration (yrs) Child	Body Weight (kg) Child	Average Carc Time (years)	Days per year (day/year)	Child Dose (mg/kg/day) Child	Slope Factor (mg/kg-day) ⁻¹	Carcinogenic Risk Child	Percent Carcinogenic Risk Child
Benzo(a)anthracene	0.345	1E-08	2300	1	0.01	365	6	15	70	365	4.35E-08	7.30E-01	3.17E-08	7.06
Benzo(a)pyrene	0.345	1E-08	2300	1	0.01	365	6	15	70	365	4.35E-08	7.30E+00	3.17E-07	70.45
Benzo(b)fluoranthene	0.358	1E-08	2300	1	0.01	365	6	15	70	365	4.49E-08	7.30E-01	3.28E-08	7.27
Benzo(k)fluoranthene	0.339	1E-08	2300	1	0.01	365	6	15	70	365	4.27E-08	7.30E-01	3.12E-08	6.92
Chrysene	0.355	1E-08	2300	1	0.01	365	6	15	70	365	4.47E-08	7.30E-02	3.27E-09	0.72
Heptachlor	0.0015	1E-08	2300	1	0.01	365	6	15	70	365	1.69E-10	4.65E+00	6.00E-10	0.19
4,4'-DDE	0.0208	1E-08	2300	1	0.01	365	6	15	70	365	2.62E-09	3.40E-01	8.91E-10	0.20
4,4'-DDD	0.0108	1E-08	2300	1	0.01	365	6	15	70	365	1.36E-09	2.40E-01	3.27E-10	0.07
4,4'-DDT	0.0134	1E-08	2300	1	0.01	365	6	15	70	365	1.69E-09	3.40E-01	5.74E-10	0.13
Dieldrin	0.0031	1E-08	2300	1	0.01	365	6	15	70	365	3.91E-10	1.60E+00	6.25E-10	0.14
Alpha-Chlordane	0.0025	1E-08	2300	1	0.01	365	6	15	70	365	3.15E-10	1.30E+00	4.10E-10	0.09
gamma-Chlordane	0.0024	1E-08	2300	1	0.01	365	6	15	70	365	3.02E-10	1.30E+00	3.93E-10	0.09
Arsenic	1.05	1E-08	2300	1	0.001	365	6	15	70	365	1.32E-08	1.70E+00	2.26E-08	4.99
Beryllium	0.14	1E-08	2300	1	0.001	365	6	15	70	365	1.78E-09	4.30E+00	7.69E-09	1.68
TOTAL													4.61E-07	100.00

Contaminant	Concentration Noncarcinogen (mg/kg)	Conversion Factor (kg/mg)	Surface Area (cm ²) Child	Adherence Factor (mg/cm ²)	Fraction Absorbed (%)	Exposure Frequency (events/yr) Child	Exposure Duration (yrs) Child	Body Weight (kg) Child	Average Noncarc Time (years)	Days per year (day/year)	Noncarc Dose (mg/kg/day) Child	Reference Dose (mg/kg-day)	Noncarcinogenic Risk Child	Percent Noncarcinogenic Risk Child
Anthracene	0.3059	1E-08	2300	1	0.01	365	6	15	6	365	4.60E-07	3.00E-01	1.50E-06	0.08
Fluoranthene	0.2	1E-08	2300	1	0.01	365	6	15	6	365	2.94E-07	4.00E-02	7.35E-06	0.37
Phenanthrene	0.295	1E-08	2300	1	0.01	365	6	15	6	365	4.34E-07	3.00E-02	1.48E-06	0.73
Heptachlor	0.0015	1E-08	2300	1	0.01	365	6	15	6	365	2.21E-09	5.00E-04	4.41E-08	0.22
Dieldrin	0.0031	1E-08	2300	1	0.01	365	6	15	6	365	4.66E-09	6.00E-05	9.12E-05	4.57
4,4'-DDT	0.0134	1E-08	2300	1	0.01	365	6	15	6	365	1.67E-08	6.00E-04	3.94E-05	1.96
Alpha-Chlordane	0.0025	1E-08	2300	1	0.01	365	6	15	6	365	3.68E-09	6.00E-05	6.13E-05	3.07
gamma-chlordane	0.0024	1E-08	2300	1	0.01	365	6	15	6	365	3.53E-09	6.00E-05	5.88E-05	2.95
Arsenic	1.05	1E-08	2300	1	0.001	365	6	15	6	365	1.54E-07	3.00E-04	5.16E-04	25.82
Barium	82.2	1E-08	2300	1	0.001	365	6	15	6	365	1.21E-05	7.00E-02	1.73E-04	8.68
Beryllium	0.14	1E-08	2300	1	0.001	365	6	15	6	365	2.08E-08	5.00E-03	4.12E-08	0.21
Cadmium	0.62	1E-08	2300	1	0.001	365	6	15	6	365	9.12E-08	1.00E-03	9.12E-05	4.57
Chromium	9	1E-08	2300	1	0.001	365	6	15	6	365	1.32E-08	6.00E-03	2.65E-04	13.28
Manganese	51.7	1E-08	2300	1	0.001	365	6	15	6	365	7.60E-08	1.40E-01	5.43E-05	2.72
Mercury	0.11	1E-08	2300	1	0.001	365	6	15	6	365	1.62E-08	3.00E-04	5.39E-05	2.70
Nickel	35.3	1E-08	2300	1	0.001	365	6	15	6	365	5.19E-08	2.00E-02	2.60E-04	13.02
Selenium	11.3	1E-08	2300	1	0.001	365	6	15	6	365	1.68E-08	7.00E-03	2.37E-04	11.91
Zinc	127.5	1E-08	2300	1	0.001	365	6	15	6	365	1.67E-05	3.00E-01	6.25E-05	3.14
TOTAL													1.99E-03	100.00

SOIL DERMAL CONTACT EXPOSURE ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 41)
 REMEDIAL INVESTIGATION CTO-0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 FUTURE RESIDENTIAL ADULT

Dermal contact with soil is calculated as follows:

$$\text{Intake (mg/kg-day)} = C * CF * SA * AF * Abs * EF * ED / BW * ATc \text{ or } ATnc * DY$$

$$\text{Risk} = \text{Intake} * CSF \text{ or } RID$$

Where:	INPUTS
C = contaminant concentration in soil (mg/kg)	
CF = conversion factor (kg/mg)	1E-06
SA = adult exposed skin surface area (cm ²)	5800
AF = soil to skin adherence factor (mg/cm ²)	1
Abs = fraction absorbed (unitless)	Specific
EF = adult exposure frequency (events/yr)	350
ED = adult exposure duration (years)	24
BW = adult body weight (kg)	70
ATc = averaging time for carcinogen (yr)	70
ATnc = averaging time for noncarcinogen (yr)	24
DY = day per year (day/yr)	365
CSF = cancer slope factor (mg/kg-day) ⁻¹	specific
RID = reference dose (mg/kg-day)	specific

Note: Inputs are scenario and site specific

Contaminant	Concentration Carcinogen (mg/kg)	Conversion Factor (kg/mg)	Surface Area (cm ²) Adult	Adherence Factor (mg/cm ²)	Fraction Absorbed (%)	Exposure Frequency (events/yr) Adult	Exposure Duration (yrs) Adult	Body Weight (kg) Adult	Average Carc Time (years)	Days per year (day/year)	Carc Dose (mg/kg/day) Adult	Slope Factor (mg/kg-day) ⁻¹	Carcinogenic Risk Adult	Percent Carcinogenic Risk Adult
Benzo(a)anthracene	0.345	1E-06	5800	1	0.01	350	24	70	70	365	8.40E-08	7.30E-01	8.88E-08	7.06
Benzo(a)pyrene	0.345	1E-06	5800	1	0.01	350	24	70	70	365	8.40E-08	7.30E+00	8.88E-07	70.45
Benzo(b)fluoranthene	0.356	1E-06	5800	1	0.01	350	24	70	70	365	8.70E-08	7.30E-01	7.06E-08	7.27
Benzo(k)fluoranthene	0.339	1E-06	5800	1	0.01	350	24	70	70	365	9.23E-08	7.30E-01	8.74E-08	8.82
Chrysene	0.355	1E-06	5800	1	0.01	350	24	70	70	365	8.67E-08	7.30E-02	7.06E-09	0.72
Heptachlor	0.0015	1E-06	5800	1	0.01	350	24	70	70	365	4.09E-10	4.65E+00	1.86E-09	0.19
4,4'-DDE	0.0208	1E-06	5800	1	0.01	350	24	70	70	365	5.87E-09	3.40E-01	1.93E-09	0.20
4,4'-DDD	0.0108	1E-06	5800	1	0.01	350	24	70	70	365	2.94E-09	2.40E-01	7.06E-10	0.07
4,4'-DDT	0.0134	1E-06	5800	1	0.01	350	24	70	70	365	3.65E-09	3.40E-01	1.24E-09	0.13
Dieldrin	0.0031	1E-06	5800	1	0.01	350	24	70	70	365	8.44E-10	1.60E+00	1.36E-09	0.14
alpha-Chlordane	0.0025	1E-06	5800	1	0.01	350	24	70	70	365	6.81E-10	1.30E+00	8.85E-10	0.09
gamma-Chlordane	0.0024	1E-06	5800	1	0.01	350	24	70	70	365	6.64E-10	1.30E+00	8.60E-10	0.09
Arsenic	1.05	1E-06	5800	1	0.001	350	24	70	70	365	2.86E-08	1.70E+00	4.89E-08	4.89
Beryllium	0.14	1E-06	5800	1	0.001	350	24	70	70	365	3.81E-09	4.30E+00	1.64E-08	1.68
TOTAL													8.74E-07	100.00

Contaminant	Concentration Noncarcinogen (mg/kg)	Conversion Factor (kg/mg)	Surface Area (cm ²) Adult	Adherence Factor (mg/cm ²)	Fraction Absorbed (%)	Exposure Frequency (events/yr) Adult	Exposure Duration (yrs) Adult	Body Weight (kg) Adult	Average Noncnc Time (years)	Days per year (day/year)	Noncnc Dose (mg/kg/day) Adult	Reference Dose (mg/kg-day)	Noncarcinogenic Risk Adult	Percent Noncarcinogenic Risk Adult
Anthracene	0.3063	1E-06	5800	1	0.01	350	24	70	24	365	2.43E-07	3.00E-01	8.10E-07	0.06
Fluoranthene	0.2	1E-06	5800	1	0.01	350	24	70	24	365	1.59E-07	4.00E-02	3.97E-08	0.37
Phenanthrene	0.295	1E-06	5800	1	0.01	350	24	70	24	365	2.34E-07	3.00E-02	7.81E-08	0.73
Heptachlor	0.0015	1E-06	5800	1	0.01	350	24	70	24	365	1.19E-09	5.00E-04	2.38E-08	0.22
Dieldrin	0.0031	1E-06	5800	1	0.01	350	24	70	24	365	2.48E-09	5.00E-05	4.93E-05	4.57
4,4'-DDT	0.0134	1E-06	5800	1	0.01	350	24	70	24	365	1.08E-08	5.00E-04	2.13E-05	1.98
alpha-Chlordane	0.0025	1E-06	5800	1	0.01	350	24	70	24	365	1.99E-09	6.00E-05	3.31E-05	3.07
gamma-chlordane	0.0024	1E-06	5800	1	0.01	350	24	70	24	365	1.91E-09	6.00E-05	3.18E-05	2.95
Arsenic	1.05	1E-06	5800	1	0.001	350	24	70	24	365	8.34E-08	3.00E-04	2.78E-04	25.82
Barium	82.2	1E-06	5800	1	0.001	350	24	70	24	365	6.63E-08	7.00E-02	9.33E-05	8.68
Beryllium	0.14	1E-06	5800	1	0.001	350	24	70	24	365	1.11E-08	5.00E-03	2.22E-08	0.21
Cadmium	0.62	1E-06	5800	1	0.001	350	24	70	24	365	4.93E-08	1.00E-03	4.93E-05	4.57
Chromium	9	1E-06	5800	1	0.001	350	24	70	24	365	7.15E-07	5.00E-03	1.43E-04	13.28
Manganese	51.7	1E-06	5800	1	0.001	350	24	70	24	365	4.11E-08	1.40E-01	2.93E-05	2.72
Mercury	0.11	1E-06	5800	1	0.001	350	24	70	24	365	8.74E-09	3.00E-04	2.91E-05	2.70
Nickel	35.3	1E-06	5800	1	0.001	350	24	70	24	365	2.60E-08	2.00E-02	1.40E-04	13.02
Vanadium	11.3	1E-06	5800	1	0.001	350	24	70	24	365	8.98E-07	7.00E-03	1.28E-04	11.91
Zinc	127.5	1E-06	5800	1	0.001	350	24	70	24	365	1.01E-05	3.00E-01	3.38E-05	3.14
TOTAL													1.06E-03	100.00

SOIL DERMAL CONTACT EXPOSURE ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 41)
 REMEDIAL INVESTIGATION CTO-0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 CURRENT MILITARY PERSONNEL

Dermal contact with soil is calculated as follows:

$$\text{Intake (mg/kg-day)} = C * CF * SA * AF * Abs * EF * ED / BW * ATc \text{ or } ATnc * DY$$

$$\text{Risk} = \text{Intake} * CSF \text{ or } RID$$

Where:

C = contaminant concentration in soil (mg/kg)	
CF = conversion factor (kg/mg)	1E-06
SA = adult exposed skin surface area (cm ²)	5600
AF = soil to skin adherence factor (mg/cm ²)	1
Abs = fraction absorbed (unitless)	Specific
EF = adult exposure frequency (events/yr)	365
ED = adult exposure duration (years)	4
BW = adult body weight (kg)	70
ATc = averaging time for carcinogen (yr)	70
ATnc = averaging time for noncarcinogen (yr)	4
DY = day per year (day/yr)	365
CSF = cancer slope factor (mg/kg-day) ⁻¹	specific
RID = reference dose (mg/kg-day)	specific

Note: Inputs are scenario and site specific

Contaminant	Concentration Carcinogen (mg/kg)	Conversion Factor (kg/mg)	Surface Area (cm ²) Adult	Adherence Factor (mg/cm ²)	Fraction Absorbed (%)	Exposure Frequency (events/yr) Adult	Exposure Duration (yrs) Adult	Body Weight (kg) Adult	Average Care Time (years)	Days per year (day/year)	Carc Dose (mg/kg/day) Adult	Slope Factor (mg/kg-day) ⁻¹	Carcinogenic Risk Adult	Percent Carcinogenic Risk Adult
Benzo(a)anthracene	0.345	1E-06	5600	1	0.01	365	4	70	70	365	1.67E-06	7.30E-01	1.14E-06	7.06
Benzo(a)pyrene	0.345	1E-06	5600	1	0.01	365	4	70	70	365	1.67E-06	7.30E+00	1.14E-07	70.45
Benzo(b)fluoranthene	0.358	1E-06	5600	1	0.01	365	4	70	70	365	1.62E-06	7.30E-01	1.18E-06	7.27
Benzo(k)fluoranthene	0.339	1E-06	5600	1	0.01	365	4	70	70	365	1.64E-06	7.30E-01	1.12E-06	6.92
Chrysene	0.355	1E-06	5600	1	0.01	365	4	70	70	365	1.61E-06	7.30E-02	1.16E-06	0.72
Heptachlor	0.0015	1E-06	5600	1	0.01	365	4	70	70	365	6.61E-11	4.66E+00	3.10E-10	0.19
4,4'-DDE	0.0208	1E-06	5600	1	0.01	365	4	70	70	365	9.44E-10	3.40E-01	3.21E-10	0.20
4,4'-DDD	0.0108	1E-06	5600	1	0.01	365	4	70	70	365	4.90E-10	2.40E-01	1.16E-10	0.07
4,4'-DDT	0.0134	1E-06	5600	1	0.01	365	4	70	70	365	6.08E-10	3.40E-01	2.07E-10	0.13
Dieldrin	0.0031	1E-06	5600	1	0.01	365	4	70	70	365	1.41E-10	1.60E+00	2.26E-10	0.14
Alpha-Chlordane	0.0025	1E-06	5600	1	0.01	365	4	70	70	365	1.14E-10	1.30E+00	1.46E-10	0.09
gamma-Chlordane	0.0024	1E-06	5600	1	0.01	365	4	70	70	365	1.09E-10	1.30E+00	1.42E-10	0.09
Arsenic	1.05	1E-06	5600	1	0.001	365	4	70	70	365	4.77E-09	1.70E+00	6.10E-09	4.99
Beryllium	0.14	1E-06	5600	1	0.001	365	4	70	70	365	6.39E-10	4.30E+00	2.73E-09	1.98
TOTAL													1.62E-07	100.00

Contaminant	Concentration Noncarcinogen (mg/kg)	Conversion Factor (kg/mg)	Surface Area (cm ²) Adult	Adherence Factor (mg/cm ²)	Fraction Absorbed (%)	Exposure Frequency (events/yr) Adult	Exposure Duration (yrs) Adult	Body Weight (kg) Adult	Average Noncanc Time (years)	Days per year (day/year)	Noncanc Dose (mg/kg/day) Adult	Reference Dose (mg/kg-day)	Noncarcinogenic Risk Adult	Percent Noncarcinogenic Risk Adult
Anthracene	0.3069	1E-06	5600	1	0.01	365	4	70	4	365	2.43E-07	3.00E-01	8.10E-07	0.08
Fluoranthene	0.2	1E-06	5600	1	0.01	365	4	70	4	365	1.59E-07	4.00E-02	3.97E-06	0.37
Phenanthrene	0.296	1E-06	5600	1	0.01	365	4	70	4	365	2.34E-07	3.00E-02	7.61E-06	0.73
Heptachlor	0.0015	1E-06	5600	1	0.01	365	4	70	4	365	1.19E-09	6.00E-04	2.36E-06	0.22
Dieldrin	0.0031	1E-06	5600	1	0.01	365	4	70	4	365	2.46E-09	6.00E-06	4.93E-05	4.67
4,4'-DDT	0.0134	1E-06	5600	1	0.01	365	4	70	4	365	1.06E-08	6.00E-04	2.13E-05	1.99
alpha-Chlordane	0.0025	1E-06	5600	1	0.01	365	4	70	4	365	1.99E-09	6.00E-06	3.31E-05	3.07
gamma-chlordane	0.0024	1E-06	5600	1	0.01	365	4	70	4	365	1.91E-09	6.00E-06	3.18E-05	2.95
Arsenic	1.05	1E-06	5600	1	0.001	365	4	70	4	365	6.34E-08	3.00E-04	2.78E-04	26.82
Barium	82.2	1E-06	5600	1	0.001	365	4	70	4	365	6.63E-08	7.00E-02	9.33E-05	6.66
Beryllium	0.14	1E-06	5600	1	0.001	365	4	70	4	365	1.11E-08	6.00E-03	2.22E-06	0.21
Cadmium	0.62	1E-06	5600	1	0.001	365	4	70	4	365	4.93E-08	1.00E-03	4.93E-05	4.67
Chromium	9	1E-06	5600	1	0.001	365	4	70	4	365	7.16E-07	6.00E-03	1.43E-04	13.28
Manganese	51.7	1E-06	5600	1	0.001	365	4	70	4	365	4.11E-06	1.40E-01	2.93E-05	2.72
Mercury	0.11	1E-06	5600	1	0.001	365	4	70	4	365	8.74E-09	3.00E-04	2.91E-05	2.70
Nickel	35.3	1E-06	5600	1	0.001	365	4	70	4	365	2.90E-08	2.00E-02	1.40E-04	13.02
Vanadium	11.3	1E-06	5600	1	0.001	365	4	70	4	365	6.98E-07	7.00E-03	1.28E-04	11.91
Zinc	127.5	1E-06	5600	1	0.001	365	4	70	4	365	1.01E-05	3.00E-01	3.36E-05	3.14
TOTAL													1.06E-03	100.00

SOIL DERMAL CONTACT EXPOSURE ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 41)
 REMEDIAL INVESTIGATION CTO-0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 FUTURE CONSTRUCTION WORKER

Dermal contact with soil is calculated as follows:

$$\text{Intake (mg/kg-day)} = C * CF * SA * AF * Abs * EF * ED / BW * ATc \text{ or } ATnc * DY$$

$$\text{Risk} = \text{Intake} * CSF \text{ or } RID$$

Where:

C = contaminant concentration in soil (mg/kg)	
CF = conversion factor (kg/mg)	1E-06
SA = adult exposed skin surface area (cm ²)	4300
AF = soil to skin adherence factor (mg/cm ²)	1
Abs = fraction absorbed (unitless)	Specific
EF = adult exposure frequency (events/yr)	90
ED = adult exposure duration (years)	1
BW = adult body weight (kg)	70
ATc = averaging time for carcinogen (yr)	70
ATnc = averaging time for noncarcinogen (yr)	1
DY = day per year (day/yr)	365
CSF = cancer slope factor (mg/kg-day) ⁻¹	specific
RID = reference dose (mg/kg-day)	specific

Note: Inputs are scenario and site specific

Contaminant	Concentration Carcinogen (mg/kg)	Conversion Factor (kg/mg)	Surface Area (cm ²) Adult	Adherence Factor (mg/cm ²)	Fraction Absorbed (%)	Exposure Frequency (events/yr) Adult	Exposure Duration (yr) Adult	Body Weight (kg) Adult	Average Carc Time (years)	Days per year (day/year)	Carc Dose (mg/kg/day) Adult	Slope Factor (mg/kg-day) ⁻¹	Carcinogenic Risk Adult	Percent Carcinogenic Risk Adult
PERC(M)PHEHS	0.268	1E-06	4300	1	0.01	90	1	70	70	365	6.84E-10	7.30E+00	4.12E-09	74.95
Heptachlor	0.0016	1E-06	4300	1	0.01	90	1	70	70	365	3.46E-12	4.50E+00	1.56E-11	0.28
Aldrin	0.0014	1E-06	4300	1	0.01	90	1	70	70	365	3.03E-12	1.70E+00	5.15E-12	0.09
Dieldrin	0.004	1E-06	4300	1	0.01	90	1	70	70	365	8.66E-12	1.60E+01	1.36E-10	2.62
1,4'-DDE	0.0066	1E-06	4300	1	0.01	90	1	70	70	365	1.21E-11	3.40E-01	4.12E-12	0.08
1,4'-DDD	0.0066	1E-06	4300	1	0.01	90	1	70	70	365	2.12E-11	2.40E-01	5.06E-12	0.09
1,4'-DDT	0.0066	1E-06	4300	1	0.01	90	1	70	70	365	1.21E-11	3.40E-01	4.12E-12	0.08
alpha-Chlordane	0.0021	1E-06	4300	1	0.01	90	1	70	70	365	4.54E-12	1.30E+00	5.91E-12	0.11
gamma-Chlordane	0.0018	1E-06	4300	1	0.01	90	1	70	70	365	3.66E-12	1.30E+00	5.06E-12	0.09
PCB 1264	0.0267	1E-06	4300	1	0.01	90	1	70	70	365	6.78E-11	7.70E+00	4.45E-10	8.10
PCB 1260	0.0261	1E-06	4300	1	0.01	90	1	70	70	365	6.66E-11	7.70E+00	4.35E-10	7.92
Arsenic	0.85	1E-06	4300	1	0.001	90	1	70	70	365	1.84E-10	1.70E+00	3.13E-10	6.69
TOTAL													6.49E-09	100.00

Contaminant	Concentration Noncarcinogen (mg/kg)	Conversion Factor (kg/mg)	Surface Area (cm ²) Adult	Adherence Factor (mg/cm ²)	Fraction Absorbed (%)	Exposure Frequency (events/yr) Adult	Exposure Duration (yr) Adult	Body Weight (kg) Adult	Average Noncarc Time (years)	Days per year (day/year)	Noncarc Dose (mg/kg/day) Adult	Reference Dose (mg/kg-day)	Noncarcinogenic Risk Adult	Percent Noncarcinogenic Risk Adult
Fluoranthene	0.26	1E-06	4300	1	0.01	90	1	70	1	365	3.94E-08	4.00E-02	9.85E-07	0.41
Naphthalene	0.13	1E-06	4300	1	0.01	90	1	70	1	365	1.97E-08	4.00E-02	4.92E-07	0.20
Phenanthrene	0.26	1E-06	4300	1	0.01	90	1	70	1	365	3.94E-08	3.00E-02	1.31E-06	0.65
Pyrene	0.19	1E-06	4300	1	0.01	90	1	70	1	365	2.66E-08	3.00E-02	8.86E-07	0.40
Chlorobenzene	0.0077	1E-06	4300	1	0.01	90	1	70	1	365	1.17E-09	2.00E-02	5.83E-08	0.02
Heptachlor	0.0016	1E-06	4300	1	0.01	90	1	70	1	365	2.42E-10	5.00E-04	4.85E-07	0.20
Aldrin	0.0014	1E-06	4300	1	0.01	90	1	70	1	365	2.12E-10	3.00E-05	7.07E-06	2.94
Heptachlor Epoxide	0.0014	1E-06	4300	1	0.01	90	1	70	1	365	2.12E-10	5.00E-03	4.24E-06	0.02
Dieldrin	0.004	1E-06	4300	1	0.01	90	1	70	1	365	8.06E-10	5.00E-05	1.21E-05	5.03
Endrin	0.0026	1E-06	4300	1	0.01	90	1	70	1	365	4.24E-10	3.00E-04	1.41E-06	0.59
1,4'-DDT	0.0066	1E-06	4300	1	0.01	90	1	70	1	365	8.48E-10	5.00E-04	1.70E-06	0.70
alpha-Chlordane	0.0021	1E-06	4300	1	0.01	90	1	70	1	365	3.18E-10	6.00E-05	5.30E-06	2.20
gamma-chlordane	0.0018	1E-06	4300	1	0.01	90	1	70	1	365	2.73E-10	6.00E-05	4.54E-06	1.89
PCB-1264	0.0267	1E-06	4300	1	0.01	90	1	70	1	365	4.04E-09	7.7E-06	6.26E-05	21.81
PCB-1260	0.0261	1E-06	4300	1	0.01	90	1	70	1	365	3.96E-09	7.7E-06	5.13E-05	21.82
Arsenic	0.85	1E-06	4300	1	0.001	90	1	70	1	365	1.29E-06	3.00E-04	4.29E-05	17.82
Barium	21.1	1E-06	4300	1	0.001	90	1	70	1	365	3.20E-07	7.00E-02	4.57E-06	1.90
Chromium	8.6	1E-06	4300	1	0.001	90	1	70	1	365	1.30E-07	5.00E-03	2.61E-05	10.82
Cyanide	1.2	1E-06	4300	1	0.001	90	1	70	1	365	1.82E-08	2.00E-02	9.09E-07	0.38
Manganese	18.9	1E-06	4300	1	0.001	90	1	70	1	365	2.66E-07	1.40E-01	2.04E-06	0.85
Vanadium	10.2	1E-06	4300	1	0.001	90	1	70	1	365	1.54E-07	7.00E-03	2.21E-05	9.17
Zinc	38	1E-06	4300	1	0.001	90	1	70	1	365	5.78E-07	3.00E-01	1.82E-06	0.80
TOTAL													2.41E-04	100.00

SOIL DERMAL CONTACT EXPOSURE ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 7)
 REMEDIAL INVESTIGATION CTO-0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 FUTURE RESIDENTIAL CHILD

Dermal contact with soil is calculated as follows:

$$\text{Intake (mg/kg-day)} = C \cdot CF \cdot SA \cdot AF \cdot Abs \cdot EF \cdot ED / BW \cdot ATc \text{ or } ATnc \cdot DY$$

$$\text{Risk} = \text{Intake} \cdot CSF \text{ or } RID$$

Where:

- C = contaminant concentration in soil (mg/kg)
- CF = conversion factor (kg/mg)
- SA = child exposed skin surface area (cm²)
- AF = soil to skin adherence factor (mg/cm²)
- Abs = fraction absorbed (unitless)
- EF = child exposure frequency (events/yr)
- ED = child exposure duration (years)
- BW = child body weight (kg)
- ATc = averaging time for carcinogen (yr)
- ATnc = averaging time for noncarcinogen (yr)
- DY = day per year (day/yr)
- CSF = cancer slope factor (mg/kg-day)⁻¹
- RID = reference dose (mg/kg-day)

INPUTS

- 1E-06
- 2300
- 1
- Specific
- 365
- 6
- 15
- 70
- 6
- 365
- specific
- specific

Note: Inputs are scenario and site specific

Contaminant	Concentration Carcinogen (mg/kg)	Conversion Factor (kg/mg)	Surface Area (cm ²) Child	Adherence Factor (mg/cm ²)	Fraction Absorbed (%)	Exposure Frequency (events/yr) Child	Exposure Duration (yr) Child	Body Weight (kg) Child	Average Carc Time (years)	Days per year (day/year)	Carc Dose (mg/kg/day) Child	Slope Factor (mg/kg-day) ⁻¹	Carcinogenic Risk Child	Percent Carcinogenic Risk Child
Trichloroethene	0.0059	1E-06	2300	1	0.01	350	6	15	70	365	7.44E-10	1.10E-02	8.18E-12	0.03
Heptachlor	0.0035	1E-06	2300	1	0.01	350	6	15	70	365	4.41E-10	4.50E+00	1.96E-09	8.17
Heptachlor epoxide	0.00143	1E-06	2300	1	0.01	350	6	15	70	365	1.80E-10	9.10E+00	1.64E-09	6.75
Dieldren	0.004	1E-06	2300	1	0.01	350	6	15	70	365	6.04E-10	1.60E+01	9.07E-09	33.19
4,4'-DDE	0.0212	1E-06	2300	1	0.01	350	6	15	70	365	2.67E-09	3.40E-01	9.08E-10	3.74
4,4'-DDD	0.0117	1E-06	2300	1	0.01	350	6	15	70	365	1.47E-09	2.40E-01	3.54E-10	1.48
4,4'-DDT	0.0305	1E-06	2300	1	0.01	350	6	15	70	365	3.84E-09	3.40E-01	1.31E-09	5.36
alpha-Chlordane	0.0031	1E-06	2300	1	0.01	350	6	15	70	365	3.91E-10	1.30E+00	5.06E-10	2.09
gamma-Chlordane	0.0032	1E-06	2300	1	0.01	350	6	15	70	365	4.03E-10	1.30E+00	5.24E-10	2.16
Arsenic	0.42	1E-06	2300	1	0.001	350	6	15	70	365	5.28E-09	1.70E+00	9.00E-09	37.03
TOTAL													2.43E-08	100.00

Contaminant	Concentration Noncarcinogen (mg/kg)	Conversion Factor (kg/mg)	Surface Area (cm ²) Child	Adherence Factor (mg/cm ²)	Fraction Absorbed (%)	Exposure Frequency (events/yr) Child	Exposure Duration (yr) Child	Body Weight (kg) Child	Average Noncarc Time (years)	Days per year (day/year)	Noncarc Dose (mg/kg/day) Child	Reference Dose (mg/kg-day)	Noncarcinogenic Risk Child	Percent Noncarcinogenic Risk Child
Trichloroethene	0.0059	1E-06	2300	1	0.01	350	6	15	6	365	6.67E-09	6.00E-03	1.45E-06	0.14
Toluene	0.003	1E-06	2300	1	0.01	350	6	15	6	365	4.41E-09	2.00E-01	2.21E-06	0.00
Heptachlor	0.0035	1E-06	2300	1	0.01	350	6	15	6	365	5.15E-09	5.00E-04	1.03E-05	1.03
Heptachlor Epoxide	0.00143	1E-06	2300	1	0.01	350	6	15	6	365	2.10E-09	1.30E-05	1.62E-04	10.14
4,4'-DDT	0.0305	1E-06	2300	1	0.01	350	6	15	6	365	4.48E-08	5.00E-04	8.97E-05	8.95
alpha-Chlordane	0.0031	1E-06	2300	1	0.01	350	6	15	6	365	4.56E-09	6.00E-05	7.60E-05	7.58
gamma-Chlordane	0.0032	1E-06	2300	1	0.01	350	6	15	6	365	4.71E-09	6.00E-05	7.84E-05	7.83
Arsenic	0.42	1E-06	2300	1	0.001	350	6	15	6	365	6.18E-08	3.00E-04	2.06E-04	20.54
Barium	8.4	1E-06	2300	1	0.001	350	6	15	6	365	1.24E-06	7.00E-02	1.76E-05	1.76
Chromium	5.3	1E-06	2300	1	0.001	350	6	15	6	365	7.79E-07	5.00E-03	1.56E-04	15.55
Manganese	8.6	1E-06	2300	1	0.001	350	6	15	6	365	9.70E-07	1.40E-01	6.93E-06	0.69
Mercury	0.06	1E-06	2300	1	0.001	350	6	15	6	365	7.35E-09	3.00E-04	2.45E-05	2.45
Nickel	2.5	1E-06	2300	1	0.001	350	6	15	6	365	3.68E-07	2.00E-02	1.84E-05	1.83
Selenium	0.45	1E-06	2300	1	0.001	350	6	15	6	365	6.62E-08	5.00E-03	1.32E-05	1.32
Vanadium	6.2	1E-06	2300	1	0.001	350	6	15	6	365	9.12E-07	7.00E-03	1.30E-04	13.00
Zinc	6.2	1E-06	2300	1	0.001	350	6	15	6	365	9.12E-07	3.00E-01	3.04E-06	0.30
Cyanide	1.2	1E-06	2300	1	0.001	350	6	15	6	365	1.76E-07	2.00E-02	8.82E-06	0.88
TOTAL													1.00E-03	100.00

SOIL DERMAL CONTACT EXPOSURE ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 74)
 REMEDIAL INVESTIGATION CTO-0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 FUTURE RESIDENTIAL ADULT

Dermal contact with soil is calculated as follows:

$$\text{Intake (mg/kg-day)} = C * CF * SA * AF * Abs * EF * ED / BW * ATc \text{ or } ATnc * DY$$

$$\text{Risk} = \text{Intake} * CSF \text{ or } /RID$$

Where:	INPUTS
C = contaminant concentration in soil (mg/kg)	
CF = conversion factor (kg/mg)	1E-06
SA = adult exposed skin surface area (cm ²)	5800
AF = soil to skin adherence factor (mg/cm ²)	1
Abs = fraction absorbed (unitless)	Specific
EF = adult exposure frequency (events/yr)	350
ED = adult exposure duration (years)	24
BW = adult body weight (kg)	70
ATc = averaging time for carcinogen (yr)	70
ATnc = averaging time for noncarcinogen (yr)	24
DY = day per year (day/yr)	365
CSF = cancer slope factor (mg/kg-day) ⁻¹	specific
RID = reference dose (mg/kg-day)	specific

Note: Inputs are scenario and site specific

Contaminant	Concentration Carcinogen (mg/kg)	Conversion Factor (kg/mg)	Surface Area (cm ²) Adult	Adherence Factor (mg/cm ²)	Fraction Absorbed (%)	Exposure Frequency (events/yr) Adult	Exposure Duration (yrs) Adult	Body Weight (kg) Adult	Average Carc Time (years)	Days per year (day/year)	Carc Dose (mg/kg/day) Adult	Slope Factor (mg/kg-day) ⁻¹	Carcinogenic Risk Adult	Percent Carcinogenic Risk Adult
Trichloroethene	0.0059	1E-06	5800	1	0.01	350	24	70	70	365	1.81E-09	1.10E-02	1.77E-11	0.03
Heptachlor	0.0035	1E-06	5800	1	0.01	350	24	70	70	365	8.63E-10	4.60E+00	4.29E-09	8.17
Heptachlor epoxide	0.00143	1E-06	5800	1	0.01	350	24	70	70	365	3.90E-10	9.10E+00	3.64E-09	8.75
Dieldrin	0.004	1E-06	5800	1	0.01	350	24	70	70	365	1.09E-09	1.60E+01	1.74E-08	33.19
4,4'-DDE	0.0212	1E-06	5800	1	0.01	350	24	70	70	365	5.78E-09	3.40E-01	1.98E-09	3.74
4,4'-DDD	0.0117	1E-06	5800	1	0.01	350	24	70	70	365	3.19E-09	2.40E-01	7.66E-10	1.46
4,4'-DDT	0.0305	1E-06	5800	1	0.01	350	24	70	70	365	8.31E-09	3.40E-01	2.82E-09	5.38
alpha-Chlordane	0.0031	1E-06	5800	1	0.01	350	24	70	70	365	8.44E-10	1.30E+00	1.10E-09	2.09
gamma-Chlordane	0.0032	1E-06	5800	1	0.01	350	24	70	70	365	8.72E-10	1.30E+00	1.13E-09	2.16
Arsenic	0.42	1E-06	5800	1	0.001	350	24	70	70	365	1.14E-08	1.70E+00	1.94E-08	37.03
TOTAL													6.25E-08	100.00

Contaminant	Concentration Noncarcinogen (mg/kg)	Conversion Factor (kg/mg)	Surface Area (cm ²) Adult	Adherence Factor (mg/cm ²)	Fraction Absorbed (%)	Exposure Frequency (events/yr) Adult	Exposure Duration (yrs) Adult	Body Weight (kg) Adult	Average Noncarc Time (years)	Days per year (day/year)	Noncarc Dose (mg/kg/day) Adult	Reference Dose (mg/kg-day)	Noncarcinogenic Risk Adult	Percent Noncarcinogenic Risk Adult
Trichloroethene	0.0059	1E-06	5800	1	0.01	350	24	70	24	365	4.69E-09	8.00E-03	7.81E-07	0.14
Toluene	0.003	1E-06	5800	1	0.01	350	24	70	24	365	2.38E-09	2.00E-01	1.19E-08	0.00
Heptachlor	0.0035	1E-06	5800	1	0.01	350	24	70	24	365	2.78E-09	5.00E-04	5.66E-08	1.03
Heptachlor Epoxide	0.00143	1E-06	5800	1	0.01	350	24	70	24	365	1.14E-09	1.30E-05	8.74E-05	16.14
4,4'-DDT	0.0305	1E-06	5800	1	0.01	350	24	70	24	365	2.42E-08	5.00E-04	4.85E-05	8.95
alpha-Chlordane	0.0031	1E-06	5800	1	0.01	350	24	70	24	365	2.46E-09	6.00E-05	4.11E-05	7.58
gamma-Chlordane	0.0032	1E-06	5800	1	0.01	350	24	70	24	365	2.64E-09	6.00E-05	4.24E-05	7.83
Arsenic	0.42	1E-06	5800	1	0.001	350	24	70	24	365	3.34E-08	3.00E-04	1.11E-04	20.64
Barium	8.4	1E-06	5800	1	0.001	350	24	70	24	365	8.67E-07	7.00E-02	9.53E-08	1.76
Chromium	5.3	1E-06	5800	1	0.001	350	24	70	24	365	4.21E-07	5.00E-03	8.42E-05	15.65
Manganese	6.6	1E-06	5800	1	0.001	350	24	70	24	365	6.24E-07	1.40E-01	3.76E-08	0.69
Mercury	0.05	1E-06	5800	1	0.001	350	24	70	24	365	3.97E-09	3.00E-04	1.32E-05	2.45
Nickel	2.5	1E-06	5800	1	0.001	350	24	70	24	365	1.99E-07	2.00E-02	9.93E-08	1.83
Selenium	0.45	1E-06	5800	1	0.001	350	24	70	24	365	3.68E-08	6.00E-03	7.16E-08	1.32
Vanadium	8.2	1E-06	5800	1	0.001	350	24	70	24	365	4.93E-07	7.00E-03	7.04E-05	13.00
Zinc	6.2	1E-06	5800	1	0.001	350	24	70	24	365	4.93E-07	3.00E-01	1.64E-08	0.30
Cyanide	1.2	1E-06	5800	1	0.001	350	24	70	24	365	8.63E-08	2.00E-02	4.77E-08	0.88
TOTAL													5.41E-04	100.00

SOIL DERMAL CONTACT EXPOSURE ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 74)
 REMEDIAL INVESTIGATION CTO-0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 CURRENT MILITARY PERSONNEL

Dermal contact with soil is calculated as follows:

$$\text{Intake (mg/kg-day)} = C * CF * SA * AF * Abs * EF * ED / BW * ATc \text{ or } ATnc * DY$$

$$\text{Risk} = \text{Intake} * CSF \text{ or } RID$$

Where:

INPUTS

C = contaminant concentration in soil (mg/kg)	1E-08
CF = conversion factor (kg/mg)	5800
SA = adult exposed skin surface area (cm ²)	1
AF = soil to skin adherence factor (mg/cm ²)	Specific
Abs = fraction absorbed (unitless)	350
EF = adult exposure frequency (events/yr)	4
ED = adult exposure duration (years)	70
BW = adult body weight (kg)	70
ATc = averaging time for carcinogen (yr)	70
ATnc = averaging time for noncarcinogen (yr)	4
DY = day per year (day/yr)	365
CSF = cancer slope factor (mg/kg-day) ⁻¹	specific
RID = reference dose (mg/kg-day)	specific

Note: Inputs are scenario and site specific

Contaminant	Concentration Carcinogen (mg/kg)	Conversion Factor (kg/mg)	Surface Area (cm ²) Adult	Adherence Factor (mg/cm ²)	Fraction Absorbed (%)	Exposure Frequency (events/yr) Adult	Exposure Duration (yrs) Adult	Body Weight (kg) Adult	Average Care Time (years)	Days per year (day/year)	Carc Dose (mg/kg/day) Adult	Slope Factor (mg/kg-day) ⁻¹	Carcinogenic Risk Adult	Percent Carcinogenic Risk Adult
Trichloroethene	0.0059	1E-08	5800	1	0.01	350	4	70	70	365	2.68E-10	1.10E-02	2.95E-12	0.03
Heptachlor	0.0035	1E-08	5800	1	0.01	350	4	70	70	365	1.59E-10	4.80E+00	7.15E-10	8.17
Heptachlor epoxide	0.00143	1E-08	5800	1	0.01	350	4	70	70	365	6.49E-11	9.10E+00	5.91E-10	6.75
Dieldrin	0.004	1E-08	5800	1	0.01	350	4	70	70	365	1.82E-10	1.80E+01	2.91E-09	33.19
4,4'-DDE	0.0212	1E-08	5800	1	0.01	350	4	70	70	365	9.63E-10	3.40E-01	3.27E-10	3.74
4,4'-DDD	0.0117	1E-08	5800	1	0.01	350	4	70	70	365	6.31E-10	2.40E-01	1.27E-10	1.46
4,4'-DDT	0.0305	1E-08	5800	1	0.01	350	4	70	70	365	1.38E-09	3.40E-01	4.71E-10	5.38
alpha-Chlordane	0.0031	1E-08	5800	1	0.01	350	4	70	70	365	1.41E-10	1.30E+00	1.63E-10	2.09
gamma-Chlordane	0.0032	1E-08	5800	1	0.01	350	4	70	70	365	1.45E-10	1.30E+00	1.86E-10	2.16
Arsenic	0.42	1E-08	5800	1	0.001	350	4	70	70	365	1.91E-09	1.70E+00	3.24E-09	37.03
TOTAL													8.76E-09	100.00

Contaminant	Concentration Noncarcinogen (mg/kg)	Conversion Factor (kg/mg)	Surface Area (cm ²) Adult	Adherence Factor (mg/cm ²)	Fraction Absorbed (%)	Exposure Frequency (events/yr) Adult	Exposure Duration (yrs) Adult	Body Weight (kg) Adult	Average Noncare Time (years)	Days per year (day/year)	Noncare Dose (mg/kg/day) Adult	Reference Dose (mg/kg-day)	Noncarcinogenic Risk Adult	Percent Noncarcinogenic Risk Adult
Trichloroethene	0.0059	1E-08	5800	1	0.01	350	4	70	4	365	4.89E-09	8.00E-03	7.81E-07	0.14
Toluene	0.003	1E-08	5800	1	0.01	350	4	70	4	365	2.38E-09	2.00E-01	1.19E-08	0.00
Heptachlor	0.0035	1E-08	5800	1	0.01	350	4	70	4	365	2.78E-09	5.00E-04	5.56E-06	1.03
Heptachlor Epoxide	0.00143	1E-08	5800	1	0.01	350	4	70	4	365	1.14E-09	1.30E-06	8.74E-05	16.14
4,4'-DDT	0.0305	1E-08	5800	1	0.01	350	4	70	4	365	2.42E-08	5.00E-04	4.85E-05	8.95
alpha-Chlordane	0.0031	1E-08	5800	1	0.01	350	4	70	4	365	2.46E-09	6.00E-05	4.11E-05	7.58
gamma-Chlordane	0.0032	1E-08	5800	1	0.01	350	4	70	4	365	2.54E-09	6.00E-05	4.24E-05	7.83
Arsenic	0.42	1E-08	5800	1	0.001	350	4	70	4	365	3.34E-08	3.00E-04	1.11E-04	20.64
Barium	8.4	1E-08	5800	1	0.001	350	4	70	4	365	6.67E-07	7.00E-02	9.53E-06	1.76
Chromium	6.3	1E-08	5800	1	0.001	350	4	70	4	365	4.21E-07	5.00E-03	8.42E-05	15.65
Manganese	6.6	1E-08	5800	1	0.001	350	4	70	4	365	8.24E-07	1.40E-01	3.76E-06	0.69
Mercury	0.05	1E-08	5800	1	0.001	350	4	70	4	365	3.97E-09	3.00E-04	1.32E-05	2.45
Nickel	2.6	1E-08	5800	1	0.001	350	4	70	4	365	1.99E-07	2.00E-02	9.93E-06	1.83
Selenium	0.45	1E-08	5800	1	0.001	350	4	70	4	365	3.58E-08	5.00E-03	7.15E-06	1.32
Vanadium	8.2	1E-08	5800	1	0.001	350	4	70	4	365	4.93E-07	7.00E-03	7.04E-06	13.00
Zinc	6.2	1E-08	5800	1	0.001	350	4	70	4	365	4.93E-07	3.00E-01	1.64E-06	0.30
Cyanide	1.2	1E-08	5800	1	0.001	350	4	70	4	365	9.53E-08	2.00E-02	4.77E-06	0.88
TOTAL													6.41E-04	100.00

SOIL DERMAL CONTACT EXPOSURE ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 74)
 REMEDIAL INVESTIGATION CTO-0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 FUTURE CONSTRUCTION WORKER

Dermal contact with soil is calculated as follows:

$$\text{Intake (mg/kg-day)} = C * CF * SA * AF * Abs * EF * ED / BW * ATc \text{ or } ATnc * DY$$

$$\text{Risk} = \text{Intake} * CSF \text{ or } RfD$$

Where:

C = contaminant concentration in soil (mg/kg)
 CF = conversion factor (kg/mg)
 SA = adult exposed skin surface area (cm²)
 AF = soil to skin adherence factor (mg/cm²)
 Abs = fraction absorbed (unitless)
 EF = adult exposure frequency (events/yr)
 ED = adult exposure duration (years)
 BW = adult body weight (kg)
 ATc = averaging time for carcinogen (yr)
 ATnc = averaging time for noncarcinogen (yr)
 DY = day per year (day/yr)
 CSF = cancer slope factor (mg/kg-day)⁻¹
 RfD = reference dose (mg/kg-day)

INPUTS

1E-08
 4300
 1
 Specific
 90
 1
 70
 70
 1
 365
 specific
 specific

Note: Inputs are scenario and site specific

Contaminant	Concentration Carcinogen (mg/kg)	Conversion Factor (kg/mg)	Surface Area (cm ²) Adult	Adherence Factor (mg/cm ²)	Fraction Absorbed (%)	Exposure Frequency (events/yr) Adult	Exposure Duration (yrs) Adult	Body Weight (kg) Adult	Average Carc Time (years)	Days per year (day/year)	Carc Dose (mg/kg/day) Adult	Slope Factor (mg/kg-day) ⁻¹	Carcinogenic Risk Adult	Percent Carcinogenic Risk Adult
Heptachlor	0.00103	1E-08	4300	1	0.01	90	1	70	70	365	2.23E-12	4.50E+00	1.00E-11	5.05
4,4'-DDE	0.0024	1E-08	4300	1	0.01	90	1	70	70	365	5.19E-12	3.40E-01	1.77E-12	0.89
4,4'-DDD	0.002	1E-08	4300	1	0.01	90	1	70	70	365	4.33E-12	2.40E-01	1.04E-12	0.52
4,4'-DDT	0.0025	1E-08	4300	1	0.01	90	1	70	70	365	5.41E-12	3.40E-01	1.84E-12	0.93
Arsenic	0.5	1E-08	4300	1	0.001	90	1	70	70	365	1.08E-10	1.70E+00	1.84E-10	92.81
TOTAL													1.98E-10	100.00

Contaminant	Concentration Noncarcinogen (mg/kg)	Conversion Factor (kg/mg)	Surface Area (cm ²) Adult	Adherence Factor (mg/cm ²)	Fraction Absorbed (%)	Exposure Frequency (events/yr) Adult	Exposure Duration (yrs) Adult	Body Weight (kg) Adult	Average Noncarc Time (years)	Days per year (day/year)	Noncarc Dose (mg/kg/day) Adult	Reference Dose (mg/kg-day)	Noncarcinogenic Risk Adult	Percent Noncarcinogenic Risk Adult
Heptachlor	0.00103	1E-08	4300	1	0.01	90	1	70	1	365	1.58E-10	5.00E-04	3.12E-07	0.57
4,4'-DDT	0.0025	1E-08	4300	1	0.01	90	1	70	1	365	3.79E-10	5.00E-04	7.57E-07	1.38
Arsenic	0.5	1E-08	4300	1	0.001	90	1	70	1	365	7.57E-09	3.00E-04	2.52E-05	45.98
Barium	6.3	1E-08	4300	1	0.001	90	1	70	1	365	9.54E-08	7.00E-02	1.38E-08	2.48
Chromium	5.4	1E-08	4300	1	0.001	90	1	70	1	365	8.18E-08	5.00E-03	1.64E-05	29.80
Manganese	3.3	1E-08	4300	1	0.001	90	1	70	1	365	5.00E-08	1.40E-01	3.57E-07	0.65
Vanadium	4.4	1E-08	4300	1	0.001	90	1	70	1	365	6.68E-08	7.00E-03	9.52E-08	17.34
Zinc	3	1E-08	4300	1	0.001	90	1	70	1	365	4.64E-08	3.00E-01	1.51E-07	0.28
Cyanide	1.1	1E-08	4300	1	0.001	90	1	70	1	365	1.87E-08	2.00E-02	8.33E-07	1.52
TOTAL													5.49E-05	100.00

**EXAMPLE INHALATION OF PARTICULATES CALCULATIONS
OPERABLE UNIT NO. 4
CONTRACT TASK ORDER 0212**

Purpose: Estimate intake/risk from the inhalation of soil particulates

$$Intake (mg/kg \cdot day) = \frac{C \times IR \times EF \times ED \times 1/PEF}{BW \times AT}$$

Where:

C	=	Contaminant concentration in soil (mg/kg)
IR	=	Inhalation rate (m ³ /day)
EF	=	Exposure frequency (days/year)
ED	=	Exposure duration (years)
PEF	=	Particulate Emission Factor (m ³ /kg)
BW	=	Body weight (kg)
AT _c	=	Averaging time carcinogen (days)
AT _{nc}	=	Averaging time noncarcinogen (days)

Risks:

Carcinogens = Intake (mg/kgday) x CSF (mg/kgday)⁻¹
 Noncarcinogens = Intake (mg/kgday)/RfD (mg/kgday)

Example Carcinogen: 4,4'-DDT

$$Intake (mg/kg \cdot day) = \frac{0.0134 \text{ mg/kg} \times 20 \text{ m}^3/\text{day} \times 350 \text{ days/yr} \times 24 \text{ yrs} \times 1/4.6E+09 \text{ m}^3/\text{kg}}{70 \text{ kg} \times 25,550 \text{ days}}$$

$$= 3E-13$$

$$Risk = 3E-13 \text{ mg/kgday} \times 3.4E-01 \text{ mg/kgday}^{-1} = 9E-14$$

Example Noncarcinogen: Manganese

$$Intake (mg/kg \cdot day) = \frac{51.7 \text{ mg/kg} \times 20 \text{ m}^3/\text{day} \times 350 \text{ days/yr} \times 24 \text{ yrs} \times 1/4.6E+09 \text{ m}^3/\text{kg}}{70 \text{ kg} \times 8,760 \text{ days}}$$

$$= 3E-09$$

$$Risk = \frac{3E-09 \text{ mg/kg} \cdot \text{day}}{4E-04 \text{ mg/kg} \cdot \text{day}} = 0.0000075$$

Re: Site 41 Future Residential Adult

PARTICULATE INHALATION EXPOSURE ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 41)
 REMEDIAL INVESTIGATION CTO-0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 FUTURE RESIDENTIAL CHILD

Intake from the Inhalation of particulates is calculated as follows:

$$\text{Intake (mg/kg-day)} = (C * EF * ED * IR * 1/PEF)/(BW * ATc \text{ or } ATnc * DY)$$

$$\text{Risk} = \text{Intake} * \text{CSF} \text{ or } \text{RfD}$$

Where:	INPUTS
C = contaminant concentration in soil (mg/kg)	Calculated
CSF = carcinogenic slope factor	Specific
RfD = reference dose for noncarcinogen	Specific
IR = Inhalation rate (m3)	10
EF = child exposure frequency (days)	350
ED = child exposure duration (years)	6
BW = child body weight (kg)	15
ATc = averaging time for carcinogen (yr)	70
ATnc = averaging time for noncarcinogen (yr)	6
DY = day per year (day/yr)	365
PEF = particulate emission factor (m3/kg)	4.63E+09

Note: Inputs are scenario and site specific

Contaminant	Concentration Carcinogen (mg/kg)	Particulate Emission Factor (m3/kg)	Exposure Frequency (events/yr)	Inhalation Rate (m3/day)	Exposure Duration (yrs)	Body Weight (kg)	Average Carc Time (years)	Days per year (day/year)	Carc Dose (mg/kg/day)	Slope Factor (mg/kg-day) ⁻¹	Carcinogenic Risk	Percent Contribution to Risk
Heptachlor	0.00150	4.6E+09	350	10	6	15	70	365	1.78E-14	4.50E+00	7.99E-14	0.00155
Dieldren	0.0031	4.6E+09	350	10	6	15	70	365	3.67E-14	1.60E+00	5.87E-14	0.00114
4,4'-DDT	0.0134	4.6E+09	350	10	6	15	70	365	1.59E-13	3.40E-01	5.39E-14	0.00105
alpha-Chlordane	0.0025	4.6E+09	350	10	6	15	70	365	2.98E-14	1.30E+00	3.85E-14	0.00075
gamma-Chlordane	0.0024	4.6E+09	350	10	6	15	70	365	2.84E-14	1.30E+00	3.69E-14	0.00072
Arsenic	1.05	4.6E+09	350	10	6	15	70	365	1.24E-11	5.00E+01	6.21E-10	12.05221
Beryllium	0.14	4.6E+09	350	10	6	15	70	365	1.66E-12	6.40E+00	1.39E-11	0.28997
Cadmium	0.62	4.6E+09	350	10	6	15	70	365	7.34E-12	6.30E+00	4.62E-11	0.89668
Chromium	9.00	4.6E+09	350	10	6	15	70	365	1.07E-10	4.20E+01	4.47E-09	88.78
TOTAL											5.16E-09	100.00

Contaminant	Concentration Noncarcinogen (mg/kg)	Particulate Emission Factor (m3/kg)	Exposure Frequency (events/yr)	Inhalation Rate (m3/day)	Exposure Duration (yrs)	Body Weight (kg)	Average Noncarc Time (years)	Days per year (day/year)	Noncarc Dose (mg/kg/day)	Reference Dose (mg/kg-day)	Noncarcinogenic Risk	Percent Noncarcinogenic Risk
Manganese	51.70	4.6E+09	350	10	6	15	6	365	7.14E-09	4.00E-04	1.78E-05	89.72
Mercury	0.11	4.6E+09	350	10	6	15	6	365	1.52E-11	3.00E-04	5.06E-08	0.26
TOTAL											1.78E-05	100

PARTICULATE INHALATION EXPOSURE ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 41)
 REMEDIAL INVESTIGATION CTO-0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 FUTURE RESIDENTIAL ADULT

Intake from the Inhalation of particulates is calculated as follows:

$$\text{Intake (mg/kg-day)} = (C * EF * ED * IR * 1/PEF)/(BW * ATc \text{ or } ATnc * DY)$$

$$\text{Risk} = \text{Intake} * \text{CSF or /RID}$$

Where:	INPUTS
C = contaminant concentration in soil (mg/kg)	Calculated
CSF = carcinogenic slope factor	Specific
RID = reference dose for noncarcinogen	Specific
IR = Inhalation rate (m3)	20
EF = adult exposure frequency (days)	350
ED = adult exposure duration (years)	24
BW = adult body weight (kg)	70
ATc = averaging time for carcinogen (yr)	70
ATnc = averaging time for noncarcinogen (yr)	24
DY = day per year (day/yr)	365
PEF = particulate emission factor (m3/kg)	4.63E+09

Note: Inputs are scenario and site specific

Contaminant	Concentration Carcinogen (mg/kg)	Particulate Emission Factor (m3/kg)	Exposure Frequency (events/yr)	Inhalation Rate (m3/day)	Exposure Duration (yrs)	Body Weight (kg)	Average Carc Time (years)	Days per year (day/year)	Carc Dose (mg/kg/day)	Slope Factor (mg/kg-day) ⁻¹	Carcinogenic Risk	Percent Contribution to Risk
Heptachlor	0.00150	4.6E+09	350	20	24	70	70	365	3.04E-14	4.50E+00	1.37E-13	0.00155
Dieldren	0.0031	4.6E+09	350	20	24	70	70	365	6.29E-14	1.60E+00	1.01E-13	0.00114
4,4'-DDT	0.0134	4.6E+09	350	20	24	70	70	365	2.72E-13	3.40E-01	9.24E-14	0.00105
alpha-Chlordane	0.0025	4.6E+09	350	20	24	70	70	365	5.07E-14	1.30E+00	6.59E-14	0.00075
gamma-Chlordane	0.0024	4.6E+09	350	20	24	70	70	365	4.87E-14	1.30E+00	6.33E-14	0.00072
Arsenic	1.05	4.6E+09	350	20	24	70	70	365	2.13E-11	5.00E+01	1.07E-09	12.05221
Beryllium	0.14	4.6E+09	350	20	24	70	70	365	2.84E-12	6.40E+00	2.39E-11	0.28997
Cadmium	0.62	4.6E+09	350	20	24	70	70	365	1.26E-11	6.30E+00	7.92E-11	0.89668
Chromium	9.00	4.6E+09	350	20	24	70	70	365	1.83E-10	4.20E+01	7.87E-09	86.78
TOTAL											6.84E-09	100.00

Contaminant	Concentration Noncarcinogen (mg/kg)	Particulate Emission Factor (m3/kg)	Exposure Frequency (events/yr)	Inhalation Rate (m3/day)	Exposure Duration (yrs)	Body Weight (kg)	Average Noncarc Time (years)	Days per year (day/year)	Noncarc Dose (mg/kg/day)	Reference Dose (mg/kg-day)	Noncarcinogenic Risk	Percent Noncarcinogenic Risk
Manganese	51.70	4.6E+09	350	20	24	70	24	365	3.06E-09	4.00E-04	7.65E-06	89.72
Mercury	0.11	4.6E+09	350	20	24	70	24	365	6.61E-12	3.00E-04	2.17E-08	0.28
TOTAL											7.87E-06	100

PARTICULATE INHALATION EXPOSURE ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 41)
 REMEDIAL INVESTIGATION CTO-0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 CURRENT MILITARY PERSONNEL

Intake from the inhalation of particulates is calculated as follows:

$$\text{Intake (mg/kg-day)} = (C * EF * ED * IR * 1/PEF) / (BW * ATc \text{ or } ATnc * DY)$$

$$\text{Risk} = \text{Intake} * CSF \text{ or } RfD$$

Where:

- C = contaminant concentration in soil (mg/kg)
- CSF = carcinogenic slope factor
- RfD = reference dose for noncarcinogen
- IR = Inhalation rate (m3)
- EF = adult exposure frequency (days)
- ED = adult exposure duration (years)
- BW = adult body weight (kg)
- ATc = averaging time for carcinogen (yr)
- ATnc = averaging time for noncarcinogen (yr)
- DY = day per year (day/yr)
- PEF = particulate emission factor (m3/kg)

INPUTS

- Calculated
- Specific
- Specific
- 20
- 350
- 4
- 70
- 70
- 4
- 365
- 4.63E+09

Note: Inputs are scenario and site specific

Contaminant	Concentration Carcinogen (mg/kg)	Particulate Emission Factor (m3/kg)	Exposure Frequency (events/yr)	Inhalation Rate (m3/day)	Exposure Duration (yrs)	Body Weight (kg)	Average Carc Time (years)	Days per year (day/year)	Carc Dose (mg/kg/day)	Slope Factor (mg/kg-day) ⁻¹	Carcinogenic Risk	Percent Contribution to Risk
Heptachlor	0.00150	4.6E+09	350	20	4	70	70	365	5.07E-15	4.50E+00	2.28E-14	0.00155
Dieldren	0.0031	4.6E+09	350	20	4	70	70	365	1.05E-14	1.60E+00	1.68E-14	0.00114
4,4'-DDT	0.0134	4.6E+09	350	20	4	70	70	365	4.53E-14	3.40E-01	1.54E-14	0.00105
alpha-Chlordane	0.0025	4.6E+09	350	20	4	70	70	365	6.45E-15	1.30E+00	1.10E-14	0.00075
gamma-Chlordane	0.0024	4.6E+09	350	20	4	70	70	365	6.12E-15	1.30E+00	1.05E-14	0.00072
Arsenic	1.05	4.6E+09	350	20	4	70	70	365	3.55E-12	5.00E+01	1.78E-10	12.05221
Beryllium	0.14	4.6E+09	350	20	4	70	70	365	4.73E-13	6.40E+00	3.98E-12	0.26987
Cadmium	0.62	4.6E+09	350	20	4	70	70	365	2.10E-12	6.30E+00	1.32E-11	0.89668
Chromium	9.00	4.6E+09	350	20	4	70	70	365	3.04E-11	4.20E+01	1.28E-09	86.78
TOTAL											1.47E-08	100.00

Contaminant	Concentration Noncarcinogen (mg/kg)	Particulate Emission Factor (m3/kg)	Exposure Frequency (events/yr)	Inhalation Rate (m3/day)	Exposure Duration (yrs)	Body Weight (kg)	Average Noncarc Time (years)	Days per year (day/year)	Noncarc Dose (mg/kg/day)	Reference Dose (mg/kg-day)	Noncarcinogenic Risk	Percent Noncarcinogenic Risk
Manganese	51.70	4.6E+09	350	20	4	70	4	365	3.08E-09	4.00E-04	7.65E-08	88.72
Mercury	0.11	4.6E+09	350	20	4	70	4	365	6.61E-12	3.00E-04	2.17E-08	0.28
TOTAL											7.87E-08	100

PARTICULATE INHALATION EXPOSURE ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 74)
 REMEDIAL INVESTIGATION CTO-0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 FUTURE RESIDENTIAL CHILD

Intake from the Inhalation of particulates is calculated as follows:

$$\text{Intake (mg/kg-day)} = (C * EF * ED * IR * 1/PEF)/(BW * ATc \text{ or } ATnc * DY)$$

$$\text{Risk} = \text{Intake} * \text{CSF} \text{ or } \text{RID}$$

Where:

- C = contaminant concentration in soil (mg/kg)
- CSF = carcinogenic slope factor
- RID = reference dose for noncarcinogen
- IR = Inhalation rate (m3)
- EF = child exposure frequency (days)
- ED = child exposure duration (years)
- BW = child body weight (kg)
- ATc = averaging time for carcinogen (yr)
- ATnc = averaging time for noncarcinogen (yr)
- DY = day per year (day/yr)
- PEF = particulate emission factor (m3/kg)

- INPUTS
- Calculated
 - Specific
 - Specific
 - 10
 - 350
 - 6
 - 15
 - 70
 - 6
 - 365
 - 4.63E+09

Note: Inputs are scenario and site specific

Contaminant	Concentration Carcinogen (mg/kg)	Particulate Emission Factor (m3/kg)	Exposure Frequency (events/yr)	Inhalation Rate (m3/day)	Exposure Duration (yrs)	Body Weight (kg)	Average Caro Time (years)	Days per year (day/year)	Caro Dose (mg/kg/day)	Slope Factor (mg/kg-day) ⁻¹	Carcinogenic Risk	Percent Contribution to Risk
Trichloroethene	0.0059	4.6E+09	350	10	6	15	70	365	8.88E-14	8.00E-03	4.19E-18	0.00
Heptachlor	0.0035	4.6E+09	350	10	6	15	70	365	4.14E-14	4.50E+00	1.86E-13	0.07
Heptachlor Epoxide	0.00143	4.6E+09	350	10	6	15	70	365	1.69E-14	9.10E+00	1.54E-13	0.06
Dieldren	0.004	4.6E+09	350	10	6	15	70	365	4.73E-14	1.60E+01	7.57E-13	0.30
4,4'-DDT	0.0305	4.6E+09	350	10	6	15	70	365	3.61E-13	3.40E-01	1.23E-13	0.05
alpha-Chlordane	0.0031	4.6E+09	350	10	6	15	70	365	3.67E-14	1.30E+00	4.77E-14	0.02
gamma-Chlordane	0.0032	4.6E+09	350	10	6	15	70	365	3.70E-14	1.30E+00	4.92E-14	0.02
Arsenic	0.42	4.6E+09	350	10	6	15	70	365	4.97E-12	5.00E+01	2.49E-10	99.47
TOTAL											2.50E-10	100.00

Contaminant	Concentration Noncarcinogen (mg/kg)	Particulate Emission Factor (m3/kg)	Exposure Frequency (events/yr)	Inhalation Rate (m3/day)	Exposure Duration (yrs)	Body Weight (kg)	Average Noncarc Time (years)	Days per year (day/year)	Noncarc Dose (mg/kg/day)	Reference Dose (mg/kg-day)	Noncarcinogenic Risk	Percent Noncarcinogenic Risk
Manganese	6.8	4.6E+09	350	10	6	15	6	365	9.11E-10	4.00E-04	2.28E-08	99.00
Mercury	0.05	4.6E+09	350	10	6	15	6	365	6.60E-12	3.00E-04	2.30E-08	1.00
TOTAL											2.30E-08	100.00

File Name: PLWQ4

PARTICULATE INHALATION EXPOSURE ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 74)
 REMEDIAL INVESTIGATION CTO-0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 FUTURE RESIDENTIAL ADULT

Intake from the inhalation of particulates is calculated as follows:

$$\text{Intake (mg/kg-day)} = (C * EF * ED * IR * 1/PEF) / (BW * ATc \text{ or } ATnc * DY)$$

$$\text{Risk} = \text{Intake} * CSF \text{ or } RfD$$

Where:	INPUTS
C = contaminant concentration in soil (mg/kg)	Calculated
CSF = carcinogenic slope factor	Specific
RfD = reference dose for noncarcinogen	Specific
IR = Inhalation rate (m3)	20
EF = adult exposure frequency (days)	350
ED = adult exposure duration (years)	24
BW = adult body weight (kg)	70
ATc = averaging time for carcinogen (yr)	70
ATnc = averaging time for noncarcinogen (yr)	24
DY = day per year (day/yr)	365
PEF = particulate emission factor (m3/kg)	4.83E+09

Note: Inputs are scenario and site specific

Contaminant	Concentration Carcinogen (mg/kg)	Particulate Emission Factor (m3/kg)	Exposure Frequency (events/yr)	Inhalation Rate (m3/day)	Exposure Duration (yrs)	Body Weight (kg)	Average Carc Time (years)	Days per year (day/year)	Carc Dose (mg/kg/day)	Slope Factor (mg/kg-day) ⁻¹	Carcinogenic Risk	Percent Contribution to Risk
Trichloroethene	0.0059	4.8E+09	350	20	24	70	70	365	1.20E-13	6.00E+03	7.18E-18	0.00
Heptachlor	0.0035	4.8E+09	350	20	24	70	70	365	7.10E-14	4.50E+00	3.20E-13	0.07
Heptachlor Epoxide	0.00143	4.8E+09	350	20	24	70	70	365	2.90E-14	9.10E+00	2.64E-13	0.06
Dieldrin	0.004	4.8E+09	350	20	24	70	70	365	8.12E-14	1.60E+01	1.30E-12	0.30
4,4'-DDT	0.0305	4.8E+09	350	20	24	70	70	365	8.19E-13	3.40E+01	2.10E-13	0.05
alpha-Chlordane	0.0031	4.8E+09	350	20	24	70	70	365	8.29E-14	1.30E+00	8.18E-14	0.02
gamma-Chlordane	0.0032	4.8E+09	350	20	24	70	70	365	6.49E-14	1.30E+00	8.44E-14	0.02
Arsenic	0.42	4.8E+09	350	20	24	70	70	365	8.52E-12	6.00E+01	4.26E-10	99.47
TOTAL											4.28E-10	100.00

Contaminant	Concentration Noncarcinogen (mg/kg)	Particulate Emission Factor (m3/kg)	Exposure Frequency (events/yr)	Inhalation Rate (m3/day)	Exposure Duration (yrs)	Body Weight (kg)	Average Noncarc Time (years)	Days per year (day/year)	Noncarc Dose (mg/kg/day)	Reference Dose (mg/kg-day)	Noncarcinogenic Risk	Percent Noncarcinogenic Risk
Manganese	8.8	4.8E+09	350	20	24	70	24	365	3.91E-10	4.00E-04	9.78E-07	99.00
Mercury	0.05	4.8E+09	350	20	24	70	24	365	2.96E-12	3.00E-04	9.86E-09	1.00
TOTAL											9.86E-07	100.00

File Name: PI.WQ5

PARTICULATE INHALATION EXPOSURE ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 74)
 REMEDIAL INVESTIGATION CTO-0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 CURRENT MILITARY PERSONNEL

Intake from the inhalation of particulates is calculated as follows:

$$\text{Intake (mg/kg-day)} = (C * EF * ED * IR * 1/PEF)/(BW * ATc \text{ or } ATnc * DY)$$

$$\text{Risk} = \text{Intake} * \text{CSF} \text{ or } /\text{RID}$$

Where:

C = contaminant concentration in soil (mg/kg)	INPUTS
CSF = carcinogenic slope factor	Calculated
RID = reference dose for noncarcinogen	Specific
IR = Inhalation rate (m3)	Specific
EF = adult exposure frequency (days)	20
ED = adult exposure duration (years)	350
BW = adult body weight (kg)	4
ATc = averaging time for carcinogen (yr)	70
ATnc = averaging time for noncarcinogen (yr)	70
DY = day per year (day/yr)	4
PEF = particulate emission factor (m3/kg)	365
	4.63E+09

Note: Inputs are scenario and site specific

Contaminant	Concentration Carcinogen (mg/kg)	Particulate Emission Factor (m3/kg)	Exposure Frequency (events/yr)	Inhalation Rate (m3/day)	Exposure Duration (yrs)	Body Weight (kg)	Average Carc Time (years)	Days per year (day/year)	Carc Dose (mg/kg/day)	Slope Factor (mg/kg-day)-1	Carcinogenic Risk	Percent Contribution to Risk
Trichloroethene	0.0058	4.6E+09	350	20	4	70	70	365	1.89E-14	6.00E-03	1.20E-18	0.00
Heptachlor	0.0035	4.6E+09	350	20	4	70	70	365	1.16E-14	4.50E+00	5.33E-14	0.07
Heptachlor Epoxide	0.00143	4.6E+09	350	20	4	70	70	365	4.84E-15	9.10E+00	4.40E-14	0.06
Dieldren	0.004	4.6E+09	350	20	4	70	70	365	1.35E-14	1.60E+01	2.16E-13	0.30
4,4'-DDT	0.0305	4.6E+09	350	20	4	70	70	365	1.03E-13	3.40E-01	3.51E-14	0.05
alpha-Chlordane	0.0031	4.6E+09	350	20	4	70	70	365	1.05E-14	1.30E+00	1.36E-14	0.02
gamma-Chlordane	0.0032	4.6E+09	350	20	4	70	70	365	1.08E-14	1.30E+00	1.41E-14	0.02
Arsenic	0.42	4.6E+09	350	20	4	70	70	365	1.42E-12	5.00E+01	7.10E-11	89.47
TOTAL											7.14E-11	100.00

Contaminant	Concentration Noncarcinogen (mg/kg)	Particulate Emission Factor (m3/kg)	Exposure Frequency (events/yr)	Inhalation Rate (m3/day)	Exposure Duration (yrs)	Body Weight (kg)	Average Noncarc Time (years)	Days per year (day/year)	Noncarc Dose (mg/kg/day)	Reference Dose (mg/kg-day)	Noncarcinogenic Risk	Percent Noncarcinogenic Risk
Manganese	8.8	4.6E+09	350	20	4	70	4	365	3.91E-10	4.00E-04	9.78E-07	89.00
Mercury	0.05	4.6E+09	350	20	4	70	4	365	2.96E-12	3.00E-04	9.88E-09	1.00
TOTAL											8.88E-07	100.00

File Name: PI.WQ6

**EXAMPLE GROUNDWATER INGESTION CALCULATIONS
OPERABLE UNIT NO. 4
CONTRACT TASK ORDER 0212**

Purpose: Estimate intake/risk from ingestion of groundwater

$$\text{Intake (mg/kg}\cdot\text{day)} = \frac{C \times IR \times EF \times ED}{BW \times AT}$$

Where:

C	=	Contaminant concentration in groundwater (mg/L)
IR	=	Daily intake ingestion rate (L/day)
EF	=	Exposure frequency (days/year)
ED	=	Exposure duration (years)
BW	=	Body weight (kg)
AT _c	=	Averaging time carcinogen (days)
AT _{nc}	=	Averaging time noncarcinogen (days)

Risks:

$$\begin{aligned} \text{Carcinogens} &= \text{Intake (mg/kgday)} \times \text{CSF (mg/kgday)}^{-1} \\ \text{Noncarcinogens} &= \text{Intake (mg/kgday)} / \text{RfD (mg/kgday)} \end{aligned}$$

Example Carcinogen: Trichloroethene

$$\begin{aligned} \text{Intake (mg/kg}\cdot\text{day)} &= \frac{0.013 \text{ mg/L} \times 2 \text{ L/day} \times 350 \text{ days/yr} \times 30 \text{ yrs}}{70 \text{ kg} \times 25,550 \text{ days}} \\ &= 1.5\text{E-}04 \end{aligned}$$

$$\text{Risk} = 1.5\text{E-}04 \text{ mg/kgday} \times 1.1\text{E-}02 \text{ mg/kgday}^{-1} = 1.7\text{E-}06$$

Example Noncarcinogen: Trichloroethene

$$\begin{aligned} \text{Intake (mg/kg}\cdot\text{day)} &= \frac{0.013 \text{ mg/L} \times 2 \text{ L/day} \times 350 \text{ days/yr} \times 30 \text{ yrs}}{70 \text{ kg} \times 10,950 \text{ days}} \\ &= 3.5\text{E-}04 \end{aligned}$$

$$\text{Risk} = \frac{3.5\text{E-}04 \text{ mg/kg}\cdot\text{day}}{6\text{E-}03 \text{ mg/kg}\cdot\text{day}} = 0.58$$

GROUNDWATER INGESTION EXPOSURE ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 41)
 REMEDIAL INVESTIGATION CTO-0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 FUTURE RESIDENTIAL CHILD

Intake from drinking water is calculated as follows:

$$\text{Intake (mg/kg-day)} = C * IRw * EF * ED/BW * AT \text{ or } ATnc * DY$$

$$\text{Risk} = \text{Intake} * \text{CSF or /RID}$$

Where:

INPUTS

- C = contaminant concentration in water (mg/l)
- IRw = child daily water ingestion rate (L/Day) 1
- EF = child exposure frequency (days/yr) 350
- ED = child exposure duration (yr) 6
- BW = child body weight (kg) 15
- ATc = averaging time for carcinogen (yr) 70
- ATnc = averaging time for noncarcinogen (yr) 6
- DY = days per year (day/year) 365
- CSF = cancer slope factor (mg/kg-day)⁻¹ specific
- RfD = reference dose (mg/kg-day) specific

Note: Inputs are scenario and site specific

Contaminant	Concentration Carcinogen (mg/l)	Ingestion Rate (L/day) Child	Exposure Frequency (day/year) Child	Exposure Duration (year) Child	Body Weight (kg) Child	Average Carc Time (years)	Days per year (day/yr)	Carc Dose (mg/kg-day) Child	Slope Factor (mg/kg-day) ⁻¹	Carcinogenic Risk Child	Percent Carcinogenic Risk Child
Arsenic	0.0253	1	350	6	15	70	365	1.39E-04	1.70E+00	2.36E-04	37.741
Beryllium	0.0165	1	350	6	15	70	365	9.04E-05	4.30E+00	3.89E-04	62.259
										6.24E-04	100.00

Contaminant	Concentration Noncarcinogen (mg/l)	Ingestion Rate (L/day) Child	Exposure Frequency (day/year) Child	Exposure Duration (year) Child	Body Weight (kg) Child	Average Noncarc Time (years)	Days per year (day/yr)	Noncarc Dose (mg/kg-day) Child	Reference Dose (mg/kg-day)	Noncarcinogenic Risk Child	Percent Noncarcinogenic Risk Child
Arsenic	0.0253	1	350	6	15	6	365	1.62E-03	3.00E-04	5.39E+00	34.48
Barium	0.7180	1	350	6	15	6	365	4.59E-02	7.00E-02	6.56E-01	4.19
Beryllium	0.0165	1	350	6	15	6	365	1.05E-03	7.00E-02	1.51E-02	0.10
Cadmium	0.0111	1	350	6	15	6	365	7.10E-04	5.00E-04	1.42E+00	9.08
Chromium	0.1660	1	350	6	15	6	365	1.06E-02	7.00E-02	1.52E-01	0.97
Cobalt	0.035	1	350	6	15	6	365	2.24E-03	6.00E-02	3.73E-02	0.24
Manganese	0.4700	1	350	6	15	6	365	3.00E-02	5.00E-03	6.01E+00	38.43
Nickel	0.0693	1	350	6	15	6	365	4.43E-03	2.00E-02	2.22E-01	1.42
Vanadium	0.1790	1	350	6	15	6	365	1.14E-02	7.00E-03	1.63E+00	10.45
Zinc	0.4720	1	350	6	15	6	365	3.02E-02	3.00E-01	1.01E-01	0.64
TOTAL										15.6	100.00

GROUNDWATER INGESTION EXPOSURE ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 41)
 REMEDIAL INVESTIGATION CTO-0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 FUTURE RESIDENTIAL ADULT

Intake from drinking water is calculated as follows:

$$\text{Intake (mg/kg-day)} = C * IRw * EF * ED/BW * AT \text{ or } ATnc * DY$$

$$\text{Risk} = \text{Intake} * \text{CSF or /RfD}$$

Where:	INPUTS
C = contaminant concentration in water (mg/l)	
IRw = adult daily water ingestion rate (L/Day)	2
EF = adult exposure frequency (days/yr)	350
ED = adult exposure duration (yr)	30
BW = adult body weight (kg)	70
ATc = averaging time for carcinogen (yr)	70
ATnc = averaging time for noncarcinogen (yr)	30
DY = days per year (day/year)	365
CSF = cancer slope factor (mg/kg-day) ⁻¹	specific
RfD = reference dose (mg/kg-day)	specific

Note: Inputs are scenario and site specific

Contaminant	Concentration Carcinogen (mg/l)	Ingestion Rate (L/day) Adult	Exposure Frequency (day/year) Adult	Exposure Duration (year) Adult	Body Weight (kg) Adult	Average Carc Time (years)	Days per year (day/yr)	Carc Dose (mg/kg-day) Adult	Slope Factor (mg/kg-day) ⁻¹	Carcinogenic Risk Adult	Percent Carcinogenic Risk Adult
Arsenic	0.0253	2	350	30	70	70	365	2.97E-04	1.70E+00	5.05E-04	37.741
Beryllium	0.0165	2	350	30	70	70	365	1.94E-04	4.30E+00	8.33E-04	62.259
										1.34E-03	100.00

Contaminant	Concentration Noncarcinogen (mg/l)	Ingestion Rate (L/day) Adult	Exposure Frequency (day/year) Adult	Exposure Duration (year) Adult	Body Weight (kg) Adult	Average Noncarc Time (years)	Days per year (day/yr)	Noncarc Dose (mg/kg-day) Adult	Reference Dose (mg/kg-day)	Noncarcinogenic Risk Adult	Percent Noncarcinogenic Risk Adult
Arsenic	0.0253	2	350	30	70	30	365	6.93E-04	3.00E-04	2.31E+00	30.28
Barium	0.7180	2	350	30	70	30	365	1.97E-02	7.00E-02	2.81E-01	3.68
Beryllium	0.0165	2	350	30	70	30	365	4.52E-04	5.00E-03	9.04E-02	1.18
Cadmium	0.0111	2	350	30	70	30	365	3.04E-04	5.00E-04	6.08E-01	7.97
Chromium	0.1660	2	350	30	70	30	365	4.55E-03	5.00E-03	9.10E-01	11.92
Cobalt	0.035	2	350	30	70	30	365	9.59E-04	6.00E-02	1.60E-02	0.21
Manganese	0.4700	2	350	30	70	30	365	1.29E-02	5.00E-03	2.58E+00	33.75
Nickel	0.0693	2	350	30	70	30	365	1.90E-03	2.00E-02	9.49E-02	1.24
Vanadium	0.1790	2	350	30	70	30	365	4.90E-03	7.00E-03	7.01E-01	9.18
Zinc	0.4720	2	350	30	70	30	365	1.29E-02	3.00E-01	4.31E-02	0.56
TOTAL										7.6	100.00

GROUNDWATER INGESTION EXPOSURE ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 74)
 REMEDIAL INVESTIGATION CTO-0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 FUTURE RESIDENTIAL CHILD

Intake from drinking water is calculated as follows:

$$\text{Intake (mg/kg-day)} = C * IRw * EF * ED/BW * AT \text{ or } ATnc * DY$$

$$\text{Risk} = \text{Intake} * CSF \text{ or } RfD$$

Where:

INPUTS

- C = contaminant concentration in water (mg/l)
- IRw = child daily water ingestion rate (L/Day)
- EF = child exposure frequency (days/yr)
- ED = child exposure duration (yr)
- BW = child body weight (kg)
- ATc = averaging time for carcinogen (yr)
- ATnc = averaging time for noncarcinogen (yr)
- DY = days per year (day/year)
- CSF = cancer slope factor (mg/kg-day)⁻¹
- RfD = reference dose (mg/kg-day)

- 1
- 350
- 6
- 15
- 70
- 6
- 365
- specific
- specific

Note: Inputs are scenario and site specific

Contaminant	Concentration Carcinogen (mg/l)	Ingestion Rate (L/day) Child	Exposure Frequency (day/year) Child	Exposure Duration (year) Child	Body Weight (kg) Child	Average Carc Time (years)	Days per year (day/yr)	Carc Dose (mg/kg-day) Child	Slope Factor (mg/kg-day) ⁻¹	Carcinogenic Risk Child	Percent Carcinogenic Risk Child
Arsenic	0.0151	1	350	6	15	70	365	8.27E-05	1.70E+00	1.41E-04	78.863
Beryllium	0.0016	1	350	6	15	70	365	8.77E-06	4.30E+00	3.77E-05	21.137
										1.78E-04	100.00

Contaminant	Concentration Noncarcinogen (mg/l)	Ingestion Rate (L/day) Child	Exposure Frequency (day/year) Child	Exposure Duration (year) Child	Body Weight (kg) Child	Average Noncarc Time (years)	Days per year (day/yr)	Noncarc Dose (mg/kg-day) Child	Reference Dose (mg/kg-day)	Noncarcinogenic Risk Child	Percent Noncarcinogenic Risk Child
Arsenic	0.0151	1	350	6	15	6	365	9.65E-04	3.00E-04	3.22E+00	40.52
Barium	0.1150	1	350	6	15	6	365	7.35E-03	7.00E-02	1.05E-01	1.32
Beryllium	0.0016	1	350	6	15	6	365	1.02E-04	5.00E-03	2.05E-02	0.26
Chromium	0.0566	1	350	6	15	6	365	3.62E-03	5.00E-03	7.24E-01	9.11
Manganese	0.081	1	350	6	15	6	365	5.18E-03	5.00E-03	1.04E+00	13.04
Vanadium	0.3010	1	350	6	15	6	365	1.92E-02	7.00E-03	2.75E+00	34.62
Zinc	0.4170	1	350	6	15	6	365	2.67E-02	3.00E-01	8.89E-02	1.12
TOTAL										7.9	100.00

GROUNDWATER INGESTION EXPOSURE ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 74)
 REMEDIAL INVESTIGATION CTO-0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 FUTURE RESIDENTIAL ADULT

Intake from drinking water is calculated as follows:

$$\text{Intake (mg/kg-day)} = C * IRw * EF * ED/BW * AT \text{ or } ATnc * DY$$

$$\text{Risk} = \text{Intake} * \text{CSF or /RfD}$$

Where:

INPUTS

C = contaminant concentration in water (mg/l)	
IRw = adult daily water ingestion rate (L/Day)	2
EF = adult exposure frequency (days/yr)	350
ED = adult exposure duration (yr)	24
BW = adult body weight (kg)	70
ATc = averaging time for carcinogen (yr)	70
ATnc = averaging time for noncarcinogen (yr)	24
DY = days per year (day/year)	365
CSF = cancer slope factor (mg/kg-day) ⁻¹	specific
RfD = reference dose (mg/kg-day)	specific

Note: Inputs are scenario and site specific

Contaminant	Concentration Carcinogen (mg/l)	Ingestion Rate (L/day) Adult	Exposure Frequency (day/year) Adult	Exposure Duration (year) Adult	Body Weight (kg) Adult	Average Carc Time (years)	Days per year (day/yr)	Carc Dose (mg/kg-day) Adult	Slope Factor (mg/kg-day) ⁻¹	Carcinogenic Risk Adult	Percent Carcinogenic Risk Adult
Arsenic	0.0151	2	350	24	70	70	365	1.42E-04	1.70E+00	2.41E-04	78.863
Beryllium	0.0016	2	350	24	70	70	365	1.50E-05	4.30E+00	6.46E-05	21.137
										3.06E-04	100.00

Contaminant	Concentration Noncarcinogen (mg/l)	Ingestion Rate (L/day) Adult	Exposure Frequency (day/year) Adult	Exposure Duration (year) Adult	Body Weight (kg) Adult	Average Noncarc Time (years)	Days per year (day/yr)	Noncarc Dose (mg/kg-day) Adult	Reference Dose (mg/kg-day)	Noncarcinogenic Risk Adult	Percent Noncarcinogenic Risk Adult
Arsenic	0.0151	2	350	24	70	24	365	4.14E-04	3.00E-04	1.38E+00	40.52
Barium	0.1150	2	350	24	70	24	365	3.15E-03	7.00E-02	4.50E-02	1.32
Beryllium	0.0016	2	350	24	70	24	365	4.38E-05	5.00E-03	8.77E-03	0.26
Chromium	0.0566	2	350	24	70	24	365	1.55E-03	5.00E-03	3.10E-01	9.11
Manganese	0.081	2	350	24	70	24	365	2.22E-03	5.00E-03	4.44E-01	13.04
Vanadium	0.3010	2	350	24	70	24	365	8.25E-03	7.00E-03	1.18E+00	34.62
Zinc	0.4170	2	350	24	70	24	365	1.14E-02	3.00E-01	3.81E-02	1.12
TOTAL										3.4	100.00

**EXAMPLE DERMAL CONTACT WITH GROUNDWATER CALCULATIONS
OPERABLE UNIT NO. 4
CONTRACT TASK ORDER 0212**

Purpose: Estimate intake/risk from dermal contact with groundwater

$$\text{Intake (mg/kg-day)} = \frac{C \times SA \times PC \times ET \times EF \times ED \times CF}{BW \times AT}$$

Where:

C	=	Contaminant concentration in groundwater (mg/L)
SA	=	Exposed skin surface available for contact (cm ²)
PC	=	Permeability constant (cm/hr)
ET	=	Exposure time (hr/day)
EF	=	Exposure frequency (days/year)
ED	=	Exposure duration (years)
CF	=	Conversion factor (1 L/1,000 cm ³)
BW	=	Body weight (kg)
AT _c	=	Averaging time carcinogen (days)
AT _{nc}	=	Averaging time noncarcinogen (days)

Risks:

$$\begin{aligned} \text{Carcinogens} &= \text{Intake (mg/kgday)} \times \text{CSF (mg/kgday)}^{-1} \\ \text{Noncarcinogens} &= \text{Intake (mg/kgday)} / \text{RfD (mg/kgday)} \end{aligned}$$

Example Carcinogen: Trichloroethene

$$\begin{aligned} \text{Intake (mg/kg-day)} &= \frac{0.013 \text{ mg/L} \times 23,000 \text{ cm}^2 \times 2.3\text{E-}01 \text{ cm/hr} \times 0.25 \text{ hr/day} \times 350 \text{ days/yr} \times 3}{70 \text{ kg} \times 25,550 \text{ days}} \\ &= 4.1\text{E-}05 \end{aligned}$$

$$\text{Risk} = 4.1\text{E-}05 \text{ mg/kgday} \times 1.1\text{E-}02 \text{ mg/kgday}^{-1} = 4\text{E-}07$$

Example Noncarcinogen: Trichloroethene

$$\begin{aligned} \text{Intake (mg/kg-day)} &= \frac{0.013 \text{ mg/L} \times 23,000 \text{ cm}^2/\text{hr} \times 2.3\text{E-}01 \text{ cm/hr} \times 0.25 \text{ hr/day} \times 350 \text{ days/yr}}{70 \text{ kg} \times 10,950 \text{ days}} \\ &= 5\text{E-}04 \end{aligned}$$

$$\text{Risk} = \frac{5\text{E-}04 \text{ mg/kg-day}}{6\text{E-}03 \text{ mg/kg-day}} = 8\text{E-}02$$

Re: Site 69 Future Residential Adult

GROUNDWATER DERMAL CONTACT ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 4)
 REMEDIAL INVESTIGATION CTD-0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 FUTURE RESIDENTIAL CHILD

Dermal Contact from groundwater is calculated as follows:

$$\text{Intake (mg/kg day)} = \text{CW} * \text{SA} * \text{PC} * \text{ET} * \text{EF} * \text{ED} * \text{CF} / \text{BW} * \text{ATc or ATnc} * \text{DY}$$

$$\text{Risk} = \text{Intake} * \text{CSF or RfD}$$

Where:

CW = contaminant concentration in water (mg/l)	
SA = child skin surface available for contact (cm ²)	23000
PC = contaminant specific dermal permeability (cm/hr)	Specific
ET = child exposure time (hours/day)	0.25
EF = child exposure frequency (days/yr)	365
ED = child exposure duration (years)	30
CF = volumetric conversion factor for water (1 liter/1000 cm ³)	0.001
BW = child body weight (kg)	70
ATc = averaging time for carcinogen (yr)	70
ATnc = averaging time for noncarcinogen (yr)	30
DY = days per year (days)	365

INPUTS

Note: Inputs are site and scenario specific

Contaminant	Concentration Carcinogen (mg/l)	Surface Area (cm ²) Child	Dermal Permeability (cm/hr)	Exposure Time (hours/day) Child	Exposure Frequency (days/yr) Child	Exposure Duration (years) Child	Volumetric Conversion (L/m ³)	Body Weight (kg) Child	Average Carc Time (years)	Days per Year (days)	Chc Dose (mg/kg day) Child	Dose Factor (mg/kg day) ⁻¹	Carcinogenic Risk Child	Percent Carcinogenic Risk Child
Chronic	0.0253	23000	1.65E-03	0.25	365	30	0.001	70	70	365	1.32E-08	1.70E+00	2.25E-08	37.74
Beryllium	0.0165	23000	1.65E-03	0.25	365	30	0.001	70	70	365	8.63E-07	4.90E+00	3.71E-08	62.28
TOTAL													6.96E-08	100.00

	Concentration Noncarcinogen (mg/l)	Surface Area (cm ²) Child	Dermal Permeability (cm/hr)	Exposure Time (hours/day) Child	Exposure Frequency (days/yr) Child	Exposure Duration (years) Child	Volumetric Conversion (L/m ³)	Body Weight (kg) Child	Average Noncarc Time (years)	Days per Year (days)	Noncarc Dose (mg/kg day) Child	Reference Dose (mg/kg day)	Noncarc Risk Child	Percent Noncarcinogenic Risk Child
Chronic	0.0253	23000	1.65E-03	0.25	365	30	0.001	70	30	365	3.06E-08	3.00E-04	1.02E-02	31.36
Barium	0.718	23000	1.65E-03	0.25	365	30	0.001	70	30	365	8.77E-05	7.00E-02	1.25E-03	3.81
Beryllium	0.0165	23000	1.65E-03	0.25	365	30	0.001	70	30	365	2.01E-08	5.00E-03	4.00E-04	1.23
Cadmium	0.0111	23000	1.65E-03	0.25	365	30	0.001	70	30	365	1.36E-08	5.00E-03	2.71E-04	0.83
Chromium	0.188	23000	1.65E-03	0.25	365	30	0.001	70	30	365	2.03E-05	5.00E-03	4.05E-03	12.35
Cobalt	0.035	23000	1.65E-03	0.25	365	30	0.001	70	30	365	4.27E-08	5.00E-02	7.12E-05	0.22
Manganese	0.47	23000	1.65E-03	0.25	365	30	0.001	70	30	365	5.74E-05	5.00E-03	1.15E-02	34.98
Nickel	0.0993	23000	1.65E-03	0.25	365	30	0.001	70	30	365	8.48E-08	5.00E-03	1.69E-03	5.15
Vanadium	0.179	23000	1.65E-03	0.25	365	30	0.001	70	30	365	2.19E-05	7.00E-03	3.12E-03	9.51
Zinc	0.472	23000	1.65E-03	0.25	365	30	0.001	70	30	365	5.78E-05	3.00E-01	1.92E-04	0.69
TOTAL													100.00	100.00

File Name: GWDC.W05

GROUNDWATER DERMAL CONTACT EXPOSURE ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 41)
 REMEDIAL INVESTIGATION CTO 0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 FUTURE RESIDENTIAL ADULT

Dermal Contact from groundwater is calculated as follows:

$$\text{Intake (mg/kg day)} = \text{CW} * \text{SA} * \text{PC} * \text{ET} * \text{EF} * \text{ED} * \text{CF} / \text{BW} * \text{ATc or ATnc} * \text{DY}$$

Risk = Intake * CSF or /RfD

Where:	INPUTS
CW = contaminant concentration in water (mg/l)	
SA = adult skin surface available for contact (cm ²)	23000
PC = contaminant specific dermal permeability (cm/hr)	Specific
ET = adult exposure time (hours/day)	0.25
EF = adult exposure frequency (days/yr)	365
ED = adult exposure duration (years)	30
CF = volumetric conversion factor for water (1 liter/1000 cm ³)	0.001
BW = adult body weight (kg)	70
ATc = averaging time for carcinogen (yr)	70
ATnc = averaging time for noncarcinogen (yr)	30
DY = days per year (days)	365

Note: Inputs are site and scenario specific

Contaminant	Concentration Carcinogen (mg/l)	Surface Area (cm ²) Adult	Dermal Permeability (cm/hr)	Exposure Time (hours/day) Adult	Exposure Frequency (days/yr) Adult	Exposure Duration (years) Adult	Volumetric Conversion (l/m ³)	Body Weight (kg) Adult	Averageing Conc Time (years)	Days per Year (days)	Dose (mg/kg day) Adult	Slope Factor (mg/kg day) ⁻¹	Carcinogenic Risk Adult	Percent Carcinogenic Risk Adult
Asenic	0.0253	23000	1.55E-03	0.25	365	30	0.001	70	70	365	1.32E-05	1.70E+00	2.25E-05	37.74
Beryllium	0.0185	23000	1.55E-03	0.25	365	30	0.001	70	70	365	8.63E-07	4.30E+00	3.71E-06	62.88
DTAL													5.96E-05	100.00

	Concentration Noncarcinogen (mg/l)	Surface Area (cm ²) Adult	Dermal Permeability (cm/hr)	Exposure Time (hours/day) Adult	Exposure Frequency (days/yr) Adult	Exposure Duration (years) Adult	Volumetric Conversion (l/m ³)	Body Weight (kg) Adult	Average Noncnc Time (years)	Days per Year (days)	Noncnc Dose (mg/kg day) Adult	Hazardous Dose (mg/kg day)	Noncnc Risk Adult	Percent Noncarcinogenic Risk Adult
Asenic	0.0253	23000	1.55E-03	0.25	365	30	0.001	70	30	365	3.05E-05	3.00E-04	1.03E-02	31.35
Barium	0.718	23000	1.55E-03	0.25	365	30	0.001	70	30	365	8.77E-05	7.00E-02	1.25E-03	3.81
Beryllium	0.0185	23000	1.55E-03	0.25	365	30	0.001	70	30	365	2.01E-06	5.00E-03	4.03E-04	1.23
Cadmium	0.0111	23000	1.55E-03	0.25	365	30	0.001	70	30	365	1.38E-06	5.00E-03	2.71E-04	0.83
Chromium	0.168	23000	1.55E-03	0.25	365	30	0.001	70	30	365	2.00E-05	5.00E-03	4.05E-03	12.35
Cobalt	0.035	23000	1.55E-03	0.25	365	30	0.001	70	30	365	4.27E-06	5.00E-02	7.12E-05	0.22
Manganese	0.47	23000	1.55E-03	0.25	365	30	0.001	70	30	365	5.74E-05	5.00E-03	1.15E-02	34.98
Nickel	0.0693	23000	1.55E-03	0.25	365	30	0.001	70	30	365	8.46E-06	5.00E-03	1.65E-03	5.15
Vanadium	0.179	23000	1.55E-03	0.25	365	30	0.001	70	30	365	2.18E-05	7.00E-03	3.12E-03	9.51
Zinc	0.472	23000	1.55E-03	0.25	365	30	0.001	70	30	365	5.78E-05	3.00E-01	1.92E-04	0.59
													0.00	100.00

GROUNDWATER DERMAL CONTACT ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 74)
 REMEDIAL INVESTIGATION CTD 0212
 MOB CAMP LEJELINE, NORTH CAROLINA
 FUTURE RESIDENTIAL CHILD

Dermal Contact from groundwater is calculated as follows:

$$\text{Intake (mg/kg day)} = \text{CW} * \text{SA} * \text{PC} * \text{ET} * \text{EF} * \text{ED} * \text{CF} / \text{BW} * \text{ATc or ATnc} * \text{DY}$$

$$\text{Risk} = \text{Intake} * \text{CSF or FQD}$$

Where:

CW = contaminant concentration in water (mg/l)	INPUTS
SA = child skin surface available for contact (cm ²)	10000
PC = contaminant specific dermal permeability (cm/hr)	Specific
ET = child exposure time (hours/day)	0.25
EF = child exposure frequency (days/yr)	350
ED = child exposure duration (years)	6
CF = volumetric conversion factor for water (1 liter/1000 cm ³)	0.001
BW = child body weight (kg)	15
ATc = averaging time for carcinogen (yr)	70
ATnc = averaging time for noncarcinogen (yr)	6
DY = days per year (days)	365

Note: Inputs are site and scenario specific

Contaminant	Concentration Carcinogen (mg/l)	Surface Area (cm ²) Child	Dermal Permeability (cm/hr)	Exposure Time (hours/day) Child	Exposure Frequency (days/yr) Child	Exposure Duration (years) Child	Volumetric Conversion (L/m ³)	Body Weight (kg) Child	Average Carc Time (years)	Days per Year (days)	Carc Dose (mg/kg-day) Child	Skin Factor (mg/kg-day) ⁻¹	Carcinogenic Risk Child	Percent Carcinogenic Risk Child
Nitrite	0.0161	10000	1.55E-03	0.25	350	6	0.001	15	70	365	3.21E-07	1.70E+00	6.45E-07	78.88
Nitrate	0.0016	10000	1.55E-03	0.25	350	6	0.001	15	70	365	3.40E-08	4.30E+00	1.46E-07	21.14
TOTAL													6.91E-07	100.00

Contaminant	Concentration Noncarcinogen (mg/l)	Surface Area (cm ²) Child	Dermal Permeability (cm/hr)	Exposure Time (hours/day) Child	Exposure Frequency (days/yr) Child	Exposure Duration (years) Child	Volumetric Conversion (L/m ³)	Body Weight (kg) Child	Average Noncarc Time (years)	Days per Year (days)	Noncarc Dose (mg/kg-day) Child	Hazardous Dose (mg/kg-day)	Noncarc Risk Child	Percent Noncarcinogenic Risk Child
Nitrite	0.0161	10000	1.55E-03	0.25	350	6	0.001	15	6	365	3.74E-08	3.00E-04	1.25E-02	40.52
Barium	0.115	10000	1.55E-03	0.25	350	6	0.001	15	6	365	2.65E-09	7.00E-02	4.07E-04	1.32
Beryllium	0.0016	10000	1.55E-03	0.25	350	6	0.001	15	6	365	3.98E-07	5.00E-03	7.90E-05	0.26
Chromium	0.0568	10000	1.55E-03	0.25	350	6	0.001	15	6	365	1.40E-05	6.00E-03	2.80E-03	9.11
Manganese	0.021	10000	1.55E-03	0.25	350	6	0.001	15	6	365	2.01E-05	5.00E-03	4.01E-03	13.04
Vanadium	0.301	10000	1.55E-03	0.25	350	6	0.001	15	6	365	7.49E-05	7.00E-03	1.07E-02	34.82
Zinc	0.417	10000	1.55E-03	0.25	350	6	0.001	15	6	365	1.03E-04	3.00E-01	3.44E-04	1.12
TOTAL													0.03	100.00

File Name: GWDCW03

GROUNDWATER DERMAL CONTACT EXPOSURE ASSESSMENT
 OPERABLE UNIT NO. 4 (SITE 7)
 REMEDIAL INVESTIGATION CTD 0212
 MCB CAMP LEJEUNE, NORTH CAROLINA
 FUTURE RESIDENTIAL ADULT

Dermal Contact from groundwater is calculated as follows:

$$\text{Intake (mg/kg-day)} = \text{CW} * \text{SA} * \text{PC} * \text{ET} * \text{EF} * \text{ED} * \text{CF} / \text{BW} * \text{ATc or ATnc} * \text{DY}$$

Risk = Intake * CSF or /RfD

Where:	INPUTS
CW = contaminant concentration in water (mg/l)	23000
SA = adult skin surface available for contact (cm ²)	SpecFic
PC = contaminant specific dermal permeability (cm/hr)	0.25
ET = adult exposure time (hours/day)	360
EF = adult exposure frequency (days/yr)	30
ED = adult exposure duration (years)	0.001
CF = volumetric conversion factor for water (1 liter/1000 cm ³)	70
BW = adult body weight (kg)	70
ATc = averaging time for carcinogen (yr)	30
ATnc = averaging time for noncarcinogen (yr)	365
DY = days per year (days)	

Note: Inputs are site and scenario specific

Contaminant	Concentration Carcinogen (mg/l)	Surface Area (cm ²) Adult	Dermal Permeability (cm/hr)	Exposure Time (hours/day) Adult	Exposure Frequency (days/yr) Adult	Exposure Duration (years) Adult	Volumetric Conversion (L/m ³)	Body Weight (kg) Adult	Averaging Carc Time (years)	Days per Year (days)	Carc Dose (mg/kg day) Adult	Slope Factor (mg/kg day) ⁻¹	Carcinogenic Risk Adult	Percent Carcinogenic Risk Adult
Arsenic	0.0161	23000	1.55E-03	0.25	360	30	0.001	70	70	365	7.80E-07	1.70E+00	1.34E-08	78.88
Beryllium	0.0016	23000	1.55E-03	0.25	360	30	0.001	70	70	365	8.37E-08	4.30E+00	3.60E-07	21.14
TOTAL													1.70E-08	100.00

	Concentration Noncarcinogen (mg/l)	Surface Area (cm ²) Adult	Dermal Permeability (cm/hr)	Exposure Time (hours/day) Adult	Exposure Frequency (days/yr) Adult	Exposure Duration (years) Adult	Volumetric Conversion (L/m ³)	Body Weight (kg) Adult	Averaging Noncarc Time (years)	Days per Year (days)	Noncarc Dose (mg/kg day) Adult	Reference Dose (mg/kg day)	Noncarc Risk Adult	Percent Noncarcinogenic Risk Adult
Arsenic	0.0161	23000	1.55E-03	0.25	360	30	0.001	70	30	365	1.84E-08	3.00E-04	6.15E-03	40.62
Barium	0.115	23000	1.55E-03	0.25	360	30	0.001	70	30	365	1.40E-05	7.00E-02	2.01E-04	1.32
Beryllium	0.0016	23000	1.55E-03	0.25	360	30	0.001	70	30	365	1.95E-07	6.00E-03	3.91E-05	0.28
Chromium	0.0568	23000	1.55E-03	0.25	360	30	0.001	70	30	365	6.91E-08	6.00E-03	1.35E-03	9.11
Manganese	0.081	23000	1.55E-03	0.25	360	30	0.001	70	30	365	9.88E-05	6.00E-03	1.65E-03	13.04
Vanadium	0.301	23000	1.55E-03	0.25	360	30	0.001	70	30	365	3.67E-05	7.00E-03	5.25E-03	34.62
Zinc	0.417	23000	1.55E-03	0.25	360	30	0.001	70	30	365	5.05E-05	3.00E-01	1.70E-04	1.12
TOTAL													0.02	100.00

File Name: GWDC:WQ4

APPENDIX R
HABITAT SURVEY RESULTS

ECOLOGICAL EVALUATION
FIELD DATA SHEET - TERRESTRIAL

Project Name: MCB Camp Lejeune

Location: Jacksonville, NC

Date: 4/26/94

Sampling Location: Site 41, Area 41A Young Pine Forest

Data Collected By: L. Savage

Habitat Type: _____

Vegetation: Pines are relatively young, 6-12" DBH (est.), undergrowth is prevalent

Trees:

Dominant Species:

- | | |
|---------------------------------------|-----------|
| 1. <u>Loblolly pine - Pinus taeda</u> | 6. _____ |
| 2. _____ | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Secondary Species:

- | | |
|---|-----------|
| 1. <u>Sweet gum - Liquidambar styraciflua</u> | 6. _____ |
| 2. _____ | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Saplings/Shrubs:

Dominant Species:

- | | |
|---|-----------|
| 1. <u>Loblolly pine - <i>P. taeda</i></u> | 6. _____ |
| 2. _____ | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Secondary Species:

- | | |
|---|-----------|
| 1. <u>Sweetgum - <i>Liquidambar styraciflua</i></u> | 6. _____ |
| 2. <u>Red cedar - <i>Juniperus virginiana</i></u> | 7. _____ |
| 3. <u>Waxmyrtle - <i>Myrica cerifera</i></u> | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Woody Vines:

Dominant Species:

- | | |
|------------------------|-----------|
| 1. <u>none clearly</u> | 6. _____ |
| 2. <u>dominant</u> | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Secondary Species:

- | | |
|--|-----------|
| 1. <u>Poison ivy - <i>Rhus radicans</i></u> | 6. _____ |
| 2. <u>Virginia Creeper - <i>Parthenocissus vitacea</i></u> | 7. _____ |
| 3. <u>Trumpet Creeper - <i>Campsis radicans</i></u> | 8. _____ |
| 4. <u>Ballbrier - <i>Smilax bona-nox</i></u> | 9. _____ |
| 5. _____ | 10. _____ |

Herbs:

Dominant Species:

1. Grasses are dominant 6. _____
2. in some open areas, 7. _____
3. Bush clover is dominant 8. _____
4. in others 9. _____
5. _____ 10. _____

Secondary Species:

1. Ebony spleenwort - ^{Asplenium} ~~Utricularia~~ 6. Bladder Sedge - ~~Carex~~ ^{Carex} intumescens
2. Slender Bush Clover - ^{Lespedeza} ~~virginica~~ 7. Bog rush - ~~Juncus~~ ^{Juncus} effusus
3. Wood Sorrel - ^{Oxalis} ~~europaea~~ 8. Corn Salad - ~~Valeriana~~ ^{Valeriana} radiata
4. Barren False Strawberry - ^{Duchesnea} ~~indica~~ 9. Brown Sedge - ~~Andropogon~~ ^{Andropogon} virginicus
5. Lyre-leaved Sage - ^{Salvia} ~~lyrata~~ 10. _____

Birds: _____

Time: 8:30 - 17:30

Weather Conditions: clear, sunny, warm (60°-85°)

Species Sex Feeding Nesting Approx. No.

1. Downy Woodpecker - Picoides pubescens
2. Red-eyed Vireo - Vireo olivaceus
3. Fish crow - Corvus ossifragus
4. Carolina Chickadee - Parus carolinensis
5. Mourning Dove - Zenaida macroura
6. Carolina wren - Thyrothorus ludovicianus
7. Barn swallow - Hirundo rustica
8. Cardinal - Richmondia cardinalis
9. Wood Thrush - Hylocichla ustulata

10. Mockingbird - Mimus polyglottos (more on reverse)

Mammals: _____

Time: _____

Weather Conditions: _____

Species Observed Sign Adult/Juvenile Sex

1. _____

2. none observed - no sign observed

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

Reptiles and Amphibians: _____

Time: Same as above

Weather Conditions: Same as above

Species Observed Sign Adult/Juvenile Sex

1. Black racer - Coluber constrictor constrictor

2. Southern toad - Bufo terrestris

3. Frog tadpoles - species unknown

4. toad tadpoles

5. _____

6. _____

7. _____
8. _____
9. _____
10. _____

Miscellaneous Notes:

Several small pond-like areas were present along the access roads. They appeared to be settled areas that had collected runoff. Tadpoles of at least two different species of frogs/toads were present as were aquatic insects including water striders, water boatmen, and water beetles.

An open area was also present behind the former trailer park. Loblolly pines, ranging in size from first-year seedlings to 20ft. trees, were dominant. Little else grew in this area except scattered grasses and broom sedge.

**ECOLOGICAL EVALUATION
FIELD DATA SHEET - TERRESTRIAL**

Project Name: MCB Camp Lejeune

Location: Jacksonville, NC

Date: 4/26/94

Sampling Location: Site 41, Area 4/B open wetland area

Data Collected By: L. Savage

Habitat Type: wetland

Vegetation: Begins as limited vegetation in damp, sandy area then becomes marsh-like drainage swale, trees and shrubs present at edges of wetland area

Trees:

Dominant Species:

- | | |
|--------------------------------|-----------|
| 1. <u>no trees are clearly</u> | 6. _____ |
| 2. <u>dominant</u> | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Secondary Species:

- | | |
|--|-----------|
| 1. <u>Loblolly pine - Pinus taeda</u> | 6. _____ |
| 2. <u>Long leaf pine - Pinus palustris</u> | 7. _____ |
| 3. <u>Red cedar - Juniperus virginiana</u> | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Saplings/Shrubs:

Dominant Species:

- | | |
|-------------------------|-----------|
| 1. <u>none dominant</u> | 6. _____ |
| 2. _____ | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Secondary Species:

- | | |
|--|-----------|
| 1. <u>Sweet gum - ^{Liquidambar} styraciflua</u> | 6. _____ |
| 2. <u>Wax myrtle - ^{Myrica} caribaea</u> | 7. _____ |
| 3. <u>Holly - Ilex opaca</u> | 8. _____ |
| 4. <u>Blueberry - Vaccinium sp.</u> | 9. _____ |
| 5. _____ | 10. _____ |

Woody Vines:

Dominant Species:

- | | |
|------------------------|-----------|
| 1. _____ | 6. _____ |
| 2. <u>none present</u> | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Secondary Species:

- | | |
|------------------------|-----------|
| 1. _____ | 6. _____ |
| 2. _____ | 7. _____ |
| 3. <u>none present</u> | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Herbs:

Dominant Species:

- 1. none are clearly 6. _____
- 2. dominant 7. _____
- 3. _____ 8. _____
- 4. _____ 9. _____
- 5. _____ 10. _____

Secondary Species:

- 1. Lichens/mosses 6. Cattails - *Typha latifolia*
- 2. Round-leaved sundew ^{*Drosera rotundifolia*} 7. Dwarf Iris - *Iris verna*
- 3. Tanacetum sedge ^{*Andropogon virginicus*} 8. Water Pennywort - *Hydrocotyle americana*
- 4. Horned bladderwort ^{*Utricularia cornuta*} 9. Aristida grass - *Aristida* sp
- 5. Rock spike moss ^{*Selaginella rupestris*} 10. grasses, sedges, rushes

Birds: _____

Time: _____

Weather Conditions:

<u>Species</u>	<u>Sex</u>	<u>Feeding</u>	<u>Nesting</u>	<u>Approx. No.</u>
1.	_____	_____	_____	_____
2.	<u>Birds observed are listed under Area</u>			
3.	<u>41A</u>			
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____
7.	_____	_____	_____	_____
8.	_____	_____	_____	_____
9.	_____	_____	_____	_____

10. _____

Mammals: _____

Time: 8:30 - 17:30

Weather Conditions: warm, sunny, 60°-85° F

Species Observed Sign Adult/Juvenile Sex

1. Fox - ~~no~~ musk smelled in area

2. white-tailed deer - tracks observed - ^{Odocoileus}virginianus

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

Reptiles and Amphibians: _____

Time: same as above

Weather Conditions:

Species Observed Sign Adult/Juvenile Sex

1. Box turtles (Terrepen carolina) male & female mating

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

Miscellaneous Notes:

**ECOLOGICAL EVALUATION
FIELD DATA SHEET - TERRESTRIAL**

Project Name: MCB Camp Lejeune

Location: Jacksonville, NC

Date: 4/26/94

Sampling Location: Site 41, Area 41C, mixed Forest

Data Collected By: L. Savage

Habitat Type: _____

Vegetation: mixed deciduous/pine forest with substantial understory and floor vegetation amount and type depends on amount of canopy, trees 6"-12" DBH (est.)

Trees:

Dominant Species:

- | | |
|---------------------------------|-----------|
| 1. <u>none clearly dominant</u> | 6. _____ |
| 2. _____ | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Secondary Species:

- | | |
|--|---|
| 1. <u>Red Maple - Acer rubrum</u>
<i>Liriodendron</i> | 6. <u>Sugar Maple - Acer saccharum</u> |
| 2. <u>Tulip - tulipifera</u> | 7. <u>White oak - Quercus alba</u> |
| 3. <u>Loblolly pine - taeda</u>
<i>Pinus</i> | 8. <u>Water Oak - Q. nigra</u> |
| 4. <u>Sweetgum - styraciflua</u>
<i>Liquidambar</i> | 9. <u>Mockernut Hickory - tomentosa</u>
<i>Carya</i> |
| 5. <u>Beech - grandifolia</u>
<i>Fagus</i> | 10. <u>Ironwood - Carpinus caroliniana</u>
<i>Betula nigra</i>
<u>Yellow Birch - Betula nigra</u>
<u>Sweet Bay - Magnolia virginiana</u> |

Saplings/Shrubs:

Dominant Species:

- | | |
|---------------------------------|-----------|
| 1. _____ | 6. _____ |
| 2. <u>none clearly dominant</u> | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Secondary Species:

- | | |
|---|--|
| 1. <u>Red Cedar</u> - ^{Juniperus} virginiana | 6. <u>American Snowbell</u> - ^{Syringa} americana |
| 2. <u>Wax myrtle</u> - ^{Myrica} cerifera | 7. _____ |
| 3. <u>Dogwood</u> - ^{Cornus} florida | 8. _____ |
| 4. <u>Umbrella magnolia</u> - ^{Magnolia} tripetalog. | 9. _____ |
| 5. <u>Holly</u> - <u>Ilex opaca</u> | 10. _____ |

Woody Vines:

Dominant Species:

- | | |
|---------------------------------|-----------|
| 1. _____ | 6. _____ |
| 2. <u>none clearly dominant</u> | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Secondary Species:

- | | |
|--|---|
| 1. <u>Japanese honeysuckle</u> - ^{Lonicera} japonica | 6. <u>Trumpet Creeper</u> - ^{Campsis} radicans |
| 2. <u>Poison Ivy</u> - <u>Rhus radicans</u> | 7. <u>Sand grape</u> - ^{Vitis} reperstris |
| 3. <u>wild grape</u> - <u>Vitis sp.</u> | 8. _____ |
| 4. <u>Greenbrier</u> - ^{Smilax} rotundifolia | 9. _____ |
| 5. <u>Virginia Creeper</u> - ^{Pardocissus} quinquefolia | 10. _____ |

Herbs:

Dominant Species:

- 1. none clearly 6. _____
- 2. dominant 7. _____
- 3. _____ 8. _____
- 4. _____ 9. _____
- 5. _____ 10. _____

Secondary Species:

- 1. Ebony spleenwort - ^{Asplenium} ebeneum 6. grasses
- 2. Marsh fern - ^{Aspidium} Thelypteris 7. Blue-eyed grass - ^{Sisyrinchium} sp.
- 3. Royal Fern - ^{Osmunda} regalis 8. _____
- 4. Sensitive Fern - ^{Onclea} sensibilis 9. _____
- 5. Cane 10. _____

Birds: _____

Time: _____

Weather Conditions:

<u>Species</u>	<u>Sex</u>	<u>Feeding</u>	<u>Nesting</u>	<u>Approx. No.</u>
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	<u>Birds observed are listed with</u>			
4.	<u>information for Area 41A</u>			
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____
7.	_____	_____	_____	_____
8.	_____	_____	_____	_____
9.	_____	_____	_____	_____

10. _____

Mammals: _____

Time: _____

Weather Conditions:

<u>Species</u>	<u>Observed</u>	<u>Sign</u>	<u>Adult/Juvenile</u>	<u>Sex</u>
1.	White-tailed Deer	tracks, droppings, trails, browse	Odocoileus virginianus	
2.	Raccoon	tracks	Procyon lotor	
3.	Squirrel	feeding area, nest	Sciurus carolinensis	
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Reptiles and Amphibians: _____

Time: _____

Weather Conditions:

<u>Species</u>	<u>Observed</u>	<u>Sign</u>	<u>Adult/Juvenile</u>	<u>Sex</u>
1.	Anole		Anolis carolinensis carolinensis	
2.				
3.				
4.				
5.				
6.				

7. _____
8. _____
9. _____
10. _____

Miscellaneous Notes:

*Ferns found usually in damper areas next
to streams*

ECOLOGICAL EVALUATION
FIELD DATA SHEET - TERRESTRIAL

Project Name: MCB Camp Lejeune

Location: Jacksonville, NC

Date: 4/26/94

Sampling Location: Site 41, Area 41 D, Wooded Swamp

Data Collected By: X. Savage

Habitat Type: wooded wetland

Vegetation: Trees with wetland vegetation, trees in areas of
deeper standing water were dead or dying

Trees:

Dominant Species:

- | | |
|------------------------|-----------|
| 1. <u>none clearly</u> | 6. _____ |
| 2. <u>dominant</u> | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Secondary Species:

- | | |
|---|-----------|
| 1. <u>Tulip - ^{Liriodendron} tulipifera</u> | 6. _____ |
| 2. <u>Black gum - ^{Nyssa} sylvatica</u> | 7. _____ |
| 3. <u>Red maple - ^{Acer} rubrum</u> | 8. _____ |
| 4. <u>Elm - Ulmus sp.</u> | 9. _____ |
| 5. <u>Swamp Chestnut Oak -
<i>Quercus michauxii</i></u> | 10. _____ |

Saplings/Shrubs:

Dominant Species:

- | | |
|-------------------------|-----------|
| 1. _____ | 6. _____ |
| 2. <u>none dominant</u> | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Secondary Species:

- | | |
|--|-----------|
| 1. <u>Ironwood - ^{Carpinus} caroliniana</u> | 6. _____ |
| 2. <u>Leucothoe axillaris</u> | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Woody Vines:

Dominant Species:

- | | |
|------------------------|-----------|
| 1. _____ | 6. _____ |
| 2. <u>none present</u> | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Secondary Species:

- | | |
|------------------------|-----------|
| 1. _____ | 6. _____ |
| 2. <u>none present</u> | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Herbs:

Dominant Species:

- | | |
|---|-----------|
| 1. <u>Lizard's tail - <i>Saururus</i></u> | 6. _____ |
| 2. _____ | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Secondary Species:

- | | |
|---|---|
| 1. <u>Sensitive Fern - <i>sensibilis</i></u> | 6. <u>Blue-eyed grass - <i>Sisyrinchium</i></u> |
| <i>Onoclea</i> | <i>sp.</i> |
| 2. <u>Marsh Fern - <i>Thelypteris</i></u> | 7. <u>sedges</u> |
| <i>Aspidium</i> | |
| 3. <u>Canal - <i>Arundinaria</i> tecta</u> | 8. _____ |
| <i>Switch</i> | <i>Hydrocotyle</i> |
| 4. <u>Water Pennywort - <i>americana</i></u> | 9. _____ |
| 5. <u>Blue violet - <i>Viola</i> sp.</u> | 10. _____ |

Birds: _____

Time: _____

Weather Conditions:

<u>Species</u>	<u>Sex</u>	<u>Feeding</u>	<u>Nesting</u>	<u>Approx. No.</u>
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	Birds are listed w. information			
4.	for site 41A			
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____
7.	_____	_____	_____	_____
8.	_____	_____	_____	_____
9.	_____	_____	_____	_____

10. _____

Mammals: _____

Time: _____

Weather Conditions:

<u>Species</u>	<u>Observed</u>	<u>Sign</u>	<u>Adult/Juvenile</u>	<u>Sex</u>
1.	Beaver - dam,	gnawed trees	(no beaver currently	
2.		apparent)		
3.	White-tailed Deer -	tracks	Odocoileus virginianus	
4.	Raccoon - droppings		Procyon lotor	
5.				
6.				
7.				
8.				
9.				
10.				

Reptiles and Amphibians: _____

Time: _____

Weather Conditions:

<u>Species</u>	<u>Observed</u>	<u>Sign</u>	<u>Adult/Juvenile</u>	<u>Sex</u>
1.	Black racer -	Coluber constrictor	constrictor	
2.				
3.				
4.				
5.				
6.				

7. _____
8. _____
9. _____
10. _____

Miscellaneous Notes:

*Cray fish chimneys were also present in
the swamp.*

ECOLOGICAL EVALUATION
FIELD DATA SHEET - TERRESTRIAL

Project Name: MCB Camp Lejeune

Location: Jacksonville, NC

Date: 4/26/94

Sampling Location: Site 41, Area 41E, Deciduous Forest

Data Collected By: L. Savage

Habitat Type: _____

Vegetation: Deciduous trees, 8"-10" DBH (est.), understory present,

Trees: Limited vegetation on 36 forest floor

Dominant Species:

- | | |
|---------------------------------|-----------|
| 1. <u>none clearly dominant</u> | 6. _____ |
| 2. _____ | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Secondary Species:

- | | |
|---|---|
| 1. <u>Tulip - ^{Liriodendron} tulipifera</u> | 6. <u>White Oak - <i>Quercus alba</i></u> |
| 2. <u>Red Maple - ^{Acer} rubrum</u> | 7. _____ |
| 3. <u>Sweetgum - ^{Liquidambar} styraciflua</u> | 8. _____ |
| 4. <u>Beech - <i>Fagus grandifolia</i></u> | 9. _____ |
| 5. <u>Mockernut Hickory
<i>Carya tomentosa</i></u> | 10. _____ |

Saplings/Shrubs:

Dominant Species:

- | | |
|-------------------------|-----------|
| 1. _____ | 6. _____ |
| 2. <u>none dominant</u> | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Secondary Species:

- | | |
|---|-----------|
| 1. <u>dogwood - ^{Cornus} Florida</u> | 6. _____ |
| 2. <u>Holly - ^{Ilex} opaca</u> | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Woody Vines:

Dominant Species:

- | | |
|------------------------|-----------|
| 1. _____ | 6. _____ |
| 2. _____ | 7. _____ |
| 3. <u>none present</u> | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Secondary Species:

- | | |
|------------------------|-----------|
| 1. _____ | 6. _____ |
| 2. _____ | 7. _____ |
| 3. <u>none present</u> | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Herbs:

Dominant Species:

- | | |
|-------------------------|-----------|
| 1. _____ | 6. _____ |
| 2. <u>none dominant</u> | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Secondary Species:

- | | |
|---|-----------|
| 1. <u>Partridgeberry - mitchella repens</u> | 6. _____ |
| 2. <u>Wild Ginger</u> | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Birds: _____

Time: _____

Weather Conditions:

<u>Species</u>	<u>Sex</u>	<u>Feeding</u>	<u>Nesting</u>	<u>Approx. No.</u>
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	<u>Birds observed are listed with information</u>			
5.	<u>for site 41A</u>			
6.	_____	_____	_____	_____
7.	_____	_____	_____	_____
8.	_____	_____	_____	_____
9.	_____	_____	_____	_____

10. _____

Mammals: _____

Time: _____

Weather Conditions:

Species Observed Sign Adult/Juvenile Sex

1. White-tailed Deer - trail Odocoileus virginiana

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

Reptiles and Amphibians: _____

Time: _____

Weather Conditions:

Species Observed Sign Adult/Juvenile Sex

1. _____

2. none observed

3. _____

4. _____

5. _____

6. _____

7. _____
8. _____
9. _____
10. _____

Miscellaneous Notes:

In one area of what was old deciduous forest, concrete debris was disposed. Floor vegetation in this area was more like that in the younger mixed forest and included:

Ground Ivy -

dominant, only observed occurrence

Sedges

Poison Ivy

Wood Sorrel

Ebony Spleenwort

Greenbriar

Sand Grape

Japanese Honeyuckle

Virginia Creeper

Grasses

**ECOLOGICAL EVALUATION
FIELD DATA SHEET - TERRESTRIAL**

Project Name: MCB Camp Lejeune

Location: Jacksonville, NC

Date: 4/27/94

Sampling Location: Site 74

Data Collected By: A. Savage

Habitat Type: _____

Vegetation: Pines with shrub layer, shrubs vary from 1' to 15' in height, scattered deciduous trees, ferns/cane in slumper areas

Trees:

Dominant Species:

- | | |
|--|-----------|
| 1. <u>Loblolly Pine - Pinus taeda</u> | 6. _____ |
| 2. <u>(dom. in Former mess Hall)</u> | 7. _____ |
| 3. <u>(Grease Pit Area)</u> | 8. _____ |
| 4. <u>Longleaf Pine - Pinus palustris</u> | 9. _____ |
| 5. <u>(dom. in Former Pest Control Area)</u> | 10. _____ |

Secondary Species:

- | | |
|--|---|
| 1. <u>Sweetgum - Liquidambar styraciflua</u> | 6. <u>Water Oak - Q. nigra</u> |
| 2. <u>Post Oak - Quercus stellata</u> | 7. <u>Tulip - Liriodendron tulipifera</u> |
| 3. <u>Red Oak - Quercus falcata</u> | 8. <u>Mockernut Hickory - Carya tomentosa</u> |
| 4. <u>White Oak - Q. alba</u> | 9. _____ |
| 5. <u>Laurel Oak - Q. laurifolia</u> | 10. _____ |

- 7. _____
- 8. _____
- 9. _____
- 10. _____

Miscellaneous Notes:

Saplings/Shrubs:

Dominant Species:

- | | |
|---|-----------|
| 1. <u>Seedling white oak was</u> | 6. _____ |
| 2. <u>dominant in several</u> | 7. _____ |
| 3. <u>small areas</u> | 8. _____ |
| 4. _____ | 9. _____ |
| 5. <u>Slender Blueberry - Vaccinium</u> | 10. _____ |

(dominant in several areas of former ^{tenellum} ~~former~~ Pest Control Area)

- | | |
|--|--|
| 1. <u>Wax Myrtle - ^{Myrica} cerifera</u> | 6. <u>Chinkapin - Castanea pumila</u> |
| 2. <u>Red Maple - Acer rubrum</u> | 7. <u>Winged Sumac - Rhus copallina</u> |
| 3. <u>Sweetgum - ^{Liquidambar} styraciflua</u> | 8. <u>Lyonia lucida - Fetterbush</u> |
| 4. <u>Deciduous tree ^{Seedlings} maple</u> | 9. <u>Staggerbush - Lyonia mariana</u> |
| 5. <u>Pine seedlings</u> | 10. <u>Sweet Pepperbush - ^{alnifolia} Clethra</u> |

Woody Vines:

Dominant Species:

- | | |
|-------------------------|-----------|
| 1. <u>none dominant</u> | 6. _____ |
| 2. _____ | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Coastal Highbush - ^{Vaccinium} Blueberry
Elliott's Blueberry - ^{caesariense} V. elliotii

Secondary Species:

- | | |
|---|-----------|
| 1. <u>Greenbrier - Smilax rotundifolia</u> | 6. _____ |
| 2. <u>Pricklybrier - S. bema-nox</u> | 7. _____ |
| 3. <u>Sand Grape - Vitis rupestris</u> | 8. _____ |
| 4. <u>Poison Ivy - Rhus radicans</u> | 9. _____ |
| 5. <u>Virginia Creeper - ^{cissis quinquefolia} Partheno-</u> | 10. _____ |

Herbs:

Dominant Species:

- 1. none dominant
- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____
- 7. _____
- 8. _____
- 9. _____
- 10. _____

Secondary Species:

- 1. Broom Sedge - ^{Andropogon}virginicus
- 2. Grasses
- 3. Cinnamon Fern - ^{Osmunda}cinna_{monia}
- 4. Royal Fern - ^{Osmunda}regalis
- 5. Marsh Fern - ^{Aspidium}Thelypteris
- 6. Sensitive Fern - *Onoclea sensibilis*
- 7. Bush Clover - *Lespedeza*
- 8. Cane
- 9. Mosses/Lichens
- 10. Broken Fern - *Pteris aquilina*
Partridgeberry - *Mitella*
repens

Birds: _____

Time: 7:30 - 12:30

Weather Conditions: warm (65°-85°), sunny

<u>Species</u>	<u>Sex</u>	<u>Feeding</u>	<u>Nesting</u>	<u>Approx. No.</u>
1. <u>Mourning Dove - <i>Zenaidura macroura</i></u>				
2. <u>Wood Pewee - <i>Contopus virens</i></u>				
3. <u>Carolina Chickadee - <i>Parus carolinensis</i></u>				
4. <u>Fish Crow - <i>Corvus ossifragus</i></u>				
5. <u>Blue Jay - <i>Cyanocitta cristata</i></u>				
6. <u>Whippoorwill - <i>Caprimulgus vociferus</i></u>				
7. <u>Red-eyed Vireo - <i>Vireo olivaceus</i></u>				
8. <u>Cardinal - <i>Richmondiana cardinalis</i></u>				
9. <u>Robin - <i>Turdus migratorius</i></u>				

10. Downy Woodpecker - Picoides pubescens - red-bellied house-sparrow
 Mammals: pubescens (See reverse)

Time: _____

Weather Conditions: _____

Species Observed Sign Adult/Juvenile Sex

- Odocoileus virginianus*
1. White-tailed Deer - tracks, trails, browse on ferns
 2. Rabbit - tracks
 3. mouse - tracks (could see marks where tail dragged)
 4. _____
 5. _____
 6. _____
 7. _____
 8. _____
 9. _____
 10. _____

Reptiles and Amphibians: _____

Time: _____

Weather Conditions: _____

Species Observed Sign Adult/Juvenile Sex

1. _____
2. none observed
3. _____
4. _____
5. _____
6. _____

- 7. _____
- 8. _____
- 9. _____
- 10. _____

Miscellaneous Notes:

APPENDIX S
THREATENED AND/OR ENDANGERED SPECIES LIST

Critical species list - Camp Lejeune endangered species and
special-interest communities survey

Principal Investigator: Richard LeBlond, 326-1440.

List current as of 9-30-91.
Replaces list of 6-30-91.

"?" = Species names followed by a "?" are less than confidently identified. They are nonetheless caught in this biological safety net, the mesh size of which errs on the side of diversity. Until identification is confirmed (most of these are represented by a specimen), these site records should be regarded as tentative.

Species sites are listed chronologically under the species name; with the 1990 month and day of discovery listed first, followed by the site's sector site number, community type and UTM grid number. Sites documented prior to the start of the current survey are indicated by the parenthetical date of discovery following the site name (see Rhexia aristosa at FD-1). Prior sites not yet relocated during the current survey are indicated by "---" in the date column (see Rhynchospora tracyi at FD-1).

Status codes. Federal status is listed first, and separated from the state status by a comma; e.g., Rhexia aristosa FC2,T (Federal Candidate level 2, state Threatened). Species with state status only are indicated by a single code without comma; e.g., Rhynchospora tracyi SR (Significantly Rare).

- FE = Federal Endangered
- FT = Federal Threatened
- FC1 = Federal Candidate level 1. At risk. Listing warranted but precluded by higher priorities.
- FC2 = Federal Candidate level 2. Vulnerable. Listing warranted but precluded by higher priorities.
- FC3 = Federal Candidate level 3C. More abundant and/or less threatened than previously known.
- E = State Endangered
- T = State Threatened
- SC = State Special Concern
- C = State Candidate
- SR = State Significantly Rare
- W = State Watch List (W1)
- W3 = " " " , undocumented state occurrence prior to Lejeune site.

proposed = proposed for listing as State Candidate, Significantly Rare or Watch List based on current evidence

List of species and communities by sector - Camp Lejeune
endangered species and special-interest communities survey

List current as of 9-30-91.
 Replaces list of 6-30-91.

		<u>Status</u>	<u>UTM Grid</u>
<u>SECTOR E</u>			
E-1	Upper Beach Amaranthus pumilus (1988)	FC2,T	907266- 949297
E-5	Brackish Marsh Parietaria praetermissa Solanum pseudogracile	W W	860237
<u>SECTOR F</u>			
FA-1	Depression Meadow Aristida palustris Burmannia biflora Panicum tenerum Rhexia aristosa Rhynchospora wrightiana	SR W SR FC2,T W	878409
FA-2	Road Meadow Rhynchospora nitens Rhynchospora pusilla	W W	895385
FA-4	Depression Meadow Aristida palustris Coelorachis rugosa Dichanthelium erectifolium Rhexia aristosa Rhynchospora harperi	SR W SR FC2,T C	883407
FB-1	Wet Pine Flatwoods Amphicarpum purshii Lysimachia loomisii Panicum tenerum Xyris difformis var. curtissii	SR W SR W	927413
FB-2	Road Meadow Rhynchospora pusilla Rhynchospora nitens	W W	926409
FB-3	Wet Pine Flatwoods Lysimachia loomisii Pleea tenuifolia Scleria minor Tofieldia glabra	W W SR FC2,C	937416

(FB-3 cont.)		
	<i>Xyris difformis</i> var. <i>curtissii</i>	W
	<i>Xyris elliottii</i>	SR
FB-4	Wet Pine Flatwoods	939426
	<i>Lysimachia loomisii</i>	W
	<i>Rhynchospora harveyi</i>	W
	<i>Rhynchospora pusilla</i>	W
	<i>Scleria minor</i>	SR
FC-2	Flatwood/Swamp Ecotone	922413
	<i>Anthaenanthia rufa</i>	W
	<i>Helianthus heterophyllus</i>	W
	<i>Lysimachia loomisii</i>	W
	<i>Oxypolis ternata</i>	FC2,T
FC-3	Depression Meadow	918318
	<i>Aristida palustris</i>	SR
	<i>Bartonia verna</i>	W
	<i>Burmannia biflora</i>	W
	<i>Dichanthelium erectifolium</i>	SR
	<i>Litsea aestivalis</i>	FC2,C
	<i>Muhlenbergia torreyana</i>	F3C,E
	<i>Paspalum praecox</i>	W
	<i>Rhexia aristosa</i>	FC2,T
	<i>Rhynchospora cephalantha</i> f. <i>antrorsa</i>	unusual/rare
	<i>Rhynchospora tracyi</i>	SR
FC-4	Pocosin Ecotone	919376
	<i>Andropogon capillipes</i>	W
	<i>Gentiana autumnalis</i>	W
FD-1	Cypress Savanna	904377
	<i>Agalinis linifolia</i>	SR
	<i>Anthaenanthia rufa</i>	W
	<i>Aristida palustris</i>	SR
	<i>Bartonia verna</i>	W
	<i>Burmannia biflora</i>	W
	<i>Carex verrucosa</i>	SR
	<i>Coelorachis rugosa</i>	W
	<i>Dichanthelium</i> sp. 1 = <i>Panicum hirstii</i>	FC2,C
	<i>Dichanthelium erectifolium</i>	SR
	<i>Lobelia boykinii</i>	FC2,C
	<i>Lysimachia loomisii</i>	W
	<i>Muhlenbergia torreyana</i>	F3C,E
	<i>Panicum tenerum</i>	SR
	<i>Paspalum praecox</i>	W
	<i>Rhexia aristosa</i>	FC2,T
	<i>Rhynchospora cephalantha</i> f. <i>antrorsa</i>	unusual/rare
	<i>Rhynchospora harperi</i>	C
	<i>Rhynchospora tracyi</i> (1984)	SR
	<i>Rhynchospora wrightiana</i>	W
	<i>Scleria georgiana</i>	C
	<i>Spiranthes laciniata</i>	C

(FD-1 cont.)
Xyris baldwiniana

W

FD-3 Small Depression Pond
Carex verrucosa
Eleocharis equisetoides

SR
SR

899378

SECTOR 6

G-10 Pocosin Ecotone
Lysimachia asperulifolia

FE,E

929348

GA-1 Depression Meadow, Wet Pine Flatwoods

Agalinis linifolia
Andropogon capillipes
Aristida palustris
Burmanna biflora
Dichanthelium erectifolium
Eleocharis equisetoides
Eleocharis melanocarpa
Gentiana autumnalis
Panicum tenerum
Rhexia aristosa
Rhynchospora tracyi
Scleria georgiana

SR
W
SR
W
SR
SR
C
W
SR
FC2,T
SR
C

894359

GA-2 Depression Meadow
Andropogon capillipes
Agalinis linifolia
Aristida palustris
Burmanna biflora
Dichanthelium erectifolium
Panicum tenerum
Pleea tenuifolia
Rhexia aristosa
Rhynchospora wrightiana
Scleria georgiana

W
SR
SR
W
SR
SR
W
FC2,T
W
C

896360

GA-3 Cypress Savanna
Agalinis linifolia
Andropogon capillipes
Aristida palustris
Burmanna biflora
Carex verrucosa
Coelorachis rugosa
Dichanthelium erectifolium
Eleocharis equisetoides
Panicum tenerum
Paspalum praecox
Rhexia aristosa
Rhynchospora pusilla
Rhynchospora tracyi
Scleria georgiana

SR
W
SR
W
SR
W
SR
SR
W
FC2,T
W
SR
C

898360

GA-4	Savanna		899349
	<i>Asclepias pedicellata</i>	C	
	<i>Dichanthelium erectifolium</i>	SR	
	<i>Dionaea muscipula</i>	FC2, C-SC	
	<i>Lysimachia loomisii</i>	W	
	<i>Oxypolis ternata</i>	FC2, C	
	<i>Pleea tenuifolia</i>	W	
	<i>Polygala brevifolia</i>	W	
	<i>Polygala hookeri</i>	C	
	<i>Rhynchospora pallida</i>	SR	
	<i>Sarracenia rubra</i> ssp. <i>rubra</i>	W	
	<i>Solidago pulchra</i>	FC2, C	
	<i>Tofieldia glabra</i>	FC2, C	
	<i>Xyris baldwiniana</i>	W	
GA-5	Depression Meadow		901361
	<i>Agalinis linifolia</i>	SR	
	<i>Anthaenaria rufa</i>	W	
	<i>Aristida palustris</i>	SR	
	<i>Burmannia biflora</i>	W	
	<i>Carex verrucosa</i>	SR	
	<i>Dichanthelium erectifolium</i>	SR	
	<i>Eleocharis equisetoides</i>	SR	
	<i>Panicum tenerum</i>	SR	
	<i>Paspalum praecox</i>	W	
	<i>Rhexia aristosa</i>	FC2, T	
	<i>Rhynchospora inundata</i>	W	
	<i>Rhynchospora tracyi</i>	SR	
	<i>Xyris smalliana</i>	W	
GB-1	Wet Pine Flatwoods/Small Stream Pocosin		908376
	<i>Rhynchospora elliottii</i>	W	
GE-2	Road Meadow		907376
	<i>Agalinis virgata</i>	C	
GB-3	Road Meadow		929368
	<i>Calopogon barbatus</i>	W	
	<i>Dionaea muscipula</i>	FC2, C-SC	
	<i>Solidago pulchra</i>	FC2, C	
GB-4	Road Meadow		931365
	<i>Dionaea muscipula</i>	FC2, C-SC	
	<i>Rhynchospora pallida</i>	SR	
	<i>Solidago pulchra</i>	FC2, C	
GB-5	Wet Pine Flatwoods		932364
	<i>Dionaea muscipula</i>	FC2, C-SC	
	<i>Solidago pulchra</i>	FC2, C	
	<i>Tofieldia glabra</i>	FC2, C	

GB-6	Pocosin Ecotone Amphicarpum purshii Dionaea muscipula Solidago pulchra	SR FC2,C-SC FC2,C	935364
GB-7	Road Meadow Rhexia aristosa Solidago pulchra	FC2,T FC2,C	940364
GB-8	Road Meadow Bartonia verna Solidago pulchra Tofieldia glabra	W FC2,C FC2,C	932368
GB-9	Road Meadow Juncus validus	W	934362
GB-10	Road Depression Meadow Calopogon barbatus	W	918374
GC-1	Small Depression Pond Agalinis linifolia Aristida palustris Coelorachis rugosa Dichanthelium erectifolium Eleocharis tricostata Panicum tenerum Paspalum praecox Rhexia aristosa Rhynchospora tracyi	SR SR W SR W SR W FC2,T SR	946360
GC-2	Small Depression Pond Agalinis linifolia Aristida palustris Burmannia biflora Cladium mariscoides Dichanthelium erectifolium Eleocharis equisetoides Ludwigia linifolia Panicum tenerum Paspalum praecox Rhexia aristosa Rhynchospora harperi Rhynchospora pusilla Rhynchospora tracyi Scleria georgiana	SR SR W SR SR SR SR SR W FC2,T C W SR C	949357
GC-3	Pocosin Ecotone Amphicarpum purshii	SR	945342
GC-5	Depression Meadow Eleocharis tricostata Panicum tenerum	W SR	940345

GC-6.	Depression Meadow		942358
	Agalinis linifolia	SR	
	Aristida palustris	SR	
	Burmannia biflora	W	
	Coelorachis rugosa	W	
	Dichanthelium erectifolium	SR	
	Litsea aestivalis	FC2, C	
	Panicum tenerum	SR	
	Paspalum praecox	W	
	Rhexia aristosa	FC2, T	
	Rhynchospora wrightiana	W	
	Scleria georgiana	C	
GC-7	Depression Meadow		942359
	Aristida palustris	SR	
	Litsea aestivalis	FC2, C	
	Panicum tenerum	SR	
	Rhexia aristosa	FC2, T	
	Rhexia cubensis	SR	
	Sarracenia rubra ssp. rubra	W	
GC-8	Small Depression Pond		947356
	Rhexia aristosa	FC2, T	
	Rhexia aristosa X cubensis	undescribed taxon	
	Rhexia cubensis	SR	
GC-9	Depression Meadow		949356
	Aristida palustris	SR	
	Coelorachis rugosa	W	
	Rhexia aristosa	FC2, T	
GC-10	Depression Meadow		948356
	Agalinis linifolia	SR	
	Aristida palustris	SR	
	Coelorachis rugosa	W	
	Eleocharis tricostata	W	
	Panicum tenerum	SR	
	Paspalum praecox	W	
	Rhexia aristosa	FC2, T	
	Rhynchospora tracyi	SR	
	Scleria georgiana	C	
GC-11	Flatwoods Road Meadow		949364
	Andropogon capillipes	W	
GC-12	Streamhead Pocosin		944348
	Amphicarpum purshii	SR	
	Dionaea muscipula	FC2, C-SC	
	Peltandra sagittifolia	SR	
	Rhynchospora pallida	SR	
	Solidago pulchra	FC2, C	
	Tofieldia glabra	FC2, C	

GD-1	Road Meadow		938326
	<i>Amphicarpum purshii</i>	SR	
	<i>Rhexia cubensis</i>	SR	
GD-2	Small Depression Pond		938335
	<i>Eleocharis tricostata</i>	W	
GD-3	Small Depression Pond		937335
	<i>Eleocharis vivipara</i>	W	
	<i>Litsea aestivalis</i>	FC2,C	
	<i>Rhexia aristosa</i>	FC2,T	
	<i>Xyris smalliana</i>	W	
GD-4	Small Depression Pond		936336
	<i>Dichanthelium erectifolium</i>	SR	
	<i>Eleocharis melanocarpa</i>	C	
	<i>Eleocharis tricostata</i>	W	
	<i>Rhexia aristosa</i>	FC2,T	
GD-5	Road Meadow		921333
	<i>Agalinis linifolia</i>	SR	
	<i>Dionaea muscipula</i>	FC2,C-SC	
	<i>Pleea tenuifolia</i>	W	
	<i>Rhynchospora pusilla</i>	W	
	<i>Solidago pulchra</i>	FC2,C	
GD-6	Road Meadow		922332
	<i>Rhexia aristosa</i>	FC2,T	
	<i>Rhexia aristosa</i> X <i>cubensis</i>	undescribed taxon	
	<i>Rhexia cubensis</i>	SR	
	<i>Rhynchospora pusilla</i>	W	
	<i>Xyris baldwiniana</i>	W	
GE-1	Flatwoods/Pocosin Ecotone		910328
	<i>Calamovilfa brevipilis</i>	FC3,E	
	<i>Carex elliotii</i>	W	
	<i>Dionaea muscipula</i> (1988)	FC2,C-SC	
	<i>Ludwigia microcarpa</i> (1988)	W	
	<i>Lysimachia asperulifolia</i> (1988)	FE,E	
	<i>Polygala brevifolia</i>	W	
	<i>Rhynchospora pallida</i>	SR	
	<i>Solidago pulchra</i> (1988)	FC2,C	
	<i>Tofieldia glabra</i>	FC2,C	
GE-2	Pocosin Ecotone		918333
	<i>Amphicarpum purshii</i>	SR	
	<i>Dionaea muscipula</i>	FC2,C-SC	
	<i>Oxypolis ternata</i>	FC2,C	
	<i>Pleea tenuifolia</i>	W	
	<i>Polygala brevifolia</i>	W	
	<i>Rhynchospora pallida</i>	SR	
	<i>Rhynchospora wrightiana</i>	W	
	<i>Solidago pulchra</i>	FC2,C	
	<i>Tofieldia glabra</i>	FC2,C	

GE-3	Road Depression Meadow		907330
	Amphicarpum purshii	SR	
	Calamovilfa brevipilis	F3C,E	
	Dionaea muscipula	FC2,C-SC	
	Pleea tenuifolia	W	
GE-4	Small Depression Pond		907328
	Rhexia aristosa	FC2,T	
	Rhynchospora inundata	W	
GF-1	Wet Pine Flatwoods		949331
	Agaliniis fasciculata	W	
	Agaliniis virgata	C	
	Calopogon barbatus	W	
	Gentiana autumnalis	W	
	Tofieldia glabra	FC2,C _s	
GF-1	Road Meadow		949331
	Andropogon capillipes	W	
GF-3	Depression Meadow		906327
	Rhexia aristosa	FC2,T	
GF-5	Road Meadow		944326
	Agaliniis linifolia	SR	
	Ludwigia microcarpa	W	
	Rhexia aristosa	FC2,T	
	Xyris baldwiniana	W	
GG-1	Depression Meadow		934317
	Dichanthelium erectifolium	SR	
	Eleocharis equisetoides	SR	
	Panicum tenerum	SR	
	Rhexia aristosa	FC2,T	
	Rhexia cubensis	SR	
	Rhynchospora inundata	W	
	Rhynchospora tracyi	SR	
	Rhynchospora wrightiana	W	
GG-2	Road Meadow		943325
	Eleocharis tricostata	W	
	Ludwigia microcarpa	W	
GH-1	Coastal Fringe Sandhill		?
	Cladina evansii	W	
GI-1	Coastal Fringe Sandhill		?
	Cladina evansii	W	

SECTOR H

HA-3	Depression Meadow	876335
	Aristida palustris	SR
	Burmannis biflora	W
	Coelorachis rugosa	W
	Dichanthelium erectifolium	SR
	Ludwigia linifolia	SR
	Rhexia aristosa	FC2, T
	Rhynchospora harperi	C
	Rhynchospora nitens	W
	Rhynchospora wrightiana	W
	Scleria georgiana	C
HA-5	Depression Meadow	874336
	Aristida palustris	SR
	Dichanthelium erectifolium	SR
	Ludwigia linifolia	SR
	Rhexia aristosa	FC2, T
	Scleria georgiana	C
HA-6	Small Depression Pond	873334
	Aristida palustris	SR
	Coelorachis rugosa	W
	Dichanthelium erectifolium	SR
	Eleocharis tricostata	W
	Rhexia aristosa	FC2, T
	Rhynchospora harperi	C
	Rhynchospora nitens	W
	Scleria reticularis var. reticularis	C
HA-7	Small Depression Pond	872334
	Dichanthelium erectifolium	SR
	Ludwigia linifolia	SR
	Rhexia aristosa	FC2, T
	Rhynchospora nitens	W
	Scleria reticularis var. reticularis	C
HA-8	Small Depression Pond	872333
	Coelorachis rugosa	W
	Rhynchospora nitens	W
	Scleria reticularis var. reticularis	C
HA-9	Road Meadow (best treated as extension of HA-10)	871336
	Scleria georgiana	C
HA-10	Small Depression Pond	870337
	Scleria georgiana	C
HA-11	Small Depression Pond	869338
	Ludwigia linifolia	SR
	Rhexia aristosa	FC2, T
	Rhynchospora nitens	W
	Scleria reticularis var. reticularis	C

HB-1	Flatwoods/Pocosin Ecotone		876311
	<i>Carex elliotii</i>	W	
	<i>Dionaea muscipula</i>	FC2, C-SC	
	<i>Polygala brevifolia</i>	W	
HB-2	Flatwoods/Pocosin Ecotone		875317
	<i>Amphicarpum purshii</i>	SR	
	<i>Lysimachia asperulifolia</i> (P. Robinson)	FE, E	
	<i>Polygala brevifolia</i>	W	
	<i>Solidago pulchra</i>	FC2, C	
HB-3	Small Depression Pond		878328
	<i>Agalinis linifolia</i>	SR	
	<i>Aristida palustris</i>	SR	
	<i>Burmannia biflora</i>	W	
	<i>Dichanthelium erectifolium</i>	SR	
	<i>Dionaea muscipula</i>	FC2, C-SC	
	<i>Ludwigia linifolia</i>	SR	
	<i>Oxypolis ternata</i>	FC2, C	
	<i>Paspalum praecox</i>	W	
	<i>Rhexia aristosa</i>	FC2, T	
	<i>Rhynchospora harperi</i>	C	
	<i>Solidago pulchra</i>	FC2, C	
HB-5	Wet Pine Flatwoods, Pocosin		870320
	<i>Asclepias pedicellata</i>	C	
	<i>Calopogon barbatus</i>	W	
	<i>Solidago pulchra</i>	FC2, C	
	<i>Sporopolus species 1</i>	FC2, T	
HD-1	Small Depression Pond/Black Gum Swamp		878337
	<i>Dichanthelium erectifolium</i>	SR	
	<i>Rhexia aristosa</i>	FC2, T	
HD-2	Depression Meadow/Small Depression Pond		876339
	<i>Aristida palustris</i>	SR	
	<i>Burmannia biflora</i>	W	
	<i>Rhexia aristosa</i>	FC2, T	
HD-3	Depression Meadow/Small Depression Pond		871341
	<i>Aristida palustris</i>	SR	
	<i>Burmannia biflora</i>	W	
	<i>Dichanthelium erectifolium</i>	SR	
	<i>Eleocharis equisetoides</i>	SR	
	<i>Eleocharis robbinsii</i>	C	
	<i>Myriophyllum laxum</i>	FC2, T	
	<i>Panicum tenerum</i>	SR	
	<i>Rhexia aristosa</i>	FC2, T	
	<i>Rhynchospora harperi</i>	C	
	<i>Rhynchospora inundata</i>	W	
	<i>Rhynchospora nitens</i>	W	
	<i>Rhynchospora pleiantha</i>	SR	
	<i>Rhynchospora tracyi</i>	SR	
	<i>Scleria georgiana</i>	C	

HE-1	Depression Meadow		893334
	Agalinis linifolia	SR	
	Aristida palustris	SR	
	Burmannia biflora	W	
	Rhexia aristosa	FC2, T	
HE-2	Depression Meadow		892334
	Agalinis linifolia	SR	
	Aristida palustris	SR	
	Bartonia verna	W	
	Burmannia biflora	W	
	Rhexia aristosa	FC2, T	
	Rhynchospora wrightiana	W	
HE-3	Depression Meadow		889332
	Aristida palustris	SR	
	Dichanthelium erectifolium	SR	
	Eleocharis equisetoides	SR	
	Ludwigia linifolia	SR	
	Panicum tenerum	SR	
	Rhexia aristosa	FC2, T	
	Rhynchospora harperi	C	
	Rhynchospora inundata	W	
	Rhynchospora tracyi	SR	
	Scleria reticularis var. reticularis	C	
	Xyris smalliana	W	
HE-4	Small Stream Pocosin		895331
	Rhynchospora inundata	W	
HE-5	Depression Meadow		896332
	Aristida palustris	SR	
	Burmannia biflora	W	
	Eleocharis equisetoides	SR	
	Panicum tenerum	SR	
	Rhexia aristosa	FC2, T	
	Rhynchospora harperi	C	
	Rhynchospora inundata	W	
HE-6	Small Depression Pond		892329
	Burmannia biflora	W	
	Dichanthelium erectifolium	SR	
	Eleocharis equisetoides	SR	
	Panicum tenerum	SR	
	Rhexia aristosa	FC2, T	
	Rhexia aristosa X cubensis	undescribed taxon	
	Rhexia cubensis	SR	
	Rhynchospora scirpoides	C	
	Rhynchospora tracyi	SR	
	Rhynchospora wrightiana	W	

HE-7.	Road Meadow		880330
	Agalinis fasciculata	W	
	Rhexia aristosa	FC2, T	
	Rhynchospora pusilla	W	
	Rhynchospora nitens	W	
HE-8	Pocosin Ecotone		883329
	Dionaea muscipula	FC2, C-SC	
HE-8	Road Depression Meadow		882328
	Paspalum praecox	W	
HF-1	Small Depression Pond/Depression Meadow		900316
	Agalinis linifolia	SR	
	Aristida palustris	SR	
	Coelorachis rugosa	W	
	Dichanthelium erectifolium	SR	
	Eleocharis tricostata	W	
	Ludwigia linifolia	SR	
	Panicum tenerum	SR	
	Paspalum praecox	W	
	Rhexia aristosa	FC2, T	
	Rhynchospora tracyi	SR	
	Rhynchospora wrightiana	W	
	Scleria georgiana	C	
	Spiranthes laciniata	C	
	Xyris smalliana	W	
HF-2	Road Meadow		899316
	Aristida palustris	SR	
	Dichanthelium erectifolium	SR	
	Eleocharis equisetoides	SR	
	Rhexia aristosa	FC2, T	
	Rhynchospora inundata	W	
	Rhynchospora nitens	W	
	Rhynchospora pallida	SR	
	Rhynchospora wrightiana	W	
	Sagittaria graminea var. chapmanii	C	
HF-3	Small Depression Pond		898318
	Aristida palustris	SR	
	Dichanthelium erectifolium	SR	
	Eleocharis equisetoides	SR	
	Paspalum praecox	W	
	Rhexia aristosa	FC2, T	
	Sagittaria graminea var. chapmanii	C	
HF-3	Road Meadow		898318
	Amphicarpum purshii	SR	
HF-4	Road Meadow		898319
	Agalinis linifolia	SR	
	Rhexia aristosa	FC2, T	
	Rhexia cubensis	SR	

(HF-4 cont.)			
	Rhynchospora nitens	W	
	Sagittaria graminea var. chapmanii	C	
HF-5	Flatwoods/Pocosin Ecotone		896319
	Carex elliottii	W	
	Rhexia cubensis	SR	
	Rhynchospora pallida	SR	
HF-6	Road Meadow		894319
	Rhexia aristosa	FC2, T	
	Rhynchospora pallida	SR	
HF-7	Small Depression Pond		892318
	Eleocharis equisetoides	SR	
	Rhynchospora inundata	W	
	Xyris smalliana	W	
HF-8	Road Meadow		896311
	Amphicarpum purshii	SR	
HF-8	Small Depression Pond		896312
	Agalinis linifolia	SR	
	Aristida palustris	SR	
	Burmannia biflora	W	
	Dichanthelium erectifolium	SR	
	Eleocharis elongata	C	
	Eleocharis equisetoides	SR	
	Eleocharis tricostata	W	
	Panicum tenerum	SR	
	Rhexia aristosa	FC2, T	
	Rhexia cubensis	SR	
	Rhynchospora inundata	W	
	Rhynchospora pleiantha	C	
HF-9	Road Meadow		889313
	Amphicarpum purshii	SR	
HF-11	Small Depression Pond		897309
	Agalinis linifolia	SR	
	Carex verrucosa	SR	
	Coelorachis rugosa	W	
	Dichanthelium erectifolium	SR	
	Eleocharis equisetoides	SR	
	Panicum tenerum	SR	
	Rhexia aristosa	FC2, T	
	Rhynchospora inundata	W	
	Spiranthes laciniata	C	
	Sporobolus species 1 (into HF-20)	FC2, T	
HF-12	Small Depression Pond		897308
	Eleocharis elongata	C	
	Eleocharis equisetoides	SR	

HF-13	Small Depression Pond		895309
	Carex verrucosa	SR	
	Panicum tenerum	SR	
	Rhexia aristosa	FC2, T	
	Rhynchospora inundata	W	
	Rhynchospora tracyi	SR	
HF-14	Pocosin Ecotone		894312
	Amphicarpum purshii	SR	
	Rhexia aristosa	FC2, T	
HF-15	Small Depression Pond		894310
	Eleocharis equisetoides	SR	
	Litsea aestivalis	FC2, C	
	Scirpus etuberculatus	SR	
HF-15	Pond/Flatwoods Ecotone		894310
	Asclepias pedicellata	C	
HF-16	Small Depression Pond		892308
	Eleocharis robbinsii? (too deep to wade)	C	
	Panicum tenerum	SR	
	Rhexia aristosa	FC2, T	
	Rhexia cubensis	SR	
	Rhynchospora inundata	W	
	Rhynchospora scirpoides	C	
HF-17	Small Depression Pond		891306
	Aristida palustris	SR	
	Burmannia biflora	W	
	Dichanthelium erectifolium	SR	
	Eleocharis equisetoides	SR	
	Eleocharis robbinsii	C	
	Panicum tenerum	SR	
	Rhexia aristosa	FC2, T	
	Rhynchospora scirpoides	C	
	Rhynchospora tracyi	SR	
	Rhynchospora wrightiana	W	
	Utricularia olivacea	T	
	Xyris smalliana	W	
HF-18	Depression Meadow		898308
	Agalinis linifolia	SR	
	Coelorachis rugosa	W	
	Paspalum praecox	W	
	Rhexia aristosa	FC2, T	
HF-19	Small Depression Pocosin		897307
	Amphicarpum purshii (into HF-20)	SR	
HF-20	Flatwoods/Pocosin Ecotone		897308
	Amphicarpum purshii	SR	
	Solidago pulchra	FC2, C	
	Sporobolus species 1	FC2, T	

HF-21	Small Depression Pond Coelorachis rugosa	W	899310
HF-22	Road Depression Meadow Juncus validus	W	902306
HF-23	Small Stream Swamp Carex albicans var. emmonsii	W	905302
HF-24	Road/Pocosin Ecotone Dionaea muscipula Rhynchospora pallida	FC2, C-SC SR	900309
HF-25	Road Depression Meadow Andropogon capillipes Burmannia biflora Dichanthelium wrightianum Dionaea muscipula Ludwigia microcarpa Paspalum praecox Polygala brevifolia Rhynchospora nitens Rhynchospora pallida Solidago pulchra Xyris baldwiniana	W W W FC2, C-SC W W W W W SR FC2, C W	904310

SECTOR I

IA-1	Small Depression Pond Rhynchospora inundata Rhynchospora scirpoides	W C	886297
IA-2	Small Depression Pond Burmannia biflora Eleocharis equisetoides Eleocharis vivipara (?) Panicum tenerum Rhynchospora inundata Rhynchospora scirpoides	W SR W SR W C	890296
IA-3	Wet Pine Flatwoods Asclepias pedicellata	C	887298
IC-2	Small Depression Pond Eleocharis equisetoides Rhynchospora inundata	SR W	875279
IC-3	Small Depression Pond Eleocharis equisetoides	SR	869280

IC-4	Small Depression Pond Eleocharis equisetoides Rhynchospora inundata Sagittaria engelmanniana	SR W W	870280
IC-6	Coastal Fringe Sandhill Cladina evansii	W	859270
IC-7	Small Depression Pond Eleocharis equisetoides	SR	862270
IC-8	Coastal Fringe Sandhill Cladina evansii	W	?
IC-9	Maritime Forest Cynanchum angustifolium Iresine rhizomatosa Sageretia minutiflora	W W C	853258
IC-10	Coastal Fringe Evergreen Forest Asplenium platyneuron var. bacculum-rubrum Cornus asperifolia Rhynchospora miliacea	W C W	856262
IC-11	Seepage Meadow Eleocharis montevidensis	proposed	867259
IE-2	Pocosin Ecotone Dionaea muscipula	FC2, C-SC	873291

SECTOR J

JB-1	Small Stream Swamp Carex chapmanii Carex floridana	FC2, T W	819305
JC-1	Small Depression Pond Eleocharis melanocarpa	C	844290

SECTOR K

KA-1	Small Stream Swamp Carex floridana	W	797390
KC-1	Wet Pine Flatwoods Buchnera floridana Calamovilfa brevipilis Dionaea muscipula Pleea tenuifolia Rhynchospora pallida Solidago pulchra	W F3C, E FC2, C-SC W SR FC2, C	772377

SECTOR L

LA-1	Road Depression Meadow	727352-
	Wet Pine Flatwoods	724337
	Dionaea muscipula	FC2, C-SC
	Pilea tenuifolia	W
	Rhynchospora pusilla	W
	Xyris elliotii	SR
LB-1	Road Meadow (US 17)	725306-724337
	Savanna	
	Agalinis aphylla	C
	Agalinis fasciculata	W
	Agalinis virgata	C
	Amphicarpum purshii	SR
	Andropogon capillipes	W
	Asclepias pedicellata	C
	Bartonia verna	W
	Calamovilfa brevipilis	F3C, E
	Calopogon barbatus	W
	Dionaea muscipula	FC2, C-SC
	Gentiana autumnalis	W
	Linum floridanum var. chrysocarpum	SR
	Oxypolis ternata	FC2, C
	Pilea tenuifolia	W
	Polygala brevifolia	W
	Rhynchospora nitens	W
	Rhynchospora pallida	SR
	Rhynchospora pusilla	W
	Solidago pulchra	FC2, C
	Sporobolus species 1	FC2, T
	Tofieldia glabra	FC2, C
	Xyris baldwiniana	W
	Xyris elliotii	SR
	Xyris flabelliformis	C
LB-3	Mesic Pine Flatwoods	734330
	Carex chapmanii	FC2, T
	Carex floridana	W
LB-4	Powerline Depression Meadow	743296-747287
	Carex elliotii	W
	Polygala brevifolia	W
LC-1	Road Meadow (NC 210)	752270-745287
	Agalinis fasciculata	W
	Agalinis tenella	W
	Andropogon capillipes	W
	Dionaea muscipula	FC2, C-SC
	Xyris difformis var. curtissii	W
	Xyris elliotii	SR

LC-2	Powerline Depression Meadow	747287-764282
	Andropogon capillipes	W
	Carex elliotii	W
	Dionaea muscipula	FC2, C-SC
	Rhexia aristosa	FC2, T
	Rhynchospora oligantha	C

SECTOR M

MB-1	Mesic Pine Flatwoods	770398
	Carex floridana	W
MD-1	Small Stream Swamp	752393-
	Carex chapmanii	FC2, T 752372
	Carex floridana	W
	Scirpus lineatus	C
	Senecio glabellus	W
ME-1	Road Meadow (US 17)	728353-735387
	Oxypolis ternata	FC2, C
MF-1	Wet Pine Flatwoods, Pocosin Ecotone	776370
	Andropogon capillipes	C
	Calamovilfa brevipilis	F3C, E
	Calopogon barbatus	W
	Carex elliotii	W
	Dionaea muscipula	FC2, C-SC
	Polygala brevifolia	W
	Solidago pulchra	FC2, C

SECTOR Q

QA-1	Small Depression Pocosin	943390
	Litsea aestivalis (1984)	FC2, C
QA-2	Small Depression Pond	941391
QA-3	Depression Meadow	946402
	Anthaenantia rufa	W
	Aristida palustris	SR
	Burmannia biflora	W
	Coelorachis rugosa	W
	Dichanthelium erectifolium	SR
	Dichanthelium sp. 1 =Panicum hirstii	FC2, C
	Eleocharis equisetoides	SR
	Lobelia boykinii	FC2, C
	Muhlenbergia torreyana	F3C, E
	Panicum tenerum	SR
	Paspalum praecox	W
	Rhexia aristosa	FC2, T
	Rhynchospora elliotii	W
	Rhynchospora harperi	C

(QA-3	Depression Meadow cont.)		
	Rhynchospora tracyi	SR	
	Scleria georgiana	C	
	Spiranthes laciniata	C	
	Xyris smalliana	W	
QA-3	Pocosin Ecotone		946401
	Amphicarpum purshii	SR	
	Gentiana autumnalis	W	
	Rhynchospora nitens	W	
QA-4	Wet Pine Flatwoods		940403
	Andropogon capillipes	W	
QA-5	Wet Pine Flatwoods		950414
	Andropogon capillipes	W	
	Gentiana autumnalis	W	
QA-6	Depression Meadow		944392
	Aristida palustris	SR	
	Carex verrucosa	SR	
	Panicum tenerum	SR	
	Rhynchospora inundata	W	
QA-7	Small Stream Swamp		944424
	Carex chapmanii	FC2, T	
	Carex elliotii	W	
	Rhynchospora miliacea	W	
	Scirpus lineatus	C	
QB-1	Nonriverine Swamp Forest (<u>Nyssa biflora</u> variant)		953375
	"Peterson's Quagmire"		
QB-2	Road Meadow (Lyman Road)		943375
	Anthaenantia rufa	W	
	Coelorachis rugosa	W	
	Dionaea muscipula	FC2, C-SC	
	Gentiana autumnalis	W	
	Paspalum praecox	W	
	Paspalum stramineum var. stramineum	proposed	
	Polygala brevifolia	W	
	Rhynchospora nitens	W	
	Rhynchospora oligantha	SR	
	Rhynchospora pallida	SR	
	Scleria georgiana	C	
	Scleria minor	SR	
	Solidago gracillima	W	
	Solidago pulchra	FC2, C	
	Tofieldia glabra	FC2, C	
	Xyris baldwiniana	W	

QB-3. Small Depression Pond
Eleocharis tricostata
Rhexia cubensis
Rhynchospora wrightiana

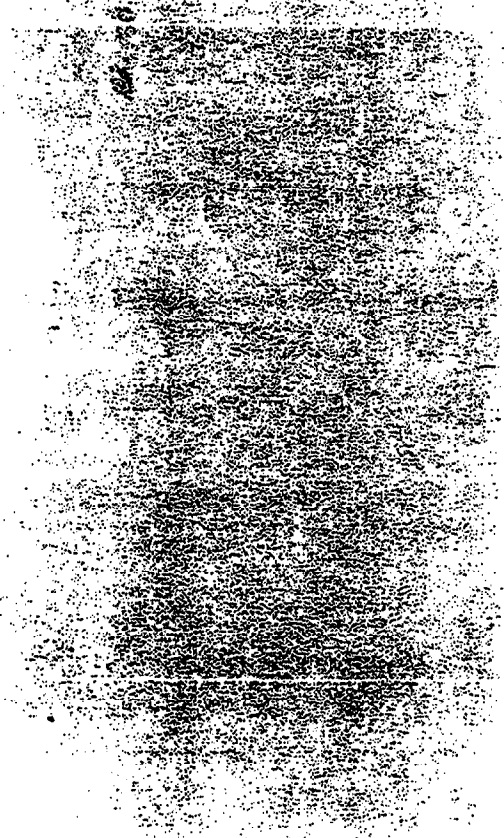
954361

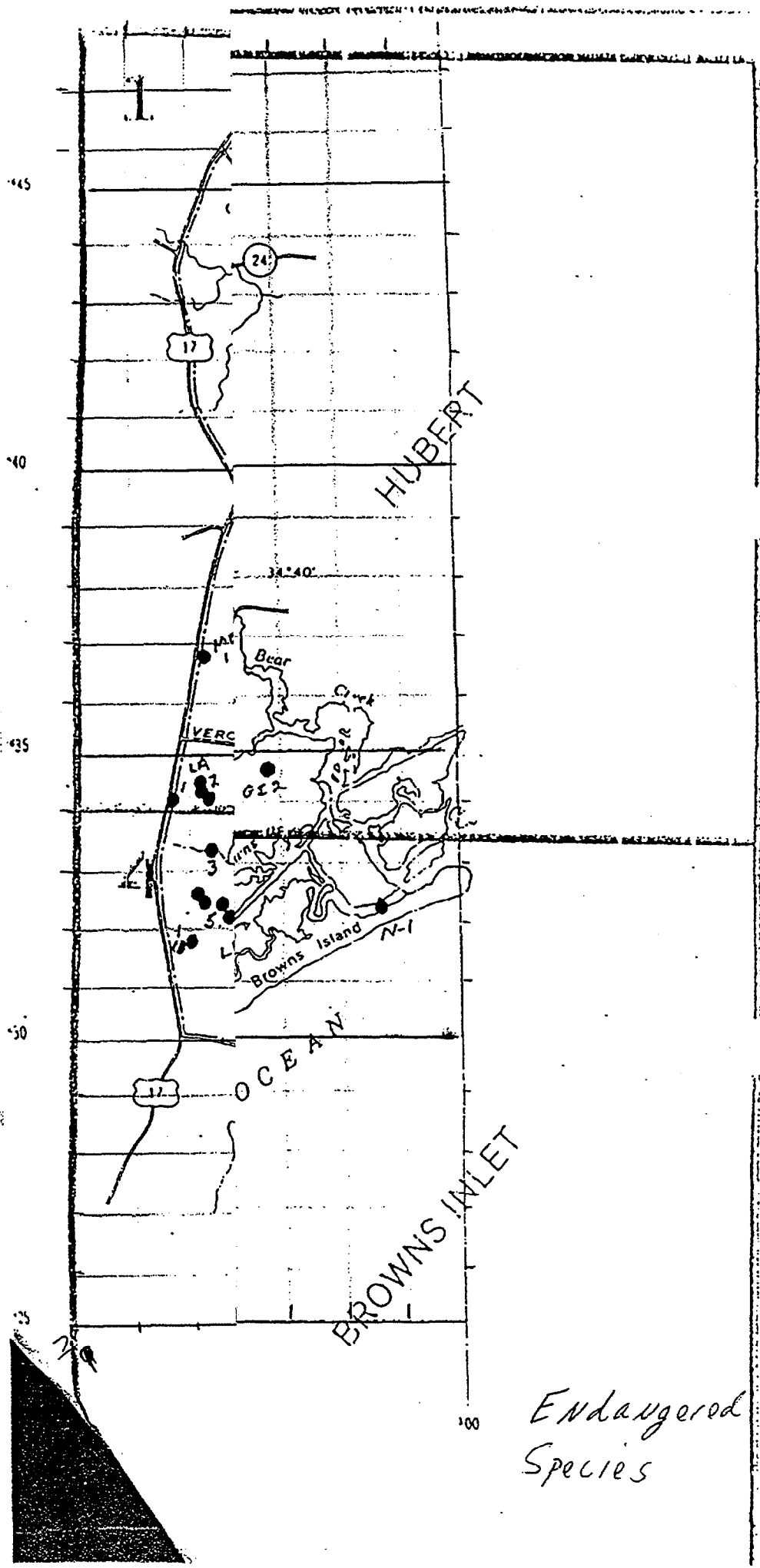
W
SR
W

RB-1. Road Meadow
Ludwigia microcarpa

888434

W





Endangered
Species

APPENDIX T
DRAFT - EVALUATION OF METALS IN GROUNDWATER
MCB CAMP LEJEUNE, NC

DRAFT

**EVALUATION OF METALS IN
GROUNDWATER**

**MARINE CORPS BASE,
CAMP LEJEUNE, NORTH CAROLINA**

CONTRACT TASK ORDER 0177

JUNE 3, 1994

Prepared for:

**DEPARTMENT OF THE NAVY
ATLANTIC DIVISION
NAVAL FACILITIES
ENGINEERING COMMAND
*Norfolk, Virginia***

Under the:

**LANTDIV CLEAN Program
Contract N62470-89-D-4814**

Prepared by:

**BAKER ENVIRONMENTAL, INC.
*Coraopolis, Pennsylvania***

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION	1
2.0 STUDY OBJECTIVES	1
3.0 SCOPE OF WORK	2
4.0 DATA ANALYSIS	3
5.0 ANALYSIS OF STUDY OBJECTIVES	8
6.0 CONCLUSIONS	10
7.0 RECOMMENDATIONS	10

FIGURES

1	Site Location Map
2	Positive Detections Above Applicable Federal and State Standards for Total and Filtered Inorganic Analytes in Groundwater-Site 2
3	Positive Detections of Total Metals Above Federal MCLs and NCWQS in Shallow Wells-Site 78
4	Positive Detections of Total Metals Above Federal MCLs and NCWQS in Intermediate Wells-Site 78
5	Positive Detections of Total Metals Above Federal MCLs and NCWQS in Deep Wells-Site 78

TABLES

1	Summary of Total Metals in Shallow Wells
2	Comparison of Repeat Sampling in Shallow Wells
3	Summary of Dissolved Metals in Shallow Wells
4	Summary of Total Metals in Upgradient Wells
5	Comparison of Inorganic Subsurface Soil Concentrations in "Clean" and "Contaminated" Wells
6	Total Metals in Deep Monitoring Wells
7	Summary of Field Parameters in Shallow, Deep, and Supply Wells

1.0 INTRODUCTION

Numerous groundwater investigations have been conducted at Marine Corps Base (MCB), Camp Lejeune under the Department of the Navy (DON) Installation Restoration Program (IRP). These studies have identified elevated levels of total metals in shallow groundwater at almost every site. The degree of contamination, based on dissolved metals analysis of groundwater samples, is limited. It is believed that the presence of elevated metals are not always related to past disposal activities for several reasons, which is the basis of this study.

Currently, Records of Decision (ROD) are being prepared for Operable Units No. 1 (Sites 21, 24, and 78) and No. 5 (Site 2). Both RODs are proposing to not remediate shallow groundwater which contains elevated levels of total metals above State groundwater standards (i.e., North Carolina Water Quality Standards) and/or Federal drinking water standards (i.e., Maximum Contaminant Levels). Specifically, remediation of shallow groundwater due to elevated total metals is not cost effective, or practical, due to the following: (1) the shallow aquifer is not used for potable supply; (2) the source of metals in groundwater cannot be correlated with soil data or previous disposal practices; (3) the extent of shallow groundwater contamination (based on total metals analysis) is widespread and in many cases undefinable, since there are no apparent contaminant plumes or patterns associated with the metals; and (4) deep groundwater, which is the source of potable water, is not significantly contaminated with metals above the standards.

2.0 STUDY OBJECTIVES

The DON/Marine Corps initiated a study on inorganics in groundwater throughout MCB Camp Lejeune to assess whether total metals in groundwater are related to disposal practices or to other factors. The overall goal of this study is to provide information that would be used in consideration of not remediating shallow groundwater at Operable Units No. 1 and No. 5, and possibly other operable units where total metals are elevated without cause. The following study objectives were identified:

- (1) Determine whether the elevated total metals detected in the shallow aquifer are related to past disposal practices, well construction factors, sampling techniques, or suspended particulates in the samples;
- (2) Determine whether total metals in shallow groundwater are elevated throughout the region or MCB Camp Lejeune;
- (3) Determine whether there is a correlation between elevated total metals in groundwater and metals in soil; and

- (4) Determine whether the concentrations of total metals (i.e., low versus high) is related to shallow and deep aquifer characteristics.

3.0 SCOPE OF WORK

Groundwater and soil data from a total of 21 sites were compiled as part of the overall study. Three of the 21 sites are located outside the boundary of the base. These sites include the ABC Cleaners Superfund Site, located along Route 24 in Jacksonville, and two sites located along Highway 17 (Off-site Properties No. 1 and No. 2). The two sites along Route 17 were investigated by the DON/Marine Corps as part of a real estate survey. The other 18 sites are located throughout various portions of MCB Camp Lejeune (see Figure 1).

Information from studies conducted by Baker and other consultants were obtained to evaluate metal concentrations in groundwater. The study focused on 14 metals of potential concern to human health and the environment. Some of the information was collected under the IR Program whereas other information was obtained during other investigations (e.g., ABC Cleaners RI/FS). The following data tables were then prepared to determine why total metals are generally elevated in shallow groundwater.

Table 1 - Total Metal Concentrations in Shallow Groundwater by Site

Table 2 - Summary of Repeat Sampling of Shallow Wells (Sites 2 and 78)

Table 3 - Dissolved Metal Concentrations in Shallow Groundwater by Site

Table 4 - Summary of Total Metal Concentrations in Upgradient Wells

Table 5 - Comparison of Subsurface Metal Concentrations in Uncontaminated and Contaminated Wells

Table 6 - Total Metal Concentrations in Deep Groundwater by Site

Table 7 - Summary of Field Parameters in Shallow Monitoring Wells, Deep Monitoring Wells, and Supply Wells

The tables are presented at the end of this report.

4.0 DATA ANALYSIS

The following discussion represents an analysis of the information contained in each of the previously mentioned tables.

Table 1 (Total Metal Concentrations in Shallow Groundwater)

All of the sites had at least one (and in most cases several) metal which exceeded either State water quality standards or Federal drinking water standards. The most frequently detected metals included chromium, lead, and manganese, which were detected at almost every site above drinking water standards. Other frequently detected metals which exceeded drinking water standards included arsenic, beryllium, cadmium, and nickel.

An analysis of the data from Table 1 indicates that elevated total metals are present in shallow groundwater at every site, including the three sites which are located off base. The two sites which did not exhibit significant contamination include the ABC Cleaners site (only chromium exceeded the standards) and Site 48 (only manganese exceeded the standards).

Total metals detected in shallow groundwater at Site 2 exceeded State and/or Federal standards in seven of the 11 shallow monitoring wells. Manganese was the most frequently detected metal (7/11). Lead (3/11), chromium (2/11), and cadmium (1/11) were also detected above the standards, but less frequently (see Figure 2).

With the exception of Wells 78GW03 and 78GW19, total metals were detected at Site 78 (Hadnot Point Industrial Area) above Federal MCLs or NCWQS in every shallow well (see Figure 3). The extent of elevated total metals in groundwater is widespread, encompassing approximately one square mile (or approximately 660 acres) in total area. The distribution and concentration of total metals in shallow groundwater makes it virtually impossible to identify or illustrate contaminant plumes (see Figure 3).

An analysis of the total metals results indicates the following pattern. Samples exhibiting elevated levels of lead, chromium, or other contaminants of concern, also exhibited elevated levels of other metals such as aluminum, antimony, iron, and zinc. Samples which did not exhibit elevated levels of lead, chromium, or manganese also did not exhibit elevated levels of other metals. This pattern indicates that the elevated total metals are not limited to one or

two contaminants, which would be the case if a lead or chromium plume in the groundwater truly existed. In other words, if a site is impacted by a particular metal due to disposal activities (say chromium for example), then other metals such as aluminum, lead, or zinc should not be consistently elevated as in the case of samples collected from the shallow aquifer at MCB Camp Lejeune. This point is depicted in the data summary tables provided in Appendix A for Sites 2 and 78. These tables were taken from the Remedial Investigation Reports for Operable Units No. 1 and No. 5. As an example, note that sample numbers 78-MW08, 78-MW10, 78-MW11, and 78-MW12 all had elevated levels of total metals when compared to samples 78-MW09-2 and 78-MW09-3. It is clear that most of the metal concentrations in a particular sample follow a consistent pattern throughout.

Table 2 (Comparison of Repeat Sampling of Shallow Wells)

Five wells from Sites 2 and 78 were randomly chosen to evaluate total metals concentrations between sampling rounds. The comparison was limited to only chromium, lead, and manganese since these contaminants were frequently detected throughout MCB Camp Lejeune. In several cases, metal concentrations were significantly different between the sampling rounds. If the shallow aquifer was impacted due to former disposal activities, a contaminant plume would be present and concentrations would not significantly deviate. The deviation in metal concentrations may indicate that sampling results are biased due to suspended particulates in the samples.

Table 3 (Dissolved Metal Concentration in Shallow Groundwater by Site)

The data base for Table 3 was limited to 12 sites since many of the previous investigations (i.e., prior to Navy CLEAN) did not analyze for dissolved metals. Nevertheless, an analysis of the 12 sites revealed that elevated levels of dissolved metals in groundwater is limited. Manganese was the most frequently detected metal above drinking water standards (10 of 12 sites exhibited elevated levels). Lead was detected at only one site (Site 21) above drinking water standards. Chromium was also detected at only one site (Site 78) above drinking water standards. No other metal was detected above the standards.

Literature searches have indicated that manganese is a naturally occurring metal in North Carolina. Therefore, the presence of manganese may not be attributable to site-related activities (Greenhorne & O'Mara, 1992).

An analysis of the data from Table 3 clearly shows a significant reduction in metal concentrations when compared to Table 1 (total metals in shallow groundwater). One possible reason for this reduction is that suspended solids or particles are not being introduced into the analysis of the sample due to filtering. A second possibility is that the metals are not significantly present in a dissolved state in shallow groundwater due to the species of metals under site conditions. It should be noted that calcium and sodium did not exhibit such a pattern since the salts of these metals are more soluble in water. For example, the concentrations of total calcium and total sodium versus dissolved calcium and dissolved sodium are similar and are not affected by the removal of the particulates during filtering. The fact that these salts do not exhibit the pattern that the other metals show supports the possibility that total metal concentrations are influenced by particulates in the sample.

Table 4 (Total Metals in Upgradient Shallow Wells)

The data base for Table 4 consists of groundwater results from 14 upgradient shallow monitoring wells (i.e., one well per site). These wells were installed to determine baseline groundwater quality to which on-site groundwater conditions could be compared. In some cases, the upgradient wells were located in areas where other base activities may have influenced groundwater quality.

The analysis of this data shows that manganese was the most frequently detected metal above Federal or State standards in upgradient shallow wells. Manganese was detected in 7 of the 14 upgradient wells above drinking water standards. Chromium and lead were also frequently detected above drinking water standards in upgradient (background) wells. These contaminants were detected in 6 of the 14 upgradient wells. At Site 2, samples collected from an upgradient well (2GW9) exhibited elevated levels of chromium (83 μ /l), lead (27.2 μ /l) and manganese (747 μ /l). At Site 78, samples collected from upgradient wells 96W4 and 78GW26 did not exhibit elevated levels of total metals. The concentration range for metals detected above NC WQS and/of Federal MCLs in upgradient wells is provided below:

- beryllium (ND-46.5 μ /l)
- cadmium (ND-10 μ /l)
- chromium (ND-198 μ /l)
- lead (ND-78.8 μ /l)
- manganese (ND-747 μ /l)
- mercury (ND-1.6J μ /l)

Based on the above range representing upgradient wells, none of the on-site wells at Site 2 exhibited total metals above the maximum background concentrations. However, at Site 78, lead and chromium were detected above the maximum background in several on-site wells.

An analysis of the data from Table 4 indicates that shallow groundwater upgradient of some sites contains total metals above drinking water standards. A comparison of Table 4 data against Table 1 data indicates that shallow groundwater samples from upgradient wells are less contaminated than samples collected from on-site monitoring wells. However, it should be noted that the data base for Table 4 consists of only 14 wells whereas the data base for Table 1 consists of over 130 wells. Therefore, to assume that upgradient groundwater quality is better than on-site groundwater quality may not be justified due to the different data bases.

Table 5 (Comparison of Subsurface Metal Concentrations in Uncontaminated and Contaminated Wells)

The purpose of this table is to determine whether metal concentrations in soils correlate with the elevated levels of metals in shallow groundwater.

To evaluate this, metals in subsurface soils, representing an area of groundwater contamination, were compared to metals in subsurface soil in areas which did not exhibit groundwater contamination. If the elevated total metals in shallow groundwater are present due to former disposal activities, subsurface metals in soil representing an area of groundwater contamination would be expected to be elevated or higher than metals in subsurface soil representing a non-contaminated area. This evaluation assumes that the well exhibiting elevated total metals is within a source area and that the soil sample is representative of soil impacted by metal contamination.

As shown on Table 5, there is no clear pattern or correlation which indicates that elevated total metals are due to soil contamination. Note that in many cases, the concentration of metals which represent "non-contaminated" areas are greater than the metals which represent "contaminated" areas. Also note that the metals in subsurface soil are within or close to background subsurface metal concentrations. Therefore, this supports the possibility that in many cases at MCB Camp Lejeune, the elevated total metals in shallow groundwater cannot be attributable to a source or to past disposal practices.

Table 6 (Total Metals in Deep Monitoring Wells)

Table 6 presents total metal concentrations in deep groundwater for each site. The data base is limited to only 8 sites. Metal concentrations in supply wells were also included for comparison purposes.

As shown on Table 6, total metals in deep groundwater are below drinking water standards with a few exceptions. Arsenic and cadmium were detected above the standards in one deep monitoring well at Site 78 (see Figure 4). Manganese was detected in deep groundwater at three sites and a few of the supply wells. Lead was detected in one supply well at 16 μl , which is slightly above the drinking water standard of 15 μl .

Elevated total metals are not widespread in deep groundwater for two possible reasons. First, most metals are not very mobile in the environment. Second, deep groundwater samples may not have significant amounts of suspended particulates due to different geologic conditions. Soils in the deeper aquifer are more compacted and consist primarily of calcareous sands, clays, and limestone fragments. Soils in the shallow aquifer are loosely compacted and consist primarily of fine-grained sands, silts, and clays. This classification may support the possibility that suspended solids are collected during sampling, thereby influencing the analysis for total metals.

Table 7 (Summary of Field Parameters in Shallow, Deep, and Supply Wells)

Table 7 provides a range of pH and specific conductivity values representative of shallow and deep groundwater. In general, lower pH values were noted more often in shallow wells than in deep wells (including the supply wells). This condition may influence the leachability and speciation of metals in groundwater.

Deep groundwater usually exhibited higher specific conductivity values. High specific conductivity values are representative of high dissolved conditions. The fact that deep groundwater generally exhibited higher specific conductivity values indicates that most of the metals, if present, are in a dissolved state. The high specific conductivity values could also indicate less suspended particulates due to the geologic conditions of the deep aquifer. The lower specific conductivity values observed in shallow wells indicates that the metals in the shallow aquifer are not in a dissolved state. This also supports the possibility that suspended particulates in the shallow aquifer are influencing the analysis of total metals.

5.0 ANALYSIS OF THE STUDY OBJECTIVES

Each of the objectives identified for this study are analyzed below based on the information collected.

Objective No. 1 (Determine whether the elevated total metals in the shallow aquifer are related to past disposal practices, well construction factors, sampling techniques, or suspended particulates in the samples)

Based on the analysis of information provided in Tables 1 through 7 and Appendix A, it appears that suspended particulates in groundwater samples could influence the concentration of total metals in groundwater. Well construction factors and sampling techniques are probably not a significant factor since the data base is representative of data obtained by Baker, ESE (Site 28 and 30), Roy F. Weston (ABC Cleaners), and Halliburton NUS (Site 7). No particular pattern was noted between sites which Baker obtained the samples versus sites in which other consultants obtained the data. Sampling methods were also considered. For Sites 63 and 65 for example, samples were collected with a bailer. At Sites 2 and 78, samples were collected with a low flow pump. All four sites exhibited elevated levels of total metals in groundwater samples. In addition, due to the fact that deep groundwater quality is not significantly impacted with metals indicates that well construction or sampling techniques are probably not factors related to elevated total metals in groundwater.

With respect to past disposal practices, Table 5 clearly shows that soil concentrations do not correlate with elevated total metals in groundwater. Based on this analysis, and on many of the sites previously investigated, the source of total metals in groundwater cannot be attributable to soil contamination or disposal practices in many cases. This is based on both the history of the site as well as the analytical soil results. In some cases, total metals were detected at elevated levels even when the site history did not correlate with the contaminants found. For example, Sites 2 and 21 have a history of pesticide storage and handling, and there are no known disposal areas (i.e., buried debris) within the site boundary. Nevertheless, both of these sites exhibited several metals above drinking water standards that would not be expected to be present at high concentrations based on the historical use of the site. These metals included lead, chromium, beryllium, cadmium, and manganese.

Objective No. 2 (Determine whether total metals in shallow groundwater are elevated throughout the region or MCB Camp Lejeune)

Based on groundwater data obtained from both upgradient wells and off base wells, total metals were detected above drinking water standards in shallow groundwater in areas that would not be influenced by former disposal activities at the sites. Given that some of the upgradient wells are contaminated, it is apparent that total metals in shallow groundwater are elevated in certain areas of the base outside of the influence of site-related disposal activities. However, it is unknown whether the shallow aquifer upgradient of the sites is contaminated due to other base-related activities or whether the levels in groundwater samples are also elevated due to the influence of suspended fines in the samples.

Objective No. 3 (Determine whether there is a correlation between elevated total metals in groundwater and metals in soil)

An evaluation of the data presented in Table 5 shows that metals in soil samples collected in areas of groundwater contamination are not elevated when compared to metals in soil samples collected in areas that did not exhibit groundwater contamination. This supports the possibility that in many cases, elevated levels of total metals in shallow groundwater are not related to the disposal history at the site. As previously mentioned, sites which did not exhibit soil contamination (when compared to background soil levels) or did not have a history of disposal indicative of metals contamination still exhibited elevated levels of total metals in groundwater. Since there is no apparent correlation between metals in soil and total metals in groundwater, then the possibility exists that the elevated total metals in groundwater are biased high due to suspended particulates.

Objective No. 4 (Determine whether the concentrations of total metals in groundwater is related to shallow and deep aquifer characteristics)

There is some evidence that the geologic conditions of the shallow and deep aquifers influence the amount of total metals detected in groundwater samples. The fact that the deep aquifer generally exhibited higher specific conductivity values indicates that there is more dissolved constituents in the deep aquifer when compared to the shallow aquifer. This was evident when comparing Table 1 (total metals in shallow groundwater) to Table 6 (total metals in deep groundwater). Table 6 did not indicate significant levels of total metals in deep groundwater throughout MCB Camp Lejeune.

The geologic conditions of the shallow aquifer would tend to result in samples that may contain suspended particulates. The suspended particulates could influence the total metals concentrations in the samples.

6.0 CONCLUSIONS

- 1. Elevated levels of total metals in the shallow aquifer are probably influenced to some degree by the geologic conditions of the site.**
- 2. There is no correlation between metal levels in soil and total metals in groundwater. Therefore, elevated total metals in groundwater cannot be attributable to soil contamination of past disposal practices.**
- 3. Elevated levels of total metals in the shallow aquifer may be biased high due to suspended particulates in the samples.**
- 4. Dissolved metals in groundwater were generally below Federal MCLs and NC WQS and therefore, do not present a significant problem at MCB Camp Lejeune.**
- 5. Total and dissolved metal concentrations in the Castle Hayne aquifer were generally below drinking water standards and therefore, do not present a significant problem at MCB Camp Lejeune.**
- 6. The presence of manganese in shallow and deep groundwater may be due to naturally occurring geologic conditions.**

7.0 RECOMMENDATIONS

- 1. Remediation of total metals in the shallow aquifer at Operable Units 1 and 5 is not recommended based on the following:**
 - **Elevated metals in groundwater at both operable units does not appear to be related to soil contamination or past disposal practices;**
 - **The distribution of total metals in groundwater is not characteristic of a plume that would be present due to a source of contamination;**
 - **Remediation of total metals would not be practical from an engineering or cost standpoint; and**
 - **Currently, there is no human or environmental exposure to shallow groundwater.**

- 2. Additional background wells should be installed at all sites in order to provide a baseline for comparing on-site groundwater quality.**

Tables

**TABLE 1
TOTAL METALS BY SITE
SHALLOW MONITORING WELLS
MCB, CAMP LEJEUNE, NORTH CAROLINA**

Site Number Units	NCWQS ug/L	FEDERAL MCL ug/L	Site 1 ug/L	Site 2 ug/L	Site 6 ug/L	Site 7 ug/L	Site 9 ug/L	Site 21 ug/L	Site 24 ug/L	Site 28 ug/L	Site 30 ug/L	Site 41 ug/L	Site 43 ug/L	Site 44 ug/L
Arsenic	50	50	7.2 - 57.4	2.2 - 23.6	ND - 23.3	ND - 43.4J	ND	ND - 101	ND - 116J	5.4 - 13J	6.4 - 12J	2.4 - 36.3	ND - 23.4	ND - 570
Barium	2000	2000	335 - 833	46 - 1420	ND - 1020	427 - 641	ND - 1060	ND - 647	ND - 1120	78.8 - 576	60.1 - 396	55.2 - 999	220 - 745	315 - 3180
Beryllium	NE	4	2.7J - 43.4	1 - 3	ND - 7.5	ND - 10.3J	ND	ND - 8	ND - 19	ND - 1.2J	ND - 2.4	0.80 - 42.8	1.5 - 4.2	1.4 - 36.6
Cadmium	5	5	ND - 12.9	7	ND	ND	ND	ND	ND - 12	3.3J - 17.3J	ND - 10.7J	3.2 - 110	ND - 6.9	ND - 32
Calcium	NA	NA	8850 - 726000	5710 - 450000	5430 - 64900	5050 - 51300	16100 - 90700	6130J - 63000J	ND - 151000	20200 - 160000	1730 - 11900	8750 - 828000	10300 - 91900	2430 - 191000
Chromium	50	100	172 - 627	11 - 117	ND - 201	47.8 - 220	ND - 214	ND - 348J	19 - 316	9.0J - 140	42.8 - 106J	10.5 - 244	161 - 249	126 - 895
Copper	1000	1300	44.6 - 117	3 - 23	ND - 175	17.7 - 36.4	ND - 39.7	ND - 84	ND - 52	18.8J - 75.4	15.8 - 42.5	16.3 - 1030	64.2 - 104	28.6 - 313
Lead	15	15	40.8J - 176J	2.7 - 44.8	ND - 200	23 - 37.3	ND - 127	ND - 2000J	5.1 - 89	20.3J - 234J	7.7J - 115J	4.8 - 9340	16.5 - 28.8	15.8 - 508
Manganese	50	50 (1)	125 - 1720	21 - 190	ND - 362	56.9 - 220	ND - 91.3	59 - 276J	29 - 518	82.2 - 304	78.5 - 578	56.6 - 2110	72.6 - 297	88 - 1730
Mercury	1.1	2	ND - 1.2J	ND	ND - 46	0.2 - 0.36	ND - 1.4	ND - 2.4J	ND - 3.2	ND - 1.4J	0.88J - 0.9J	0.13 - 0.92	ND - 0.24	ND - 1.1
Nickel	100	100	28.5 - 426	ND	ND - 41.9	ND	ND	ND - 123	ND - 140	ND - 59.8	17.1J - 52.6J	28.8 - 137	20.5 - 143	21.9 - 486
Sodium	NA	NA	9090 - 19000	ND - 103000	1110 - 68700	7040 - 156000	1390 - 4170	7930 - 15700	5230 - 19200	9480 - 74700	5320 - 8100	2080 - 40200	9160 - 22100	4060 - 12600
Vanadium	NE	NE	214 - 640	9 - 184	ND - 330	37.8 - 423	ND - 175	ND - 419	ND - 408	6.1 - 164	57 - 101	20.4 - 244	122 - 233	184 - 759
Zinc	2100	5000 (1)	ND - 1110	6 - 146	ND - 1620	83.6 - 133	ND - 118	27J - 487J	20 - 630	ND	79.2 - 104	25.7 - 5180	19 J - 661J	87.3 - 2800J

Site Number Units	Site 48 ug/L	Site 63 ug/L	Site 65 ug/L	Site 69 ug/L	Site 78 ug/L	Site 82 ug/L	ABC Cleaners ug/L	Offsite Property #1 ug/L	Offsite Property #2 ug/L
Arsenic	ND	ND - 23.4	ND - 308	2.9 - 29.0	ND - 405J	ND - 67.8	ND - 12	10.3 - 160	ND
Barium	18 - 51.3	56.1 - 5410	105 - 638	46.5 - 850	ND - 1250	ND - 540	35 - 220	ND - 468	ND
Beryllium	ND	ND - 3.1	ND	1.3 - 10.6	ND - 19	ND	NA	ND - 8.5	ND
Cadmium	2.2 - 3.3	ND	ND	2.4 - 11.4	ND - 21	ND	NA	ND	ND
Calcium	30600 - 115000	2830 - 24300	33300 - 181000	2010 - 38700	ND - 642000	6580 - 60800	790 - 16000	ND - 22800	ND - 5200
Chromium	5.8 - 17.5	4.4 - 134	50.1 - 364	15.1 - 159	ND - 858J	ND - 174	ND - 57	52.8 - 636	ND - 94
Copper	3.1 - 13.5	10.7 - 126	28.2 - 127	16.2 - 70.8	ND - 699	ND - 29.3	ND - 89	ND - 140	ND
Lead	ND	4.3J - 369	19.1 - 132	7.8 - 188	ND - 360J	ND - 89	ND - 10	12.3 - 345	6.3 - 62.3
Manganese	38.1 - 585	50.3 - 1020	56.2 - 474	13.0 - 912	26 - 714	26.9 - 283	4 - 44	56 - 973	ND - 60.1
Mercury	0.04 - 0.09	ND - 0.20	ND - 0.29	0.10 - 0.94	ND - 1.5	ND - 0.66	NA	ND	ND
Nickel	ND	19.8 - 54.2	19.4 - 84.3	13.6 - 99.8	ND - 234	ND - 34.6	ND - 77	40.2 - 380	ND
Sodium	5750 - 8760	3150 - 7100	3850 - 11700	4790 - 41300	ND - 42500	5670 - 36500	5800 - 33000	ND - 9390	ND - 7630
Vanadium	3.4 - 12.8	7.9 - 163	59.8 - 433	17.3 - 210	ND - 1700	ND - 256	ND - 45	70 - 739	ND - 64.7
Zinc	ND - 30.3	58.5J - 1110J	148J - 406J	36.2 - 12100	6J - 967J	ND - 204	14 - 220	ND - 736	ND - 40.8

NOTES:
 J - Value is estimated.
 JB - Value is estimated below the CRDL, but greater than the IDL.
 NE - Not established.
 NA - Not analyzed.
 ND - Not detected.
 NCWQS - North Carolina Water Quality Standard
 MCL - Maximum Contaminant Level
 (1) - Secondary MCL

TABLE 2
COMPARISON OF REPEAT SAMPLING OF SHALLOW WELLS
MCB, CAMP LEJEUNE, NORTH CAROLINA

Well Date	2GW01		2GW03		2GW06		2GW08		2GW09	
	5/1993	3/1994	5/1993	3/1994	5/1993	3/1994	5/1993	3/1994	5/1993	3/1994
Chromium	18	ND	11	ND	15	ND	ND	ND	25	83
Lead	15.5 J	ND	3.5 J	ND	6.7 J	ND	ND	3.4	27.2 J	23.6
Manganese	55	47	21	ND	79	140	53	415	290	747

Well Date	78GW05		78GW08		78GW15		78GW16		78GW19	
	1/1991	4/1994	1/1991	4/1994	1/1991	4/1994	1/1991	4/1994	1/1991	4/1994
Chromium	ND	17 J	91.8	491 J	21.4	215 J	209	353 J	13.8	ND
Lead	13.6	13.1 J	54.1	131 J	16.6	53	100	224	31.7	8.3
Manganese	162	161 J	46.5	213 J	18.3	115	98.3	150	79	26

NOTES:
 J - Value is estimated.
 ND - Not detected.

**TABLE 3
DISSOLVED METALS BY SITE
SHALLOW MONITORING WELLS
MCB, CAMP LEJEUNE, NORTH CAROLINA**

Site Number Units	NCWQS ug/L	FEDERAL MCL ug/L	Site 1 ug/L	Site 2 ug/L	Site 6 ug/L	Site 7 ug/L	Site 9 ug/L	Site 21 ug/L	Site 24 ug/L	Site 28 ug/L	Site 30 ug/L	Site 41 ug/L	Site 43 ug/L	Site 44 ug/L
Arsenic	50	50	NA	2.2 - 7.1	ND	NA	ND	ND - 10.6	ND - 16.3	NA	NA	2.2 - 4.7	NA	NA
Barium	2000	2000	NA	25 - 149	ND	NA	ND	ND	ND	NA	NA	12.4 - 451	NA	NA
Beryllium	NE	4	NA	1	ND	NA	ND	ND	ND	NA	NA	0.80 - 3.2	NA	NA
Cadmium	5	5	NA	ND	ND	NA	ND	ND - 5	ND	NA	NA	3.2 - 4.2	NA	NA
Calcium	NA	NA	NA	5800 - 441000	6230 - 57400	NA	15800 - 82400	35900	ND - 113000	NA	NA	4710 - 138000	NA	NA
Chromium	50	100	NA	10	ND	NA	ND	ND	ND	NA	NA	8.3 - 9.6	NA	NA
Copper	1000	1300	NA	2 - 9	ND	NA	ND	ND	ND	NA	NA	16.3 - 23.9	NA	NA
Lead	15	15	NA	2.1	ND	NA	ND	ND - 94	ND	NA	NA	1.0	NA	NA
Manganese	50	50 (1)	NA	17 - 129	ND - 92.7	NA	ND	40 - 134	ND - 320	NA	NA	7.1 - 521	NA	NA
Mercury	1.1	2	NA	ND	ND	NA	ND	ND	ND - 0.5	NA	NA	0.13 - 0.20	NA	NA
Nickel	100	100	NA	ND	ND	NA	ND	ND	ND - 57	NA	NA	28.8 - 31.2	NA	NA
Sodium	NA	NA	NA	ND - 103000	1420 - 70500	NA	1280 - 3860	16200	ND - 183000	NA	NA	2300 - 34200	NA	NA
Vanadium	NE	NE	NA	43	ND	NA	ND	ND	ND	NA	NA	20.4	NA	NA
Zinc	2100	5000 (1)	NA	8 - 35	ND - 350	NA	ND	6B - 50	ND - 437	NA	NA	10.6 - 125	NA	NA

Site Number Units	Site 48 ug/L	Site 63 ug/L	Site 65 ug/L	Site 69 ug/L	Site 78 ug/L	Site 82 ug/L	ABC Cleaners ug/L	Offsite Property #1 ug/L	Offsite Property #2 ug/L
Arsenic	ND	NA	NA	2.9	ND - 21.6	ND	NA	ND - 18.8	ND
Barium	16.8 - 27.6	NA	NA	13.7 - 35.8	ND	ND	NA	ND	ND
Beryllium	ND	NA	NA	1.3	ND	ND	NA	ND	ND
Cadmium	ND - 3.1	NA	NA	2.4	ND	ND	NA	ND	ND
Calcium	72600 - 80700	NA	NA	764 - 10600	ND - 296000	15200 - 58500	NA	ND - 7710	ND
Chromium	ND	NA	NA	7.2	ND - 59	ND	NA	ND - 30.0	ND
Copper	2.6 - 7.6	NA	NA	16.2	ND - 121	ND	NA	ND - 10.7	ND
Lead	ND	NA	NA	1	ND - 17.2	ND	NA	ND - 15.8	ND
Manganese	39.7 - 539	NA	NA	8.5 - 139	ND - 152	21 - 127	NA	ND - 63.8	ND - 21.3
Mercury	0.05 - 0.09	NA	NA	0.1	ND - 0.6	ND	NA	ND	ND
Nickel	ND	NA	NA	13.6	ND	ND	NA	ND	ND
Sodium	6430 - 8920	NA	NA	5170 - 41100	ND - 42200	5980 - 36000	NA	ND - 9540	ND - 6730
Vanadium	ND	NA	NA	16.6	ND	ND	NA	ND	ND
Zinc	ND	NA	NA	7.0 - 7670	ND - 58	ND - 119	NA	ND - 468	ND - 222

NOTES:
 J - Value is estimated.
 JB - Value is estimated below the CRDL, but greater than the IDL.
 NE - Not established.
 NA - Not analyzed.
 ND - Not detected.
 NCWQS - North Carolina Water Quality Standard
 MCL - Maximum Contaminant Level
 (1) - Secondary MCL

**TABLE 4
SUMMARY OF TOTAL METALS IN UPGRADIENT WELLS
SHALLOW MONITORING WELLS
MCB, CAMP LEJEUNE, NORTH CAROLINA**

Well Number	NCWQS	FEDERAL	Upgradient of Site 1	Upgradient of Site 2	Upgradient of Site 6	Upgradient of Site 7	Upgradient of Site 9	Upgradient of Sites 21 and 78	Upgradient of Site 24	Upgradient of Site 28	Upgradient of Site 30	Upgradient of Site 41	Upgradient of Site 43	Upgradient of Site 44
	Units	MCL	1GW06	2GW09	6BP6S	7GW03	9GW4S	78GW26	24GW07	28GW04		41GW05		
	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L		ug/L		
Arsenic	50	50	17.8 J	12.9	ND	ND	ND	ND	3.7 J	7.4 J		13.1		
Barium	2000	2000	348	328	257	428	71.3	ND	ND	576		55.7		
Beryllium	NE	4	3.2 J	3	ND	ND	ND	ND	ND	9.3 J		1.6		
Cadmium	5	5	ND	ND	ND	ND	ND	not reported	ND	3.3 J		10		
Chromium	50	100	193	75	198	124	ND	13	37	122		54.4		
Copper	1000	1300	64.8	25	35.6	36.4	ND	ND	ND	20.7 J		27		
Lead	15	15	78.8 J	27.2	64.4	30.3 J	ND	9	11.4	22.4 J		23.7		
Manganese	50	50 (1)	202	747	84.5	56.9 J	ND	ND	39	206		203		
Mercury	1.1	2	1.6 J	ND	ND	0.36	ND	ND	ND	ND		0.16		
Nickel	100	100	51.6	ND	ND	ND	ND	ND	ND	59.8		38		
Vanadium	NE	NE	214	86	209	152	ND	149	64	85.3		38.1		
Zinc	2100	5000 (1)	ND	103	56.6	86.4 J	ND	68.1	41	ND		173		

No Upgradient Well Sites

No Upgradient Well Sites

No Upgradient Well Sites

Well Number	Upgradient of Site 48	Upgradient of Site 63	Upgradient of Site 65	Upgradient of Site 69	Upgradient of Site 78	Upgradient of Site 82	Upgradient of ABC Cleaners	Upgradient of Offsite Property #1	Upgradient of Offsite Property #2
	Units	48GW1		69GW07	9GW04	6MW3S	MW-S01		
	ug/L			ug/L	ug/L	ug/L	ug/L		
Arsenic	ND			2.9	ND	ND	ND		
Barium	29.4 J			46.5	ND	ND	35		
Beryllium	ND			1.3	ND	ND	NA		
Cadmium	2.5 J			2.4	ND	ND	NA		
Chromium	ND			15.8	ND	ND	ND		
Copper	ND			16.2	ND	ND	ND		
Lead	ND			7.8	ND	ND	3		
Manganese	70.6			13	ND	ND	10		
Mercury	ND			0.1	ND	ND	NA		
Nickel	ND			13.6	ND	ND	ND		
Vanadium	3.4 J			17.3	ND	ND	9		
Zinc	ND			36.2	ND	ND	23		

No Upgradient Well Sites

No Upgradient Well Sites

No Upgradient Well Sites

No Upgradient Well Sites

NOTES:
 J - Value is estimated.
 JB - Value is estimated below the CRDL, but greater than the IDL.
 NE - Not established.
 NA - Not analyzed.
 ND - Not detected.
 NCWQS - North Carolina Water Quality Standard
 MCL - Maximum Contaminant Level
 (1) - Secondary MCL

**TABLE 5
COMPARISON OF INORGANIC SUBSURFACE SOIL CONCENTRATIONS IN "CLEAN" AND "CONTAMINATED" WELLS
MCB, CAMP LEJEUNE, NORTH CAROLINA**

Units Well Number Soil Sample Number	Camp Lejeune Background Subsurface Soil Data mg/kg	Site 1		Site 2		Site 6		Site 7		Site 9		Site 21	
		"Clean" mg/kg	"Contaminated" mg/kg	"Clean" mg/kg	"Contaminated" mg/kg	"Clean" mg/kg	"Contaminated" mg/kg	"Clean" mg/kg	"Contaminated" mg/kg	"Clean" mg/kg	"Contaminated" mg/kg	"Clean" mg/kg	"Contaminated" mg/kg
		--	--	2GW07	2GW09	6GW18	6GW15	7GW03	7GW02	9GWS	9GW1	21GW03	21GW02
		--	--	2-GW07-01	2-GW09-02	6-GW18-0303	6-GW15-03	GW03-002	GW02-7595	9-GWS-03	9-SB35-03	21-GW03	21-GW02
Arsenic	0.03 - 0.47	NA	NA	1.7 J	ND	ND	ND	1.5	ND	ND	ND	ND	0.55 J
Barium	2 - 11	NA	NA	12.3 J	ND	ND	ND	6.6	71	ND	ND	ND	4.4 J
Beryllium	0.03 - 0.23	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	0.17 - 1.2	NA	NA	ND	ND	ND	ND	1.3	4.5	ND	ND	ND	ND
Chromium	2 - 9	NA	NA	10.9 J	4.6	ND	JB	5.2	5	ND	7.6 J	15.2	5.2 J
Copper	0.47 - 2	NA	NA	0.97 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	1 - 12	NA	NA	8 J	4.3	3.3 J	JB	2.5	34.4	1.6	3.3	7.1	6.9 J
Manganese	0.40 - 8	NA	NA	4.3 J	4.1	ND	1.8 B	3	11.6	ND	3.7 J	13.5	3.3 J
Mercury	0.01 - 0.11	NA	NA	0.3 J	ND	ND	ND	10.13	0.48	ND	ND	ND	ND
Nickel	0.70 - 3.0	NA	NA	ND	ND	ND	ND	3.4	11.8	ND	ND	ND	ND
Vanadium	0.75 - 13	NA	NA	13.8 J	ND	ND	2.9 B	5.5	4.5	ND	ND	15.5	4.4 J
Zinc	0.40 - 12	NA	NA	ND	ND	ND	ND	1.3	ND	ND	6.1 J	5.7	3 J

NOTES:
 Shaded area indicates inorganic which exceeded a MCL and/or NCWQS in groundwater sample.
 J - Value is estimated.
 JB - Value is estimated below the CRDL, but greater than the IDL.
 NA - No available wells to compare OR compound was not analyzed.
 ND - Not detected.
 NCWQS - North Carolina Water Quality Standard
 MCL - Maximum Contaminant Level
 (1) - Secondary MCL

**TABLE 5
COMPARISON OF INORGANIC SUBSURFACE SOIL CONCENTRATIONS IN "CLEAN" AND "CONTAMINATED" WELLS
MCB, CAMP LEJEUNE, NORTH CAROLINA**

Units Well Number Soil Sample Number	Site 24		Site 28		Site 30		Site 41		Site 43		Site 44	
	"Clean" mg/kg	"Contaminated" mg/kg	"Clean" mg/kg	"Contaminated" mg/kg	"Clean" mg/kg	"Contaminated" mg/kg	"Clean" mg/kg	"Contaminated" mg/kg	"Clean" mg/kg	"Contaminated" mg/kg	"Clean" mg/kg	"Contaminated" mg/kg
	24GW10	24GW02	--	--	--	--	41GW04	41-GW11	43GW01	43GW02	44GW02	44GW01
	24-GW10	24-BDA-SB09	--	--	--	--	41-GW04-DW	41-GW11-01	43-GW01-00	43-GW02-00	44-GW02-035	--
Arsenic	ND	ND	NA	NA	NA	NA	0.31	1.6	ND	ND	ND	1.7
Barium	ND	ND	NA	NA	NA	NA	9.4	22.6	ND	ND	ND	17.9
Beryllium	ND	ND	NA	NA	NA	NA	0.18	0.18	ND	ND	ND	ND
Cadmium	ND	ND	NA	NA	NA	NA	0.73	0.73	8.3	ND	ND	ND
Chromium	11.2	J	NA	NA	NA	NA	3.6	11.9	3.3	6.7	3.6	10.1
Copper	ND	ND	NA	NA	NA	NA	3.7	22.5	3.4	ND	6.2 J	25.4 J
Lead	4.6 J	6.2 J	NA	NA	NA	NA	4.8	110	9.9	6.1	3.3	10.7
Manganese	4.7	8.1 J	NA	NA	NA	NA	6.7	75.5	31.2	6.2	3.3	20.4
Mercury	ND	ND	NA	NA	NA	NA	0.06	0.31	ND	ND	ND	ND
Nickel	ND	ND	NA	NA	NA	NA	6.6	6.6	7.6	7.1	3.1	3.4
Vanadium	18.4	10	NA	NA	NA	NA	6.8	9.3	7.2	5.8	5	14.7
Zinc	ND	7.8	NA	NA	NA	NA	7.7	130	20.1	3	3.2	3.9

NOTES:

Shaded area indicates inorganic which exceeded a MCL and/or NCWQS in groundwater sample.

J - Value is estimated.

JB - Value is estimated below the CRDL, but greater than the IDL.

NA - No available wells to compare OR compound was not analyzed.

ND - Not detected.

NCWQS - North Carolina Water Quality Standard

MCL - Maximum Contaminant Level

(1) - Secondary MCL

**TABLE 5
COMPARISON OF INORGANIC SUBSURFACE SOIL CONCENTRATIONS IN "CLEAN" AND "CONTAMINATED" WELLS
MCB, CAMP LEJEUNE, NORTH CAROLINA**

Units Well Number Soil Sample Number	Site 48		Site 63		Site 65		Site 69		Site 78		Site 82	
	"Clean" mg/kg	"Contaminated" mg/kg	"Clean" mg/kg	"Contaminated" mg/kg	"Clean" mg/kg	"Contaminated" mg/kg	"Clean" mg/kg	"Contaminated" mg/kg	"Clean" mg/kg	"Contaminated" mg/kg	"Clean" mg/kg	"Contaminated" mg/kg
	48-GW01	48-GW03	63MW03	63MW02	65MW03	65MW02	69-GW11	69-GW03	78GW34	78GW24-1	6-GW28	82MW3
	48-GW1A-01	48-C3-03	63-MW03-04	63-MW02-06	65-MW03-11	65-MW02-06	69-GW11-04	69-CSA-SB23-00	78-GW34	78-B903-SB03	6-GW28-09	6-GW27D-06
Arsenic	1.3	0.77 J	ND	ND	ND	ND	0.68	0.63	ND	ND	0.31	15.9
Barium	21.1	15	ND	ND	3.4	6.8	5.6	3	ND	ND	ND	ND
Beryllium	0.2	0.19	ND	ND	ND	ND	0.3	0.28	ND	ND	ND	ND
Cadmium	1.4	1.8 J	ND	ND	NA	NA	0.56	0.52	ND	ND	ND	ND
Chromium	18.2	18.6	7.7	ND	3.9	3.7	6.8	10.7	18.5	2.7	2.6	3.1
Copper	3.5	3.8	ND	ND	1.5	3.1	3.8	3.5	3.4 B	ND	ND	ND
Lead	32.3	14.3	4.2	2.5	1.7	3.7	4.3	1.1	4.5 J	2.6 J	2.7	4.3
Manganese	4.1	7	4.9	19.8	3.5	6.9	4	1.2	9.2	ND	ND	ND
Mercury	ND	ND	ND	ND	NA	NA	0.06	0.05	ND	ND	ND	ND
Nickel	2.2	1.9 J	ND	ND	ND	ND	3.2	3	ND	ND	ND	ND
Vanadium	28.3	20.8 J	ND	ND	4.4	3	4.4	3.6	18.7	19.2	ND	ND
Zinc	ND	ND	ND	ND	2.7	5	3.2	1.2	7.9	ND	ND	ND

NOTES:
 Shaded area indicates inorganic which exceeded a MCL and/or NCWQS in groundwater sample.
 J - Value is estimated.
 JB - Value is estimated below the CRDL, but greater than the IDL.
 NA - No available wells to compare OR compound was not analyzed.
 ND - Not detected.
 NCWQS - North Carolina Water Quality Standard
 MCL - Maximum Contaminant Level
 (1) - Secondary MCL

**TABLE 5
COMPARISON OF INORGANIC SUBSURFACE SOIL CONCENTRATIONS IN "CLEAN" AND "CONTAMINATED" WELLS
MCB, CAMP LEJEUNE, NORTH CAROLINA**

Units Well Number Soil Sample Number	ABC Cleaners		Offsite Property #1		Offsite Property #2	
	"Clean"	"Contaminated"	"Clean"	"Contaminated"	"Clean"	"Contaminated"
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	--	--	--	--	--	--
	--	--	--	--	--	--
Arsenic	NA	NA	NA	NA	NA	NA
Barium	NA	NA	NA	NA	NA	NA
Beryllium	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA
Chromium	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA	NA
Manganese	NA	NA	NA	NA	NA	NA
Mercury	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA
Vanadium	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA

NOTES:
 Shaded area indicates inorganic which exceeded a MCL and/or NCWQS in groundwater sample.
 J - Value is estimated.
 JB - Value is estimated below the CRDL, but greater than the IDL.
 NA - No available wells to compare OR compound was not analyzed.
 ND - Not detected.
 NCWQS - North Carolina Water Quality Standard
 MCL - Maximum Contaminant Level
 (1) - Secondary MCL

**TABLE 6
TOTAL METALS BY SITE
DEEP MONITORING WELLS
MCB, CAMP LEJEUNE, NORTH CAROLINA**

	Site 1	Site 2	Site 6	Site 7	Site 9	Site 21	Site 24	Site 28	Site 30	Site 41	Site 43	Site 44	Site 48	Site 63	Site 65	Site 69	Site 78	Site 82	ABC Cleaners	Base Supply Wells (1)											
Arsenic		ND	ND		ND					2.2 - 9.6						2.2 - 3.5	2 - 118 J	ND	ND - 14	ND											
Barium		1420	ND		ND					22.6 - 186						42.3 - 58.0	ND - 347	ND	4 - 36	ND											
Beryllium		ND	ND		ND					3.2						0.80 - 0.89	ND	ND	NA	NA											
Cadmium	No Deep Wells	ND	ND	No Deep Wells	ND	No Deep Wells	No Deep Wells	No Deep Wells	No Deep Wells	4.2 - 4.7	No Deep Wells	No Deep Wells	No Deep Wells	No Deep Wells	No Deep Wells	3.2	ND - 21	ND	NA	ND											
Chromium		16	ND		ND					ND						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper		ND	ND		ND					ND						ND	ND	ND	ND	ND	23.9	ND	ND	ND	ND	ND	16.3	ND	ND	ND - 41	ND - 130
Lead		ND	ND		ND					ND						ND	ND	ND	ND	ND	1.0 - 11.1	ND	ND	ND	ND	ND	3.1 - 6.8	ND	ND	ND - 10	ND - 16
Manganese		ND	ND - 33.5		ND					ND						ND	ND	ND	ND	ND	16.9 - 101	ND	ND	ND	ND	ND	53.7 - 114	ND - 591	ND - 21.6	ND - 45	10 - 120
Mercury		ND	ND		ND					ND						ND	ND	ND	ND	ND	0.15 - 0.17	ND	ND	ND	ND	ND	0.16 - 0.17	ND - 0.3	ND	NA	ND
Nickel		ND	ND		ND					ND						ND	ND	ND	ND	ND	31.2	ND	ND	ND	ND	ND	28.8	ND	ND	ND - 14	NA
Vanadium		ND	ND		ND					ND						ND	ND	ND	ND	ND	20.4 - 49.8	ND	ND	ND	ND	ND	20.4	ND - 24 J	ND	ND - 15	NA
Zinc		ND	ND		ND					ND						ND	ND	ND	ND	ND	17.8 - 83.8	ND	ND	ND	ND	ND	31.1 - 48.7	ND - 181 J	ND	58 - 390	ND - 120

NOTES:

J - Value is estimated.

NA - Not analyzed.

ND - Not detected.

(1) - Range is based on 67 supply wells located throughout MCB, Camp Lejeune, NC.

**TABLE 7
SUMMARY OF FIELD PARAMETERS IN
SHALLOW, DEEP, AND SUPPLY WELLS
MCB, CAMP LEJEUNE, NORTH CAROLINA**

	Shallow Wells		Deep Wells		Supply Wells	
	Range (1)	Average Maximum	Range (2)	Average Maximum	Range (3)	Average Maximum
pH (standard units)	4.5 - 7.28	6.08	7.52 - 11.34	8.88	6.91 - 7.45	7.32
Specific Conductivity (micromhos/cm)	40 - 580	267	149 - 525	350	212 - 511	353

- (1) - Based on data from 11 sites.
- (2) - Based on data from 6 sites.
- (3) - Based on data from 9 supply wells.

Figures

Appendix A
Data Summary Tables
for Sites 2 and 78

OPERABLE UNIT NO. 1 - SITES 21, 24, 78
SHALLOW, INTERMEDIATE AND DEEP MONITORING WELLS
GROUNDWATER DATA AND FREQUENCY SUMMARY
REMEDIAL INVESTIGATION CTO - 19177
MCB CAMP LEJEUNE, NORTH CAROLINA
TAL METALS AND CYANIDE

	MINIMUM NONDETECTED UG/L	MAXIMUM NONDETECTED UG/L	MINIMUM DETECTED UG/L	MAXIMUM DETECTED UG/L	LOCATION OF MAXIMUM DETECTED	FREQUENCY OF DETECTION
ALUMINUM	NA	NA	68 J	542000 J	78-GW06-01	59 / 59
ANTIMONY	3 U	20 U	3.3 B	169 J	78-GW02-01	7 / 33
ARSENIC	2 U	10 U	2.3 J	405 J	78-GW02-01	44 / 48
BARIUM	NA	NA	17 B	1250	78-GW07-01	59 / 59
BERYLLIUM	1 U	4 U	1 B	19	24-GW02-01	52 / 59
CADMIUM	5 U	25 U	5	21	78-GW04-3-01	9 / 59
CALCIUM	NA	NA	2420 B	642000	78-GW04-1-01	59 / 59
CHROMIUM	10 U	50 U	10	858 J	78-GW06-01	46 / 59
COBALT	8 U	8 U	8 B	170	78-GW22-2-01	25 / 59
COPPER	2 U	2 U	3 B	699	78-GW39-01	58 / 59
IRON	NA	NA	32 B	523000	78-GW04-3-01	59 / 59
LEAD	1.8 U	4.9 U	2.9 B	2000 J	21-GW08-01	50 / 59
MAGNESIUM	NA	NA	88 B	37100	24-GW03-01	59 / 59
MANGANESE	2 U	2 U	2 B	714	78-GW24-1-01	57 / 59
MERCURY	0.2 U	0.2 U	0.23 J	3.2	24-GW06-01	24 / 52
NICKEL	20 U	20 U	20 B	234	78-GW22-2-01	31 / 59
POTASSIUM	NA	NA	982 B	67300	78-GW32-3-01	59 / 59
SELENIUM	1 U	5 U	1.1 J	99.5 J	78-GW32-2-01	41 / 54
SILVER	3 U	15 U	5 J	5 J	78-GW09-3-01	1 / 59
SODIUM	NA	NA	2450 B	42500	78-GW32-3-01	59 / 59
THALLIUM	1 U	1 U	1 B	7.3 J	78-GW32-2-01	16 / 59
VANADIUM	4 U	4 U	4 J	1700	78-GW08-01	55 / 59
ZINC	6 U	6 U	6 J	967 J	78-GW22-2-01	57 / 59
CYANIDE	10 U	10 U	ND	ND	ND	0 / 54

OPERABLE UNIT NO. 1 - SITES 21, 24, 78
 SHALLOW, INTERMEDIATE AND DEEP MONITORING WELLS
 GROUNDWATER DATA AND FREQUENCY SUMMARY
 REMEDIAL INVESTIGATION CTO - 19177
 MCB CAMP LEJEUNE, NORTH CAROLINA
 TAL METALS AND CYANIDE

SAMPLE NO.	21-GW01-01	21-GW02-01	21-GW03-01	21-GW04-01	21-GW0A-01	21-GW0B-01
UNITS	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
ALUMINUM	4910 J	319000 J	4820 J	20100 J	16900 J	118000 J
ANTIMONY	7 UJ	7 U	7 U	7 U	7 R	7 U
ARSENIC	15	10	2 U	11.8	45.2 J	30.4
BARIUM	32 B	647	51 B	119 B	100 B	386
BERYLLIUM	1 B	5	1 B	1 B	1 B	6
CADMIUM	5 U	10 U	5 U	5 U	5 U	10 U
CALCIUM	63000 J	24100 J	6130 J	21700 J	23800	6250 J
CHROMIUM	10 UJ	348 J	10 UJ	33 J	21 J	192 J
COBALT	8 U	18 B	8 U	10 B	8 U	36 B
COPPER	4 B	79	7 B	28	24 B	38
IRON	9920 J	122000 J	13400 J	24900 J	38900 J	72900 J
LEAD	1.8 UJ	214 J	4.9 UJ	33 J	29	2000 J
MAGNESIUM	5070	15400	4550 B	5490	4850 B	11600
MANGANESE	64 J	179 J	134 J	193 J	59	276 J
MERCURY	0.2 R	2.4 J	0.2 R	0.2 R	0.2 U	0.2 R
NICKEL	20 U	86	20 U	20 U	20 U	60
POTASSIUM	2390 B	10500	2240 B	3800 B	2360 B	9520
SELENIUM	1 U	11 J	1 U	1 U	1 UJ	3.7 J
SILVER	3 U	3 U	3 U	3 U	3 UJ	3 U
SODIUM	15700	12600	7950	14400	12600	14400
THALLIUM	1 U	1 UJ	1 U	1 UJ	1 UJ	1 U
VANADIUM	30 B	281	11 B	42 B	48 B	243
ZINC	65 J	136 J	27 J	57 J	41 J	175 J
CYANIDE	10 U	10 U	10 U	10 U	10 U	10 U

OPERABLE UNIT NO. 1 - SITES 21, 24, 78
 SHALLOW, INTERMEDIATE AND DEEP MONITORING WELLS
 GROUNDWATER DATA AND FREQUENCY SUMMARY
 REMEDIAL INVESTIGATION CTO - 19177
 MCB CAMP LEJEUNE, NORTH CAROLINA
 TAL METALS AND CYANIDE

SAMPLE NO.	21-GW0C-01	24-GW01-01	24-GW02-01	24-GW03-01	24-GW04-01	24-GW06-01
UNITS	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
ALUMINUM	209000 J	262000	93700	50200	58900	19800
ANTIMONY	7 U	3 U	3 UJ	3 U	4.6 B	3.5 B
ARSENIC	101	10 UJ	2.3 J	4.7 J	116 J	10.1 J
BARIUM	467	380	1120	480	290	159 B
BERYLLIUM	8	3 B	19	5	2 B	9
CADMIUM	10 U	5 U	12	5 U	5 U	5
CALCIUM	35200 J	4120 B	2420 B	124000	65600	151000
CHROMIUM	291 J	296	316	110	153	78
COBALT	60	8 U	41 B	66	8 U	35 B
COPPER	84	49	52	22 B	31	15 B
IRON	106000 J	58600	395000	16300	70500	69500
LEAD	92.5 J	89	17.9	21.6	23.6	7.4
MAGNESIUM	16300	12200	7240	37100	7690	4320 B
MANGANESE	273 J	117	518	393	66	431
MERCURY	0.23 J	0.23	2.6	0.2 U	0.2 U	3.2
NICKEL	123	38 B	140	85	20 U	93
POTASSIUM	11800	12000	7550	15400	6130	3370 B
SELENIUM	4.3 B	1.3 J	1.1 J	16.2 J	4.3 J	1 UJ
SILVER	3 U	3 UJ	15 UJ	3 UJ	3 UJ	3 UJ
SODIUM	15200	6030	11600	19200	5230	7280
THALLIUM	1 U	1 U	1 U	2.4 B	1 U	1 B
VANADIUM	419	304	408	92	202	83
ZINC	487 J	118	461	650	80	489
CYANIDE	10 U					

OPERABLE UNIT NO. 1 - SITES 21, 24, 78
 SHALLOW, INTERMEDIATE AND DEEP MONITORING WELLS
 GROUNDWATER DATA AND FREQUENCY SUMMARY
 REMEDIAL INVESTIGATION CTO - 19177
 MCB CAMP LEJEUNE, NORTH CAROLINA
 TAL METALS AND CYANIDE

SAMPLE NO.	24-GW07-01	24-GW08-01	24-GW09-01	24-GW10-01	78-GW02-01	78-GW03-01
UNITS	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
ALUMINUM	36000	61100	12800	23300	29200 J	23900 J
ANTIMONY	3 U	3 U	3.3 B	5.7 B	169 J	38.5 J
ARSENIC	3.7 J	8 J	4.3 J	2.5 J	405 J	5.7 J
BARIUM	85 B	112 B	164 B	59 B	109 B	36 B
BERYLLIUM	1 B	2 B	1 B	1 U	12	2 B
CADMIUM	5 U	5 U	5 U	5 U	8	5 U
CALCIUM	4960 B	27000	9530	3820 B	37000	32900
CHROMIUM	37	85	19	21	18 J	10 UJ
COBALT	8 U	8 U	11 B	8 U	8 U	8 U
COPPER	19 B	24 B	11 B	13 B	20 B	8 B
IRON	13700	27500	13100	7010	427000 J	5020 J
LEAD	11.4	23.8	5.1	7.3	19.6	3.4
MAGNESIUM	2670 B	5050	7630	1760 B	3650 B	2210 B
MANGANESE	39	47	180	29	141	27
MERCURY	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
NICKEL	20 U	20 U	20 U	20 U	20 U	20 U
POTASSIUM	3870 B	5580	4280 B	2620 B	2770 B	1320 B
SELENIUM	2.1 J	1.9 J	2.6 J	1 UJ	19.8 J	2.4 J
SILVER	3 UJ	3 UJ	3 UJ	3 UJ	15 UJ	3 UJ
SODIUM	6520	6550	6010	6650	5120	4270 B
THALLIUM	1 U	1 U	1 U	1 U	1 UJ	1 UJ
VANADIUM	64	129	26 B	34 B	1660	50
ZINC	41	47	50	20	58 J	12 J
CYANIDE	10 U	10 U	10 U	10 U	10 U	10 U

OPERABLE UNIT NO. 1 - SITES 21, 24, 78
 SHALLOW, INTERMEDIATE AND DEEP MONITORING WELLS
 GROUNDWATER DATA AND FREQUENCY SUMMARY
 REMEDIAL INVESTIGATION CTO - 19177
 MCB CAMP LEJEUNE, NORTH CAROLINA
 TAL METALS AND CYANIDE

SAMPLE NO.	78-GW04-1-01	78-GW04-2-01	78-GW04-3-01	78-GW05-01	78-GW06-01	78-GW07-01
UNITS	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
ALUMINUM	297000 J	286	115 B	23000 J	542000 J	207000 J
ANTIMONY	7 R	7 R	7 R	7 U	7 U	7 U
ARSENIC	18.6 J	2 R	118 J	5.2 J	26 B	16.2
BARIUM	728	519	547	54 B	1200	1250
BERYLLIUM	19	1 B	1 B	2 B	9	5
CADMIUM	12	5 U	21	5 U	5 U	5 U
CALCIUM	642000	170000	105000	90200 J	7180 J	18700 J
CHROMIUM	496 J	10 U	50 U	17 J	858 J	400 J
COBALT	28 B	8 U	8 U	8 U	11 B	20 B
COPPER	87	4 B	7 B	8 B	127	53
IRON	267000 J	32 B	523000	14900 J	142000 J	96700 J
LEAD	126	2 U	2 U	13.1 J	155 J	61.5 J
MAGNESIUM	25500	88 B	3210 B	12700	24000	20000
MANGANESE	703	51	591	161 J	184 J	135 J
MERCURY	0.75	0.2 U	0.3	0.2 R	1.1 J	0.44 J
NICKEL	136	20 B	20 U	20 U	86	54
POTASSIUM	18800	21800	11300	4770 B	25600	13200
SELENIUM	9 J	1 R	1 R	6.4	5.5 B	9.1
SILVER	6 UJ	3 U	15 U	3 U	3 U	3 U
SODIUM	8870	11500	9290	23900	5090	9260
THALLIUM	1.2 J	1 U	1 U	1 UJ	1.1 B	1 UJ
VANADIUM	591	4 UJ	24 J	28 B	811	406
ZINC	373 J	7 J	79 J	32 J	223 J	158 J
CYANIDE	10 U	10 U	10 U	10 U	10 U	10 U

OPERABLE UNIT NO. 1 - SITES 21, 24, 78
 SHALLOW, INTERMEDIATE AND DEEP MONITORING WELLS
 GROUNDWATER DATA AND FREQUENCY SUMMARY
 REMEDIAL INVESTIGATION CTO - 19177
 MCB CAMP LEJEUNE, NORTH CAROLINA
 TAL METALS AND CYANIDE

SAMPLE NO. UNITS	78-GW08-01	78-GW09-2-01	78-GW09-3-01	78-GW10-01	78-GW11-01	78-GW12-01
	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
ALUMINUM	483000 J	68 J	2710 J	404000 J	332000	108000 J
ANTIMONY	7 U	7 R	7 R	7 R	7 R	7 R
ARSENIC	60.5	2 R	2 R	43 J	10 R	9.6 J
BARIUM	740	27 B	41 B	582	631	155 B
BERYLLIUM	9	1 U	1 B	8	5	2 B
CADMIUM	25 U	5 U	5 U	10 U	25 U	10 U
CALCIUM	28200 J	114000	99100	54400	9130	31200
CHROMIUM	491 J	10 UJ	10 UJ	362 J	412	114 J
COBALT	29 B	8 U	8 U	31 B	8 U	8 U
COPPER	86	4 B	4 B	91	84	30
IRON	138000 J	955 J	99 J	157000 J	120000	26400 J
LEAD	131 J	2 U	2 U	257	195	35.5
MAGNESIUM	18500	2550 B	249 B	17400	15400	7220
MANGANESE	213 J	19	2 U	326	174	47
MERCURY	1.3 J	0.2 U	0.2 U	1.5	0.75	0.2 U
NICKEL	89	20 U	20 U	108	79	20 U
POTASSIUM	14700	1220 B	7820	15800	13000	6090
SELENIUM	25.3	1 UJ	1 UJ	18 J	12 J	3.6 J
SILVER	3 U	3 UJ	5 J	3 UJ	3 U	3 UJ
SODIUM	4710 B	5820	7280	3340 B	3490 B	5420
THALLIUM	1.3 J	1 UJ	1 UJ	1 UJ	1 U	1 UJ
VANADIUM	1700	4 U	9 B	499	526	145
ZINC	200 J	11 J	181 J	217 J	120 J	64 J
CYANIDE	10 U	10 U	10 U	10 U	10 U	10 U

OPERABLE UNIT NO. 1 - SITES 21, 24, 78
 SHALLOW, INTERMEDIATE AND DEEP MONITORING WELLS
 GROUNDWATER DATA AND FREQUENCY SUMMARY
 REMEDIAL INVESTIGATION CTO - 19177
 MCB CAMP LEJEUNE, NORTH CAROLINA
 TAL METALS AND CYANIDE

SAMPLE NO.	78-GW13-01	78-GW14-01	78-GW15-01	78-GW16-01	78-GW17-1-01	78-GW17-2-01
UNITS	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
ALUMINUM	61800 J	103000 J	205000 J	341000 J	168000 J	541 J
ANTIMONY	7 U	7 R	7 R	7 R	7 R	7 R
ARSENIC	38.3	18.4 J	4 R	19 J	11.6 J	2 R
BARIUM	236	321	469	511	261	57 B
BERYLLIUM	3 B	1 B	4 B	6	4 B	1 B
CADMIUM	5 U	10 U	5 U	5 U	10 U	5 U
CALCIUM	4040 J	5300	29100	62700	86900	144000
CHROMIUM	222 J	113 J	215 J	353 J	200 J	10 UJ
COBALT	20 B	8 U	9 B	13 B	9 B	8 U
COPPER	18 B	33	49	80	40	5 B
IRON	61800 J	49600 J	43300 J	80900 J	48700 J	2120 J
LEAD	26.4 J	63	53	224	81	5.9
MAGNESIUM	11800	10600	13400	10800	9940	2570 B
MANGANESE	57 J	68	115	150	96	33
MERCURY	0.3 J	0.38	0.2 U	0.38	0.2 U	0.2 U
NICKEL	40	34 B	29 B	61	30 B	20 U
POTASSIUM	8210	6460	12000	14000	11600	1630 B
SELENIUM	4.7 B	12.4 J	2.1 J	14.5 J	5 UJ	1 UJ
SILVER	3 U	3 UJ	3 UJ	3 UJ	3 UJ	3 UJ
SODIUM	15000	15400	6410	4120 B	3180 B	9480
THALLIUM	1 U	1 UJ	1 J	1.4 J	1 J	1 UJ
VANADIUM	158	122	248	371	289	4 U
ZINC	96 J	51 J	116 J	157 J	98 J	6 UJ
CYANIDE	10 U	10 U	10 U	10 U	10 U	10 U

OPERABLE UNIT NO. 1 - SITES 21, 24, 78
 SHALLOW, INTERMEDIATE AND DEEP MONITORING WELLS
 GROUNDWATER DATA AND FREQUENCY SUMMARY
 REMEDIAL INVESTIGATION CTO - 19177
 MCB CAMP LEJEUNE, NORTH CAROLINA
 TAL METALS AND CYANIDE

SAMPLE NO.	78-GW19-01	78-GW20-01	78-GW21-01	78-GW22-01	78-GW22-1-01	78-GW22-2-01
UNITS	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
ALUMINUM	4110 J	149000 J	23800 J	78900 J	257000	190000 J
ANTIMONY	7 R	7 U	7 U	14 J	7 R	7 UJ
ARSENIC	3.1 J	30.3	6.3 J	10 J	59.5 J	75.6
BARIUM	101 B	430	382	107 B	411	471
BERYLLIUM	1 B	4 B	2 B	1 B	4 B	12
CADMIUM	5 U	5 U	5 U	10 U	25 U	6
CALCIUM	3700 B	5450 J	32900 J	90100	44500	118000 J
CHROMIUM	10 UJ	231 J	22 J	83 J	238	389 J
COBALT	8 U	35 B	10 B	8 U	8 U	170
COPPER	3 B	61	11 B	34	54	92
IRON	8500 J	101000 J	26400 J	27600 J	62300	140000 J
LEAD	8.3	119 J	19.1 J	37.2	272	360 J
MAGNESIUM	5740	13100	9110	5500	12000	13000
MANGANESE	26	93 J	85 J	70	158	348 J
MERCURY	0.2 U	0.37 J	0.2 R	0.3	0.45	0.2 R
NICKEL	20 U	75	20 U	21 B	99	234
POTASSIUM	2130 B	9100	4100 B	6180	12000	10200
SELENIUM	1 UJ	4.2 B	1.1 B	4.2 J	7.5 J	45
SILVER	3 UJ	3 U	3 U	3 UJ	3 U	3 U
SODIUM	24000	11900	9480	12100	9910	8230
THALLIUM	1 UJ	1.8 B	1 U	1.7 J	1 U	3 B
VANADIUM	9 B	236	86	114	269	547
ZINC	6 J	250 J	108 J	50 J	150 J	967 J
CYANIDE	10 U	10 U	10 U	10 U	10 U	10 U

OPERABLE UNIT NO. 1 - SITES 21, 24, 78
 SHALLOW, INTERMEDIATE AND DEEP MONITORING WELLS
 GROUNDWATER DATA AND FREQUENCY SUMMARY
 REMEDIAL INVESTIGATION CTO - 19177
 MCB CAMP LEJEUNE, NORTH CAROLINA
 TAL METALS AND CYANIDE

SAMPLE NO.	78-GW23-01	78-GW24-1-01	78-GW24-2-01	78-GW24-3-01	78-GW25-01	78-GW29-01
	UNITS	UG/L	UG/L	UG/L	UG/L	UG/L
ALUMINUM	111000 J	160000	1340	304	101000 J	78800 J
ANTIMONY	7 R	7 R	7 R	7 R	7 R	7 R
ARSENIC	7.6 J	100 J	2 R	2 R	11.4 J	19 J
BARIUM	230	396	34 B	17 B	119 B	1070
BERYLLIUM	2 B	7	1 B	1 U	2 B	12
CADMIUM	5 U	5 U	5	5	5 U	5 U
CALCIUM	10800	34400	107000	73400	37800	41600
CHROMIUM	101 J	264	10	10 U	82 J	252 J
COBALT	8 B	39 B	8 U	8 U	8 U	17 B
COPPER	25	71	6 B	5 B	26	34
IRON	30800 J	159000	2320	2370	26300 J	125000 J
LEAD	50	152	3.3	2.9 B	30.5	25.5
MAGNESIUM	7110	11600	1740 B	1500 B	4500 B	21900
MANGANESE	87	714	21	41	33	341
MERCURY	0.3	0.75	0.2 U	0.2 U	0.2 U	0.2 U
NICKEL	42	91	20 U	20 U	20 U	125
POTASSIUM	5450	9090	1050 B	982 B	4950 B	11600
SELENIUM	4.4 J	17.6 J	1 R	1 R	1.6 J	2.5 J
SILVER	3 UJ	3 U	3 U	3 U	3 UJ	3 UJ
SODIUM	7450	10800	8350	7050	16400	21200
THALLIUM	1.7 J	1.5 B	1 U	1 U	1.3 J	1 UJ
VANADIUM	108	436	4 J	4 UJ	144	183
ZINC	67 J	291 J	11 J	16 J	34 J	330 J
CYANIDE	10 U	10 U	10 U	10 U	10 U	10 U

OPERABLE UNIT NO. 1 - SITES 21, 24, 78
 SHALLOW, INTERMEDIATE AND DEEP MONITORING WELLS
 GROUNDWATER DATA AND FREQUENCY SUMMARY
 REMEDIAL INVESTIGATION CTO - 19177
 MCB CAMP LEJEUNE, NORTH CAROLINA
 TAL METALS AND CYANIDE

SAMPLE NO.	78-GW31-2-01	78-GW31-3-01	78-GW32-2-01	78-GW32-3-01	78-GW33-01	78-GW34-01
	UNITS	UG/L	UG/L	UG/L	UG/L	UG/L
ALUMINUM	110 B	1200	112000 J	539 J	78200	6870
ANTIMONY	7 R	7 R	7 R	7 R	3 U	3 U
ARSENIC	2 R	2 R	21.6 J	2 R	5.6 J	4.4 J
BARIUM	17 B	415	476	42 B	162 B	173 B
BERYLLIUM	1 B	1 B	10	1 B	1 B	1 U
CADMIUM	5 U	5 U	10	5 U	5 U	5 U
CALCIUM	77600	308000	94600	5440	64800	10400
CHROMIUM	10 U	21	215 J	10 UJ	65	10 U
COBALT	8 U	8 U	84	8 U	8 U	8 U
COPPER	3 B	5 B	87	2 U	20 B	11 B
IRON	280	72 B	98500 J	112 J	14900	7250
LEAD	2 U	2 U	146	2 U	18.1	5.5
MAGNESIUM	2200 B	151 B	13700	319 B	7290	2880 B
MANGANESE	8 B	2 B	328	2 U	86	96
MERCURY	0.3	0.2 U	0.3	0.2 U	0.2 U	0.2 U
NICKEL	20 U	20 U	166	20 U	20 B	20 U
POTASSIUM	1640 B	61600	8460	67300	6900	2620 B
SELENIUM	1 R	1.7 J	99.5 J	1 UJ	12.8 J	1 UJ
SILVER	3 U	3 U	3 UJ	3 UJ	3 UJ	3 UJ
SODIUM	10400	26100	7510	42500	7030	4070 B
THALLIUM	1 U	1 UJ	7.3 J	1.3 J	1 U	1 U
VANADIUM	4 J	10 J	462	5 B	74	15 B
ZINC	23 J	10 J	826 J	6 UJ	37	59
CYANIDE	10 U	10 U	10 U	10 U	10 U	10 U

OPERABLE UNIT NO. 1 - SITES 21, 24, 78
 SHALLOW, INTERMEDIATE AND DEEP MONITORING WELLS
 GROUNDWATER DATA AND FREQUENCY SUMMARY
 REMEDIAL INVESTIGATION CTO - 19177
 MCB CAMP LEJEUNE, NORTH CAROLINA
 TAL METALS AND CYANIDE

SAMPLE NO.	78-GW35-01	78-GW36-01	78-GW37-01	78-GW38-01	78-GW39-01
	UNITS	UG/L	UG/L	UG/L	UG/L
ALUMINUM	47100	120000	73500	102000	60000
ANTIMONY	3 U	20 U	3 U	20 U	20 U
ARSENIC	2 UJ	3.1 J	4 J	33.6 J	4 UJ
BARIUM	261	152 B	123 B	420	256
BERYLLIUM	1 B	2 U	2 B	4 U	1 U
CADMIUM	5 U	5 U	5 U	25 U	5 U
CALCIUM	7480	35400	10100	62200	16800
CHROMIUM	55	111	65	201	60
COBALT	8 U	8 U	8 U	8 U	10 B
COPPER	15 B	29	22 B	110	699
IRON	11800	21200	18800	67500	28800
LEAD	13.2	30.2	21.8	41.2	186
MAGNESIUM	5680	5740	4600 B	17500	14300
MANGANESE	57	62	62	106	84
MERCURY	0.2 U	0.3	0.2 U	0.2 U	0.52
NICKEL	20 U	24 B	20 U	32 B	32 B
POTASSIUM	6150	5820	5990	8180	3840 B
SELENIUM	3.5 J	1.7 J	1.1 J	1.3 J	4.3 J
SILVER	3 UJ	3 UJ	3 UJ	3 UJ	3 UJ
SODIUM	10300	2450 B	7270	10300	19500
THALLIUM	1 U	1 U	1 U	1 U	1 U
VANADIUM	59	98	106	235	67
ZINC	30	57	58	134	138
CYANIDE	10 U	10 U	10 U	10 U	10 U

OPERABLE UNIT NO. 5 - SITE 2
SHALLOW AND DEEP MONITORING WELLS
GROUNDWATER STATISTICAL SUMMARY
REMEDIAL INVESTIGATION CTO - 19174
MCB CAMP LEJEUNE, NORTH CAROLINA
TAL METALS AND CYANIDE

	SAMPLE NO.	2-GW01-01	2-GW02-01	2-GW03-01	2-GW03DW-01	2-GW04-01	2-GW05-01
	UNITS	UG/L		UG/L	UG/L	UG/L	UG/L
ALUMINUM		36000		5200	269	16800	4050
ANTIMONY		10 U		10 U	3.5 U	10 U	10 U
ARSENIC		21.2		2.5 B	1 UJ	23.6	2.2 B
BARIUM		52 B		46 B	1420	95 B	100 B
BERYLLIUM		1 B		0.5 U	0.5 U	2 B	0.5 U
CADMIUM		7		2.5 U	2.5 U	2.5 U	2.5 U
CALCIUM		23700		8460	450000	11100	21000
CHROMIUM		18		11	16	5 U	5 U
COBALT		10 B		4 U	4 U	4 U	4 U
COPPER		10 B		4 B	8 B	5 B	3 B
IRON		10300		7190	127	28100	12700
LEAD		15.5 L		3.5 J	1.1 UJ	2.7 J	0.5 UJ
MAGNESIUM		5600		1600 B	75 B	1920 B	4800 B
MANGANESE		55		21	2 U	21	46
MERCURY		0.1 U		0.1 U	0.1 U	0.1 U	0.1 U
NICKEL		10 U		10 U	10 U	10 U	10 U
POTASSIUM		2560 B		1030 B	187000	1210 B	2130 B
SELENIUM		4.2 B		0.5 U	0.5 U	0.5 U	0.5 U
SILVER		1.5 U		1.5 U	1.5 U	1.5 U	1.5 U
SODIUM		4040 B		5490	103000	5560	10100
THALLIUM		0.5 U		0.5 U	0.5 UJ	0.5 U	0.5 U
VANADIUM		72		10 B	2 U	89	9 B
ZINC		146		13 B	9 B	16 B	6 B
CYANIDE		5 U		5 U	5 U	5 U	5 U

OPERABLE UNIT NO. 5 - SITE 2
SHALLOW AND DEEP MONITORING WELLS
GROUNDWATER STATISTICAL SUMMARY
REMEDIAL INVESTIGATION CTO - 19174
MCB CAMP LEJEUNE, NORTH CAROLINA
TAL METALS AND CYANIDE

SAMPLE NO.	2-GW06-01	2-GW07-01	2-GW08-01	2-GW09-01
	UNITS	UG/L	UG/L	UG/L
ALUMINUM	13600	8550	6380	56300
ANTIMONY	10 U	10 U	3.5 UJ	10 U
ARSENIC	5.4 B	5.7 B	9.2 B	12.9
BARIUM	173 B	98 B	98 B	328
BERYLLIUM	0.5 U	0.5 U	0.5 U	3 B
CADMIUM	2.5 U	2.5 U	2.5 U	2.5 U
CALCIUM	7940	9350	5710	22100
CHROMIUM	15	15	5 U	75
COBALT	12 B	4 U	4 U	10 B
COPPER	5 B	7 B	6 B	25
IRON	11700	12500	9150	42000
LEAD	6.7 J	8.3 J	1.8 UJ	27.2 J
MAGNESIUM	4120 B	3620 B	2020 B	9980
MANGANESE	79	72	53	290
MERCURY	0.1 U	0.1 U	0.1 U	0.1 U
NICKEL	10 U	10 U	10 U	25 B
POTASSIUM	2570 B	1940 B	1550 B	6610
SELENIUM	0.5 U	0.5 U	0.5 U	0.5 U
SILVER	1.5 U	1.5 U	1.5 U	1.5 U
SODIUM	21900	8180	11800	18300
THALLIUM	0.5 U	0.5 U	0.5 U	0.5 U
VANADIUM	15 B	18 B	12 B	86
ZINC	26	22	27	103
CYANIDE	5 U	5 U	5 U	5 U

OPERABLE UNIT NO. 5 - SITE 2
SHALLOW AND DEEP MONITORING WELLS
GROUNDWATER STATISTICAL SUMMARY
REMEDIAL INVESTIGATION CTO - 19174
MCB CAMP LEJEUNE, NORTH CAROLINA
DISSOLVED METALS

SAMPLE NO.	2-GW01D-01	2-GW02D-01	2-GW03D-01	2-GW03DWD-01	2-GW04D-01	2-GW05D-01
UNITS	UG/L		UG/L	UG/L	UG/L	UG/L
ALUMINUM	1930		66 B	89 B	60 B	1990
ANTIMONY	10 U		10 U	3.5 UJ	10 U	10 U
ARSENIC	2.2 B		1 U	1 UJ	6.1 B	1 U
BARIUM	42 B		25 B	1400	64 B	98 B
BERYLLIUM	1 B		0.5 U	0.5 U	0.5 U	1 B
CADMIUM	2.5 U		2.5 U	2.5 U	2.5 U	2.5 U
CALCIUM	24400		7100	441000	11300	21800
CHROMIUM	5 U		5 U	11	5 U	5 U
COBALT	4 U		4 U	4 U	4 U	4 U
COPPER	4 B		2 B	6 B	9 B	4 B
IRON	2560		2170	10 U	2720	7400
LEAD	2.1 J		0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
MAGNESIUM	5220		1030 B	26 B	1840 B	4900 B
MANGANESE	51		4.5 U	1 U	17	46
MERCURY	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U
NICKEL	10 U		10 U	10 U	10 U	10 U
POTASSIUM	2140 B		589 B	188000	1130 B	2170 B
SELENIUM	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U
SILVER	1.5 U		1.5 U	1.5 U	1.5 U	1.5 U
SODIUM	3590 B		5400	103000	5710	9970
THALLIUM	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U
VANADIUM	2 U		2 U	2 U	2 U	2 U
ZINC	28		3 U	3 U	8 B	9 B
CYANIDE						

OPERABLE UNIT NO. 5 - SITE 2
SHALLOW AND DEEP MONITORING WELLS
GROUNDWATER STATISTICAL SUMMARY
REMEDIAL INVESTIGATION CTO - 19174
MCB CAMP LEJEUNE, NORTH CAROLINA
DISSOLVED METALS

SAMPLE NO.	2-GW06D-01	2-GW07D-01	2-GW08D-01	2-GW09D-01
UNITS	UG/L	UG/L	UG/L	UG/L
ALUMINUM	149 B	43 B	95 B	1230
ANTIMONY	10 U	10 U	3.5 U	10 U
ARSENIC	2.9 B	1 U	7.1 B	1 U
BARIUM	126 B	49 B	62 B	149 B
BERYLLIUM	0.5 U	0.5 U	0.5 U	1 B
CADMIUM	2.5 U	2.5 U	2.5 U	2.5 U
CALCIUM	8080	9590	5800	20800
CHROMIUM	5 U	5 U	5 U	10
COBALT	10 B	8 B	4 U	14 B
COPPER	2 B	5 B	4 B	5 B
IRON	7070	4660	6180	7040
LEAD	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
MAGNESIUM	3610 B	3060 B	1730 B	6890
MANGANESE	65	48	40	129
MERCURY	0.1 U	0.1 U	0.1 U	0.1 U
NICKEL	10 U	10 U	10 U	10 U
POTASSIUM	1970 B	1490 B	1150 B	2790
SELENIUM	0.5 U	0.5 U	0.5 U	0.5 U
SILVER	1.5 U	1.5 U	1.5 U	1.5 U
SODIUM	22600	8720	12100	17200
THALLIUM	0.5 U	0.5 U	0.5 U	0.5 U
VANADIUM	2 U	2 U	2 U	2 U
ZINC	12 B	13 B	19 B	35
CYANIDE				

Table H-1. Comparison of Target Analyte Screening Values (SVs) with Detection and Quantitation Limits of Current Analytical Methods^a

Target Analyte	SV ^b	Methods									
		Puget Sound Protocols ^c		National Study of Chemical Residues in Fish ^d		EMSL ^e	National Contaminant Biomonitoring Program ^f		California OEHA ^g	State of California, Dept. of Fish and Game Environmental Services Division ^h	EPA 301(h) Monitoring Program ⁱ
		LOD ^j	PQL ^k	MLD ^l	TQL ^m	MDL ⁿ	LOD ^o	LOQ ^p	MDL ^q	LOD ^r	Detection Limits ^s
Metals											
Cadmium	10 ppm	0.01 ppm	N/R	N/I	N/I	0.02 ppm	0.005-0.046 ppm	N/R	N/I	0.01-0.1 ppm	0.01 ppm (GFAA); 0.4 ppm (ICP)
Mercury	0.6 ppm	0.01 ppm	N/R	1.3 ppb (LOD) ^t	N/R	0.1 ppm	0.01-0.05 ppm	N/R	0.050 ppm	0.02 ppm	0.01 ppm (CVAA)
Selenium	50 ppm	N/I	N/I	N/I	N/I	0.6 ppm	0.017-0.15 ppm	N/R	N/I	0.05 ppm	0.02 ppm (GFAA)
Organochlorine Pesticides						N/I					0.1-5 ppb ^u
Chlordane (total)	80 ppb										
cis-Chlordane		1-5 ppb	20 ppb	N/R	2.5 ppb		<1.5 ppb	2-15 ppb	3-5 ppb	5 ppb	
trans-Chlordane		N/I	N/I	N/R	2.5 ppb		<1.5 ppb	2-15 ppb	2-5 ppb	5 ppb	
cis-Nonachlor		N/I	N/I	N/R	2.5 ppb		<1.5 ppb	2-15 ppb	N/I	5 ppb	
trans-Nonachlor		N/I	N/I	N/R	2.5 ppb		<1.5 ppb	2-15 ppb	4-7 ppb	5 ppb	
Oxychlordane		N/I	N/I	N/R	2.5 ppb		<1.5 ppb	2-15 ppb	N/I	5 ppb	
DDT (total)	300 ppb								38 ppb		
4,4'-DDT		0.1-2 ppb	4 ppb	N/I	N/I		<1.5 ppb	2-15 ppb	7-13 ppb	10 ppb	
2,4'-DDT		0.1-2 ppb	4 ppb	N/I	N/I		<1.5 ppb	2-15 ppb	5-6 ppb	10 ppb	
4,4'-DDD		0.1-2 ppb	4 ppb	N/I	N/I		<1.5 ppb	2-15 ppb	5-6 ppb	10 ppb	
2,4'-DDD		0.1-2 ppb	4 ppb	N/I	N/I		<1.5 ppb	2-15 ppb	3-6 ppb	10 ppb	
4,4'-DDE		0.1-2 ppb	4 ppb	N/R	2.5 ppb		<1.5 ppb	2-15 ppb	15-38 ppb	5 ppb	
2,4'-DDE		0.1-2 ppb	4 ppb	N/I	N/I		<1.5 ppb	2-15 ppb	6-10 ppb	10 ppb	
Dicofol	10,000 ppb	N/I	N/I	N/R	2.5 ppb		N/I	N/I	N/I	100 ppb	
Dieldrin	7 ppb	0.1-2 ppb	4 ppb	N/R	2.5 ppb		<1.5 ppb	2-15 ppb	N/I	5 ppb	
Endosulfan (total)	20,000 ppb										
Endosulfan I		N/I	N/I	N/I	N/I		N/I	N/I	N/I	5 ppb	
Endosulfan II		N/I	N/I	N/I	N/I		N/I	N/I	N/I	70 ppb	
Endrin	3,000 ppb	N/I	N/I	N/R	2.5 ppb		<1-5 ppb	2-15 ppb	N/I	15 ppb	
Heptachlor epoxide	10 ppb	N/I	N/I	N/R	2.5 ppb		<1-5 ppb	2-15 ppb	N/I	N/I	
Hexachlorobenzene	70 ppb	0.1-2 ppb	4 ppb	N/R	2.5 ppb		<1-5 ppb	2-15 ppb	N/I	N/R	
Lindane	80 ppb	0.1-2 ppb	4 ppb	N/R	2.5 ppb		<1-5 ppb	2-15 ppb	N/I	2 ppb	
Mirex	2,000 ppb	N/I	N/I	N/R	2.5 ppb		<1-5 ppb	2-15 ppb	N/I	N/I	
Toxaphene	100 ppb	3-15 ppb	60 ppb	N/I	N/I		60 ppb	153 ppb	N/I	100 ppb	

See notes and references at end of table.

(continued)

Table H-1 (continued)

Target Analyte	SV ^b	Methods									
		Puget Sound Protocols ^c		National Study of Chemical Residues in Fish ^d		EMSL ^e	National Contaminant Biomonitoring Program ^f		California OEHHA ^g	State of California, Dept. of Fish and Game Environmental Services Division ^h	EPA 301(h) Monitoring Program ⁱ
		LOD ^j	PQL ^k	MLD ^l	TQL ^m	MDL ⁿ	LOD ^o	LOQ ^p	MDL ^q	LOD ^r	Detection Limits ^s
Organophosphate Pesticides											
Carbophenothion	1,000 ppb	N/I	N/I	N/I	N/I	N/I	N/I	N/I	N/I	N/I	1-15 ppb
Chlorpyrifos	30,000 ppb	N/I	N/I	N/R	2.5 ppb		N/I	N/I	N/I	10 ppb	
Diazinon	900 ppb	N/I	N/I	N/I	N/I		N/I	N/I	N/I	50 ppb	
Disulfoton	500 ppb	N/I	N/I	N/I	N/I		N/I	N/I	N/I	N/I	
Ethion	5,000 ppb	N/I	N/I	N/I	N/I		N/I	N/I	N/I	20 ppb	
Terbufos	10,000 ppb	N/I	N/I	N/I	N/I		N/I	N/I	N/I	N/I	
Chlorophenoxy Herbicides											
Oxyfluorfen	800 ppb	N/I	N/I	N/I	N/I	N/I	N/I	N/I	N/I	N/I	N/I
PCBs (total Aroclors)	10 ppb	(1-5 ppb) ^v	(20 ppb) ^v	N/R	(1.25-6.25 ppb) ^w				50 ppb		20 ppb
Aroclor 1242		N/I	N/I	N/I	N/I		N/R	N/R	N/I	N/I	
Aroclor 1248		N/I	N/I	N/I	N/I		62 ppb	167 ppb	N/I	50 ppb	
Aroclor 1254		N/I	N/I	N/I	N/I		41 ppb	111 ppb	50 ppb	50 ppb	
Aroclor 1260		N/I	N/I	N/I	N/I		61 ppb	155 ppb	50 ppb	50 ppb	
Dioxins/dibenzofurans (total)^x	0.7 ppt	N/I	N/I	N/I		N/I	N/I	N/I	N/I	N/I	N/I
TCDD/TCDF				1 ppt	N/R						
PeCDD/PeCDF				2 ppt	N/R						
HxCDD/HxCDF				4 ppt	N/R						
HpCDD/HpCDF				10 ppt	N/R						
OCDD/OCDF				N/I	N/I						

CVAA = Cold vapor atomic absorption spectrophotometry.
 GFAA = Graphite furnace atomic absorption spectrophotometry.
 ICP = Inductively coupled plasma atomic emission spectrometry.
 N/I = Target analyte not included in monitoring program or recommended methods.

N/R = Not reported.
 PCBs = Polychlorinated biphenyls.

Table H-1 (continued)

- ^a All values for SVs, detection limits, and quantitation limits are given in units of weight of analyte per wet weight of edible fish/shellfish tissue.
- ^b From Table 5-2. Except for mercury, SVs are for general adult population using oral RIDs or SFs available in the EPA IRIS database and assuming a consumption rate (CR) = 6.5 g/d, average body weight (BW) = 70 kg, lifetime (70-yr) exposure, and for carcinogens a risk level (RL) = 10^{-5} . The IRIS RID for methylmercury was lowered by a factor of 5 to calculate the recommended SV = 0.6 ppm in order to account for a possible fivefold increase in fetal sensitivity to methylmercury exposure (WHO, 1990). This approach is deemed to be most prudent as an interim measure until the current reevaluation of the methylmercury RID is completed (IRIS, 1993). Note: Increasing CR, decreasing BW and/or using an RL $<10^{-5}$ will decrease the SV. Program managers must ensure that detection and quantitation limits of analytical methods are sufficient to allow reliable quantitation of target analytes at or below selected SVs. If analytical methodology is not sensitive enough to reliably quantitate target analytes at or below selected SVs (e.g., PCBs, dioxins/dibenzofurans), the program managers must determine appropriate fish consumption guidance based on lowest detectable concentrations, or provide justification for adjusting SVs to values at or above achievable method detection or quantitation limits.
- ^c Puget Sound Estuary Program (1990a,b). Analysis of cadmium and lead by GFAA. Analysis of mercury by CVAA. Analysis of organochlorine pesticides and PCBs by gas chromatography/electron capture detection (GC/ECD). Analysis of PAHs by gas chromatography/mass spectrometry (GC/MS). Inorganic protocols based on U.S. EPA SW-846 methods (U.S. EPA, 1986b) and U.S. EPA Contract Laboratory Methods (U.S. EPA, 1987a). Organic protocols based on Krahn et al. (1988), U.S. EPA (1984, 1986b, 1988, 1989d), Horwitz et al. (1980), NUS (1985), MacLeod et al. (1985), and Brown et al. (1985), on a series of Puget Sound Estuary Program Workshops, and on a national QA Workshop sponsored by the National Oceanic and Atmospheric Administration (NOAA) and National Institute of Standards and Technology (NIST).
- ^d National Study of Chemical Residues in Fish (U.S. EPA, 1992a, 1992b). Analysis of mercury by CVAA (U.S. EPA, 1989a). Analysis of organochlorine pesticides and PCBs by GC/MS (U.S. EPA, 1989c). Analysis of dioxins/dibenzofurans by high-resolution gas chromatography/high-resolution mass spectrometry (HRGC/HRMS) (U.S. EPA, 1989b).
- ^e U.S. EPA (1991). Analysis of cadmium, lead, and selenium by ICP. Analysis of mercury by CVAA.
- ^f U.S. Fish and Wildlife Service National Contaminant Biomonitoring Program (Schmitt and Brumbaugh, 1990; Schmitt et al., 1990). Analysis of cadmium and lead by GFAA. Analysis of mercury by CVAA. Analysis of selenium by hydride generation atomic absorption (HAA). Analysis of organochlorine pesticides and PCBs by GC/ECD.
- ^g Pollock et al. (1991). Compositing fish samples extracted and analyzed for organics by GC/ECD using FDA Method PAM 211.1 in the *Pesticide Analytical Manual-Vol. I* (U.S. FDA, 1978). This method has been validated in interlaboratory studies and is an official method of the Association of Official Analytical Chemists (AOAC) for DDT, chlordane, and PCBs in fish. Mercury was determined using the AOAC flameless atomic absorption method (Williams, 1984).
- ^h California Department of Fish and Game. (1990). Metals methods based in part on EPA SW-846 methods (U.S. EPA, 1986b). Analysis of cadmium and lead by flame AA and GFAA. Analysis of mercury by CVAA. Analysis of selenium by hydride generation AA. Organics methods based on FDA methods (U.S. FDA, 1975) and EPA 301(h) methods (U.S. EPA, 1986a). Analysis of organochlorine and organophosphate pesticides and PCBs by GC/ECD. Analysis of PAHs by gas chromatography/flame ionization detection (GC/FID).
- ⁱ U.S. EPA (1985, 1986, 1987b). Analysis of cadmium and lead by GFAA or ICP. Analysis of selenium by GFAA. Analysis of mercury by CVAA. Analysis of organochlorine pesticides and PCBs by GC/ECD. Analysis of organophosphate pesticides by GC/phosphorus specific flame photometric or alkali flame ionization detection. Analysis of PAHs by GC/MS. Extract cleanup (e.g., removal of polar interferences by alumina column chromatography) assumed.
- ^j LOD = Limit of detection. Method detection limit as defined in 40 CFR 136 using a minimum of three replicates.

(continued)

Table H-1 (continued)

^k PQL = Practical quantitation limit. Defined in the Puget Sound Estuary Program as the minimum concentration of an analyte required to be measured and allowed to be reported without qualification as an estimated quantity for samples without substantial interferences. Based on the lowest concentration of the initial calibration curve (C, in µg/mL), the amount of sample typically analyzed (W, in g), and the final extract volume (V, in mL):

$$\text{PQL } (\mu\text{g/g;ppm}) = \frac{C (\mu\text{g/mL}) \cdot V (\text{mL})}{W (\text{g})}$$

^l MLD = Minimum level of detection. Concentration predicted from ratio of baseline noise area to labeled internal standard plus three times the standard error of the estimate from the weighted initial calibration curve.

^m TQL = Target quantitation limit. Specific detection limits were not determined for individual samples, so were operationally set at zero.

ⁿ MDL = Method detection limit. Minimum concentration of an analyte that can be identified, measured, and reported with 99 percent confidence that the analyte concentration is greater than zero. Determined according to the procedure in 40 CFR 136 using seven replicates.

^o LOD (for metals) = $3(S_b^2 + S_s^2)$, where S_b^2 and S_s^2 are variances of concentrations measured for procedural blanks and a low-level sample, respectively. LOD (for pesticides) = Mean method blank plus three times the standard deviation. Determined according to Keith et al. (1983).

^p LOQ = Limit of quantitation. Mean method blank plus 10 times the standard deviation. Determined according to Keith et al. (1983).

^q MDL = Method detection limit. Determined according to procedure in 49 CFR 209.

^r LOD = Limit of detection. The lowest concentration that is statistically different from a blank. Determined according to the IUPAC method in Long and Winefordner (1983).

^s From U.S. EPA (1985). Based on detection levels normally achieved in methods commonly used for tissue analyses in environmental laboratories. These detection limits are generally between the instrument detection limit (IDL) and method detection limit (MDL) (see Section 8.3.3.3) and are based on the expertise and best professional judgment of experienced analysts. Detection limits for metals based on 5 g (wet weight) of muscle tissue digested and diluted to 50 mL. Detection limits for organics based on 25 g (wet weight) of muscle tissue extracted, concentrated to 0.5 mL after gel permeation chromatography cleanup, and 1 µL injected. Bonded, fused silica capillary GC columns, which provide better resolution than packed columns, are assumed for analysis of semivolatile compounds.

^t LOD = Limit of detection. No procedure given for determining the LOD.

^u The higher detection limits are appropriate for pesticides such as mirex, the DDTs, and endosulfans. Compounds such as lindane and hexachlorobenzene can be detected at the lower limits. Toxaphene (a mixture) may require a higher detection limit than the other organochlorine pesticides.

^v Aroclors not determined. Values given are for individual mono- through decachlorobiphenyls.

^w Aroclors not determined. PCBs reported by total congener at the following levels of chlorination (TQLS in parentheses): 1-3 (1.25 ppb); 4-6 (2.5 ppb); 7-8 (3.75 ppb); 9-10 (6.25 ppb).

(continued)

Table H-1 (continued)

* Detection and quantitation limits obtained from a survey of 10 laboratories with expertise in dioxin/dibenzofuran analyses by HRGC/HRMS ranged from 0.04-10 ppt and 0.2-100 ppt, respectively.

References:

Brown, D.W., A.J. Friedman, and W.D. MacLeod, Jr. 1985. *Quality Assurance Guidelines for Chemical Analysis of Aquatic Environmental Samples*. Prepared for Seattle District, U.S. Army Corps of Engineers, Seattle, Washington. National Analytical Facility, National Oceanographic and Atmospheric Administration, Seattle, WA.

California Department of Fish and Game. 1990. *Laboratory Quality Assurance Program Plan*. Environmental Services Division, Sacramento, CA.

Horwitz, W., L. Kamps, and K. Boyer. 1980. Quality assurance in the analysis of foods for trace constituents. *Anal. Chem.* 63:1344-1354.

IRIS (Integrated Risk Information System). 1993. U.S. Environmental Protection Agency, Duluth, MN.

Keith, L.H., W. Crommett, J. Deegan, Jr., R.A. Libby, J.K. Taylor, and G. Wentler. 1983. Principles of environmental analysis. *Analyt. Chem.* 55:1426-1435.

Krahn, M.M., C.A. Wigren, R.W. Pearce, L.K. Moore, R.G. Bogar, W.D. MacLeod, Jr., S.L. Chan, and D.W. Brown. 1988. *Standard Analytical Procedures for the NOAA National Analytical Facility. New HPLC Cleanup and Revised Extraction Procedures for Organic Contaminants*. NOAA Tech. Memo NMFS F/NWC-153. National Oceanic and Atmospheric Administration, U.S. Department of Commerce, Northwest and Alaska Fisheries Center, Seattle, WA. 52 pp.

Long, G.L., and J.L. Winefordner. 1983. Limit of detection. A closer look at the IUPAC definition. *Anal. Chem.* 55(7):712A-724A.

MacLeod W., Jr., D. Brown, A. Friedman, O. Maynes, and R. Pierce. 1985. *Standard Analytical Procedures of the NOAA National Analytical Facility, 1984-85, Extractable Toxic Organic Compounds*. NOAA Technical Memorandum NMFS F/NWC-64. Prepared for the National Status and Trends Program, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, Rockville, MD.

NUS. 1985. *Laboratory data validation functional guidelines for evaluating organics analysis*. Technical Directive Document No. HQ-8410-01. Prepared by the U.S. EPA Data Validation Workgroup for U.S. EPA Hazardous Site Control Division, Washington, DC.

Puget Sound Estuary Program. 1990a (revised). *Recommended guidelines for measuring organic compounds in Puget Sound sediments and tissue samples*. In: *Recommended Protocols and Guidelines for Measuring Selected Environmental Variables in Puget Sound*. Prepared by PTI Environmental Services, Bellevue, WA. Region 10, U.S. Environmental Protection Agency, Seattle, WA. (Looseleaf)

Puget Sound Estuary Program. 1990b (revised). *Recommended protocols for measuring metals in Puget Sound water, sediment, and tissue samples*. In: *Recommended Protocols and Guidelines for Measuring Selected Environmental Variables in Puget Sound*. Prepared by PTI Environmental Services, Bellevue, WA. Region 10, U.S. Environmental Protection Agency, Seattle, WA. (Looseleaf)

Schmitt, C.J., and W.G. Brumbaugh. 1990. *National Contaminant Biomonitoring Program: Concentrations of arsenic, cadmium, copper, lead, mercury, selenium, and zinc in U.S. freshwater fish, 1978-1984*. *Arch. Environ. Contam. Toxicol.* 19:731-747.

(continued)

Table H-1 (continued)

- Schmitt, C.J., J.L. Zajicek, and P.H. Peterman. 1990. National Contaminant Biomonitoring Program: Residues of organochlorine chemicals in U.S. freshwater fish, 1976-1984. *Arch. Environ. Contam. Toxicol.* 19:748-761.
- U.S. EPA (U.S. Environmental Protection Agency). 1984 (revised January 1985). *Contract Laboratory Program Statement of Work for Organics Analysis, Multi-Media, Multi-Concentration*. IFB WA 85-T176, T177, T178. Washington, DC.
- U.S. EPA (U.S. Environmental Protection Agency). 1985. *Bioaccumulation Monitoring Guidance: 3. Recommended Analytical Detection Limits*. EPA-503/6-90-001. Office of Marine and Estuarine Protection, Washington, DC.
- U.S. EPA (U.S. Environmental Protection Agency). 1986a. *Bioaccumulation Monitoring Guidance: 4. Analytical Methods for U.S. EPA Priority Pollutants and 301(h) Pesticides in Tissues from Marine and Estuarine Organisms*. EPA-503/6-90-002. Office of Marine and Estuarine Protection, Washington, DC.
- U.S. EPA (U.S. Environmental Protection Agency). 1986b. *Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods*. SW-846; 3rd Edition (with 1990 updates). Office of Solid Waste and Emergency Response, Washington, DC.
- U.S. EPA (U.S. Environmental Protection Agency). 1987a. *Contract Laboratory Program Statement of Work, Inorganic Analysis, Multi-media, Multi-concentration*. SOW No. 87 (Revised December 1987). Washington, DC.
- U.S. EPA (U.S. Environmental Protection Agency). 1987b. *Quality Assurance/Quality Control (QA/QC) for 301(h) Monitoring Programs: Guidance on Field and Laboratory Methods*. EPA-430/9-86-004. Office of Marine and Estuarine Protection, Washington, DC.
- U.S. EPA (U.S. Environmental Protection Agency). 1988. *Laboratory Data Validation Functional Guidelines for Evaluating Organics Analysis*. EPA R-582-5-5-01. U.S. EPA Sample Management Office, Alexandria, VA.
- U.S. EPA (U.S. Environmental Protection Agency). 1989a. *Analytical Procedures and Quality Assurance Plan for the Determination of Mercury in Fish*. Draft. Environmental Research Laboratory, Duluth MN.
- U.S. EPA (U.S. Environmental Protection Agency). 1989b. *Analytical Procedures and Quality Assurance Plan for the Determination of PCDD/PCDF in Fish*. Draft. Environmental Research Laboratory, Duluth MN.
- U.S. EPA (U.S. Environmental Protection Agency). 1989c. *Analytical Procedures and Quality Assurance Plan for the Determination of Xenobiotic Chemical Contaminants in Fish*. EPA-600/3-90-023. Environmental Research Laboratory, Duluth, NM.
- U.S. EPA (U.S. Environmental Protection Agency). 1989d. *Method 1624: Volatile Organic Compounds by Isotope Dilution GC/MS. Method 1625: Semivolatile Organic Compounds by Isotope Dilution GC/MS*. Office of Water Regulations and Standards, Industrial Technology Division, Washington, DC. 75 pp.
- U.S. EPA (U.S. Environmental Protection Agency). 1991. *Methods for the Determination of Metals in Environmental Samples*. EPA-600/4-91/010. Environmental Monitoring Systems Laboratory, Office of Research and Development, Cincinnati, OH.
- U.S. EPA (U.S. Environmental Protection Agency). 1992a. *National Study of Chemical Residues in Fish*. Volume I. EPA-623/R-92-008a. Office of Science and Technology, Washington, DC.

(continued)

Table H-1 (continued)

U.S. EPA (U.S. Environmental Protection Agency). 1992b. *National Study of Chemical Residues in Fish*. Volume II. EPA-823/R-92-008b. Office of Science and Technology, Washington, DC.

U.S. FDA (U.S. Food and Drug Administration). 1975. *Pesticide Analytical Manual, Volume I, Methods Which Detect Multiple Residues*. Section 2.3.2. Rockville, MD.

U.S. FDA (U.S. Food and Drug Administration). 1978. *Pesticide Analytical Manual, Volumes I and II*. Report No. FDA/JCA/79/76-3. U.S. Department of Health and Human Services, Washington, DC.

WHO (World Health Organization). 1990. *Environmental Health Criteria 101: Methyl mercury*. World Health Organization, Geneva, Switzerland.

Williams, S. (ed.). 1984. *Official Methods of Analysis of the Association of Official Analytical Chemists*. Fourteenth edition. The Association of Official Analytical Chemists, Inc., Arlington, VA.

Extra Copy

**DRINKING WATER REGULATIONS
AND HEALTH ADVISORIES**

by

Office of Water
U.S. Environmental Protection Agency
Washington, D.C.
202-260-7571

**SAFE DRINKING WATER HOTLINE
1-800-426-4791
Monday thru Friday, 8:30 AM to 5:00 PM EST**

May 1994

LEGEND

Abbreviations column descriptions are:

- MCLG - Maximum Contaminant Level Goal. A non-enforceable concentration of a drinking water contaminant that is protective of adverse human health effects and allows an adequate margin of safety.
- MCL - Maximum Contaminant Level. Maximum permissible level of a contaminant in water which is delivered to any user of a public water system.
- RfD - Reference Dose. An estimate of a daily exposure to the human population that is likely to be without appreciable risk of deleterious effects over a lifetime.
- DWEL - Drinking Water Equivalent Level. A lifetime exposure concentration protective of adverse, non-cancer health effects, that assumes all of the exposure to a contaminant is from a drinking water source.

(*) The codes for the Status Reg and Status HA columns are as follows:

- F - final
D - draft
L - listed for regulation
P - proposed
T - tentative

Other codes found in the table include the following:

- NA - not applicable
PS - performance standard 0.5 NTU - 1.0 NTU
TI - treatment technique

** - No more than 5% of the samples per month may be positive. For systems collecting fewer than 40 samples/month, no more than 1 sample per month may be positive.

*** - guidance

- Large discrepancies between Lifetime and Longer-term HA values may occur because of the Agency's conservative policies, especially with-regard to carcinogenicity, relative source contribution, and less than lifetime exposures in chronic toxicity testing. These factors can result in a cumulative UF (uncertainty factor) of 10 to 1000 when calculating a Lifetime HA.

The scheme for categorizing chemicals according to their carcinogenic potential is as follows:

Group A: Human carcinogen

Sufficient evidence in epidemiologic studies to support causal association between exposure and cancer

Group B: Probable human carcinogen

Limited evidence in epidemiologic studies (Group B1) *and/or* sufficient evidence from animal studies (Group B2)

Group C: Possible human carcinogen

Limited evidence from animal studies *and* inadequate or no data in humans

Group D: Not classifiable

Inadequate or no human and animal evidence of carcinogenicity

Group E: No evidence of carcinogenicity for humans

No evidence of carcinogenicity in at least two adequate animal tests in different species *or* in adequate epidemiologic and animal studies

Drinking Water Standards and Health Advisories

May 1994

Page

Chemicals	Standards			Status HA	Health Advisories								Cancer Group
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		10-kg Child			70-kg Adult					
					One-day (mg/l)	Ten-day (mg/l)	Longer- term (mg/l)	Longer- term (mg/l)	RfD (mg/kg/ day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10 ⁻⁴ Cancer Risk	
ORGANICS													
Acenaphthene	-	-	-	-	-	-	-	-	0.06	-	-	-	-
Acifluorfen	T	zero	-	F	2	2	0.1	0.4	0.013	0.4	-	0.1	B2
Acrylamide	F	zero	TT	F	0.2	0.2	0.01	0.04	0.001	0.04	-	0.001	B2
Acrylonitrile	T	zero	-	D	-	-	-	-	-	-	-	0.006	B1*
Adipate (diethylhexyl)	F	0.4	0.4	-	20	20	20	60	0.6	20	0.4	3	C
Alachlor	F	zero	0.002	F	0.1	0.1	-	-	0.01	0.4	-	0.04	B2
Aldicarb	D	0.007	0.007	D	-	-	-	-	0.001	0.035	0.007	-	D
Aldicarb sulfone	D	0.007	0.007	D	-	-	-	-	0.001	0.035	0.007	-	D
Aldicarb sulfoxide	D	0.007	0.007	D	-	-	-	-	0.001	0.035	0.007	-	D
Aldrin	-	-	-	D	0.0003	0.0003	0.0003	0.0003	0.00003	0.001	-	0.0002	B2
Ametryn	-	-	-	F	9	9	0.9	3	0.009	0.3	0.06	-	D
Ammonium sulfamate	-	-	-	F	20	20	20	80	0.28	8	2	-	D
Anthracene (PAH)	-	-	-	-	-	-	-	-	0.3	-	-	-	D
Atrazine	F	0.003	0.003	F	0.1	0.1	0.05	0.2	0.035	0.2*	0.003*	-	C
Baygon	-	-	-	F	0.04	0.04	0.04	0.1	0.004	0.1	0.003	-	C
Bentazon	T	0.02	-	F	0.3	0.3	0.3	0.9	0.0025	0.09	0.02	-	D
Benz(a)anthracene (PAH)	P	zero	0.0001	-	-	-	-	-	-	-	-	-	B2
Benzene	F	zero	0.005	F	0.2	0.2	-	-	-	-	-	0.1	A
Benzo(a)pyrene (PAH)	F	zero	0.0002	-	-	-	-	-	-	-	-	-	B2*
Benzo(b)fluoranthene (PAH)	P	zero	0.0002	-	-	-	-	-	-	-	-	-	B2
Benzo(g,h,i)perylene (PAH)	-	-	-	-	-	-	-	-	-	-	-	-	D
Benzo(k)fluoranthene (PAH)	P	zero	0.0002	-	-	-	-	-	-	-	-	-	B2
bis-2-Chloroisopropyl ether	-	-	-	F	4	4	4	13	0.04	1	0.3	-	D
Bromacil	L	-	-	F	5	5	3	9	0.13	5	0.09	-	C
Bromobenzene	L	-	-	D	-	-	-	-	-	-	-	-	-

* Under review.

NOTE: Anthracene and Benzo(g,h,i)perylene — not proposed in Phase V.

NOTE: Changes from the last version are noted in **Italic and Bold Face** print.

Drinking Water Standards and Health Advisories

May 1994

Page

Chemicals	Standards			Status HA	Health Advisories								Cancer Group	
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		10-kg Child			70-kg Adult						
					One-day (mg/l)	Ten-day (mg/l)	Longer-term (mg/l)	Longer-term (mg/l)	RfD (mg/kg/day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10 ⁻⁴ Cancer Risk		
Bromochloroacetonitrile	L	-	-	D	-	-	-	-	-	-	-	-	-	-
Bromochloromethane	-	-	-	F	50	1	1	5	0.013	0.5	0.09	-	-	-
Bromodichloromethane (THM)	T	zero	0.1*/0.08*	D	7	7	4	13	0.02	0.7	-	0.06	-	B2
Bromoform (THM)	T	zero	0.1*/0.08*	D	5	2	2	6	0.02	0.7	-	0.4	-	B2
Bromomethane	T	-	-	F	0.1	0.1	0.1	0.5	0.001	0.04	0.01	-	-	D
Butyl benzyl phthalate (PAE)	P	zero	0.1	-	-	-	-	-	0.2	6	-	-	-	C
Butylate	-	-	-	F	2	2	1	4	0.05	2	0.35	-	-	D
Butylbenzene n-	-	-	-	D	-	-	-	-	-	-	-	-	-	-
Butylbenzene sec-	-	-	-	D	-	-	-	-	-	-	-	-	-	-
Butylbenzene tert-	-	-	-	D	-	-	-	-	-	-	-	-	-	-
Carbaryl	-	-	-	F	1	1	1	1	0.1	4	0.7	-	-	D
Carbofuran	F	0.04	0.04	F	0.05	0.05	0.05	0.2	0.005	0.2	0.04	-	-	E
Carbon tetrachloride	F	zero	0.005	F	4	0.2	0.07	0.3	0.0007	0.03	-	0.03	-	B2
Carboxin	-	-	-	F	1	1	1	4	0.1	4	0.7	-	-	D
Chloral hydrate	T	0.04	0.06**	D	7	1.4	0.2	0.6	0.0002	0.07	0.06	-	-	C
Chloramben	-	-	-	F	3	3	0.2	0.5	0.015	0.5	0.1	-	-	D
Chlordane	F	zero	0.002	F	0.06	0.06	-	-	0.00006	0.002	-	0.003	-	B2
Chlorodibromomethane (THM)	T	0.06	0.1*/0.08*	D	7	7	2	8	0.02	0.7	0.06	-	-	C
Chloroethane	L	-	-	D	-	-	-	-	-	-	-	-	-	-
Chloroform (THM)	T	zero	0.1*/0.08*	D	4	4	0.1	0.4	0.01	0.4	-	0.6	-	B2
Chloromethane	L	-	-	F	9	0.4	0.4	1	0.004	0.1	0.003	-	-	C
Chlorophenol (2-)	-	-	-	D	0.05	0.05	0.05	0.2	0.005	0.2	0.04	-	-	D
p-Chlorophenyl methyl sulfide/sulfone/sulfoxide	-	-	-	**	-	-	-	-	-	-	-	-	-	D
Chloropicrin	L	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorothalonil	-	-	-	F	0.2	0.2	0.2	0.5	0.015	0.5	-	0.15	-	B2
Chlorotoluene o-	L	-	-	F	2	2	2	7	0.02	0.7	0.1	-	-	D
Chlorotoluene p-	L	-	-	F	2	2	2	7	0.02	0.7	0.1	-	-	D
Chlorpyrifos	-	-	-	F	0.03	0.03	0.03	0.1	0.003	0.1	0.02	-	-	D
Chrysene (PAH)	P	zero	0.0002	-	-	-	-	-	-	-	-	-	-	B2
Cyanazine	T	0.001	-	D	0.1	0.1	0.02	0.07	0.002	0.07	0.001	-	-	C

* Current MCL * Total for all THMs combined cannot exceed the 0.08 level.

** Total for all haloacetic acids cannot exceed 0.06 level.

** A will not be developed due to insufficient data; a "Database Deficient"

port has been published.

Drinking Water Standards and Health Advisories

May 1994

Page

Chemicals	Standards			Status- HA	Health Advisories							Cancer Group	
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		10-kg Child			70-kg Adult					
					One-day (mg/l)	Ten-day (mg/l)	Longer- term (mg/l)	Longer- term (mg/l)	RfD (mg/kg/ day)	DWEL (mg/l)	Lifetime (mg/l)		mg/l at 10 ⁻⁴ Cancer Risk
Cyanogen chloride	L	-	-	-	-	-	-	-	-	-	-	-	-
Cymene p-	-	-	-	D	-	-	-	-	-	-	-	-	-
2,4-D	F	0.07	0.07	F	1	0.3	0.1	0.4	0.01	0.4	0.07	-	D
DCPA (Dacthal)	L	-	-	F	80	80	5	20	0.5	20	4	-	D
Dalapon	F	0.2	0.2	F	3	3	0.3	0.9	0.026	0.9	0.2	-	D
Di(2-ethylhexyl)adipate	F	0.4	0.4	-	20	20	20	60	0.6	20	0.4	3	C
Diazinon	-	-	-	F	0.02	0.02	0.005	0.02	0.00009	0.003	0.0006	-	E
Dibenz(a,h)anthracene (PAH)	P	zero	0.0003	-	-	-	-	-	-	-	-	-	B2
Dibromoacetonitrile	L	-	-	D	2	2	2	8	0.02	0.8	0.02	-	C
Dibromochloropropane (DBCP)	F	zero	0.0002	F	0.2	0.05	-	-	-	-	-	0.003	B2
Dibromomethane	L	-	-	-	-	-	-	-	-	-	-	-	D
Dibutyl phthalate (PAE)	-	-	-	-	-	-	-	-	0.1	4	-	-	D
Dicamba	L	-	-	F	0.3	0.3	0.3	1	0.03	1	0.2	-	D
Dichloroacetaldehyde	L	-	-	D	-	-	-	-	-	-	-	-	-
Dichloroacetic acid	T	zero	0.06**	D	1	1	1	4	0.004	0.1	-	-	B2
Dichloroacetonitrile	L	-	-	D	1	1	0.8	3	0.008	0.3	0.006	-	C
Dichlorobenzene o-	F	0.6	0.6	F	9	9	9	30	0.09	3	0.6	-	D
Dichlorobenzene m-*	F	0.6	0.6	F	9	9	9	30	0.09	3	0.6	-	D
Dichlorobenzene p-	F	0.075	0.075	F	10	10	10	40	0.1	4	0.075	-	C
Dichlorodifluoromethane	L	-	-	F	40	40	9	30	0.2	5	1	-	D
Dichloroethane (1,1-)	L	-	-	D	-	-	-	-	-	-	-	-	-
Dichloroethane (1,2-)	F	zero	0.005	F	0.7	0.7	0.7	2.6	-	-	-	0.04	B2
Dichloroethylene (1,1-)	F	0.007	0.007	F	2	1	1	4	0.009	0.4	0.007	-	C
Dichloroethylene (cis-1,2-)	F	0.07	0.07	F	4	3	3	11	0.01	0.4	0.07	-	D
Dichloroethylene (trans-1,2-)	F	0.1	0.1	F	20	2	2	6	0.02	0.6	0.1	-	D
Dichloromethane	F	zero	0.005	F	10	2	-	-	0.06	2	-	0.5	B2
Dichlorophenol (2,4-)	-	-	-	D	0.03	0.03	0.03	0.1	0.003	0.1	0.02	-	D
Dichloropropane (1,1-)	-	-	-	D	-	-	-	-	-	-	-	-	-
Dichloropropane (1,2-)	F	zero	0.005	F	-	0.09	-	-	-	-	-	0.05	B2
Dichloropropane (1,3-)	L	-	-	D	-	-	-	-	-	-	-	-	-

* The values for m-dichlorobenzene are based on data for o-dichlorobenzene.

** Total for all haloacetic acids cannot exceed 0.06 level.

Drinking Water Standards and Health Advisories

May 1994

Page

Chemicals	Standards			Status HA	Health Advisories								Cancer Group
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		10-kg Child			70-kg Adult					
					One-day (mg/l)	Ten-day (mg/l)	Longer-term (mg/l)	Longer-term (mg/l)	RfD (mg/kg/day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10 ⁻⁴ Cancer Risk	
Dichloropropane (2,2-)	L	-	-	D	-	-	-	-	-	-	-	-	-
Dichloropropane (1,1-)	L	-	-	D	-	-	-	-	-	-	-	-	-
Dichloropropene (1,3-)	T	zero	-	F	0.03	0.03	0.03	0.09	0.0003	0.01	-	0.02	B2
Dieldrin	-	-	-	F	0.0005	0.0005	0.0005	0.002	0.00005	0.002	-	0.0002	B2
Diethyl phthalate (PAE)	-	-	-	D	-	-	-	-	0.8	30	5	-	D
Diethylene glycol dinitrate	-	-	-	**	-	-	-	-	-	-	-	-	-
Diethylhexyl phthalate (PAE)	F	zero	0.006	D	-	-	-	-	0.02	0.7	-	0.3	B2*
Diisopropyl methylphosphonate	-	-	-	F	8	8	8	30	0.08	3	0.6	-	D
Dimethrin	-	-	-	F	10	10	10	40	0.3	10	2	-	D
Dimethyl methylphosphonate	-	-	-	F	2	2	2	6	0.2	7	0.1	0.7	C
Dimethyl phthalate (PAE)	-	-	-	-	-	-	-	-	-	-	-	-	D
1,3-Dinitrobenzene	-	-	-	F	0.04	0.04	0.04	0.14	0.0001	0.005	0.001	-	D
Dinitrotoluene (2,4-)	L	-	-	F	0.50	0.50	0.30	1	0.002	0.1	-	-	-
Dinitrotoluene (2,6-)	L	-	-	F	0.40	0.40	0.40	1	0.001	0.04	-	-	-
tg 2,6 & 2,4 dinitrotoluene ***	-	-	-	-	-	-	-	-	-	-	-	0.005	B2
Dinoseb	F	0.007	0.007	F	0.3	0.3	0.01	0.04	0.001	0.04	0.007	-	D
Dioxane p-	-	-	-	F	4	0.4	-	-	-	-	-	0.7	B2
Diphenamid	-	-	-	F	0.3	0.3	0.3	1	0.03	1	0.2	-	D
Diphenylamine	-	-	-	F	1	1	0.3	1	0.03	1	0.2	-	D
Diquat	F	0.02	0.02	-	-	-	-	-	0.0022	0.08	0.02	-	D
Disulfoton	-	-	-	F	0.01	0.01	0.003	0.009	0.00004	0.001	0.0003	-	E
Dithiane (1,4-)	-	-	-	F	0.4	0.4	0.4	1	0.01	0.4	0.08	-	D
Diuron	-	-	-	F	1	1	0.3	0.9	0.002	0.07	0.01	-	D
Endothall	F	0.1	0.1	F	0.8	0.8	0.2	0.2	0.02	0.7	0.1	-	D
Endrin	F	0.002	0.002	F	0.02	0.02	0.003	0.01	0.0003	0.01	0.002	-	D
Epichlorohydrin	F	zero	TT	F	0.1	0.1	0.07	0.07	0.002	0.07	-	0.4	B2
Ethylbenzene	F	0.7	0.7	F	30	3	1	3	0.1	3	0.7	-	D
Ethylene dibromide (EDB)	F	zero	0.00005	F	0.008	0.008	-	-	-	-	-	0.00004	B2
Ethylene glycol	-	-	-	F	20	6	6	20	2	40	7	-	D
ETU	L	-	-	F	0.3	0.3	0.1	0.4	0.00008	0.003	-	0.03	B2
Fenamiphos	-	-	-	F	0.009	0.009	0.005	0.02	0.00025	0.009	0.002	-	D

* Under review. ** A HA will not be developed due to insufficient data; a "Database Deficiency Report" has been published.

*** tg technical grade

Drinking Water Standards and Health Advisories

May 1994

Page

Chemicals	Standards			Status HA	Health Advisories								Cancer Group
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		10-kg Child			70-kg Adult					
					One-day (mg/l)	Ten-day (mg/l)	Longer- term (mg/l)	Longer- term (mg/l)	RfD (mg/kg/ day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10 ⁻⁴ Cancer Risk	
Fluometron	-	-	-	F	2	2	2	5	0.013	0.4	0.09	-	D
Fluorene (PAH)	-	-	-	-	-	-	-	-	0.04	-	-	-	D
Fluorotrichloromethane	L	-	-	F	7	7	3	10	0.3	10	2	-	D
Fog Oil	-	-	-	D	-	-	-	-	-	-	-	-	-
Fonofos	-	-	-	F	0.02	0.02	0.02	0.07	0.002	0.07	0.01	-	D
Formaldehyde	-	-	-	D	10	5	5	20	0.15	5	1	-	B1
Gasoline, unleaded (benzene)	-	-	-	D	-	-	-	-	-	-	0.005	-	-
Glyphosate	F	0.7	0.7	F	20	20	1	1	0.1	4	0.7	-	E
Heptachlor	F	zero	0.0004	F	0.01	0.01	0.005	0.005	0.0005	0.02	-	0.0008	B2
Heptachlor epoxide	F	zero	0.0002	F	0.01	-	0.0001	0.0001	1E-5	0.0004	-	0.0004	B2
Hexachlorobenzene	F	zero	0.001	F	0.05	0.05	0.05	0.2	0.0008	0.03	-	0.002	B2
Hexachlorobutadiene	T	0.001	-	F	0.3	0.3	0.1	0.4	0.002	0.07	0.001	-	C
Hexachlorocyclopentadiene	F	0.05	0.05	-	-	-	-	-	0.007	0.2	-	-	D
Hexachloroethane	L	-	-	F	5	5	0.1	0.5	0.001	0.04	0.001	-	C
Hexane (n-)	-	-	-	F	10	4	4	10	-	-	-	-	D
Hexazinone	-	-	-	F	3	3	3	9	0.033	1	0.2	-	D
HMX	-	-	-	F	5	5	5	20	0.05	2	0.4	-	D
Indeno(1,2,3,-c,d)pyrene (PAH)	P	zero	0.0004	D	-	-	-	-	-	-	-	-	B2
Isophorone	L	-	-	F	15	15	15	15	0.2	7	0.1	4	C
Isopropyl methylphosphonate	-	-	-	D	30	30	30	100	0.1	4.0	0.7	-	D
Isopropylbenzene	-	-	-	D	-	-	-	-	-	-	-	-	-
Lindane	F	0.0002	0.0002	F	1	1	0.03	0.1	0.0003	0.01	0.0002	-	C
Malathion	-	-	-	F	0.2	0.2	0.2	0.8	0.02	0.8	0.2	-	D
Maleic hydrazide	-	-	-	F	10	10	5	20	0.5	20	4	-	D
MCPA	-	-	-	F	0.1	0.1	0.1	0.4	0.0015	0.05	0.01	-	E
Methomyl	L	-	-	F	0.3	0.3	0.3	0.3	0.025	0.9	0.2	-	D
Methoxychlor	F	0.04	0.04	F	0.05	0.05	0.05	0.2	0.005	0.2	0.04	-	D
Methyl ethyl ketone	-	-	-	F	-	-	-	-	-	-	-	-	-
Methyl parathion	-	-	-	F	0.3	0.3	0.03	0.1	0.00025	0.009	0.002	-	D

* Under review.

Drinking Water Standards and Health Advisories

May 1994

Page

Chemicals	Standards			Status HA	Health Advisories								Cancer Group
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		10-kg Child			70-kg Adult					
					One-day (mg/l)	Ten-day (mg/l)	Longer- term (mg/l)	Longer- term (mg/l)	RfD (mg/kg/ day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10 ⁻⁴ Cancer Risk	
Methyl tert butyl ether	L	-	-	D	3	3	0.5	2	0.005	0.2	0.04	-	D
Metolachlor	L	-	-	F	2	2	2	5	0.15	5	0.1	-	C
Metribuzin	L	-	-	F	5	5	0.3	0.9	0.025	0.9	0.2	-	D
Monochloroacetic acid	L	-	-	D	-	-	-	-	-	-	-	-	-
Monochlorobenzene	F	0.1	0.1	F	2	2	2	7	0.02	0.7	0.1	-	D
Naphthalene	-	-	-	F	0.5	0.5	0.4	1	0.004	0.1	0.02	-	D
Nitrocellulose (non-toxic)	-	-	-	F	-	-	-	-	-	-	-	-	-
Nitroguanidine	-	-	-	F	10	10	10	40	0.1	4	0.7	-	D
Nitrophenol p-	-	-	-	F	0.8	0.8	0.8	3	0.008	0.3	0.06	-	D
Oxamyl (Vydate)	F	0.2	0.2	F	0.2	0.2	0.2	0.9	0.025	0.9	0.2	-	E
Paraquat	-	-	-	F	0.1	0.1	0.05	0.2	0.0045	0.2	0.03	-	E
Pentachloroethane	-	-	-	D	-	-	-	-	-	-	-	-	-
Pentachlorophenol	F	zero	0.001	F	1	0.3	0.3	1	0.03	1	-	0.03	B2
Phenanthrene (PAH)	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenol	-	-	-	D	6	6	6	20	0.6	20	4	-	D
Picloram	F	0.5	0.5	F	20	20	0.7	2	0.07	2	0.5	-	D
Polychlorinated biphenyls (PCBs)	F	zero	0.0005	P	-	-	-	-	-	-	-	0.0005	B2
Prometon	L	-	-	F	0.2	0.2	0.2	0.5	0.015*	0.5*	0.1*	-	D
Pronamide	-	-	-	F	0.8	0.8	0.8	3	0.075	3	0.05	-	C
Propachlor	-	-	-	F	0.5	0.5	0.1	0.5	0.013	0.5	0.09	-	D
Propazine	-	-	-	F	1	1	0.5	2	0.02	0.7	0.01	-	C
Propham	-	-	-	F	5	5	5	20	0.02	0.6	0.1	-	D
Propylbenzene n-	-	-	-	D	-	-	-	-	-	-	-	-	-
Pyrene (PAH)	-	-	-	-	-	-	-	-	0.03	-	-	-	D
RDX	-	-	-	F	0.1	0.1	0.1	0.4	0.003	0.1	0.002	0.03	C
Simazine	F	0.004	0.004	F	0.07	0.07	0.07	0.07	0.005	0.2	0.004	-	C
Styrene	F	0.1	0.1	F	20	2	2	7	0.2	7	0.1	-	C
2,4,5-T	L	-	-	F	0.8	0.8	0.8	1	0.01	0.35	0.07	-	D
2,3,7,8-TCDD (Dioxin)	F	zero	3E-08	F	1E-06	1E-07	1E-08	4E-08	1E-09	4E-08	-	2E-08	B2

* Under review. NOTE: Phenanthrene -- not proposed.

Drinking Water Standards and Health Advisories

May 1994

Pt

Chemicals	Standards			Status HA	Health Advisories								Cancer Group
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		10-kg Child			70-kg Adult					
					One-day (mg/l)	Ten-day (mg/l)	Longer-term (mg/l)	Longer-term (mg/l)	RII (mg/kg/day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10 ⁻⁴ Cancer Risk	
Tebuthiuron	-	-	-	F	3	3	0.7	2	0.07	2	0.5	-	D
Terbacil	-	-	-	F	0.3	0.3	0.3	0.9	0.013	0.4	0.09	-	E
Terbufos	-	-	-	F	0.005	0.005	0.001	0.005	0.00013	0.005	0.0009	-	D
Tetrachloroethane (1,1,1,2-)	L	-	-	F	2	2	0.9	3	0.03	1	0.07	0.1	C
Tetrachloroethane (1,1,2,2-)	L	-	-	D	-	-	-	-	-	-	-	-	-
Tetrachloroethylene	F	zero	0.005	F	2	2	1	6	0.01	0.6	-	0.07	-
Tetranitromethane	-	-	-	**	-	-	-	-	-	-	-	-	-
Toluene	F	1	1	F	20	2	2	7	0.2	7	1	-	D
Toxaphene	F	zero	0.003	F	0.5	0.04	-	-	0.1	0.0035	-	0.003	B2
2,4,5-TP	F	0.05	0.05	F	0.2	0.2	0.07	0.3	0.0075	0.3	0.05	-	D
1,1,2-Trichloro-1,2,2-trifluoroethane	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroacetic acid	T	0.3	0.06**	D	4	4	4	13	0.1	4.0	0.3	-	C
Trichloroacetonitrile	L	-	-	D	0.05	0.05	-	-	-	-	-	-	-
Trichlorobenzene (1,2,4-)	F	0.07	0.07	F	0.1	0.1	0.1	0.6	0.01	0.4	0.07	-	D
Trichlorobenzene (1,3,5-)	-	-	-	F	0.6	0.6	0.6	2	0.006	0.2	0.04	-	D
Trichloroethane (1,1,1-)	F	0.2	0.2	F	100	40	40	100	0.035	1	0.2	-	D
Trichloroethane (1,1,2-)	F	0.003	0.005	F	0.6	0.4	0.4	1	0.004	0.1	0.003	-	C
Trichloroethanol (2,2,2-)	L	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethylene	F	zero	0.005	F	-	-	-	-	-	0.3	-	0.3	B2
Trichlorophenol (2,4,6-)	L	-	-	D	-	-	-	-	-	-	-	0.3	B2
Trichloropropane (1,1,1-)	-	-	-	D	-	-	-	-	-	-	-	-	-
Trichloropropane (1,2,3-)	L	-	-	F	0.6	0.6	0.6	2	0.006	0.2	0.04	-	B2
Trifluralin	L	-	-	F	0.08	0.08	0.08	0.3	0.0075	0.3	0.005	0.5	C
Trimethylbenzene (1,2,4-)	-	-	-	D	-	-	-	-	-	-	-	-	-
Trimethylbenzene (1,3,5-)	-	-	-	D	-	-	-	-	-	-	-	-	-
Trinitroglycerol	-	-	-	F	0.005	0.005	0.005	0.005	-	-	0.005	-	-
Trinitrotoluene	-	-	-	F	0.02	0.02	0.02	0.02	0.0005	0.02	0.002	0.1	C
Vinyl chloride	F	zero	0.002	F	3	3	0.01	0.05	-	-	-	0.0015	A
Xylenes	F	10	10	F	40	40	40	100	2	60	10	-	D

** A HA will not be developed due to insufficient data; a "Database Deficiency Report" has been published.

** Total for all haloacetic acids cannot exceed 0.06 level.

Drinking Water Standards and Health Advisories

May 1994

Pa

Chemicals	Standards			Status HA	Health Advisories								Cancer Group
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		10-kg Child			70-kg Adult					
					One-day (mg/l)	Ten-day (mg/l)	Longer- term (mg/l)	Longer- term (mg/l)	RI/D (mg/kg/ day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10 ⁻⁴ Cancer Risk	
INORGANICS													
Aluminum	L	-	-	D	-	-	-	-	-	-	-	-	-
Ammonia	-	-	-	D	-	-	-	-	-	-	30	-	D
Antimony	F	0.006	0.006	F	0.01	0.01	0.01	0.015	0.0004	0.01	0.003	-	D
Arsenic	*	-	0.05	D	-	-	-	-	-	-	-	0.002	A
Asbestos (fibers/l >10µm length)	F	7 MFL	7 MFL	-	-	-	-	-	-	-	-	700 MFL	A
Barium	F	2	2	F	-	-	-	-	0.07	2	2	-	D
Beryllium	F	0.004	0.004	D	30	30	4	20	0.005	0.2	-	0.0008	B2
Boron	L	-	-	D	4	0.9	0.9	3	0.09	3	0.6	-	D
Bromate	L	zero	0.01	-	-	-	-	-	-	-	-	-	-
Cadmium	F	0.005	0.005	F	0.04	0.04	0.005	0.02	0.0005	0.02	0.005	-	D
Chloramine	T ^{4***}	-	4	D	1	1	1	1	0.1	3.3	3/4***	-	-
Chlorate	L	-	-	D	-	-	-	-	-	-	-	-	-
Chlorine	T	4	4	D	-	-	-	-	0.08	-	-	-	D
Chlorine dioxide	T	0.3	0.8	D	-	-	-	-	0.01	0.35	0.3	-	D
Chlorite	L	0.08	1	D	-	-	-	-	0.003	0.1	0.08	-	D
Chromium (total)	F	0.1	0.1	F	1	1	0.2	0.8	0.005	0.2	0.1	-	D
Copper	F	1.3	TT**	-	-	-	-	-	-	-	-	-	D
Cyanide	P	0.2	0.2	F	0.2	0.2	0.2	0.8	0.022	0.8	0.2	-	D
Fluoride*	F	4	4	-	-	-	-	-	0.12	-	-	-	-
Hypochlorite	T	4 ¹	-	-	-	-	-	-	-	-	-	-	-
Hypochlorous acid	T	4 ¹	-	-	-	-	-	-	-	-	-	-	-
Lead (at tap)	F	zero	TT**	-	-	-	-	-	-	-	-	-	B2
Manganese	L	-	-	D	-	-	-	-	0.14/ 0.005	-	-	-	-
Mercury (inorganic)	F	0.002	0.002	F	-	-	-	0.002	0.0003	0.01	0.002	-	D
Molybdenum	L	-	-	D	-	0.08	0.01	0.05	0.005	0.2	0.04	-	D
Nickel	F	0.1	0.1	F	1	1	0.5	1.7	0.02	0.6	0.1	-	D
Nitrate (as N)	F	10	10	F	-	10 ⁴	-	-	1.6	-	-	-	-

* review. ** Copper -- action level 1.3 mg/L; Lead - action level 0.05 mg/L. *** Measured as free chlorine. ¹ Regulated as chlorine.

Drinking Water Standards and Health Advisories

May 1994

Pa

Chemicals	Standards			Status HA	Health Advisories								Cancer Group	
	Status Reg.	MCLG (mg/l)	MCL (mg/l)		10-kg Child			70-kg Adult						
					One-day (mg/l)	Ten-day (mg/l)	Longer- term (mg/l)	Longer- term (mg/l)	RfD (mg/kg/ day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10 ⁻⁴ Cancer Risk		
Nitrite (as N)	F	1	1	F	-	1*	-	-	0.16*	-	-	-	-	-
Nitrate + Nitrite (both as N)	F	10	10	F	-	-	-	-	-	-	-	-	-	-
Selenium	F	0.05	0.05	-	-	-	-	-	0.005	-	-	-	-	-
Silver	-	-	-	D	0.2	0.2	0.2	0.2	0.005	0.2	0.1	-	-	D
Sodium	-	-	-	D	-	-	-	-	-	20***	-	-	-	-
Strontium	L	-	-	D	25	25	25	90	0.6	90	17	-	-	D
Sulfate	P	**	**	-	-	-	-	-	-	-	-	-	-	-
Thallium	F	0.0005	0.002	F	0.007	0.007	0.007	0.02	0.00007	0.002	0.0004	-	-	-
Vanadium	L	-	-	D	-	-	-	-	-	-	-	-	-	D
White phosphorous	-	-	-	F	-	-	-	-	0.00002	0.0005	0.0001	-	-	D
Zinc	L	-	-	F	6	6	3	12	0.3	11	2	-	-	D
Zinc chloride (measured as Zinc)	L	-	-	F	6	6	3	12	0.3	11	2	-	-	D
RADIONUCLIDES														
Beta particle and photon activity (formerly man-made radionuclides)	P	zero	4 mreim	-	-	-	-	-	-	-	-	-	4 mreim/y	A
Gross alpha particle activity	P	zero	15 pCi/L	-	-	-	-	-	-	-	-	-	15 pCi/L	A
Radium 226	P	zero	20 pCi/L	-	-	-	-	-	-	-	-	-	20 pCi/L	A
Radium 228	P	zero	20 pCi/L	-	-	-	-	-	-	-	-	-	20 pCi/L	A
Radon	P	zero	300 pCi/L	-	-	-	-	-	-	-	-	-	150 pCi/L	A
Uranium	P	zero	20 µg/L	-	-	-	-	-	0.003	-	-	-	-	A

* Under review.

** Deferred.

*** Guidance.

Secondary Maximum Contaminant Levels

May 1994

Page 10

Chemicals	Status	SMCLs (mg/L)
Aluminum	F	0.05 to 0.2
Chloride	F	250
Color	F	15 color units
Copper	F	1.0
Corrosivity	F	non-corrosive
Fluoride*	F	2.0
Foaming agents	F	0.5
Iron	F	0.3
Manganese	F	0.05
Odor	F	3 threshold odor numbers
pH	F	6.5 -- 8.5
Silver	F	0.1
Sulfate	F	250
Total dissolved solids (TDS)	F	500
Zinc	F	5

Status Codes: P -- proposed, F -- final

* Under review.

Microbiology

May 1994

Page 11

	Status	MCLG	MCL
Cryptosporidium	L	-	-
<i>Giardia lamblia</i>	F	zero	TT
<i>Legionella</i>	F [#]	zero	TT
Standard Plate Count	F [#]	NA	TT
Total Coliforms (after 12/31/90)	F	zero	**
Turbidity (after 12/31/90)	F	NA	PS
Viruses	F [#]	zero	TT

Key: PS, TT, F, defined as previously stated.

[#] Final for systems using surface water; also being considered for regulation under groundwater disinfection rule.