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NSWC CRANE
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Comprehensive Long-term Environmental Action Navy

CONTRACT NUMBER N62467-04-D-0055

Rev. 0
12/28/07

Phase 5 Field Investigation Report
for
SWMU 9

Naval Surface Warfare Center Crane
Crane, Indiana

Contract Task Order 0042

December 2007

NAVFAC
Naval Facilities Engineering Command
Midwest
201 Decatur Avenue
Building 1A, Code EV
Great Lakes, Illinois 60088

TETRA TECH NUS, Inc.

DEPARTMENT OF THE NAVY
CRANE DIVISION
NAVAL SURFACE WARFARE CENTER
300 HIGHWAY 361
CRANE INDIANA 47522-5001

IN REPLY REFER TO:
5090/S4.7.3
Ser PRCR4/8041
15 FEB 2008

U.S. Environmental Protection Agency, Region V
Waste, Pesticides, & Toxics Division
Waste Management Branch
Corrective Action Section LU-9J
77 West Jackson Blvd.
Chicago, IL 60604

Dear Mr. Ramanauskas:

Crane Division, Naval Surface Warfare Center submits the Draft Herbicide Investigation Report for Solid Waste Management Unit (SWMU) 9 (Pesticide Control Area-Building 55). One copy is included for your review as Enclosure (1). The permit required Certification Statement is provided as enclosure (2).

If you require any further information, my point of contact is Mr. Thomas J. Brent, Code PRCR4-TB, at 812-854-6160, email thomas.brent@navy.mil.

Sincerely,

C. D. Freeman for

J. M. HUNSICKER
Environmental Site Mgr
By direction of the Commanding Officer

Enclosures: 1. SWMU 9 Draft Herbicide Investigation Report
2. Certification Statement

Copy to:
ADMINISTRATIVE RECORD
NAVFAC MW (Howard Hickey) (w/o encl)
IDEM (Doug Griffin)
TTNUS (Ralph Basinski) (w/o encl)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Christine D. Freeman

SIGNATURE

Environmental Site Mgr

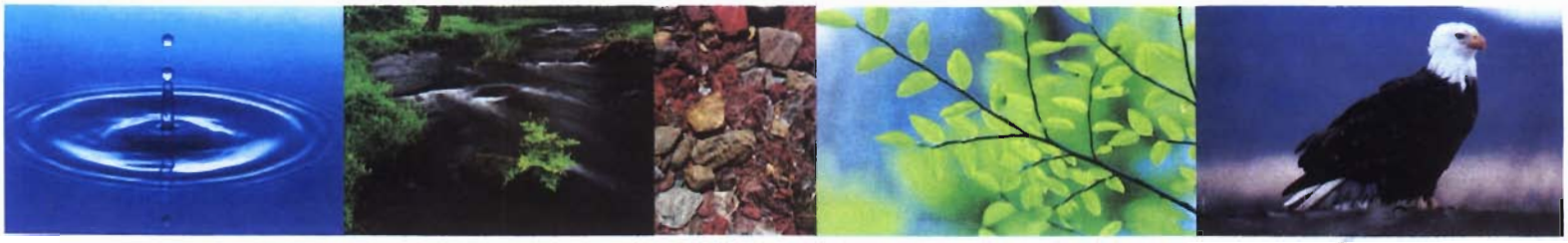
TITLE

2/15/08

DATE

Comprehensive Long-term Environmental Action Navy

CONTRACT NUMBER N62467-04-D-0055



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REVISION 0
DECEMBER 2007

PHASE 5 FIELD INVESTIGATION REPORT FOR SWMU 9

NAVAL SURFACE WARFARE CENTER
CRANE DIVISION
CRANE, INDIANA

COMPREHENSIVE LONG-TERM
ENVIRONMENTAL ACTION NAVY (CLEAN) CONTRACT

Submitted to:
Naval Facilities Engineering Command
Midwest
201 Decatur Avenue
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Great Lakes, Illinois 60088

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CONTRACT NUMBER N62467-04-D-0055
CONTRACT TASK ORDER 0042

DECEMBER 2007

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ACRONYMS

µg/kg	Microgram per kilogram
bgs	Below ground surface
CLEAN	Comprehensive Long-Term Environmental Action Navy
CTO	Contract Task Order
DI	Deionized
DPT	Direct-push technology
DRO	Diesel range organics
FOL	Field Operations Leader
GPS	Global positioning system
HA	Hand augering
HASP	Health and Safety Plan
IDEM	Indiana Department of Environmental Management
IUPPS	Indiana Underground Plant Protection Service
mg/kg	Milligram per kilogram
NAVFAC	Naval Facilities Engineering Command
NSWC	Naval Surface Warfare Center
PCB	Polychlorinated biphenyl
PID	Photoionization detector
PPE	Personal protective equipment
PRG	Preliminary Remediation Goal
QA	Quality assurance
QAPP	Quality Assurance Project Plan
QC	Quality control
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
RISC	Risk Integrated System of Closure
SOP	Standard operating procedure
SSL	Soil screening level
SV	Screening value
SWMU	Solid Waste Management Unit
TOM	Task Order Manager
Tetra Tech	Tetra Tech NUS, Inc.
USCS	Unified Soil Classification System

USEPA	United States Environmental Protection Agency
VOC	Volatile organic compound

EXECUTIVE SUMMARY

This report provides documentation on sampling activities (Phase 5) conducted in the southern portion of NSWC Crane Solid Waste Management Unit (SWMU) 9 Pesticide Control/R-150 Tank Area during August 2007. Also included are analytical data from Phases 1 through 4 fieldwork conducted as part of a supplement Resource Conservation and Recovery Act (RCRA) Facility Investigation RFI for SWMU 9 South. The Phase 5 fieldwork, which is documented in this report, was performed for the United States Navy, Naval Facilities Engineering Command (NAVFAC) Midwest by Tetra Tech, Inc. (Tetra Tech) under various Contract Task Orders (CTOs) of the Comprehensive Long-Term Environmental Action Navy (CLEAN) IV Contract Number N62467-04-D-0055. Phases 1 through 4 of fieldwork were performed under CTO 376 of CLEAN III Contract Number N62467-94-D-0888. The original RFI SWMU 9 RFI work was conducted under CTO 010 of CLEAN Contract Number N62467-94-D-0888. After the CTO 10 work was completed new information was discovered that showed that the original assumptions regarding the location of the Former Building 55 Pesticide Area were incorrect. Therefore, additional investigations were conducted.

SWMU 9 South consists of four sub areas which include the following:

- Former Building 55 Pesticide Area
- Building 150 Fuel Spill Area
- Former Fire Training Area
- Former Gas Station Area

Five phases of field investigations have now been conducted at SWMU 9 South as follows:

- Phase 1 Investigation (March 2005).
- Phase 2 Investigation (May 2005).
- Phase 3 Investigation (October 2006).
- Phase 4 Investigation (August 2006).
- Phase 5 Investigation (August 2007).

As a result of investigations conducted during Phases 1 through 4 it was determined that soils were contaminated with pesticides at the Former Building 55 Pesticide Area, PCBs at the Former Fire Training Area, and volatile organics at the Building 150 Fuel Spill Area and Former Gas Station Area. The Navy developed an Interim Measures Work Plan (IMWP) for remediation of these contaminated soils. During

the review of the IMWP a determination was made that herbicides data should also be collected at the Former Building 55 Pesticide Area. This data was collected during Phase 5 and is documented in this report. Additional data for pesticides was also collected to further refine the locations where soils were contaminated with pesticides. The focus of this field event was primarily in the known areas of soil contamination where soil is proposed for excavation and removal and to refine the remedial waste types and volumes.

The field activities were conducted August 27 through 31, 2007. During this Phase 5 field investigation, 65 soil samples were collected from 24 soil borings. Because herbicides were not previously analyzed in any of the four previous phases of field investigations, the majority of soil samples collected were placed alongside previous soil boring locations to determine if herbicide contamination was also present in these locations. Other samples were placed in outlying areas to confirm that pesticide delineation had occurred and to determine if herbicides were present.

Section 3.0 presents a summary of the data from all 5 phases of field work and a complete list of all data collected from all 5 phases is presented on CD in Appendix D. The results of Phase 5 also show that herbicides are not present at significant concentrations.

1.0 INTRODUCTION

1.1 PURPOSE

The purpose of this report is to describe the activities performed during the most recent field investigation of Solid Waste Management Unit (SWMU) 9, at the Naval Surface Warfare Center (NSWC) Crane located in Crane, Indiana. The activities associated with this investigation were completed in accordance with the Resource Conservation and Recovery Act (RCRA) Quality Assurance Project Plan (QAPP) Addendum No. 3 (Tetra Tech, 2007a). The activities included additional soil sampling to support remedial actions at SWMU 9 to further delineate the extent of contamination and refinement of remedial waste types and volumes. The focus of this field event was primarily in the known areas of soil contamination where soil is proposed for excavation and removal. This work was performed for the United States Navy, Naval Facilities Engineering Command (NAVFAC) Midwest by Tetra Tech NUS, Inc. (Tetra Tech) under Contract Task Order (CTO) 0042 of the Comprehensive Long-Term Environmental Action Navy (CLEAN) IV Contract Number N62467-04-D-0055. The field activities were conducted from August 27 through 31, 2007.

Also included in this report are the soil data from the previous four phases of sampling at SWMU 9 in 2005 and 2006. Section 3.0 of this report presents all soil data and comparisons to ecological and human health screening values (SVs).

1.2 FACILITY DESCRIPTION

NSWC Crane is located in the southern portion of Indiana, approximately 75 miles southwest of Indianapolis and 71 miles northwest of Louisville, Kentucky, immediately east of Crane Village and Burns City (see Figure 1-1). NSWC Crane encompasses 62,463 acres (approximately 98 square miles), most of which are located in the northern portion of Martin County. Smaller portions of NSWC Crane are located in Greene, Daviess, and Lawrence Counties. NSWC Crane is located in a rural, sparsely populated area. Most of NSWC Crane is forested, and the surrounding area is wooded or farmed land. NSWC Crane provides material, technical, and logistical support to the Navy for equipment, shipboard weapons systems, and nonexpendable ordnance items. In addition, NSWC Crane supports the Crane Army Ammunition Activity with production, renovation, storage, shipment, demilitarization, and disposal of conventional ammunition.

1.3 SITE DESCRIPTION AND HISTORY

SWMU 9 is centrally located within NSWC Crane as shown on Figure 1-1. SWMU 9 is an inactive site occupying approximately 11 acres and was used as a pesticide control area from 1950 through 1974. The original Pesticide Control Building was Building 55. Around 1970, the pesticide operations were removed from the building. Following the end of all operations in 1974, Building 55 was demolished; however, a concrete pad associated with the building is still visible at SWMU 9. The control activities associated with former Building 55 consisted of storage and management of various types of pesticides and herbicides, and pesticide spray tanks and containers may have been rinsed within or adjacent to the building. Two other areas associated with SWMU 9 include Building 150, which is currently located north of the former Building 55 footprint, and the former Fire Training Area, which was located southwest of former Building 55. Building 150 is currently being used as a heating plant with associated above ground fuel tanks and fuel lines. A spill from a fuel tank in this area occurred in March 2003, and the area was investigated during field activities in October 2005. Results relating to the fuel spill are contained in the SWMU 9 RCRA Facility Investigation (RFI) Report (Tetra Tech, 2007b). The former Fire Training Area was used to train base personnel to fight fires that were started with various fuels including diesel fuel and used oil. The duration of the fire training and types and volumes of fuel used are not known.

Various investigations have been conducted at SWMU 9. Based on the findings of these investigations, a remedial action (interim measure) is currently being planned to remove soil contaminated with polychlorinated biphenyls (PCBs) and diesel range organics (DRO) near the Building 150 area and former Fire Training Area. The remedial action will also remove soil contaminated with pesticides near the former Building 55 area.

During the planning phase of the impending remedial action, it was determined that additional soil samples needed to be collected to completely delineate the extent of pesticide contamination and to determine if herbicide contamination exists at the site. These samples were collected in August 2007 during the Phase 5 field investigation. Table 1-1 provides the sample locations, sample rationale, and associated analyses for this most recent phase of sampling at SWMU 9. Section 2.4 presents a more complete discussion of the samples collected during the Phase 5 investigation.

1.4 PREVIOUS SAMPLING AND ANALYSIS

Prior to this field investigation, previous field investigations (Phases 1 through 4) were conducted in 2005 and 2006 to address contamination at SWMU 9, as described below.

Phase 1 Investigation (March 2005). Field activities for the Phase 1 investigation consisted of collecting surface soil, subsurface soil, groundwater, surface water, and sediment samples within the area of historical pesticide operations (former Building 55). Analytical results indicated that pesticides were present beyond the area sampled.

Phase 2 Investigation (May 2005). The Phase 2 investigation included further delineation of the nature and extent of contamination found in Phase 1. The analytical results from the two phases indicated that significant pesticide and petroleum contamination was present in soil in an area adjacent to a former wash rack located immediately west of former Building 55. High concentrations of PCBs were detected in surface and subsurface soil at the former Fire Training Area.

Phase 3 Investigation (October 2005). The Phase 3 investigation focused on the following areas of soil contamination:

- Additional soil samples were collected to delineate the nature and extent of contamination associated with the former wash rack adjacent to former Building 55.

- Soil samples were collected near Building 150 where a fuel spill occurred in 2003 and near a concrete pad stained with petroleum. No previous sampling had been conducted in this area.

- Soil samples were collected from the former Fire Training Area to determine the nature and extent of PCB contamination.

- Soil samples were collected from a former gas station where underground storage tanks were thought to have been located.

Phase 4 Investigation (August 2006). Analytical results from the previous three phases of investigation did not fully delineate the extent of surface and subsurface soil contamination in the area west of former Building 55 and within the former gas station area. In addition, soil samples needed to be collected at the Building 150 fuel spill area for analysis of specific polynuclear aromatic hydrocarbons.

Table 1-2 provides a summary of all samples collected during the five phases of field work at SWMU 9. Analytical data from all five phases are presented in Section 3.0 of this report.

1.5 REPORT ORGANIZATION

The following sections are contained in the remainder of this document:

- Section 2.0 presents the activities associated with this field investigation (Phase 5 – August 2007).
- Section 3.0 presents the data from all soil samples collected at SWMU 9 during Phases 1 through 5.

TABLE 1-1

PHASE 5 SAMPLE LOCATIONS AND RATIONALE
SWMU 9
NSWC CRANE
CRANE, INDIANA

Sample Location	Depth Intervals to Sample[1]	Comments and Sample Rationale	Analysis	
			Pesticides	Herbicides
09SB084	0-2'; 2-4'; 4-6', (1)	Complete pesticide delineation (adding herbicides)	X	X
09SB085	0-2'; 2-4'; 4-6', (1)	Complete pesticide delineation (adding herbicides)	X	X
09SB086	0-2'; 2-4'; 4-6', (1)	Complete pesticide delineation (adding herbicides)	X	X
09SB087	0-2'; 2-4'; 4-6', (1)	Herbicide delineation only - pesticides well defined		X
09SB088	0-2'; 2-4'; 4-6', (1)	Herbicide delineation only - pesticides well defined		X
09SB089	NA	Sample replaced by location 09SB108	NA	NA
09SB090	0-2'; 2-4'; 4-6', (1)	Repeat (near) exiting sample location 09SB023 Herbicides only - pesticides well defined		X
09SB091	0-2'; 2-4'; 4-6', (1)	Repeat (near) exiting sample location 09SB027 Herbicides only - pesticides well defined		X
09SB092	0-2'; 2-4'; 4-6', (1)	Repeat (near) exiting sample location 09SB026 Herbicides only - pesticides well defined		X
09SB093	0-2'; 2-4'; 4-6', (1)	Repeat (near) exiting sample location 09SB022 Herbicides only - pesticides well defined		X
09SB094	0-2'; 2-4'; 4-6', (1)	Repeat (near) exiting sample location 09SB018 Herbicides only - pesticides well defined		X
09SB095	0-2'; 2-4'; 4-6', (1)	Repeat (near) exiting sample location 09SB024 Herbicides only - pesticides well defined		X
09SB096	0-2'; 2-4'; 4-6', (1)	Repeat (near) exiting sample location 09SB069 Herbicides only - pesticides well defined		X
09SB097	0-2'; 2-4'; 4-6', (1)	Repeat (near) exiting sample location 09SB021 Herbicides only - pesticides well defined		X
09SB098	0-2'; 2-4'; 4-6', (1)	Repeat (near) exiting sample location 09SB025 Herbicides only - pesticides well defined		X
09SB099	0-2'; 2-4'; 4-6', (1)	Repeat (near) exiting sample location 09SB019 Herbicides only - pesticides well defined		X
09SB100	0-2'; 2-4'; 4-6', (1)	Repeat (near) exiting sample location 09SB070 Herbicides only - pesticides well defined		X
09SB101	0-2'; 2-4'; 4-6', (1)	Repeat (near) exiting sample location 09SB068 Herbicides only - pesticides well defined		X
09SB102	0-2'; 2-4'; 4-6', (1)	Repeat (near) exiting sample location 09SB046 Herbicides only - pesticides well defined		X
09SB103	0-2'; 2-4'; 4-6', (1)	Repeat (near) exiting sample location 09SB020 Herbicides only - pesticides well defined		X
09SB104	0-2'; 2-4'; 4-6', (1)	Repeat (near) exiting sample location 09SB066 Herbicides only - pesticides well defined		X
09SB105	0-2'; 2-4'; 4-6', (1)	Repeat (near) exiting sample location 09SB030 Herbicides only - pesticides well defined		X
09SB106	0-2'; 2-4'; 4-6', (1)	Repeat (near) exiting sample location 09SB067 Herbicides only - pesticides well defined		X
09SB107	0-2'; 2-4'; 4-6', (1)	Repeat (near) exiting sample location 09SB047 Herbicides only - pesticides well defined		X
09SB108	0-2'; 2-4'; 4-6', (1)	Herbicide delineation only - pesticides well defined		X

1 - The last sample interval at each boring location was collected within the last 2-foot interval above bedrock.
NA = Not applicable

TABLE 1-2

SUMMARY OF SOIL SAMPLES AND ANALYSES IN PHASES 1 THROUGH 5
SWMU 9
NSWC CRANE
CRANE, INDIANA

Area	Location	Sample Number	Phase	DIOX	CEC	DRO	GRO	O&G	TOC	PCB	PEST	VOC	WS	HERB
Bldg 150 Fuel Spills	09SB036	09SS360002	3			X	X	X		X	X	X		
		09SB360204				X	X	X		X	X	X		
	09SB037	09SS370002	3			X	X	X		X	X	X		
		09SB370204				X	X	X		X	X	X		
		09SB370406				X	X	X		X	X	X		
		09SB370810				X	X	X		X	X	X		
	09SB038	09SS380002	3			X	X	X		X	X	X		
	09SB039	09SS390002	3			X	X	X		X	X	X		
		09SB390204				X	X	X		X	X	X		
		09SB390406				X	X	X		X	X	X		
		09SB390608				X	X	X		X	X	X		
	09SB040	09SS400002	3			X	X	X		X	X	X		
	09SB041	09SS410002	3			X	X	X		X	X	X		
		09SB410204				X	X	X		X	X	X		
		09SB410405				X	X	X		X	X	X		
	09SB078	09SS780002	4			X								
		09SB780204				X								
		09SB780406				X								
		09SB780810				X								
	09SB079	09SS790002	4			X								
		09SB790204				X								
		09SB790406				X								
		09SB790810				X								
	09SB080	09SS800002	4			X								
		09SB800204				X								
		09SB800406				X								
	09SB081	09SS810002	4			X								
		09SB810204				X								
		09SB810406				X								
		09SB810709				X								
	09SB082	09SS820002	4			X								
	09SB083	09SS830002	4			X								
		09SB830204				X								
		09SB830406				X								
		09SB830709				X								
Bldg 55 Pest/Fuel	09SB012	09SS120002	1		X				X	X	X		X	
		09SB120204								X	X			
		09SB121315								X	X			
	09SB013	09SS130002	1							X	X			
		09SB130204			X				X	X	X		X	
		09SB130911								X	X			

TABLE 1-2

SUMMARY OF SOIL SAMPLES AND ANALYSES IN PHASES 1 THROUGH 5
SWMU 9
NSWC CRANE
CRANE, INDIANA

Area	Location	Sample Number	Phase	DIOX	CEC	DRO	GRO	O&G	TOC	PCB	PEST	VOC	WS	HERB
Bldg 55 Pest/Fuel (Continued)	09SB014	09SS140002	1							X	X			
		09SB140204								X	X			
		09SB140809			X				X	X	X		X	
	09SB015/TW001	09SS150002	1		X				X	X	X		X	
		09SB151112								X	X			
		09SB151416								X	X			
	09SB016	09SS160002	1							X	X			
		09SB160607			X				X	X	X		X	
		09SB161314								X	X			
	09SB017	09SS170002	1							X	X			
		09SB170204								X	X			
		09SB170911			X				X	X	X		X	
	09SB018	09SS180002	2							X	X			
		09SB180204			X	X		X	X	X	X	X	X	
		09SB180406				X		X		X	X	X		
	09SB019	09SS190002	2							X	X			
		09SB190204								X	X			
		09SB190406			X				X	X	X		X	
	09SB020	09SS200002	2		X				X	X	X		X	
		09SB200204								X	X			
		09SB200608								X	X			
	09SB021	09SS210002	2							X	X			
		09SB210204			X				X	X	X		X	
		09SB210507								X	X			
	09SB022	09SS220002	2							X	X			
		09SB220204								X	X			
		09SB220507			X				X	X	X		X	
	09SB023/TW004	09SS230002	2		X				X	X	X		X	
		09SB230204								X	X			
		09SB230507								X	X			
	09SB024/TW006	09SS240002	2							X	X			
		09SB240204			X				X	X	X		X	
		09SB240406				X		X		X	X	X		
	09SB025	09SS250002	2							X	X			
		09SB250204								X	X			
		09SB250709			X	X		X	X	X	X	X	X	
	09SB026	09SS260002	2		X				X	X	X		X	
		09SB260204								X	X			
		09SB260507								X	X			

TABLE 1-2

SUMMARY OF SOIL SAMPLES AND ANALYSES IN PHASES 1 THROUGH 5
SWMU 9
NSWC CRANE
CRANE, INDIANA

Area	Location	Sample Number	Phase	DIOX	CEC	DRO	GRO	O&G	TOC	PCB	PEST	VOC	WS	HERB
Bldg 55 Pest/Fuel (Continued)	09SB027/TW005	09SS270002	2							X	X			
		09SB270204			X				X	X	X		X	
		09SB270507				X		X		X	X	X		
	09SB028	09SS280002	2							X	X			
		09SB280204								X	X			
		09SB280608			X				X	X	X		X	
	09SB029	09SS290002	2		X				X	X	X		X	
		09SB290204								X	X			
		09SB290507								X	X			
	09SB030	09SS300002	2							X	X			
		09SB300204			X				X	X	X		X	
		09SB300507								X	X			
	09SB042	09SS420002	3			X	X	X		X	X	X		
		09SB420204				X	X	X		X	X	X		
		09SB420406				X	X	X		X	X	X		
		09SB420607				X	X	X		X	X	X		
	09SB043	09SS430002	3			X	X	X		X	X	X		
		09SB430204				X	X	X		X	X	X		
		09SB430406				X	X	X		X	X	X		
		09SB431618				X	X	X		X	X	X		
	09SB044	09SS440002	3			X	X	X		X	X	X		
		09SB440204				X	X	X		X	X	X		
		09SB440405				X	X	X		X	X	X		
	09SB045	09SS450002	3			X	X	X		X	X	X		
		09SB450204				X	X	X		X	X	X		
		09SB450406				X	X	X		X	X	X		
		09SB451416				X	X	X		X	X	X		
	09SB046	09SS460002	3			X	X	X		X	X	X		
		09SB460204				X	X	X		X	X	X		
		09SB460406				X	X	X		X	X	X		
		09SB460607				X	X	X		X	X	X		
	09SB047	09SS470002	3			X	X	X		X	X	X		
		09SB470204				X	X	X		X	X	X		
		09SB470406				X	X	X		X	X	X		
		09SB470608				X	X	X		X	X	X		
	09SB048	09SS480002	3			X	X	X		X	X	X		
		09SB480204				X	X	X		X	X	X		
		09SB480406				X	X	X		X	X	X		
		09SB480608				X	X	X		X	X	X		

TABLE 1-2

SUMMARY OF SOIL SAMPLES AND ANALYSES IN PHASES 1 THROUGH 5
SWMU 9
NSWC CRANE
CRANE, INDIANA

Area	Location	Sample Number	Phase	DIOX	CEC	DRO	GRO	O&G	TOC	PCB	PEST	VOC	WS	HERB
Bldg 55 Pest/Fuel (Continued)	09SB049	09SS490002	3			X	X	X		X	X	X		
		09SB490204				X	X	X		X	X	X		
		09SB490406				X	X	X		X	X	X		
		09SB490607				X	X	X		X	X	X		
	09SB049A	09SS49A0002	3			X	X	X		X	X	X		
		09SB49A0204				X	X	X		X	X	X		
		09SB49A0406				X	X	X		X	X	X		
		09SB49A1415				X	X	X		X	X	X		
	09SB065	09SS650002	4			X				X	X			
		09SB650204				X				X	X			
		09SB650406				X				X	X			
		09SB651416				X				X	X			
	09SB066	09SS660002	4			X				X	X			
		09SB660204				X				X	X			
		09SB660406				X				X	X			
		09SB661416				X				X	X			
	09SB067	09SS670002	4			X				X	X			
		09SB670204				X				X	X			
		09SB670406				X				X	X			
		09SB671214				X				X	X			
	09SB068	09SS680002	4			X				X	X			
		09SB680204				X				X	X			
	09SB069	09SS690002	4			X				X	X			
		09SB690204				X				X	X			
		09SB690406				X				X	X			
	09SB070	09SS700002	4			X				X	X			
		09SB700204				X				X	X			
		09SB700406				X				X	X			
	09SB071	09SS710002	4			X				X	X			
		09SB710204				X				X	X			
		09SB710406				X				X	X			
	09SB072	09SS720002	4			X				X	X			
		09SB720204				X				X	X			
		09SB720406				X				X	X			
		09SB720810				X				X	X			
	09SB073	09SS730002	4			X				X	X			
		09SB730204				X				X	X			
		09SB730406				X				X	X			
		09SB730810				X				X	X			

TABLE 1-2

SUMMARY OF SOIL SAMPLES AND ANALYSES IN PHASES 1 THROUGH 5
SWMU 9
NSWC CRANE
CRANE, INDIANA

Area	Location	Sample Number	Phase	DIOX	CEC	DRO	GRO	O&G	TOC	PCB	PEST	VOC	WS	HERB
Bldg 55 Pest/Fuel (Continued)	09SB074	09SS740002	4			X				X	X			
		09SB740204				X				X	X			
		09SB740406				X				X	X			
		09SB741416				X				X	X			
	09SB075	09SS750002	4			X				X	X			
		09SB750204				X				X	X			
		09SB750406				X				X	X			
		09SB750709				X				X	X			
	09SB084	09SS840002	5								X			X
		09SB0840204									X			X
		09SB0840406									X			X
		09SB0840607									X			X
	09SB085	09SS850002	5								X			X
		09SB0850204									X			X
		09SB0850406									X			X
	09SB086	09SS860002	5								X			X
		09SB0860204									X			X
		09SB0860406									X			X
		09SB0860810									X			X
	09SB087	09SS870002	5			X								X
		09SB0870204				X								X
		09SB0870406				X								X
		09SB0871012				X								X
	09SB088	09SS880002	5			X								X
		09SB0880204				X								X
		09SB0880406				X								X
		09SB0880810				X								X
	09SB090	09SS900002	5			X								X
		09SB0900204				X								X
		09SB0900406				X								X
	09SB091	09SS910002	5			X								X
		09SB0910204				X								X
		09SB0910406				X								X
		09SB0911416				X								X
	09SB092	09SS920002	5			X								X
	09SB093	09SS930002	5			X								X
		09SB0930204				X								X
		09SB0930406				X								X
	09SB094	09SS940002	5			X								X
		09SB0940204				X								X

TABLE 1-2

SUMMARY OF SOIL SAMPLES AND ANALYSES IN PHASES 1 THROUGH 5
SWMU 9
NSWC CRANE
CRANE, INDIANA

Area	Location	Sample Number	Phase	DIOX	CEC	DRO	GRO	O&G	TOC	PCB	PEST	VOC	WS	HERB
Bldg 55 Pest/Fuel (Continued)	09SB095	09SS950002	5			X								X
	09SB096	09SS960002	5			X								X
		09SB0960204				X								X
	09SB097	09SS970002	5			X								X
		09SB0970204				X								X
	09SB098	09SS980002	5			X								X
		09SB0980204				X								X
		09SB0980406				X								X
		09SB0981618				X								X
	09SB099	09SS990002	5			X								X
	09SB100	09SS1000002	5			X								X
		09SB1000203				X								X
	09SB101	09SS1010002	5			X								X
		09SB1010204				X								X
	09SB102	09SS1020002	5			X								X
		09SB1020203				X								X
	09SB103	09SS1030002	5			X								X
		09SB1030203				X								X
	09SB104	09SS1040002	5			X								X
		09SB1040204				X								X
		09SB1040406				X								X
		09SB1041012				X								X
	09SB105	09SS1050002	5			X								X
		09SB1050204				X								X
		09SB1050406				X								X
		09SB1051315				X								X
	09SB106	09SS1060002	5			X								X
		09SB1060204				X								X
		09SB1060406				X								X
		09SB1061214				X								X
	09SB107	09SS1070002	5			X								X
	09SB108	09SS1080002	5			X								X
		09SB1080204				X								X
Fire Training Area	09SB031	09SS310002	2							X	X			
		09SB310204								X	X			
		09SB310507								X	X			
	09SB032	09SS320002	2							X	X			
		09SB320204								X	X			
		09SB320406								X	X			

TABLE 1-2

SUMMARY OF SOIL SAMPLES AND ANALYSES IN PHASES 1 THROUGH 5
SWMU 9
NSWC CRANE
CRANE, INDIANA

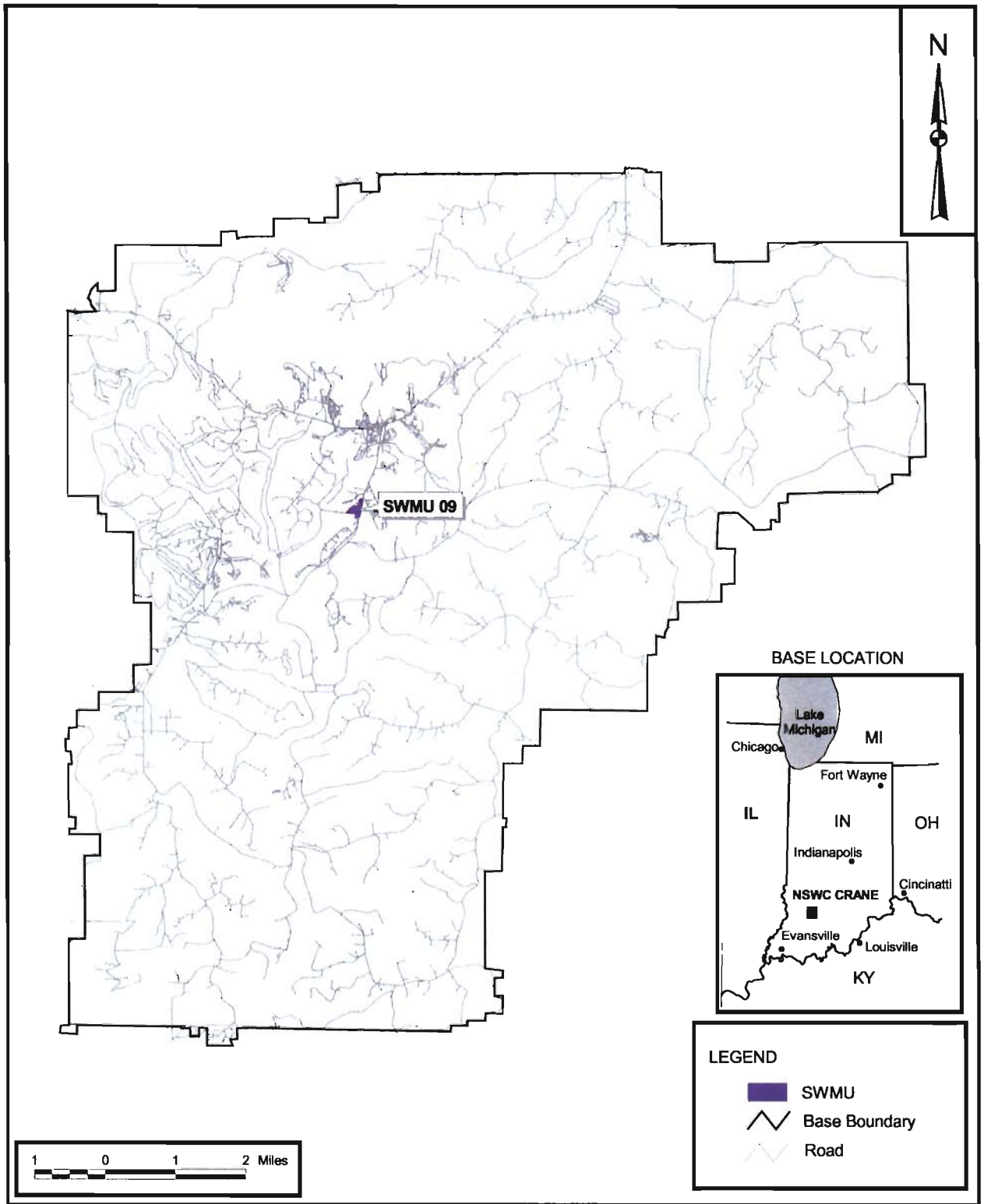
Area	Location	Sample Number	Phase	DIOX	CEC	DRO	GRO	O&G	TOC	PCB	PEST	VOC	WS	HERB
Fire Training Area (Continued)	09SB033	09SS330002	2							X	X			
		09SB330204								X	X			
		09SB330507								X	X			
	09SB034	09SS340002	2							X	X			
		09SB340204								X	X			
		09SB340406								X	X			
	09SB035	09SS350002	2							X	X			
		09SB350204								X	X			
		09SB350406								X	X			
	09SB050	09SS500002	3	X		X	X	X		X	X	X		
		09SB500204				X	X	X		X	X	X		
		09SB500406				X	X	X		X	X	X		
		09SB500608				X	X	X		X	X	X		
	09SB051	09SS510002	3	X		X	X	X		X	X	X		
		09SB510204				X	X	X		X	X	X		
		09SB510406				X	X	X		X	X	X		
		09SB510608				X	X	X		X	X	X		
	09SB052	09SS520002	3	X		X	X	X		X	X	X		
		09SB520204				X	X	X		X	X	X		
		09SB520406				X	X	X		X	X	X		
		09SB520709				X	X	X		X	X	X		
	09SB053	09SS530002	3	X		X	X	X		X	X	X		
		09SB530204				X	X	X		X	X	X		
		09SB530406				X	X	X		X	X	X		
		09SB530608				X	X	X		X	X	X		
	09SB054	09SS540002	3	X		X	X	X		X	X	X		
		09SB540204				X	X	X		X	X	X		
		09SB540406				X	X	X		X	X	X		
		09SB540607				X	X	X		X	X	X		
	09SB055	09SS550002	3	X		X	X	X		X	X	X		
		09SB550204				X	X	X		X	X	X		
		09SB550406				X	X	X		X	X	X		
		09SB550608				X	X	X		X	X	X		
	09SB056	09SS560002	3	X		X	X	X		X	X	X		
		09SB560204				X	X	X		X	X	X		
		09SB560406				X	X	X		X	X	X		
		09SB560607				X	X	X		X	X	X		
	09SB057	09SS570002	3	X		X	X	X		X	X	X		
		09SB570204				X	X	X		X	X	X		
		09SB570406				X	X	X		X	X	X		
		09SB570608				X	X	X		X	X	X		

TABLE 1-2

SUMMARY OF SOIL SAMPLES AND ANALYSES IN PHASES 1 THROUGH 5
SWMU 9
NSWC CRANE
CRANE, INDIANA

Area	Location	Sample Number	Phase	DIOX	CEC	DRO	GRO	O&G	TOC	PCB	PEST	VOC	WS	HERB

CEC	Cation exchange capacity	PEST	Pesticides
DIOX	Dioxins and furans	SVOC	Semivolatile organic compounds
DRO	Diesel range organic compounds	TM	Total metals
GRO	Gasoline range organic compounds	TOC	Total organic carbon
HARD	Hardness	TSS	Total suspended solids
HERB	Herbicides	VOC	Volatile organic compounds
O&G	Oil and grease		
PAH	Polynuclear aromatic hydrocarbons		
PCB	Polychlorinated biphenyls		



DRAWN BY J. LAMEY	DATE 5/6/02	SITE LOCATION MAP SWMU 9 NSWC, CRANE CRANE, INDIANA	CONTRACT NUMBER CTO 0042
CHECKED BY J. GOERDT	DATE 12/27/07		APPROVED BY J. GOERDT / DATE 12/27/07
COST/SCHEDULE-AREA			APPROVED BY — / DATE —
SCALE AS NOTED	NAVFAC		DRAWING NO. FIGURE 1-1 / REV 0

P:\GIS\NSWC_CRANE\APR\POLE_YARD.APR SITE LOCATION 12/27/07 JEE

2.0 FIELD INVESTIGATION

This section presents sampling activities, procedures, and documentation utilized during the Phase 5 (August 2007) field operations performed at NSWC Crane SWMU 9.

2.1 OVERVIEW

The field activities during this investigation at SWMU 9 were conducted over a 5-day period (August 27 through 31, 2007).

Work performed during this field event was conducted in accordance with the procedures and methodologies described in the RCRA Addendum No. 3 to the QAPP (Tetra Tech, 2007a). Standard operating procedures (SOPs) that governed the field work are included in the approved QAPP (Tetra Tech, 2004). Copies of all field forms, records, field logbooks, and health and safety documentation associated with this field investigation are provided in Appendices A through C of this document.

2.2 MOBILIZATION/DEMOBILIZATION

Tetra Tech personnel began mobilization activities on August 27, 2007. Field team members reviewed the QAPP Addendum, associated appendices, and the Health and Safety Plan (HASP) prior to the start of project activities. In addition, the Field Operations Leader (FOL) held a field team orientation meeting prior to the field activities to ensure that personnel were familiar with the scope of the work. Health and safety documentation is contained in Appendix C.

Prior to the initiation of fieldwork, the FOL arrived at the site and began on-site mobilization activities. These activities included coordination with base personnel and utility clearance of all proposed boring locations through the Indiana Underground Plant Protection Service (IUPPS). The equipment required for the field activities was shipped to the site. At the conclusion of field activities, the FOL directed the decontamination and demobilization of all equipment.

2.3 SUBSURFACE INVESTIGATION METHODOLOGIES AND PROCEDURES

2.3.1 Drilling

All borings were drilled in accordance with SOP CTO331-04 and logged in accordance with SOP CTO331-07 (Tetra Tech, 2004). Boring logs are included in Appendix A.1. Boring dates, depths, drilling

methods used, and depth intervals for soil sampling are presented in Table 2-1. Figure 2-1 shows the locations of all soil borings completed as part of this field investigation at SWMU 9.

Twenty-four borings for soil sampling were drilled during this investigation. Direct-push technology (DPT) was used where applicable, and hand augering (HA) was used at sample locations where the DPT rig could not gain access. One surface soil sample (0 to 2 feet below ground surface [bgs]), and three subsurface soil samples (2 to 4, 4 to 6, and two feet above bedrock) were proposed for each of the 24 boring locations. Table 2-1 provides total depths for each boring location.

2.3.1.1 Direct-Push Technology

DPT involves pushing small-diameter sampling tools hydraulically and/or mechanically downward into the ground to the desired depth. Soil samples were collected from DPT and HA borings for chemical analyses and lithologic logging. All samples obtained from the boreholes were screened with a photoionization detector (PID) immediately upon opening. PID readings were recorded on the boring logs (Appendix A.1). Soil sample collection information is provided in Section 2.4.1.

2.3.2 Borehole and Sample Logging

A Tetra Tech geologist maintained a log for each boring in accordance with SOP CTO331-07 (Borehole and Soil Sample Logging). The boring logs are included in Appendix A.1 and contain the following information as appropriate:

- Boring identification
- Name of geologist logging the boring
- Name of drilling contractor
- Sample number and type
- Sample depth
- Sample recovery and sample interval
- Soil density or cohesiveness
- Soil color
- Unified Soil Classification System (USCS) material descriptions
- Location of boring
- Drilling construction problems or deviations from the project-specific approved QAPP
- Date of drilling
- Screening instrument readings

In addition, depths of changes in lithology, sample moisture observations, and total depth of each borehole were included on each log, as well as any other pertinent observations.

2.3.3 Borehole Abandonment

Borings at SWMU 9 were backfilled with bentonite chips that were hydrated in accordance with the manufacturer's specifications. The ground surface at each boring location was restored to its original condition.

2.4 SAMPLING OPERATIONS

This section discusses the methodology for soil sampling activities at SWMU 9. Table 2-3 provides a summary of all proposed versus actual samples collected and a list of the analyses performed.

2.4.1 Soil Sample Collection

During this field investigation, 65 soil samples were collected from 24 soil borings in accordance with SOP CTO331-08. Sample locations 09SB090 through 107 were placed alongside previous soil boring locations to determine if herbicide contamination was present at these locations. Sample locations 09SB084 through 086 were placed to confirm that pesticide contamination was delineated and to determine if herbicides were present. Sample locations 09SB087, 088, and 108 were placed in new, outlying locations to delineate any possible herbicide contamination. Pesticide contamination was well defined in these areas during previous investigations. Figure 2-1 shows soil boring locations for all five phases of field investigation in the areas of Building 150, former Building 55, and the former Fire Training Area (Phase 5 sample locations are shown in red). Soil sample log sheets are included in Appendix A.2 of this document.

2.4.1.1 Surface Soil Sampling

Twenty-four surface soil samples were collected from 24 borings from ground surface to 2 feet bgs using DPT or HA. Upon retrieval, all samples were monitored for the presence of volatile organic compounds (VOCs) using a PID. The results of this screening were recorded on boring logs and/or soil sample log sheets (included in Appendix A.1 and Appendix A.2, respectively, of this document). Sample aliquots were collected from the soil core within the 0- to 2-foot depth interval and placed in the appropriate containers following homogenization. During this field event all 24 of the proposed surface soil samples were collected at SWMU 9.

2.4.1.2 Subsurface Soil Sampling

Upon retrieval from the boring, each sample was monitored for the presence of VOCs using a PID. The results of this screening were recorded on the boring logs and/or soil sample log sheets. The soil core material was then homogenized, and soil to be analyzed was placed into the required containers. Subsurface soil sample intervals for SWMU 9 are listed in Table 2-1.

During this Phase 5 field event, 41 of the proposed 72 subsurface soil samples were collected from the 24 borings at SWMU 9. The remaining 31 proposed subsurface soil samples were not collected due to refusal at the deeper depths, mainly while utilizing the HA method (see Table 2-2).

2.5 FIELD SAMPLE DOCUMENTATION

Sample documentation consisted of the completion of boring logs, soil sample log sheets, sample bottle tags, chain-of-custody records, equipment calibration log sheets, field logbooks, and health and safety documentation. Field documentation was completed as per SOP CTO 331-03. The sample log sheets contain information such as sample location and ID, container requirements and analyses to be performed, sample type, time, date, and method of sample collection. Any unusual circumstances encountered during sample collection were noted on the forms. Sample log sheets are included in Appendix A.2 of this document. Chain-of-custody records (see Appendix B.1) were used to track each sample from collection to receipt and analysis at the laboratory. Equipment calibration log sheets are discussed in Section 2.8.1 and are included in Appendix B.2 of this document.

2.6 SAMPLE HANDLING, PACKAGING, AND SHIPPING

Sample handling activities included field-related considerations concerning the selection of sample containers, preservatives, allowable holding times, sample custody, and maintaining samples at the appropriate storage temperature. All samples were containerized in 4-ounce clear glass jars and then sealed in Ziploc® plastic bags to minimize the possibility of breakage during transport. The sample containers were then placed in a cooler lined with a large plastic garbage bag. Samples were cooled immediately after collection with ice placed over the sample containers. A temperature blank was placed in each cooler prior to shipment. The plastic garbage bag was sealed with a knot, and the chain-of-custody form was sealed in a Ziploc® bag and taped to the inside of the cooler lid. A signed and dated custody seal was applied to each end of the cooler and then covered with strapping tape to provide a tamper-evident seal. A Federal Express airbill was applied to the shipping cooler. Tetra Tech maintained custody of the samples until they were relinquished to Federal Express. The Federal Express tracking

number (airbill number) was recorded on the chain-of-custody form, and the sender's copy of the airbill was maintained for shipment tracking, if needed. All samples were shipped to the laboratory for overnight delivery and were received within sample holding times.

2.7 QUALITY CONTROL SAMPLES

Quality assurance (QA)/quality control (QC) samples were generated and collected during sampling activities to monitor both field and laboratory procedures. These procedures are detailed in the approved QAPP and QAPP Addendum. QA/QC samples included field duplicates, equipment rinsate blanks, and temperature blanks as follows:

- Field duplicates consisted of two samples collected independently at a single sample location at the same time. Field duplicates were collected at the rate of 1 per 20 samples and were used to assess the overall precision of the sampling and analysis program.

- Equipment rinsate blanks were obtained under representative field conditions by collecting the rinse water generated by running analyte-free water through or over sample collection equipment after decontamination and before use. When pre-cleaned, dedicated, or disposable sampling equipment was used (no decontamination required), one equipment rinsate blank was collected as a batch blank. Equipment rinsate blanks were analyzed for the same chemical constituents as the associated environmental samples.

- Temperature blanks were used to determine if samples were adequately cooled during shipment. Temperature blanks consisted of analyte-free water poured into a clean sample container at the site or supplied by the fixed-base laboratory. One temperature blank was submitted to the laboratory in each cooler, and the temperature was checked upon receipt at the laboratory.

Field duplicate QC log sheets are presented in Appendix A.3 of this document. These types of QA/QC samples are briefly described below.

2.8 FIELD INSTRUMENT MEASUREMENTS

Field measurements taken and recorded during field sampling operations included monitoring of organic vapors emanating from site sources such as soil samples with a PID. PID readings were recorded on the boring log at each sample location.

2.8.1 Equipment Calibration

The PID used in the field was calibrated daily prior to use according to manufacturer's requirements and in accordance with applicable SOPs. The equipment calibration log is presented in Appendix B.2.

2.9 GPS

Twenty-one of the 24 borings were installed at locations that had previously been surveyed. The northings and eastings of the four new sample locations (09SB084, 085, 088, and 108) were determined using a Trimble GEO XT global positioning system (GPS) that has an accuracy to 30 centimeters after 5 minutes of satellite tracking.

2.10 DECONTAMINATION

The nondedicated, nondisposable equipment involved in field sampling activities was decontaminated before beginning work and between borings and sampling activities in accordance with SOP CTO331-17.

2.10.1 Sampling Equipment

Nondedicated (reusable) equipment used for collecting samples (i.e.: hand auger) was decontaminated before field sampling, between sample collections, and at the end of the sampling event. The following decontamination steps were taken:

- Potable water and phosphate-free detergent wash (scrub if necessary)
- Potable water rinse
- Deionized (DI) water rinse
- Air dry (if possible)
- Wrap in aluminum foil (if not to be used immediately)

An isopropanol rinse was not necessary because no oily residue was evident on the sampling equipment.

2.11 FIELD CORRECTIVE ACTION

Corrective action includes the process of identifying, recommending, approving, and implementing measures to counter unacceptable procedures or "out of QC" performance that can affect data quality, and the process of modifying procedures to address unexpected/unusual field conditions encountered.

Corrective action in the field resulted when substantive changes were made to the sampling network (e.g., more/fewer samples collected, sampling locations other than those specified, etc.) and when sampling procedures or field analytical procedures required modification. Project personnel reported all suspected technical or QA nonconformance or suspected deficiencies for any activity or issued document to the FOL or designee. The Task Order Manager (TOM) was responsible for assessing the suspected problems in consultation with the project QA/QC Manager and for making a decision based on the potential for the situation to affect the quality of the resulting data. If it was determined that the situation warranted a reportable nonconformance requiring corrective action, a nonconformance report was initiated by the TOM.

The only change that occurred in the field during the Phase 5 field activities at SWMU 9 involved sample location 09SB089. The sample location was initially placed in the wrong location. Prior to determining the mistake, samples had been collected and shipped to the fixed-base laboratory for analysis. The FOL contacted the Tetra Tech chemist who in turn, contacted the laboratory and instructed them to discard the samples associated with that particular sample location out. So there would be no confusion, a new boring (09SB108) was installed at the correct proposed location, and new samples were collected. A Field Task Modification Form was completed and is located in Appendix B.4.

2.12 INVESTIGATION-DERIVED WASTE HANDLING

The field investigation generated several types of potentially contaminated wastes including personal protective equipment (PPE), sample equipment decontamination fluids, DPT plastic sleeves, and soil cuttings. Management of each residue was performed as follows:

PPE – All nitrile gloves were bagged and disposed in a NSWC Crane trash receptor.

DPT Plastic Sleeves – All plastic sleeves were returned to the DPT subcontractor who removed them from Crane property.

Drilling and Sampling Equipment Decontamination Fluids – All equipment decontamination fluids were collected and discharged to the NSWC Crane permitted waste treatment plant.

Waste Cuttings from Drilling Activities – All borings and cuttings were returned to their respective boring location. Any remaining cuttings were spread on the ground in the immediate vicinity of the boring.

2.13 SITE MANAGEMENT AND FACILITY SUPPORT

The FOL was designated as the lead in coordinating all day-to-day activities during the investigation. The FOL was responsible for ensuring that all field team members (including subcontractors) were familiar with the approved QAPP Addendum and the HASP. Additionally, the FOL was responsible for all sampling operations, QA/QC, field documentation requirements, and field change orders. The FOL reported to the TOM on a daily basis regarding the status of fieldwork.

All site preparation, mobilization/demobilization, and sampling activities were coordinated through NSWC Crane personnel via pre-visit communication and daily meetings during field work.

2.14 RECORDKEEPING

All logs were maintained electronically for this field event in accordance with SOP CTO331-03. Information recorded in the daily log included daily field activities, weather conditions, identity and arrival and departure times of personnel, management issues, etc. Copies of the field logs are included in Appendix B.3.

2.15 RESTORATION AND REVEGETATION

Due to the limited disturbance associated with sampling activities at SWMU 9 during this field event, no major restoration or revegetation was required at the conclusion of these field activities.

TABLE 2-1

BORING DATES AND DEPTHS OF SOIL SAMPLES COLLECTED DURING PHASE 5
SWMU 9
NSWC CRANE
CRANE, INDIANA

Boring No.	Total Depth (feet bgs)	Drilling Method	Boring Date	Depth Interval(s) of Soil Samples (feet bgs)
09SB084	7	DPT	29-Aug-07	0-2, 2-4, 4-6, 6-7
09SB085	6	DPT	29-Aug-07	0-2, 2-4, 4-6
09SB086	10	DPT	28-Aug-07	0-2, 2-4, 4-6, 8-10
09SB087	12	DPT	28-Aug-07	0-2, 2-4, 4-6, 10-12
09SB088	10	DPT	29-Aug-07	0-2, 2-4, 4-6, 8-10
09SB089	Not Sampled(1)			
09SB090	6	DPT	29-Aug-07	0-2, 2-4, 4-6
09SB091	16	DPT	28-Aug-07	0-2, 2-4, 4-6, 14-16
09SB092	2	HA	30-Aug-07	0-2
09SB093	6	DPT	29-Aug-07	0-2, 2-4, 4-6
09SB094	4	HA	30-Aug-07	0-2, 2-4
09SB095	2	HA	30-Aug-07	0-2
09SB096	4	HA	30-Aug-07	0-2, 2-4
09SB097	4	HA	29-Aug-07	0-2, 2-4
09SB098	18	DPT	28-Aug-07	0-2, 2-4, 4-6, 16-18
09SB099	2	HA	30-Aug-07	0-2
09SB100	3	HA	29-Aug-07	0-2, 2-3
09SB101	4	HA	30-Aug-07	0-2, 2-4
09SB102	3	HA	30-Aug-07	0-2, 2-3
09SB103	3	HA	29-Aug-07	0-2, 2-3
09SB104	12	DPT	28-Aug-07	0-2, 2-4, 4-6, 10-12
09SB105	15	DPT	28-Aug-07	0-2, 2-4, 4-6, 13-15
09SB106	14	DPT	28-Aug-07	0-2, 2-4, 4-6, 12-14
09SB107	2	HA	29-Aug-07	0-2
09SB108	4	HA	30-Aug-07	0-2, 2-4

1 = Samples collected in the wrong location. Sample was replaced with sample 09SB108.
bgs - Below ground surface.
DPT = Direct-push technology.
HA = Hand augering.

TABLE 2-2

SUMMARY OF ENVIRONMENTAL SAMPLES, LABORATORY ANALYSES, AND REASON FOR UNCOLLECTED SAMPLES
SWMU 9
NSWC CRANE
CRANE, INDIANA

Sample Location	Pesticides SW-846-8081	Herbicides SW-846-8151A	Reason Sample Was Not Collected
Surface Soil			
09SB0840002	X	X	
09SB0850002	X	X	
09SB0860002	X	X	
09SB0870002		X	
09SB0880002		X	
09SB089XXXX		O	Sample collected in wrong location - not analyzed
09SB0900002		X	
09SB0910002		X	
09SB0920002		X	
09SB0930002		X	
09SB0940002		X	
09SB0950002		X	
09SB0960002		X	
09SB0970002		X	
09SB0980002		X	
09SB0990002		X	
09SB1000002		X	
09SB1010002		X	
09SB1020002		X	
09SB1030002		X	
09SB1040002		X	
09SB1050002		X	
09SB1060002		X	
09SB1070002		X	
09SB1080002		X	
Analyzed	**3**	**24**	
Omitted	**---**	**1**	
Subsurface Soil			
09SB0840204	X	X	
09SB0840406	X	X	
09SB0840607	X	X	
09SB0850204	X	X	
09SB0850406	X	X	
09SB085XXXX	O	O	Refusal at 6 feet
09SB0860204	X	X	
09SB0860406	X	X	

TABLE 2-2

SUMMARY OF ENVIRONMENTAL SAMPLES, LABORATORY ANALYSES, AND REASON FOR UNCOLLECTED SAMPLES
SWMU 9
NSWC CRANE
CRANE, INDIANA

Sample Location	Pesticides SW-846-8081	Herbicides SW-846-8151A	Reason Sample Was Not Collected
09SB0860810	X	X	
09SB0870204		X	
09SB0870406		X	
09SB0871012		X	
09SB0880204		X	
09SB0880406		X	
09SB0880810		X	
09SB089XXXX		O	Sample collected in wrong location - not analyzed
09SB089XXXX		O	Sample collected in wrong location - not analyzed
09SB089XXXX		O	Sample collected in wrong location - not analyzed
09SB0900204		X	
09SB0900406		X	
09SB090XXXX		O	Refusal at 6 feet
09SB0910204		X	
09SB0910406		X	
09SB0911416		X	
09SB092XXXX		O	Refusal at 2 feet
09SB092XXXX		O	Refusal at 2 feet
09SB092XXXX		O	Refusal at 2 feet
09SB0930204		X	
09SB0930406		X	
09SB093XXXX		O	Refusal at 6 feet
09SB0940204		X	
09SB094XXXX		O	Refusal at 4 feet
09SB094XXXX		O	Refusal at 4 feet
09SB095XXXX		O	Refusal at 2 feet
09SB095XXXX		O	Refusal at 2 feet
09SB095XXXX		O	Refusal at 2 feet
09SB0960204		X	
09SB096XXXX		O	Refusal at 4 feet
09SB096XXXX		O	Refusal at 4 feet
09SB0970204		X	
09SB097XXXX		O	Refusal at 4 feet
09SB097XXXX		O	Refusal at 4 feet
09SB0980204		X	
09SB0980406		X	
09SB0981618		X	
09SB099XXXX		O	Refusal at 2 feet

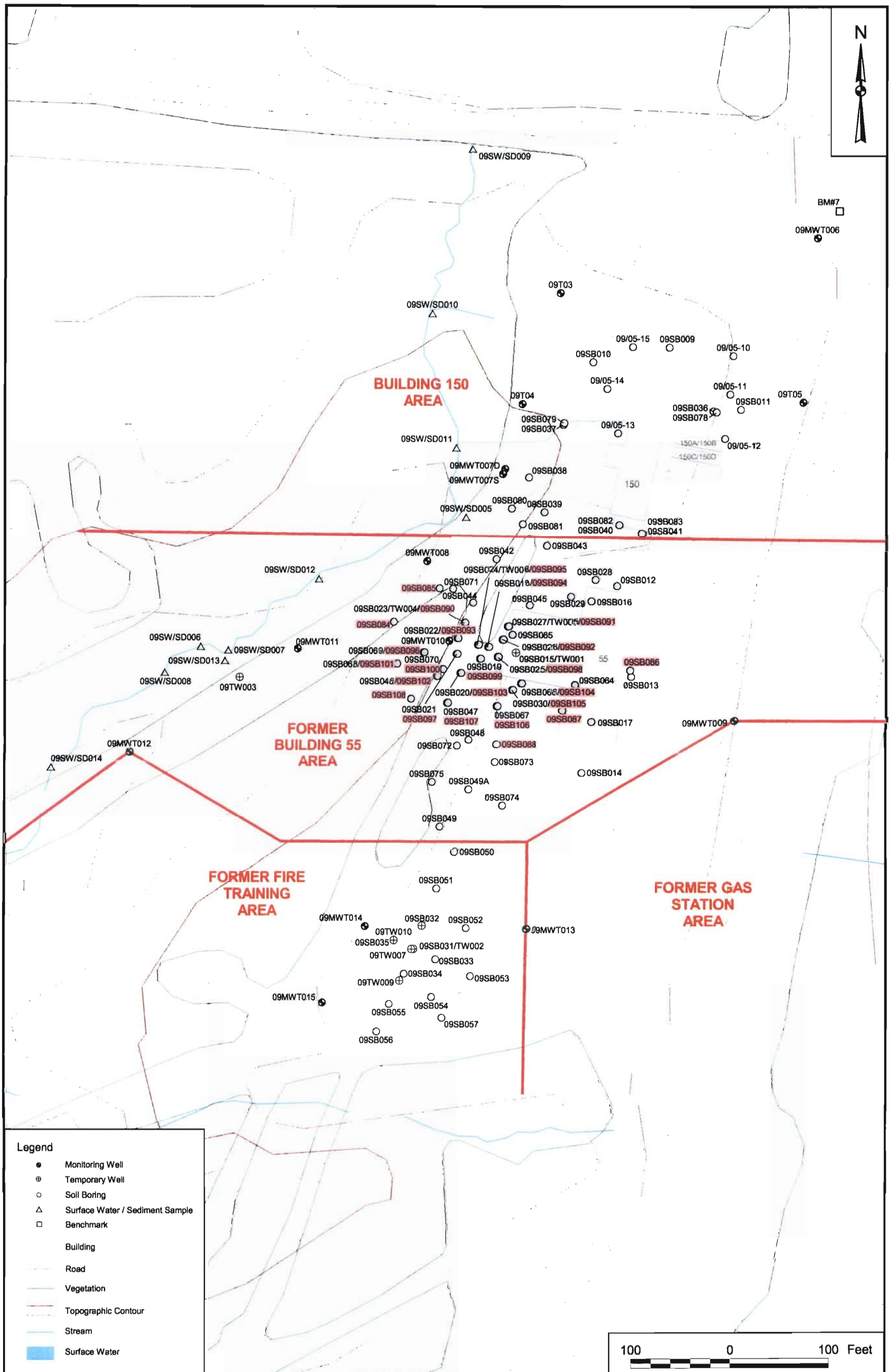
TABLE 2-2

SUMMARY OF ENVIRONMENTAL SAMPLES, LABORATORY ANALYSES, AND REASON FOR UNCOLLECTED SAMPLES
SWMU 9
NSWC CRANE
CRANE, INDIANA

Sample Location	Pesticides SW-846-8081	Herbicides SW-846-8151A	Reason Sample Was Not Collected
09SB099XXXX		O	Refusal at 2 feet
09SB099XXXX		O	Refusal at 2 feet
09SB1000203		X	
09SB100XXXX		O	Refusal at 3 feet
09SB100XXXX		O	Refusal at 3 feet
09SB1010204		X	
09SB101XXXX		O	Refusal at 4 feet
09SB101XXXX		O	Refusal at 4 feet
09SB1020203		X	
09SB102XXXX		O	Refusal at 3 feet
09SB102XXXX		O	Refusal at 3 feet
09SB1030203		X	
09SB103XXXX		O	Refusal at 3 feet
09SB103XXXX		O	Refusal at 3 feet
09SB1040204		X	
09SB1040406		X	
09SB1041012		X	
09SB1050204		X	
09SB1050406		X	
09SB1051315		X	
09SB1060204		X	
09SB1060406		X	
09SB1061214		X	
09SB107XXXX		O	Refusal at 2 feet
09SB107XXXX		O	Refusal at 2 feet
09SB107XXXX		O	Refusal at 2 feet
09SB1080204		X	
09SB108XXXX		O	Refusal at 4 feet
09SB108XXXX		O	Refusal at 4 feet
Analyzed	**8**	**41**	
Omitted	**1**	**34**	

X = Sample collected and analyzed as proposed.
O = Sample not collected or analyzed as proposed.

P:\GIS\CRANE_NWSC\MAPDOCS\APR\OLD SQL CONNECTION\SWMU09.APR SWMU 9 SAMPLING LOCATIONS LAYOUT 12/27/07 JEE



DRAWN BY	DATE	CONTRACT NUMBER
J. ENGLISH	6/12/07	CTO 0042
CHECKED BY	DATE	APPROVED BY / DATE
J. GOERDT	12/27/07	J. GOERDT / 12/27/07
COST/SCHEDULE-AREA		APPROVED BY / DATE
SCALE		DRAWING NO.
AS NOTED		FIGURE 2-1
		REV 0

NAVFAC

AREAS WITHIN SWMU 9 AND SAMPLING LOCATIONS
SWMU 9
NSWC CRANE
CRANE, INDIANA

3.0 DATA PRESENTATION

This section presents the analytical soil data for all five phases of field investigations at SWMU 9.

3.1 DATA PRESENTATION

Data were collected by Tetra Tech over a 9-month period in 2005. Additional samples were collected in October 2006 to delineate known contamination, and samples were also collected in August 2007 to further delineate the extent of contamination and to refine remedial waste types and volumes. The focus of the latest phase of investigation was primarily the known areas of soil contamination where soil is proposed for excavation and removal. The Phases 1 through 5 investigations are described in Sections 1.0 (Phases 1 to 4) and 2.0 (Phase 5). The complete list of samples collected is presented in Table 1-2. Laucks Testing Laboratories conducted the analyses, which are summarized by analytical fraction for each sample in Table 2-2.

3.2 SWMU 9 DATA

Table 3-1 presents a summary comparison of SWMU 9 surface and subsurface soil data to human health and ecological screening criteria.

As described in Sections 1.0 and 2.0, there are three main areas at SWMU 9 where contamination exists. These include the Former Building 55 Pesticide/Fuel Area, Building 150 Area, and the former Fire Training Area. Tables 3-2 through 3-7 present data for these three areas by area and sample matrix as follows:

- Table 3-2: Surface soil at former Building 55 Pesticide/Fuel Area
- Table 3-3: Surface soil at Building 150 Fuel Spills Area
- Table 3-4: Surface soil at former Fire Training Area
- Table 3-5: Subsurface soil at former Building 55 Pesticide/Fuel Area
- Table 3-6: Subsurface soil at Building 150 Fuel Spills Area
- Table 3-7: Subsurface soil at former Fire Training Area

The above tables display the applicable human health and ecological screening values (SVs), and those SVs that are exceeded by at least one result are highlighted.

A complete database for all samples collected at SWMU 9 during the 5 Phases of field investigation is provided on a CD in Appendix D.

TABLE 3-1

SUMMARY OF MAXIMUM DETECTED SOIL CONCENTRATIONS COMPARED TO HUMAN HEALTH AND ECOLOGICAL SCREENING CRITERIA
SWMU 9
NSWC CRANE
CRANE INDIANA

Chemical	Frequency of Detection	Range of Detected Concentrations	Sample Containing Maximum Concentration	Range of Nondetects	USEPA Region 9 PRG (Residential)[1]	USEPA Region 9 PRG (Industrial)[1]	IDEM Direct Contact Criteria (Residential)[2]	IDEM Direct Contact Criteria (Industrial)[2]	USEPA SSL Soil to Groundwater[3]	IDEM Migration to Groundwater[2]	USEPA Region 5 Ecological Screening Level[4]
Volatile Organic Compounds (ug/kg)											
1,1-Dichloroethane	1/87	1.36 J - 1.36 J	09SS380002	0.856 - 1.57	52000 N[5]	180000 N[5]	1300000	1700000	2100	5600	89600
2-Butanone	16/87	2 J - 54 J	09SS380002	0.856 - 1.57	2200000 N	11000000 N	44000000	70000000	4400	35000	12600
2-Hexanone	20/87	1 J - 4 J	09SB360204	0.866 - 1.57	NA	NA	NA	NA	NA	NA	443000
4-Methyl-2-Pentanone	6/87	1 J - 4 J	09SS380002	0.856 - 1.57	530000 N	4700000 N	12000000	29000000	620	20000	2500
Acetone	26/77	1 J - 320 J	09SS380002	0.866 - 35	1400000 N	5400000 N	35000000	51000000	6600	28000	255
Carbon Disulfide	1/87	5 J - 5 J	09SS380002	0.856 - 1.57	36000 N	720000 sat	900000	1200000	1500	10000	13100
Chlorobenzene	3/87	4 - 110	09SB250709	0.856 - 1.57	13000 N[5]	44000 N[5]	380000	510000	65	1300	2050
Methylene Chloride	9/87	1 J - 3 J	09SB390204 09SS400002	0.856 - 1.57	9100 C	21000 C	120000	200000	1.2	23	4690
Toluene	2/87	4 J - 4 J	09SB470204 09SS380002	0.856 - 1.57	520000 sat	520000 sat	8800000	16000000	590	12000	10000
Total Xylenes	2/87	6 J - 7 J	09SB240406	0.856 - 1.57	27000 N	420000 sat	690000	890000	7100	210000	NA
OSDRO (ug/kg)											
2-Methylnaphthalene	15/58	4.7 J - 850	09SS650002	3.7 - 5.6	5600 N[6]	19000 N[6]	630000	1600000	NA	3100	29000 [7]
Acenaphthene	8/58	3.9 J - 85	09SS800002	3.5 - 19	370000 N	2900000 N	9500000	24000000	31000	130000	29000 [7]
Acenaphthylene	2/58	4.4 J - 5.1 J	09SS800002	3.5 - 19	370000 N[8]	2900000 N[8]	1100000	2800000	NA	18000	29000 [7]
Anthracene	7/58	5.2 J - 130	09SS800002	3.5 - 8	2200000 N	100000000 max	47000000	120000000	650000	51000	29000 [7]
Benzo(a)anthracene	19/58	4.3 J - 730 J	09SS800002	3.7 - 5.1	150 C[5]	2100 C	5000	15000	160	19000	1100 [7]
Benzo(a)pyrene	13/58	5.6 J - 850 J	09SS800002	3.5 - 8	15 C[5]	210 C	500	1500	410	8200	1100 [7]
Benzo(b)fluoranthene	15/58	4.3 J - 1300 J	09SS800002	3.5 - 8	150 C[5]	2100 C	5000	15000	490	57000	1100 [7]
Benzo(g,h,i)perylene	16/58	14 - 760 J	09SS800002	3.5 - 5.1	230000 N[9]	2900000 N[9]	4700000[9]	12000000[9]	NA	NA	1100 [7]
Benzo(k)fluoranthene	9/58	8.8 - 370 J	09SS800002	3.5 - 8	1500 C[5]	21000 C[5]	50000	150000	490	39000	1100 [7]
Chrysene	18/58	4.9 J - 930 J	09SS800002	3.7 - 5.1	15000 C[5]	210000 C[5]	500000	1500000	160	25000	1100 [7]
Dibenzo(a,h)anthracene	3/58	9.5 - 150 J	09SS800002	3.5 - 19	15 C[5]	210 C[5]	500	1500	1500	18000	1100 [7]
Fluoranthene	19/58	5.3 J - 1300	09SS800002	3.7 - 5.1	230000 N	2200000 N	6300000	16000000	310000	880000	29000 [7]
Fluorene	7/58	12 - 64	09SB790406	3.5 - 19	270000 N	2600000 N	6300000	16000000	41000	170000	29000 [7]
Indeno(1,2,3-cd)pyrene	10/58	6.8 J - 580 J	09SS800002	3.5 - 19	150 C[5]	2100 C[5]	5000	15000	1400	3100	1100.0 [7]
Naphthalene	11/58	4.4 J - 330	09SS650002	3.7 - 5.1	5600 N	19000 N	3200000	8000000	3100	700	29000 [7]
Phenanthrene	21/58	4.3 J - 840	09SS800002	3.7 - 5.1	230000 N[9]	2900000 N[9]	470000	1200000	NA	13000	29000 [7]
Pyrene	21/58	4.7 J - 2500 J	09SS800002	3.7 - 5.1	230000 N	2900000 N	4700000	12000000	230000	570000	1100 [7]
Pesticides/PCBs (ug/kg)											
4,4'-DDD	46/204	1.1 J - 22000 J	09SS180002	0.16 - 4116	2400 C	10000 C	28000	120000	710	140000	21 [7]
4,4'-DDE	65/203	0.89 J - 130000	09SS180002	0.14 - 4116	1700 C	7000 C	20000	86000	2200	450000	21.0 [7]
4,4'-DDT	86/204	1.2 J - 2200000	09SS180002	0.16 - 4116	1700 C	7000 C	20000	86000	1300	260000	21.00 [7]
Aldrin	1/203	6.9 J - 6.9 J	09SS200002	0.067 - 1982	29 C	100 C	250	800	25	4900	99.4
alpha-BHC	4/203	1.5 J - 150	09SB240204	0.076 - 1982	90 C	360 C	990	4000	0.036	7.2	224
alpha-Chlordane	35/204	0.92 J - 170000	09SS180002	0.079 - 1982	1600 C[10]	6500 C[10]	17000[10]	68000[10]	480	NA	680
Aroclor-1016	2/192	23 - 900 J	09SB570406	9.52 - 27439	390 N	21000 C	1800[11]	5300[11]	NA	NA	680
Aroclor-1232	1/192	1000 - 1000	09SB540607	9.52 - 27439	220 C[11]	740 C[11]	1800[11]	5300[11]	NA	NA	680
Aroclor-1242	9/192	2000 - 260000	09SS340002	9.52 - 20000	220 C[11]	740 C[11]	5300[11]	5300[11]	NA	NA	680
Aroclor-1248	6/192	24 - 880	09SS510002	9.52 - 27439	220 C[11]	740 C[11]	1800[11]	5300[11]	NA	NA	680
Aroclor-1254	1/192	72 J - 72 J	09SS330002	9.6 - 27439	220 C[11]	740 C[11]	1800[11]	5300[11]	NA	NA	680
Aroclor-1260	18/192	16 J - 2200	09SB49A1415	9.52 - 27439	220 C[11]	740 C[11]	5300[11]	5300[11]	NA	NA	3.98
beta-BHC	5/203	1.5 J - 5.6 J	09SS200002	0.076 - 1982	320 C	1300 C	3300	12000	0.13	26	9940
delta-BHC	1/202	0.6 J - 0.6 J	09SB84-SO-0002	0.075 - 1982	90 C[12]	360 C[12]	990[12]	4000[12]	NA	NA	2.38
Dieldrin	17/201	1.6 J - 6000 J	09SS670002	0.11 - 4116	30 C	110 C	270	860	0.23	46	5 [7]
Endosulfan I	1/203	4 - 40 J	09SS200002-D	0.084 - 1982	370000 C[13]	3700000 C[13]	1100000[13]	2900000[13]	980[13]	NA	119

TABLE 3-1

SUMMARY OF MAXIMUM DETECTED SOIL CONCENTRATIONS COMPARED TO HUMAN HEALTH AND ECOLOGICAL SCREENING CRITERIA
SWMU 9
NSWC CRANE
CRANE INDIANA

Chemical	Frequency of Detection	Range of Detected Concentrations	Sample Containing Maximum Concentration	Range of Nondetects	USEPA Region 9 PRG (Residential)[1]	USEPA Region 9 PRG (Industrial)[1]	IDEM Direct Contact Criteria (Residential)[2]	IDEM Direct Contact Criteria (Industrial)[2]	USEPA SSL Soil to Groundwater[3]	IDEM Migration to Groundwater[2]	USEPA Region 5 Ecological Screening Level[4]
gamma-Chlordane	36/204	1 J - 210000	09SS180002	0.067 - 1982	1600 C[10]	6500 C[10]	17000[10]	68000[10]	480	NA	5.98
Heptachlor	3/203	3.4 J - 48000	09SS180002	0.095 - 1982	110 C	380 C	930	2900	1100	23000	152
Heptachlor Epoxide	9/202	1.4 J - 94	09SS250002	0.082 - 1982	53 C	190 C	470	1500	33	670	19.9
Methoxychlor	1/203	32 J - 32 J	09SB49A1415	1.1 - 19817	31000 N	310000 N	910000	2500000	7800	160000	680
Total Aroclor	38/38	16 - 260000	09SS340002	- - -	220 C	740 C	1800	5300	NA	6200	NA
Herbicides (ug/kg)											
2,4,5-T	2/65	2.8 J - 3.5 J	09SB86-SO-0002	0.22 - 0.28	61000 N	620000 N	1800000	4900000	540	2200	109
2,4,5-TP (Silvex)	1/65	2.9 J - 2.9 J	09SB86-SO-0002	0.37 - 0.46	49000 N	490000 N	NA	NA	1000	NA	27.3
2,4-D	1/65	5.1 J - 5.1 J	09SB106-SO-0406	0.32 - 0.39	69000 N	770000 N	2000000	5200000	74	350	119
Dioxin/Furans (ug/kg)											
1,2,3,4,6,7,8,9-OCDD	8/8	2.2 J - 16	09SS530002	- - -	13 C[14]	53 C[14]	NA	NA	NA	NA	NA
Miscellaneous Parameters											
Cation Exchange Capacity (MEQ)	19/19	4.2 - 21	09SS260002	- - -	NA	NA	NA	NA	NA	NA	NA
pH (SU)	19/19	4.1 - 9.9	09SS150002	- - -	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	16/19	1000 - 44000	09SS260002	1000 - 1000	NA	NA	NA	NA	NA	NA	NA
Petroleum Hydrocarbons (mg/kg)											
Diesel Range Organics	62/145	3.5 J - 5800 J	09SS400002	2.8 - 61.5	NA	NA	1600	3900	NA	80	NA
Gasoline Range Organics	6/82	10.6 - 49.7	09SS400002	2.82 - 3.48	NA	NA	800	1500	NA	25	NA
Oil & Grease - Hem	17/82	430 J - 9000	09SS400002	226 - 279	NA	NA	NA	NA	NA	NA	NA
Oil Range Organics (C24-C40)	23/87	28 - 10000 J	09SB180204	11.3 - 120	NA	NA	NA	NA	NA	NA	NA

1 - USEPA Region IX Preliminary Remediation Goal (PRG). The noncarcinogenic values (denoted with an "N" flag) are the PRG divided by 10 to correspond to a target hazard quotient of 0.1. (USEPA Region IX, October 2004, Updated December 28, 2004).
2 - Indiana Department of Environmental Management (IDEM), Risk Integrated System of Closure (RISC) residential closure levels for soil (IDEM, January 2006).
3 - USEPA Soil Screening Levels (SSLs). EPA Internet Site at http://risk.lsd.ornl.gov/calc_start.htm. Values are based on a DAF of 1.
4 - USEPA Region 5 Ecological Screening Levels, August 22, 2003.
5 - The toxicity criteria in the October 2004 PRG table is outdated. Value was updated using toxicity criteria from the April 2007 USEPA Region 3 RBC Table.
6 - Naphthalene is used as a surrogate for 2-methylnaphthalene.
7 - USEPA Ecological Soil Screening Levels (2003,2005,2007) available at http://www.epa.gov/ecotox/ecossl/
8 - Acenaphthene is used as a surrogate for acenaphthylene.
9 - Pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
10 - Chlordane is used as a surrogate for alpha- and gamma-chlordane.
11 - The value for Total PCB congeners (Aroclors) is presented.
12 - Alpha-BHC is used as a surrogate for delta BHC.
13 - Endosulfan is used as a surrogate for Endosulfan I, Endosulfan II, and Endosulfan Sulfate.
14 - The PRG presented for OCDD is based on the Region IX PRGs for 2,3,7,8-TCDD and the World Health Organization Toxicity Equivalent Factors (TEFs).

Shading indicates an exceedance of criteria.

C = Carcinogenic.
IDEM = Indiana Department of Environmental Management.
max = Ceiling limit.
mg/kg = Milligrams per kilogram.
N = Noncarcinogenic.
NA = No criterion available.
sat = Soil saturation concentraton.
ug/kg = Micrograms per kilogram.
USEPA = United States Environmental Protection Agency.

TABLE 3-1

SUMMARY OF MAXIMUM DETECTED SOIL CONCENTRATIONS COMPARED TO HUMAN HEALTH AND ECOLOGICAL SCREENING CRITERIA
SWMU 9
NSWC CRANE
CRANE INDIANA

Chemical	Frequency of Detection	Range of Detected Concentrations	Sample Containing Maximum Concentration	Range of Nondetects	USEPA Region 9 PRG (Residential)[1]	USEPA Region 9 PRG (Industrial)[1]	IDEM Direct Contact Criteria (Residential)[2]	IDEM Direct Contact Criteria (Industrial)[2]	USEPA SSL Soil to Groundwater[3]	IDEM Migration to Groundwater[2]	USEPA Region 5 Ecological Screening Level[4]
Associated Samples											
09SB100-SO-0002	09SB240406		09SB470608	09SB700204		09SB90-SO-0002	09SS340002				
09SB100-SO-0203	09SB250204		09SB480204	09SB700406		09SB90-SO-0002-D	09SS350002				
09SB101-SO-0002	09SB250709		09SB480406	09SB710204		09SB90-SO-0204	09SS360002				
09SB101-SO-0204	09SB260204		09SB480608	09SB710406		09SB90-SO-0406	09SS370002				
09SB102-SO-0002	09SB260507		09SB490204	09SB720204		09SB91-SO-0002	09SS380002				
09SB102-SO-0203	09SB270204		09SB490406	09SB720406		09SB91-SO-0204	09SS390002				
09SB103-SO-0002	09SB270507		09SB490607	09SB720810		09SB91-SO-0406	09SS400002				
09SB103-SO-0203	09SB280204		09SB49A0204	09SB730204		09SB91-SO-1416	09SS410002				
09SB104-SO-0002	09SB280608		09SB49A0406	09SB730406		09SB92-SO-0002	09SS420002				
09SB104-SO-0204	09SB290204		09SB49A1415	09SB730810		09SB93-SO-0002	09SS430002				
09SB104-SO-0406	09SB290507		09SB500204	09SB740204		09SB93-SO-0204	09SS440002				
09SB104-SO-1012	09SB300204		09SB500406	09SB740406		09SB93-SO-0406	09SS450002				
09SB105-SO-0002	09SB300507		09SB500406-D	09SB741416		09SB94-SO-0002	09SS460002				
09SB105-SO-0204	09SB310204		09SB500608	09SB750204		09SB94-SO-0002-D	09SS470002				
09SB105-SO-0406	09SB310507		09SB510204	09SB750406		09SB94-SO-0204	09SS480002				
09SB105-SO-1315	09SB320204		09SB510406	09SB750709		09SB95-SO-0002	09SS490002				
09SB106-SO-0002	09SB320406		09SB510608	09SB780204		09SB96-SO-0002	09SS49A0002				
09SB106-SO-0204	09SB330204		09SB520204	09SB780406		09SB96-SO-0002-D	09SS500002				
09SB106-SO-0406	09SB330507		09SB520406	09SB780810		09SB96-SO-0204	09SS510002				
09SB106-SO-1214	09SB340204		09SB520709	09SB790204		09SB97-SO-0002	09SS520002				
09SB107-SO-0002	09SB340406		09SB530204	09SB790406		09SB97-SO-0204	09SS530002				
09SB108-SO-0002	09SB350204		09SB530406	09SB790810		09SB98-SO-0002	09SS540002				
09SB108-SO-0204	09SB350406		09SB530608	09SB800204		09SB98-SO-0204	09SS550002				
09SB120204	09SB360204		09SB540204	09SB800406		09SB98-SO-0406	09SS560002				
09SB121315	09SB370204		09SB540204-D	09SB810204		09SB98-SO-1618	09SS570002				
09SB130204	09SB370406		09SB540406	09SB810406		09SB99-SO-0002	09SS650002				
09SB130911	09SB370810		09SB540607	09SB810709		09SB99-SO-0002-D	09SS660002				
09SB140204	09SB390204		09SB550204	09SB810709-D		09SS120002	09SS670002				
09SB140809	09SB390406		09SB550406	09SB830204		09SS130002	09SS680002				
09SB151112	09SB390608		09SB550608	09SB830406		09SS140002	09SS690002				
09SB151416	09SB410204		09SB560204	09SB84-SO-0002		09SS150002	09SS700002				
09SB151416-D	09SB410405		09SB560406	09SB84-SO-0204		09SS160002	09SS710002				
09SB160607	09SB420204		09SB560607	09SB84-SO-0406		09SS170002	09SS720002				
09SB161314	09SB420406		09SB570204	09SB84-SO-0607		09SS180002	09SS730002				
09SB170204	09SB420607		09SB570406	09SB85-SO-0002		09SS190002	09SS740002				
09SB170911	09SB430204		09SB570608	09SB85-SO-0204		09SS200002	09SS750002				
09SB180204	09SB430406		09SB650204	09SB85-SO-0204-D		09SS200002-D	09SS780002				
09SB180406	09SB431618		09SB650406	09SB85-SO-0406		09SS210002	09SS790002				
09SB190204	09SB431618-D		09SB651416	09SB86-SO-0002		09SS220002	09SS800002				
09SB190406	09SB440204		09SB651416-D	09SB86-SO-0204		09SS230002	09SS810002				
09SB200204	09SB440405		09SB660204	09SB86-SO-0406		09SS240002	09SS820002				
09SB200608	09SB450204		09SB660406	09SB86-SO-0810		09SS250002	09SS830002				
09SB210204	09SB450406		09SB661416	09SB87-SO-0002		09SS260002					
09SB210507	09SB451416		09SB670204	09SB87-SO-0204		09SS270002					
09SB220204	09SB460204		09SB670406	09SB87-SO-0406		09SS280002					
09SB220507	09SB460406		09SB670406-D	09SB87-SO-1012		09SS290002					
09SB220507-D	09SB460607		09SB671214	09SB88-SO-0002		09SS300002					
09SB230204	09SB470204		09SB680204	09SB88-SO-0204		09SS310002					
09SB230507	09SB470204-D		09SB690204	09SB88-SO-0406		09SS320002					
09SB240204	09SB470406		09SB690406	09SB88-SO-0810		09SS330002					

TABLE 3-2

RESULTS FOR CHEMICALS DETECTED IN SURFACE SOIL AT FORMER BUILDING 55 PESTICIDE/FUEL AREA
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	01	01	01	01	01	01	01
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB012	09SB013	09SB014	09SB015/TW001	09SB016	09SB017	09SB018
SAMPLE NUMBER			09SS120002	09SS130002	09SS140002	09SS150002	09SS160002	09SS170002	09SS180002
SOIL CLASSIFICATION			3	3	3	3	3	3	3
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/4/2005
Volatile Organics (ug/kg)									
METHYLENE CHLORIDE	9100	4690							
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE	5600	29000							
ACENAPHTHENE	370000	29000							
ACENAPHTHYLENE	370000	29000							
ANTHRACENE	2200000	29000							
BENZO(A)ANTHRACENE	150	1100							
BENZO(A)PYRENE	15	1100							
BENZO(B)FLUORANTHENE	150	1100							
BENZO(G,H,I)PERYLENE	230000	1100							
BENZO(K)FLUORANTHENE	1500	1100							
CHRYSENE	15000	1100							
FLUORANTHENE	230000	29000							
FLUORENE	270000	29000							
INDENO(1,2,3-CD)PYRENE	150	1100							
NAPHTHALENE	5600	29000							
PHENANTHRENE	230000	29000							
PYRENE	230000	1100							
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21	3.3 U	3.2 U	3.2 U	49	5.1 J	3.1 U	22000 J
4,4'-DDE	1700	21	3.3 U	3.2 U	3.2 U	8.1 J	320	3.8	130000
4,4'-DDT	1700	21	3.3 U	3.2 U	1.2 J	81 J	140	1.5 J	2200000
ALDRIN	29	99.39	1.6 U	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U	1600 U
ALPHA-CHLORDANE	1600	679.71	1.6 U	1.5 U	2.4	1.5 U	3.3	1.5 U	170000
AROCLOR-1260	220	3.98	20 U	20 U	20 U	19 U	18 U	19 U	20000 U
BETA-BHC	320	9940	1.6 U	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U	1600 U
DELTA-BHC	90	2.38	1.6 U	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U	1600 U
DIELDRIN	30	4.9	3.3 U	3.2 U	3.2 U	3.1 U	8.1	3.1 U	3300 U
ENDOSULFAN I	370000	119.27	1.6 U	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U	1600 U
GAMMA-CHLORDANE	1600	5.98	1.6 U	1.5 U	3.9	1.5 U	1.4 U	1.5 U	210000
HEPTACHLOR	110	151.88	1.6 U	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U	48000
TOTAL AROCLOR	220	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U
Herbicides (ug/kg)									
2,4,5-T	61000	108.8							
2,4,5-TP (SILVEX)	49000	27.25							
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ	NA	NA	16 J			6 J			
PH (S.U.)	NA	NA	6.9			9.9			
TOTAL ORGANIC CARBON (mg/kg)	NA	NA	5500 J			23000 J			
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	NA	NA							
OIL & GREASE - HEM	NA	NA							
OIL RANGE ORGANICS (C24-C40)	NA	NA							

TABLE 3-2

RESULTS FOR CHEMICALS DETECTED IN SURFACE SOIL AT FORMER BUILDING 55 PESTICIDE/FUEL AREA
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	02	02	02	02	02	02	02
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB019	09SB020	09SB020	09SB021	09SB022	09SB023/TW004	09SB024/TW006
SAMPLE NUMBER			09SS190002	09SS200002	09SS200002-D	09SS210002	09SS220002	09SS230002	09SS240002
SOIL CLASSIFICATION			3	3		3	3	3	3
SAMPLE CODE			NORMAL	NORMAL	DUP	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005
Volatile Organics (ug/kg)									
METHYLENE CHLORIDE	9100	4690							
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE	5600	29000							
ACENAPHTHENE	370000	29000							
ACENAPHTHYLENE	370000	29000							
ANTHRACENE	2200000	29000							
BENZO(A)ANTHRACENE	150	1100							
BENZO(A)PYRENE	15	1100							
BENZO(B)FLUORANTHENE	150	1100							
BENZO(G,H,I)PERYLENE	230000	1100							
BENZO(K)FLUORANTHENE	1500	1100							
CHRYSENE	15000	1100							
FLUORANTHENE	230000	29000							
FLUORENE	270000	29000							
INDENO(1,2,3-CD)PYRENE	150	1100							
NAPHTHALENE	5600	29000							
PHENANTHRENE	230000	29000							
PYRENE	230000	1100							
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21	820 J	1700	1400	220	65	1.63 U	1.59 U
4,4'-DDE	1700	21	3100 J	670	520	45	10	1.63 U	70
4,4'-DDT	1700	21	27000 J	3500	3700	180	66	1.63 U	350
ALDRIN	29	99.39	0.778 UJ	6.9 J	6.33 U	0.794 U	0.812 U	0.784 U	0.767 U
ALPHA-CHLORDANE	1600	679.71	700 J	140	110	74	19	0.784 U	7.2 J
AROCLOR-1260	220	3.98	10.8 UJ	55 U	87.7 U	11 U	11.2 U	10.9 U	10.6 U
BETA-BHC	320	9940	0.778 UJ	5.6 J	6.33 U	2 J	0.812 U	0.784 U	0.767 U
DELTA-BHC	90	2.38	0.778 UJ	3.97 U	6.33 U	0.794 U	0.812 U	0.784 U	0.767 U
DIELDRIN	30	4.9	7 J	420	250 J	12	1.69 U	1.63 U	1.59 U
ENDOSULFAN I	370000	119.27	0.778 UJ	3.97 UJ	40 J	0.794 U	0.812 U	0.784 U	0.767 U
GAMMA-CHLORDANE	1600	5.98	700 J	150	120	50	11	0.784 U	16 J
HEPTACHLOR	110	151.88	3.4 J	3.97 U	6.33 U	0.794 U	0.812 U	0.784 U	0.767 U
TOTAL AROCLOR	220	NA	0 U	0 U		0 U	0 U	0 U	0 U
Herbicides (ug/kg)									
2,4,5-T	61000	108.8							
2,4,5-TP (SILVEX)	49000	27.25							
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ	NA	NA		13				15	
PH (S.U.)	NA	NA		6.9				6.7	
TOTAL ORGANIC CARBON (mg/kg)	NA	NA		4000				1400	
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	NA	NA							
OIL & GREASE - HEM	NA	NA							
OIL RANGE ORGANICS (C24-C40)	NA	NA							

TABLE 3-2

RESULTS FOR CHEMICALS DETECTED IN SURFACE SOIL AT FORMER BUILDING 55 PESTICIDE/FUEL AREA
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	02	02	02	02	02	02	03
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB025	09SB026	09SB027/TW005	09SB028	09SB029	09SB030	09SB042
SAMPLE NUMBER			09SS250002	09SS260002	09SS270002	09SS280002	09SS290002	09SS300002	09SS420002
SOIL CLASSIFICATION			3	3	3	3	3	3	3
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			5/9/2005	5/9/2005	5/9/2005	5/10/2005	5/10/2005	5/10/2005	10/3/2005
Volatile Organics (ug/kg)									
METHYLENE CHLORIDE	9100	4690							1.05 UJ
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE	5600	29000							
ACENAPHTHENE	370000	29000							
ACENAPHTHYLENE	370000	29000							
ANTHRACENE	2200000	29000							
BENZO(A)ANTHRACENE	150	1100							
BENZO(A)PYRENE	15	1100							
BENZO(B)FLUORANTHENE	150	1100							
BENZO(G,H,I)PERYLENE	230000	1100							
BENZO(K)FLUORANTHENE	1500	1100							
CHRYSENE	15000	1100							
FLUORANTHENE	230000	29000							
FLUORENE	270000	29000							
INDENO(1,2,3-CD)PYRENE	150	1100							
NAPHTHALENE	5600	29000							
PHENANTHRENE	230000	29000							
PYRENE	230000	1100							
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21	19 J	1800 J	83	1.57 U	1.65 U	1.77 U	1.67 U
4,4'-DDE	1700	21	400	30000 J	80	1.57 U	1.65 U	1.77 U	13 J
4,4'-DDT	1700	21	990	110000 J	47	6.6 J	1.65 U	1.77 U	13
ALDRIN	29	99.39	0.703 U	93.8 U	0.742 U	0.756 U	0.793 U	0.852 U	0.803 U
ALPHA-CHLORDANE	1600	679.71	800	1000 J	170	0.756 U	0.793 U	0.852 U	0.803 U
AROCLOR-1260	220	3.98	38.9 U	1299 U	10.3 U	10.5 U	11 U	11.8 U	11.1 UJ
BETA-BHC	320	9940	0.703 U	93.8 U	0.742 U	0.756 U	0.793 U	0.852 U	0.803 U
DELTA-BHC	90	2.38	0.703 U	93.8 U	0.742 U	0.756 U	0.793 U	0.852 U	0.803 UJ
DIELDRIN	30	4.9	17	210 J	1.54 U	1.57 U	1.65 U	1.77 U	1.67 U
ENDOSULFAN I	370000	119.27	0.703 U	93.8 U	0.742 U	0.756 U	0.793 U	0.852 U	0.803 U
GAMMA-CHLORDANE	1600	5.98	760	1100 J	190	0.756 U	0.793 U	0.852 U	0.803 U
HEPTACHLOR	110	151.88	59	93.8 U	0.742 U	0.756 U	0.793 U	0.852 U	0.803 U
TOTAL AROCLOR	220	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U
Herbicides (ug/kg)									
2,4,5-T	61000	108.8							
2,4,5-TP (SILVEX)	49000	27.25							
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ	NA	NA		21			16		
PH (S.U.)	NA	NA		7.6			6.6		
TOTAL ORGANIC CARBON (mg/kg)	NA	NA		44000			1000 U		
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	NA	NA							10
OIL & GREASE - HEM	NA	NA							247 U
OIL RANGE ORGANICS (C24-C40)	NA	NA							36

TABLE 3-2

RESULTS FOR CHEMICALS DETECTED IN SURFACE SOIL AT FORMER BUILDING 55 PESTICIDE/FUEL AREA
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	03	03	03	03	03	03	03
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB043	09SB044	09SB045	09SB046	09SB047	09SB048	09SB049
SAMPLE NUMBER			09SS430002	09SS440002	09SS450002	09SS460002	09SS470002	09SS480002	09SS490002
SOIL CLASSIFICATION			3	3	3	3	3	3	3
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			10/3/2005	10/3/2005	10/3/2005	10/3/2005	9/30/2005	9/30/2005	9/30/2005
Volatile Organics (ug/kg)									
METHYLENE CHLORIDE	9100	4690	0.905 UJ	1.09 UJ	0.973 UJ	1.04 UJ	1.06 UJ	1.22 UJ	1 J
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE	5600	29000							
ACENAPHTHENE	370000	29000							
ACENAPHTHYLENE	370000	29000							
ANTHRACENE	2200000	29000							
BENZO(A)ANTHRACENE	150	1100							
BENZO(A)PYRENE	15	1100							
BENZO(B)FLUORANTHENE	150	1100							
BENZO(G,H,I)PERYLENE	230000	1100							
BENZO(K)FLUORANTHENE	1500	1100							
CHRYSENE	15000	1100							
FLUORANTHENE	230000	29000							
FLUORENE	270000	29000							
INDENO(1,2,3-CD)PYRENE	150	1100							
NAPHTHALENE	5600	29000							
PHENANTHRENE	230000	29000							
PYRENE	230000	1100							
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21	1.56 U	1500 J	1.6 UJ	1034 U	120	250 J	1.63 UJ
4,4'-DDE	1700	21	60 J	2200	1.6 UJ	1900 J	300	560 J	28 J
4,4'-DDT	1700	21	66	570	1.6 U	130000 J	320	830 J	9.3
ALDRIN	29	99.39	0.753 U	0.806 U	0.771 UJ	498 U	0.799 UJ	0.853 UJ	0.787 UJ
ALPHA-CHLORDANE	1600	679.71	0.753 U	900	0.771 U	498 U	0.799 U	0.853 U	0.787 U
AROCLOR-1260	220	3.98	10.4 UJ	11.2 U	10.7 U	6893 U	11.1 U	11.8 U	21 J
BETA-BHC	320	9940	0.753 U	0.806 U	0.771 UJ	498 U	0.799 U	0.853 U	0.787 U
DELTA-BHC	90	2.38	0.753 UJ	0.806 U	0.771 UJ	498 U	0.799 UJ	0.853 UJ	0.787 UJ
DIELDRIN	30	4.9	1.56 U	1.67 U	1.6 UJ	1034 U	6.6	1.77 U	1.63 U
ENDOSULFAN I	370000	119.27	0.753 U	0.806 U	0.771 U	498 U	0.799 U	0.853 U	0.787 U
GAMMA-CHLORDANE	1600	5.98	3.3	820	0.771 U	498 U	0.799 U	0.853 U	0.787 U
HEPTACHLOR	110	151.88	0.753 U	0.806 U	0.771 UJ	498 U	0.799 UJ	0.853 UJ	0.787 UJ
TOTAL AROCLOR	220	NA	0 U	0 U	0 U	0 U	0 U	0 U	21
Herbicides (ug/kg)									
2,4,5-T	61000	108.8							
2,4,5-TP (SILVEX)	49000	27.25							
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ	NA	NA							
PH (S.U.)	NA	NA							
TOTAL ORGANIC CARBON (mg/kg)	NA	NA							
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	NA	NA	35	120	2.97 U	58	3.07 U	180	3.03 U
OIL & GREASE - HEM	NA	NA	680	2700	237 U	440 J	246 U	3200	242 U
OIL RANGE ORGANICS (C24-C40)	NA	NA	78	720	11.9 U	81	12.3 U	730	12.1 U

TABLE 3-2

RESULTS FOR CHEMICALS DETECTED IN SURFACE SOIL AT FORMER BUILDING 55 PESTICIDE/FUEL AREA
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	03	04	04	04	04	04	04
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB049A	09SB065	09SB066	09SB067	09SB068	09SB069	09SB070
SAMPLE NUMBER			09SS49A0002	09SS650002	09SS660002	09SS670002	09SS680002	09SS690002	09SS700002
SOIL CLASSIFICATION			3						
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			9/30/2005	10/21/2006	10/21/2006	10/21/2006	10/22/2006	10/22/2006	10/22/2006
Volatile Organics (ug/kg)									
METHYLENE CHLORIDE	9100	4690	1.05 UJ						
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE	5600	29000		850	5.5 J	66	4.3 U	4.2 U	4.3 U
ACENAPHTHENE	370000	29000		21	3.8 U	3.9 J	4.3 U	4.2 U	4.3 U
ACENAPHTHYLENE	370000	29000		3.7 U	3.8 U	4.4 J	4.3 U	4.2 U	4.3 U
ANTHRACENE	2200000	29000		27	6 J	6.9 J	4.3 U	4.2 U	4.3 U
BENZO(A)ANTHRACENE	150	1100		45	44 J	16 J	4.3 U	4.2 U	4.3 U
BENZO(A)PYRENE	15	1100		29 J	52 J	3.7 UJ	4.3 U	4.2 U	4.3 U
BENZO(B)FLUORANTHENE	150	1100		45 J	73 J	27 J	4.3 U	4.2 U	4.3 U
BENZO(G,H,I)PERYLENE	230000	1100		42 J	64 J	42 J	4.3 U	4.2 U	4.3 U
BENZO(K)FLUORANTHENE	1500	1100		11 J	26 J	3.7 UJ	4.3 U	4.2 U	4.3 U
CHRYSENE	15000	1100		44	52 J	28 J	4.3 U	4.2 U	4.3 U
FLUORANTHENE	230000	29000		46	72	16	4.3 U	4.2 U	4.3 U
FLUORENE	270000	29000		13	3.8 U	3.7 U	4.3 U	4.2 U	4.3 U
INDENO(1,2,3-CD)PYRENE	150	1100		23 J	46 J	3.7 UJ	4.3 U	4.2 U	4.3 U
NAPHTHALENE	5600	29000		330	3.8 U	26	4.3 U	4.2 U	4.3 U
PHENANTHRENE	230000	29000		160	40	57	4.3 U	4.2 U	4.3 U
PYRENE	230000	1100		87	140 J	44 J	4.3 U	4.2 U	4.3 U
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21	92 J	39 J	290 J	160 J	1.7 UJ	170 J	5400 J
4,4'-DDE	1700	21	900	48 J	730 J	1500 J	5.9 J	180	3700 J
4,4'-DDT	1700	21	690	34 J	2500 J	2000 J	17 J	6400	190000
ALDRIN	29	99.39	0.778 UJ	0.73 U	0.75 UR	0.72 UJ	0.84 UJ	42 U	84 U
ALPHA-CHLORDANE	1600	679.71	0.778 U	7.6	220 J	790 J	0.84 UJ	78 J	360 J
AROCLOR-1260	220	3.98	10.8 U	10 U	10 UR	10 UJ	12 UJ	580 U	1200 U
BETA-BHC	320	9940	0.778 U	0.73 U	0.75 UR	0.72 UJ	0.84 UJ	42 U	84 U
DELTA-BHC	90	2.38	0.778 UJ	0.73 U	0.75 UR	3 R	0.84 UJ	42 U	84 U
DIELDRIN	30	4.9	1.62 U	1.5 U	1.6 UR	6000 J	1.7 UJ	360	4200 J
ENDOSULFAN I	370000	119.27	0.778 U	0.73 U	0.75 UR	0.72 UJ	0.84 UJ	42 U	84 U
GAMMA-CHLORDANE	1600	5.98	9.6	20 J	260 J	860 J	0.84 UJ	73 J	540 J
HEPTACHLOR	110	151.88	0.778 UJ	0.73 U	0.75 UR	0.72 UJ	0.84 UJ	42 U	84 U
TOTAL AROCLOR	220	NA	0 U	0 U	70	0 U	0 U	0 U	0 U
Herbicides (ug/kg)									
2,4,5-T	61000	108.8							
2,4,5-TP (SILVEX)	49000	27.25							
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ	NA	NA							
PH (S.U.)	NA	NA							
TOTAL ORGANIC CARBON (mg/kg)	NA	NA							
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	NA	NA	22	95	38	200	12 J	13 J	360
OIL & GREASE - HEM	NA	NA	240 U						
OIL RANGE ORGANICS (C24-C40)	NA	NA	76						

TABLE 3-2

RESULTS FOR CHEMICALS DETECTED IN SURFACE SOIL AT FORMER BUILDING 55 PESTICIDE/FUEL AREA
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	04	04	04	04	04	05	05
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB071	09SB072	09SB073	09SB074	09SB075	09SB084	09SB085
SAMPLE NUMBER			09SS710002	09SS720002	09SS730002	09SS740002	09SS750002	09SS840002	09SS850002
SOIL CLASSIFICATION									
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			10/22/2006	10/21/2006	10/21/2006	10/21/2006	10/21/2006	8/29/2007	8/29/2007
Volatile Organics (ug/kg)									
METHYLENE CHLORIDE	9100	4690							
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE	5600	29000	4 U	4.2 U	3.9 U	9	3.9 U		
ACENAPHTHENE	370000	29000	4 U	4.2 U	3.9 U	3.5 U	3.9 U		
ACENAPHTHYLENE	370000	29000	4 U	4.2 U	3.9 U	3.5 U	3.9 U		
ANTHRACENE	2200000	29000	4 U	4.2 U	3.9 U	3.5 U	3.9 U		
BENZO(A)ANTHRACENE	150	1100	4 U	4.8 J	15	8.5 J	3.9 U		
BENZO(A)PYRENE	15	1100	4 UJ	4.2 U	19	3.5 UJ	3.9 U		
BENZO(B)FLUORANTHENE	150	1100	4 UJ	7.7 J	32	3.5 UJ	3.9 U		
BENZO(G,H,I)PERYLENE	230000	1100	4 UJ	4.2 U	14	3.5 UJ	3.9 U		
BENZO(K)FLUORANTHENE	1500	1100	4 UJ	4.2 U	8.8	3.5 UJ	3.9 U		
CHRYSENE	15000	1100	4 U	7.7 J	20	6.9 J	3.9 U		
FLUORANTHENE	230000	29000	4 U	11	37	5.3 J	3.9 U		
FLUORENE	270000	29000	4 U	4.2 U	3.9 U	3.5 U	3.9 U		
INDENO(1,2,3-CD)PYRENE	150	1100	4 UJ	4.2 U	11	3.5 UJ	3.9 U		
NAPHTHALENE	5600	29000	4 U	4.2 U	3.9 U	5.6 J	3.9 U		
PHENANTHRENE	230000	29000	4 U	4.8 J	14	7.4	3.9 U		
PYRENE	230000	1100	4 U	8.7	44	14 J	3.9 U		
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21	1.6 UJ	36 J	5.8	10	1.6 U	0.16 U	0.16 U
4,4'-DDE	1700	21	1.6 UJ	210	230	76	1.6 U	1.1 J	1.8 J
4,4'-DDT	1700	21	6.7 J	71	68	83	1.6 U	1.4 J	5.4
ALDRIN	29	99.39	0.79 UJ	0.84 U	0.77 U	0.69 U	0.77 U	0.068 U	0.07 U
ALPHA-CHLORDANE	1600	679.71	0.79 UJ	0.84 U	0.77 U	4.6	0.77 U	0.95 J	18
AROCLOR-1260	220	3.98	11 UJ	12 U	11 U	9.6 U	11 U		
BETA-BHC	320	9940	0.79 UJ	0.84 U	0.77 U	0.69 U	0.77 U	0.078 U	2.4
DELTA-BHC	90	2.38	0.79 UJ	0.84 U	0.77 U	0.69 U	0.77 U	0.6 J	0.078 U
DIELDRIN	30	4.9	1.6 UJ	67 R	1.6 U	3.5 R	1.6 U	0.11 U	0.12 U
ENDOSULFAN I	370000	119.27	0.79 UJ	0.84 U	0.77 U	0.69 U	0.77 U	0.086 U	0.088 U
GAMMA-CHLORDANE	1600	5.98	0.79 UJ	0.84 U	2.1	5.3	0.77 U	0.068 U	20
HEPTACHLOR	110	151.88	0.79 UJ	0.84 U	0.77 U	0.69 U	0.77 U	0.097 U	0.1 U
TOTAL AROCLOR	220	NA	0 U	0 U	0 U	0 U	0 U		
Herbicides (ug/kg)									
2,4,5-T	61000	108.8						0.24 U	0.25 U
2,4,5-TP (SILVEX)	49000	27.25						0.4 U	0.41 U
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ	NA	NA							
PH (S.U.)	NA	NA							
TOTAL ORGANIC CARBON (mg/kg)	NA	NA							
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	NA	NA	170	7.5	8	33	5.4 J		
OIL & GREASE - HEM	NA	NA							
OIL RANGE ORGANICS (C24-C40)	NA	NA							

TABLE 3-2

RESULTS FOR CHEMICALS DETECTED IN SURFACE SOIL AT FORMER BUILDING 55 PESTICIDE/FUEL AREA
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	05	05	05	05	05	05	05
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB086	09SB087	09SB088	09SB090	09SB090	09SB091	09SB092
SAMPLE NUMBER			09SS860002	09SS870002	09SS880002	09SS900002	09SS900002-D	09SS910002	09SS920002
SOIL CLASSIFICATION									
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	DUP	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			8/28/2007	8/28/2007	8/29/2007	8/29/2007	8/29/2007	8/28/2007	8/30/2007
Volatile Organics (ug/kg)									
METHYLENE CHLORIDE	9100	4690							
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE	5600	29000							
ACENAPHTHENE	370000	29000							
ACENAPHTHYLENE	370000	29000							
ANTHRACENE	2200000	29000							
BENZO(A)ANTHRACENE	150	1100							
BENZO(A)PYRENE	15	1100							
BENZO(B)FLUORANTHENE	150	1100							
BENZO(G,H,I)PERYLENE	230000	1100							
BENZO(K)FLUORANTHENE	1500	1100							
CHRYSENE	15000	1100							
FLUORANTHENE	230000	29000							
FLUORENE	270000	29000							
INDENO(1,2,3-CD)PYRENE	150	1100							
NAPHTHALENE	5600	29000							
PHENANTHRENE	230000	29000							
PYRENE	230000	1100							
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21	0.17 U						
4,4'-DDE	1700	21	2.7 J						
4,4'-DDT	1700	21	3.5						
ALDRIN	29	99.39	0.071 U						
ALPHA-CHLORDANE	1600	679.71	0.084 U						
AROCLOR-1260	220	3.98							
BETA-BHC	320	9940	0.081 U						
DELTA-BHC	90	2.38	0.079 U						
DIELDRIN	30	4.9	0.12 U						
ENDOSULFAN I	370000	119.27	0.089 U						
GAMMA-CHLORDANE	1600	5.98	0.071 U						
HEPTACHLOR	110	151.88	0.1 U						
TOTAL AROCLOR	220	NA							
Herbicides (ug/kg)									
2,4,5-T	61000	108.8	3.5 J	0.25 U	0.24 U	0.24 U	0.25 U	0.22 U	0.24 U
2,4,5-TP (SILVEX)	49000	27.25	2.9 J	0.41 U	0.4 U	0.4 U	0.42 U	0.37 U	0.4 U
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ	NA	NA							
PH (S.U.)	NA	NA							
TOTAL ORGANIC CARBON (mg/kg)	NA	NA							
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	NA	NA							
OIL & GREASE - HEM	NA	NA							
OIL RANGE ORGANICS (C24-C40)	NA	NA							

TABLE 3-2

RESULTS FOR CHEMICALS DETECTED IN SURFACE SOIL AT FORMER BUILDING 55 PESTICIDE/FUEL AREA
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	05	05	05	05	05	05	05
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB093	09SB094	09SB094	09SB095	09SB096	09SB096	09SB097
SAMPLE NUMBER			09SS930002	09SS940002	09SS940002-D	09SS950002	09SS960002	09SS960002-D	09SS970002
SOIL CLASSIFICATION									
SAMPLE CODE			NORMAL	NORMAL	DUP	NORMAL	NORMAL	DUP	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			8/29/2007	8/30/2007	8/30/2007	8/30/2007	8/30/2007	8/30/2007	8/29/2007
Volatile Organics (ug/kg)									
METHYLENE CHLORIDE	9100	4690							
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE	5600	29000							
ACENAPHTHENE	370000	29000							
ACENAPHTHYLENE	370000	29000							
ANTHRACENE	2200000	29000							
BENZO(A)ANTHRACENE	150	1100							
BENZO(A)PYRENE	15	1100							
BENZO(B)FLUORANTHENE	150	1100							
BENZO(G,H,I)PERYLENE	230000	1100							
BENZO(K)FLUORANTHENE	1500	1100							
CHRYSENE	15000	1100							
FLUORANTHENE	230000	29000							
FLUORENE	270000	29000							
INDENO(1,2,3-CD)PYRENE	150	1100							
NAPHTHALENE	5600	29000							
PHENANTHRENE	230000	29000							
PYRENE	230000	1100							
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21							
4,4'-DDE	1700	21							
4,4'-DDT	1700	21							
ALDRIN	29	99.39							
ALPHA-CHLORDANE	1600	679.71							
AROCLOR-1260	220	3.98							
BETA-BHC	320	9940							
DELTA-BHC	90	2.38							
DIELDRIN	30	4.9							
ENDOSULFAN I	370000	119.27							
GAMMA-CHLORDANE	1600	5.98							
HEPTACHLOR	110	151.88							
TOTAL AROCLOR	220	NA							
Herbicides (ug/kg)									
2,4,5-T	61000	108.8	0.24 U	0.23 U	0.23 U	0.23 U	0.24 U	0.26 U	0.25 U
2,4,5-TP (SILVEX)	49000	27.25	0.4 U	0.38 U	0.38 U	0.38 U	0.4 U	0.43 U	0.41 U
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ	NA	NA							
PH (S.U.)	NA	NA							
TOTAL ORGANIC CARBON (mg/kg)	NA	NA							
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	NA	NA							
OIL & GREASE - HEM	NA	NA							
OIL RANGE ORGANICS (C24-C40)	NA	NA							

TABLE 3-1

SUMMARY OF MAXIMUM DETECTED SOIL CONCENTRATIONS COMPARED TO HUMAN HEALTH AND ECOLOGICAL SCREENING CRITERIA
SWMU 9
NSWC CRANE
CRANE INDIANA

Chemical	Frequency of Detection	Range of Detected Concentrations	Sample Containing Maximum Concentration	Range of Nondetects	USEPA Region 9 PRG (Residential)[1]	USEPA Region 9 PRG (Industrial)[1]	IDEM Direct Contact Criteria (Residential)[2]	IDEM Direct Contact Criteria (Industrial)[2]	USEPA SSL Soil to Groundwater[3]	IDEM Migration to Groundwater[2]	USEPA Region 5 Ecological Screening Level[4]
Volatile Organic Compounds (ug/kg)											
1,1-Dichloroethane	1/87	1.36 J - 1.36 J	09SS380002	0.856 - 1.57	52000 N[5]	180000 N[5]	1300000	1700000	2100	5600	89600
2-Butanone	16/87	2 J - 54 J	09SS380002	0.856 - 1.57	2200000 N	11000000 N	44000000	70000000	4400	35000	12600
2-Hexanone	20/87	1 J - 4 J	09SB360204	0.866 - 1.57	NA	NA	NA	NA	NA	NA	443000
4-Methyl-2-Pentanone	6/87	1 J - 4 J	09SS380002	0.856 - 1.57	530000 N	4700000 N	12000000	29000000	620	20000	2500
Acetone	26/77	1 J - 320 J	09SS380002	0.866 - 35	1400000 N	5400000 N	35000000	51000000	6600	28000	255
Carbon Disulfide	1/87	5 J - 5 J	09SS380002	0.856 - 1.57	36000 N	720000 sat	900000	1200000	1500	10000	13100
Chlorobenzene	3/87	4 - 110	09SB250709	0.856 - 1.57	13000 N[5]	44000 N[5]	380000	510000	65	1300	2050
Methylene Chloride	9/87	1 J - 3 J	09SB390204 09SS400002	0.856 - 1.57	9100 C	21000 C	120000	200000	1.2	23	4690
Toluene	2/87	4 J - 4 J	09SB470204 09SS380002	0.856 - 1.57	520000 sat	520000 sat	8800000	16000000	590	12000	10000
Total Xylenes	2/87	6 J - 7 J	09SB240406	0.856 - 1.57	27000 N	420000 sat	690000	890000	7100	210000	NA
OSDRO (ug/kg)											
2-Methylnaphthalene	15/58	4.7 J - 850	09SS650002	3.7 - 5.6	5600 N[6]	19000 N[6]	630000	1600000	NA	3100	29000 [7]
Acenaphthene	8/58	3.9 J - 85	09SS800002	3.5 - 19	370000 N	2900000 N	9500000	24000000	31000	130000	29000 [7]
Acenaphthylene	2/58	4.4 J - 5.1 J	09SS800002	3.5 - 19	370000 N[8]	2900000 N[8]	1100000	2800000	NA	18000	29000 [7]
Anthracene	7/58	5.2 J - 130	09SS800002	3.5 - 8	2200000 N	100000000 max	47000000	120000000	650000	51000	29000 [7]
Benzo(a)anthracene	19/58	4.3 J - 730 J	09SS800002	3.7 - 5.1	150 C[5]	2100 C	5000	15000	160	19000	1100 [7]
Benzo(a)pyrene	13/58	5.6 J - 850 J	09SS800002	3.5 - 8	15 C[5]	210 C	500	1500	410	8200	1100 [7]
Benzo(b)fluoranthene	15/58	4.3 J - 1300 J	09SS800002	3.5 - 8	150 C[5]	2100 C	5000	15000	490	57000	1100 [7]
Benzo(g,h,i)perylene	16/58	14 - 760 J	09SS800002	3.5 - 5.1	230000 N[9]	2900000 N[9]	4700000[9]	12000000[9]	NA	NA	1100 [7]
Benzo(k)fluoranthene	9/58	8.8 - 370 J	09SS800002	3.5 - 8	1500 C[5]	21000 C[5]	50000	150000	490	39000	1100 [7]
Chrysene	18/58	4.9 J - 930 J	09SS800002	3.7 - 5.1	15000 C[5]	210000 C[5]	500000	1500000	160	25000	1100 [7]
Dibenzo(a,h)anthracene	3/58	9.5 - 150 J	09SS800002	3.5 - 19	15 C[5]	210 C[5]	500	1500	1500	18000	1100 [7]
Fluoranthene	19/58	5.3 J - 1300	09SS800002	3.7 - 5.1	230000 N	2200000 N	6300000	16000000	310000	880000	29000 [7]
Fluorene	7/58	12 - 64	09SB790406	3.5 - 19	270000 N	2600000 N	6300000	16000000	41000	170000	29000 [7]
Indeno(1,2,3-cd)pyrene	10/58	6.8 J - 580 J	09SS800002	3.5 - 19	150 C[5]	2100 C[5]	5000	15000	1400	3100	1100.0 [7]
Naphthalene	11/58	4.4 J - 330	09SS650002	3.7 - 5.1	5600 N	19000 N	3200000	8000000	3100	700	29000 [7]
Phenanthrene	21/58	4.3 J - 840	09SS800002	3.7 - 5.1	230000 N[9]	2900000 N[9]	470000	1200000	NA	13000	29000 [7]
Pyrene	21/58	4.7 J - 2500 J	09SS800002	3.7 - 5.1	230000 N	2900000 N	4700000	12000000	230000	570000	1100 [7]
Pesticides/PCBs (ug/kg)											
4,4'-DDD	46/204	1.1 J - 22000 J	09SS180002	0.16 - 4116	2400 C	10000 C	28000	120000	710	140000	21 [7]
4,4'-DDE	65/203	0.89 J - 130000	09SS180002	0.14 - 4116	1700 C	7000 C	20000	86000	2200	450000	21.0 [7]
4,4'-DDT	86/204	1.2 J - 2200000	09SS180002	0.16 - 4116	1700 C	7000 C	20000	86000	1300	260000	21.00 [7]
Aldrin	1/203	6.9 J - 6.9 J	09SS200002	0.067 - 1982	29 C	100 C	250	800	25	4900	99.4
alpha-BHC	4/203	1.5 J - 150	09SB240204	0.076 - 1982	90 C	360 C	990	4000	0.036	7.2	224
alpha-Chlordane	35/204	0.92 J - 170000	09SS180002	0.079 - 1982	1600 C[10]	6500 C[10]	17000[10]	68000[10]	480	NA	680
Aroclor-1016	2/192	23 - 900 J	09SB570406	9.52 - 27439	390 N	21000 C	1800[11]	5300[11]	NA	NA	680
Aroclor-1232	1/192	1000 - 1000	09SB540607	9.52 - 27439	220 C[11]	740 C[11]	1800[11]	5300[11]	NA	NA	680
Aroclor-1242	9/192	2000 - 260000	09SS340002	9.52 - 20000	220 C[11]	740 C[11]	5300[11]	5300[11]	NA	NA	680
Aroclor-1248	6/192	24 - 880	09SS510002	9.52 - 27439	220 C[11]	740 C[11]	1800[11]	5300[11]	NA	NA	680
Aroclor-1254	1/192	72 J - 72 J	09SS330002	9.6 - 27439	220 C[11]	740 C[11]	1800[11]	5300[11]	NA	NA	680
Aroclor-1260	18/192	16 J - 2200	09SB49A1415	9.52 - 27439	220 C[11]	740 C[11]	5300[11]	5300[11]	NA	NA	3.98
beta-BHC	5/203	1.5 J - 5.6 J	09SS200002	0.076 - 1982	320 C	1300 C	3300	12000	0.13	26	9940
delta-BHC	1/202	0.6 J - 0.6 J	09SB84-SO-0002	0.075 - 1982	90 C[12]	360 C[12]	990[12]	4000[12]	NA	NA	2.38
Dieldrin	17/201	1.6 J - 6000 J	09SS670002	0.11 - 4116	30 C	110 C	270	860	0.23	46	5 [7]
Endosulfan I	1/203	4 - 40 J	09SS200002-D	0.084 - 1982	370000 C[13]	3700000 C[13]	1100000[13]	2900000[13]	980[13]	NA	119

TABLE 3-1

SUMMARY OF MAXIMUM DETECTED SOIL CONCENTRATIONS COMPARED TO HUMAN HEALTH AND ECOLOGICAL SCREENING CRITERIA
SWMU 9
NSWC CRANE
CRANE INDIANA

Chemical	Frequency of Detection	Range of Detected Concentrations	Sample Containing Maximum Concentration	Range of Nondetects	USEPA Region 9 PRG (Residential)[1]	USEPA Region 9 PRG (Industrial)[1]	IDEM Direct Contact Criteria (Residential)[2]	IDEM Direct Contact Criteria (Industrial)[2]	USEPA SSL Soil to Groundwater[3]	IDEM Migration to Groundwater[2]	USEPA Region 5 Ecological Screening Level[4]
gamma-Chlordane	36/204	1 J - 210000	09SS180002	0.067 - 1982	1600 C[10]	6500 C[10]	17000[10]	68000[10]	480	NA	5.98
Heptachlor	3/203	3.4 J - 48000	09SS180002	0.095 - 1982	110 C	380 C	930	2900	1100	23000	152
Heptachlor Epoxide	9/202	1.4 J - 94	09SS250002	0.082 - 1982	53 C	190 C	470	1500	33	670	19.9
Methoxychlor	1/203	32 J - 32 J	09SB49A1415	1.1 - 19817	31000 N	310000 N	910000	2500000	7800	160000	680
Total Aroclor	38/38	16 - 260000	09SS340002	- - -	220 C	740 C	1800	5300	NA	6200	NA
Herbicides (ug/kg)											
2,4,5-T	2/65	2.8 J - 3.5 J	09SB86-SO-0002	0.22 - 0.28	61000 N	620000 N	1800000	4900000	540	2200	109
2,4,5-TP (Silvex)	1/65	2.9 J - 2.9 J	09SB86-SO-0002	0.37 - 0.46	49000 N	490000 N	NA	NA	1000	NA	27.3
2,4-D	1/65	5.1 J - 5.1 J	09SB106-SO-0406	0.32 - 0.39	69000 N	770000 N	2000000	5200000	74	350	119
Dioxin/Furans (ug/kg)											
1,2,3,4,6,7,8,9-OCDD	8/8	2.2 J - 16	09SS530002	- - -	13 C[14]	53 C[14]	NA	NA	NA	NA	NA
Miscellaneous Parameters											
Cation Exchange Capacity (MEQ)	19/19	4.2 - 21	09SS260002	- - -	NA	NA	NA	NA	NA	NA	NA
pH (SU)	19/19	4.1 - 9.9	09SS150002	- - -	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	16/19	1000 - 44000	09SS260002	1000 - 1000	NA	NA	NA	NA	NA	NA	NA
Petroleum Hydrocarbons (mg/kg)											
Diesel Range Organics	62/145	3.5 J - 5800 J	09SS400002	2.8 - 61.5	NA	NA	1600	3900	NA	80	NA
Gasoline Range Organics	6/82	10.6 - 49.7	09SS400002	2.82 - 3.48	NA	NA	800	1500	NA	25	NA
Oil & Grease - Hem	17/82	430 J - 9000	09SS400002	226 - 279	NA	NA	NA	NA	NA	NA	NA
Oil Range Organics (C24-C40)	23/87	28 - 10000 J	09SB180204	11.3 - 120	NA	NA	NA	NA	NA	NA	NA

1 - USEPA Region IX Preliminary Remediation Goal (PRG). The noncarcinogenic values (denoted with an "N" flag) are the PRG divided by 10 to correspond to a target hazard quotient of 0.1. (USEPA Region IX, October 2004, Updated December 28, 2004).
2 - Indiana Department of Environmental Management (IDEM), Risk Integrated System of Closure (RISC) residential closure levels for soil (IDEM, January 2006).
3 - USEPA Soil Screening Levels (SSLs). EPA Internet Site at http://risk.lsd.ornl.gov/calc_start.htm. Values are based on a DAF of 1.
4 - USEPA Region 5 Ecological Screening Levels, August 22, 2003.
5 - The toxicity criteria in the October 2004 PRG table is outdated. Value was updated using toxicity criteria from the April 2007 USEPA Region 3 RBC Table.
6 - Naphthalene is used as a surrogate for 2-methylnaphthalene.
7 - USEPA Ecological Soil Screening Levels (2003,2005,2007) available at http://www.epa.gov/ecotox/ecossl/
8 - Acenaphthene is used as a surrogate for acenaphthylene.
9 - Pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
10 - Chlordane is used as a surrogate for alpha- and gamma-chlordane.
11 - The value for Total PCB congeners (Aroclors) is presented.
12 - Alpha-BHC is used as a surrogate for delta BHC.
13 - Endosulfan is used as a surrogate for Endosulfan I, Endosulfan II, and Endosulfan Sulfate.
14 - The PRG presented for OCDD is based on the Region IX PRGs for 2,3,7,8-TCDD and the World Health Organization Toxicity Equivalent Factors (TEFs).

Shading indicates an exceedance of criteria.

C = Carcinogenic.
IDEM = Indiana Department of Environmental Management.
max = Ceiling limit.
mg/kg = Milligrams per kilogram.
N = Noncarcinogenic.
NA = No criterion available.
sat = Soil saturation concentraton.
ug/kg = Micrograms per kilogram.
USEPA = United States Environmental Protection Agency.

TABLE 3-1

SUMMARY OF MAXIMUM DETECTED SOIL CONCENTRATIONS COMPARED TO HUMAN HEALTH AND ECOLOGICAL SCREENING CRITERIA
SWMU 9
NSWC CRANE
CRANE INDIANA

Chemical	Frequency of Detection	Range of Detected Concentrations	Sample Containing Maximum Concentration	Range of Nondetects	USEPA Region 9 PRG (Residential)[1]	USEPA Region 9 PRG (Industrial)[1]	IDEM Direct Contact Criteria (Residential)[2]	IDEM Direct Contact Criteria (Industrial)[2]	USEPA SSL Soil to Groundwater[3]	IDEM Migration to Groundwater[2]	USEPA Region 5 Ecological Screening Level[4]
Associated Samples											
09SB100-SO-0002	09SB240406		09SB470608	09SB700204		09SB90-SO-0002	09SS340002				
09SB100-SO-0203	09SB250204		09SB480204	09SB700406		09SB90-SO-0002-D	09SS350002				
09SB101-SO-0002	09SB250709		09SB480406	09SB710204		09SB90-SO-0204	09SS360002				
09SB101-SO-0204	09SB260204		09SB480608	09SB710406		09SB90-SO-0406	09SS370002				
09SB102-SO-0002	09SB260507		09SB490204	09SB720204		09SB91-SO-0002	09SS380002				
09SB102-SO-0203	09SB270204		09SB490406	09SB720406		09SB91-SO-0204	09SS390002				
09SB103-SO-0002	09SB270507		09SB490607	09SB720810		09SB91-SO-0406	09SS400002				
09SB103-SO-0203	09SB280204		09SB49A0204	09SB730204		09SB91-SO-1416	09SS410002				
09SB104-SO-0002	09SB280608		09SB49A0406	09SB730406		09SB92-SO-0002	09SS420002				
09SB104-SO-0204	09SB290204		09SB49A1415	09SB730810		09SB93-SO-0002	09SS430002				
09SB104-SO-0406	09SB290507		09SB500204	09SB740204		09SB93-SO-0204	09SS440002				
09SB104-SO-1012	09SB300204		09SB500406	09SB740406		09SB93-SO-0406	09SS450002				
09SB105-SO-0002	09SB300507		09SB500406-D	09SB741416		09SB94-SO-0002	09SS460002				
09SB105-SO-0204	09SB310204		09SB500608	09SB750204		09SB94-SO-0002-D	09SS470002				
09SB105-SO-0406	09SB310507		09SB510204	09SB750406		09SB94-SO-0204	09SS480002				
09SB105-SO-1315	09SB320204		09SB510406	09SB750709		09SB95-SO-0002	09SS490002				
09SB106-SO-0002	09SB320406		09SB510608	09SB780204		09SB96-SO-0002	09SS49A0002				
09SB106-SO-0204	09SB330204		09SB520204	09SB780406		09SB96-SO-0002-D	09SS500002				
09SB106-SO-0406	09SB330507		09SB520406	09SB780810		09SB96-SO-0204	09SS510002				
09SB106-SO-1214	09SB340204		09SB520709	09SB790204		09SB97-SO-0002	09SS520002				
09SB107-SO-0002	09SB340406		09SB530204	09SB790406		09SB97-SO-0204	09SS530002				
09SB108-SO-0002	09SB350204		09SB530406	09SB790810		09SB98-SO-0002	09SS540002				
09SB108-SO-0204	09SB350406		09SB530608	09SB800204		09SB98-SO-0204	09SS550002				
09SB120204	09SB360204		09SB540204	09SB800406		09SB98-SO-0406	09SS560002				
09SB121315	09SB370204		09SB540204-D	09SB810204		09SB98-SO-1618	09SS570002				
09SB130204	09SB370406		09SB540406	09SB810406		09SB99-SO-0002	09SS650002				
09SB130911	09SB370810		09SB540607	09SB810709		09SB99-SO-0002-D	09SS660002				
09SB140204	09SB390204		09SB550204	09SB810709-D		09SS120002	09SS670002				
09SB140809	09SB390406		09SB550406	09SB830204		09SS130002	09SS680002				
09SB151112	09SB390608		09SB550608	09SB830406		09SS140002	09SS690002				
09SB151416	09SB410204		09SB560204	09SB84-SO-0002		09SS150002	09SS700002				
09SB151416-D	09SB410405		09SB560406	09SB84-SO-0204		09SS160002	09SS710002				
09SB160607	09SB420204		09SB560607	09SB84-SO-0406		09SS170002	09SS720002				
09SB161314	09SB420406		09SB570204	09SB84-SO-0607		09SS180002	09SS730002				
09SB170204	09SB420607		09SB570406	09SB85-SO-0002		09SS190002	09SS740002				
09SB170911	09SB430204		09SB570608	09SB85-SO-0204		09SS200002	09SS750002				
09SB180204	09SB430406		09SB650204	09SB85-SO-0204-D		09SS200002-D	09SS780002				
09SB180406	09SB431618		09SB650406	09SB85-SO-0406		09SS210002	09SS790002				
09SB190204	09SB431618-D		09SB651416	09SB86-SO-0002		09SS220002	09SS800002				
09SB190406	09SB440204		09SB651416-D	09SB86-SO-0204		09SS230002	09SS810002				
09SB200204	09SB440405		09SB660204	09SB86-SO-0406		09SS240002	09SS820002				
09SB200608	09SB450204		09SB660406	09SB86-SO-0810		09SS250002	09SS830002				
09SB210204	09SB450406		09SB661416	09SB87-SO-0002		09SS260002					
09SB210507	09SB451416		09SB670204	09SB87-SO-0204		09SS270002					
09SB220204	09SB460204		09SB670406	09SB87-SO-0406		09SS280002					
09SB220507	09SB460406		09SB670406-D	09SB87-SO-1012		09SS290002					
09SB220507-D	09SB460607		09SB671214	09SB88-SO-0002		09SS300002					
09SB230204	09SB470204		09SB680204	09SB88-SO-0204		09SS310002					
09SB230507	09SB470204-D		09SB690204	09SB88-SO-0406		09SS320002					
09SB240204	09SB470406		09SB690406	09SB88-SO-0810		09SS330002					

TABLE 3-2

RESULTS FOR CHEMICALS DETECTED IN SURFACE SOIL AT FORMER BUILDING 55 PESTICIDE/FUEL AREA
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	01	01	01	01	01	01	01
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB012	09SB013	09SB014	09SB015/TW001	09SB016	09SB017	09SB018
SAMPLE NUMBER			09SS120002	09SS130002	09SS140002	09SS150002	09SS160002	09SS170002	09SS180002
SOIL CLASSIFICATION			3	3	3	3	3	3	3
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/4/2005
Volatile Organics (ug/kg)									
METHYLENE CHLORIDE	9100	4690							
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE	5600	29000							
ACENAPHTHENE	370000	29000							
ACENAPHTHYLENE	370000	29000							
ANTHRACENE	2200000	29000							
BENZO(A)ANTHRACENE	150	1100							
BENZO(A)PYRENE	15	1100							
BENZO(B)FLUORANTHENE	150	1100							
BENZO(G,H,I)PERYLENE	230000	1100							
BENZO(K)FLUORANTHENE	1500	1100							
CHRYSENE	15000	1100							
FLUORANTHENE	230000	29000							
FLUORENE	270000	29000							
INDENO(1,2,3-CD)PYRENE	150	1100							
NAPHTHALENE	5600	29000							
PHENANTHRENE	230000	29000							
PYRENE	230000	1100							
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21	3.3 U	3.2 U	3.2 U	49	5.1 J	3.1 U	22000 J
4,4'-DDE	1700	21	3.3 U	3.2 U	3.2 U	8.1 J	320	3.8	130000
4,4'-DDT	1700	21	3.3 U	3.2 U	1.2 J	81 J	140	1.5 J	2200000
ALDRIN	29	99.39	1.6 U	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U	1600 U
ALPHA-CHLORDANE	1600	679.71	1.6 U	1.5 U	2.4	1.5 U	3.3	1.5 U	170000
AROCLOR-1260	220	3.98	20 U	20 U	20 U	19 U	18 U	19 U	20000 U
BETA-BHC	320	9940	1.6 U	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U	1600 U
DELTA-BHC	90	2.38	1.6 U	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U	1600 U
DIELDRIN	30	4.9	3.3 U	3.2 U	3.2 U	3.1 U	8.1	3.1 U	3300 U
ENDOSULFAN I	370000	119.27	1.6 U	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U	1600 U
GAMMA-CHLORDANE	1600	5.98	1.6 U	1.5 U	3.9	1.5 U	1.4 U	1.5 U	210000
HEPTACHLOR	110	151.88	1.6 U	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U	48000
TOTAL AROCLOR	220	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U
Herbicides (ug/kg)									
2,4,5-T	61000	108.8							
2,4,5-TP (SILVEX)	49000	27.25							
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ	NA	NA	16 J			6 J			
PH (S.U.)	NA	NA	6.9			9.9			
TOTAL ORGANIC CARBON (mg/kg)	NA	NA	5500 J			23000 J			
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	NA	NA							
OIL & GREASE - HEM	NA	NA							
OIL RANGE ORGANICS (C24-C40)	NA	NA							

TABLE 3-2

RESULTS FOR CHEMICALS DETECTED IN SURFACE SOIL AT FORMER BUILDING 55 PESTICIDE/FUEL AREA
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	02	02	02	02	02	02	02
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB019	09SB020	09SB020	09SB021	09SB022	09SB023/TW004	09SB024/TW006
SAMPLE NUMBER			09SS190002	09SS200002	09SS200002-D	09SS210002	09SS220002	09SS230002	09SS240002
SOIL CLASSIFICATION			3	3		3	3	3	3
SAMPLE CODE			NORMAL	NORMAL	DUP	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005
Volatile Organics (ug/kg)									
METHYLENE CHLORIDE	9100	4690							
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE	5600	29000							
ACENAPHTHENE	370000	29000							
ACENAPHTHYLENE	370000	29000							
ANTHRACENE	2200000	29000							
BENZO(A)ANTHRACENE	150	1100							
BENZO(A)PYRENE	15	1100							
BENZO(B)FLUORANTHENE	150	1100							
BENZO(G,H,I)PERYLENE	230000	1100							
BENZO(K)FLUORANTHENE	1500	1100							
CHRYSENE	15000	1100							
FLUORANTHENE	230000	29000							
FLUORENE	270000	29000							
INDENO(1,2,3-CD)PYRENE	150	1100							
NAPHTHALENE	5600	29000							
PHENANTHRENE	230000	29000							
PYRENE	230000	1100							
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21	820 J	1700	1400	220	65	1.63 U	1.59 U
4,4'-DDE	1700	21	3100 J	670	520	45	10	1.63 U	70
4,4'-DDT	1700	21	27000 J	3500	3700	180	66	1.63 U	350
ALDRIN	29	99.39	0.778 UJ	6.9 J	6.33 U	0.794 U	0.812 U	0.784 U	0.767 U
ALPHA-CHLORDANE	1600	679.71	700 J	140	110	74	19	0.784 U	7.2 J
AROCLOR-1260	220	3.98	10.8 UJ	55 U	87.7 U	11 U	11.2 U	10.9 U	10.6 U
BETA-BHC	320	9940	0.778 UJ	5.6 J	6.33 U	2 J	0.812 U	0.784 U	0.767 U
DELTA-BHC	90	2.38	0.778 UJ	3.97 U	6.33 U	0.794 U	0.812 U	0.784 U	0.767 U
DIELDRIN	30	4.9	7 J	420	250 J	12	1.69 U	1.63 U	1.59 U
ENDOSULFAN I	370000	119.27	0.778 UJ	3.97 UJ	40 J	0.794 U	0.812 U	0.784 U	0.767 U
GAMMA-CHLORDANE	1600	5.98	700 J	150	120	50	11	0.784 U	16 J
HEPTACHLOR	110	151.88	3.4 J	3.97 U	6.33 U	0.794 U	0.812 U	0.784 U	0.767 U
TOTAL AROCLOR	220	NA	0 U	0 U		0 U	0 U	0 U	0 U
Herbicides (ug/kg)									
2,4,5-T	61000	108.8							
2,4,5-TP (SILVEX)	49000	27.25							
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ	NA	NA		13				15	
PH (S.U.)	NA	NA		6.9				6.7	
TOTAL ORGANIC CARBON (mg/kg)	NA	NA		4000				1400	
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	NA	NA							
OIL & GREASE - HEM	NA	NA							
OIL RANGE ORGANICS (C24-C40)	NA	NA							

TABLE 3-2

RESULTS FOR CHEMICALS DETECTED IN SURFACE SOIL AT FORMER BUILDING 55 PESTICIDE/FUEL AREA
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	02	02	02	02	02	02	03
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB025	09SB026	09SB027/TW005	09SB028	09SB029	09SB030	09SB042
SAMPLE NUMBER			09SS250002	09SS260002	09SS270002	09SS280002	09SS290002	09SS300002	09SS420002
SOIL CLASSIFICATION			3	3	3	3	3	3	3
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			5/9/2005	5/9/2005	5/9/2005	5/10/2005	5/10/2005	5/10/2005	10/3/2005
Volatile Organics (ug/kg)									
METHYLENE CHLORIDE	9100	4690							1.05 UJ
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE	5600	29000							
ACENAPHTHENE	370000	29000							
ACENAPHTHYLENE	370000	29000							
ANTHRACENE	2200000	29000							
BENZO(A)ANTHRACENE	150	1100							
BENZO(A)PYRENE	15	1100							
BENZO(B)FLUORANTHENE	150	1100							
BENZO(G,H,I)PERYLENE	230000	1100							
BENZO(K)FLUORANTHENE	1500	1100							
CHRYSENE	15000	1100							
FLUORANTHENE	230000	29000							
FLUORENE	270000	29000							
INDENO(1,2,3-CD)PYRENE	150	1100							
NAPHTHALENE	5600	29000							
PHENANTHRENE	230000	29000							
PYRENE	230000	1100							
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21	19 J	1800 J	83	1.57 U	1.65 U	1.77 U	1.67 U
4,4'-DDE	1700	21	400	30000 J	80	1.57 U	1.65 U	1.77 U	13 J
4,4'-DDT	1700	21	990	110000 J	47	6.6 J	1.65 U	1.77 U	13
ALDRIN	29	99.39	0.703 U	93.8 U	0.742 U	0.756 U	0.793 U	0.852 U	0.803 U
ALPHA-CHLORDANE	1600	679.71	800	1000 J	170	0.756 U	0.793 U	0.852 U	0.803 U
AROCLOR-1260	220	3.98	38.9 U	1299 U	10.3 U	10.5 U	11 U	11.8 U	11.1 UJ
BETA-BHC	320	9940	0.703 U	93.8 U	0.742 U	0.756 U	0.793 U	0.852 U	0.803 U
DELTA-BHC	90	2.38	0.703 U	93.8 U	0.742 U	0.756 U	0.793 U	0.852 U	0.803 UJ
DIELDRIN	30	4.9	17	210 J	1.54 U	1.57 U	1.65 U	1.77 U	1.67 U
ENDOSULFAN I	370000	119.27	0.703 U	93.8 U	0.742 U	0.756 U	0.793 U	0.852 U	0.803 U
GAMMA-CHLORDANE	1600	5.98	760	1100 J	190	0.756 U	0.793 U	0.852 U	0.803 U
HEPTACHLOR	110	151.88	59	93.8 U	0.742 U	0.756 U	0.793 U	0.852 U	0.803 U
TOTAL AROCLOR	220	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U
Herbicides (ug/kg)									
2,4,5-T	61000	108.8							
2,4,5-TP (SILVEX)	49000	27.25							
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ	NA	NA		21			16		
PH (S.U.)	NA	NA		7.6			6.6		
TOTAL ORGANIC CARBON (mg/kg)	NA	NA		44000			1000 U		
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	NA	NA							10
OIL & GREASE - HEM	NA	NA							247 U
OIL RANGE ORGANICS (C24-C40)	NA	NA							36

TABLE 3-2

RESULTS FOR CHEMICALS DETECTED IN SURFACE SOIL AT FORMER BUILDING 55 PESTICIDE/FUEL AREA
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	03	03	03	03	03	03	03
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB043	09SB044	09SB045	09SB046	09SB047	09SB048	09SB049
SAMPLE NUMBER			09SS430002	09SS440002	09SS450002	09SS460002	09SS470002	09SS480002	09SS490002
SOIL CLASSIFICATION			3	3	3	3	3	3	3
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			10/3/2005	10/3/2005	10/3/2005	10/3/2005	9/30/2005	9/30/2005	9/30/2005
Volatile Organics (ug/kg)									
METHYLENE CHLORIDE	9100	4690	0.905 UJ	1.09 UJ	0.973 UJ	1.04 UJ	1.06 UJ	1.22 UJ	1 J
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE	5600	29000							
ACENAPHTHENE	370000	29000							
ACENAPHTHYLENE	370000	29000							
ANTHRACENE	2200000	29000							
BENZO(A)ANTHRACENE	150	1100							
BENZO(A)PYRENE	15	1100							
BENZO(B)FLUORANTHENE	150	1100							
BENZO(G,H,I)PERYLENE	230000	1100							
BENZO(K)FLUORANTHENE	1500	1100							
CHRYSENE	15000	1100							
FLUORANTHENE	230000	29000							
FLUORENE	270000	29000							
INDENO(1,2,3-CD)PYRENE	150	1100							
NAPHTHALENE	5600	29000							
PHENANTHRENE	230000	29000							
PYRENE	230000	1100							
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21	1.56 U	1500 J	1.6 UJ	1034 U	120	250 J	1.63 UJ
4,4'-DDE	1700	21	60 J	2200	1.6 UJ	1900 J	300	560 J	28 J
4,4'-DDT	1700	21	66	570	1.6 U	130000 J	320	830 J	9.3
ALDRIN	29	99.39	0.753 U	0.806 U	0.771 UJ	498 U	0.799 UJ	0.853 UJ	0.787 UJ
ALPHA-CHLORDANE	1600	679.71	0.753 U	900	0.771 U	498 U	0.799 U	0.853 U	0.787 U
AROCLOR-1260	220	3.98	10.4 UJ	11.2 U	10.7 U	6893 U	11.1 U	11.8 U	21 J
BETA-BHC	320	9940	0.753 U	0.806 U	0.771 UJ	498 U	0.799 U	0.853 U	0.787 U
DELTA-BHC	90	2.38	0.753 UJ	0.806 U	0.771 UJ	498 U	0.799 UJ	0.853 UJ	0.787 UJ
DIELDRIN	30	4.9	1.56 U	1.67 U	1.6 UJ	1034 U	6.6	1.77 U	1.63 U
ENDOSULFAN I	370000	119.27	0.753 U	0.806 U	0.771 U	498 U	0.799 U	0.853 U	0.787 U
GAMMA-CHLORDANE	1600	5.98	3.3	820	0.771 U	498 U	0.799 U	0.853 U	0.787 U
HEPTACHLOR	110	151.88	0.753 U	0.806 U	0.771 UJ	498 U	0.799 UJ	0.853 UJ	0.787 UJ
TOTAL AROCLOR	220	NA	0 U	0 U	0 U	0 U	0 U	0 U	21
Herbicides (ug/kg)									
2,4,5-T	61000	108.8							
2,4,5-TP (SILVEX)	49000	27.25							
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ	NA	NA							
PH (S.U.)	NA	NA							
TOTAL ORGANIC CARBON (mg/kg)	NA	NA							
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	NA	NA	35	120	2.97 U	58	3.07 U	180	3.03 U
OIL & GREASE - HEM	NA	NA	680	2700	237 U	440 J	246 U	3200	242 U
OIL RANGE ORGANICS (C24-C40)	NA	NA	78	720	11.9 U	81	12.3 U	730	12.1 U

TABLE 3-2

RESULTS FOR CHEMICALS DETECTED IN SURFACE SOIL AT FORMER BUILDING 55 PESTICIDE/FUEL AREA
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	03	04	04	04	04	04	04
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB049A	09SB065	09SB066	09SB067	09SB068	09SB069	09SB070
SAMPLE NUMBER			09SS49A0002	09SS650002	09SS660002	09SS670002	09SS680002	09SS690002	09SS700002
SOIL CLASSIFICATION			3						
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			9/30/2005	10/21/2006	10/21/2006	10/21/2006	10/22/2006	10/22/2006	10/22/2006
Volatile Organics (ug/kg)									
METHYLENE CHLORIDE	9100	4690	1.05 UJ						
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE	5600	29000		850	5.5 J	66	4.3 U	4.2 U	4.3 U
ACENAPHTHENE	370000	29000		21	3.8 U	3.9 J	4.3 U	4.2 U	4.3 U
ACENAPHTHYLENE	370000	29000		3.7 U	3.8 U	4.4 J	4.3 U	4.2 U	4.3 U
ANTHRACENE	2200000	29000		27	6 J	6.9 J	4.3 U	4.2 U	4.3 U
BENZO(A)ANTHRACENE	150	1100		45	44 J	16 J	4.3 U	4.2 U	4.3 U
BENZO(A)PYRENE	15	1100		29 J	52 J	3.7 UJ	4.3 U	4.2 U	4.3 U
BENZO(B)FLUORANTHENE	150	1100		45 J	73 J	27 J	4.3 U	4.2 U	4.3 U
BENZO(G,H,I)PERYLENE	230000	1100		42 J	64 J	42 J	4.3 U	4.2 U	4.3 U
BENZO(K)FLUORANTHENE	1500	1100		11 J	26 J	3.7 UJ	4.3 U	4.2 U	4.3 U
CHRYSENE	15000	1100		44	52 J	28 J	4.3 U	4.2 U	4.3 U
FLUORANTHENE	230000	29000		46	72	16	4.3 U	4.2 U	4.3 U
FLUORENE	270000	29000		13	3.8 U	3.7 U	4.3 U	4.2 U	4.3 U
INDENO(1,2,3-CD)PYRENE	150	1100		23 J	46 J	3.7 UJ	4.3 U	4.2 U	4.3 U
NAPHTHALENE	5600	29000		330	3.8 U	26	4.3 U	4.2 U	4.3 U
PHENANTHRENE	230000	29000		160	40	57	4.3 U	4.2 U	4.3 U
PYRENE	230000	1100		87	140 J	44 J	4.3 U	4.2 U	4.3 U
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21	92 J	39 J	290 J	160 J	1.7 UJ	170 J	5400 J
4,4'-DDE	1700	21	900	48 J	730 J	1500 J	5.9 J	180	3700 J
4,4'-DDT	1700	21	690	34 J	2500 J	2000 J	17 J	6400	190000
ALDRIN	29	99.39	0.778 UJ	0.73 U	0.75 UR	0.72 UJ	0.84 UJ	42 U	84 U
ALPHA-CHLORDANE	1600	679.71	0.778 U	7.6	220 J	790 J	0.84 UJ	78 J	360 J
AROCLOR-1260	220	3.98	10.8 U	10 U	10 UR	10 UJ	12 UJ	580 U	1200 U
BETA-BHC	320	9940	0.778 U	0.73 U	0.75 UR	0.72 UJ	0.84 UJ	42 U	84 U
DELTA-BHC	90	2.38	0.778 UJ	0.73 U	0.75 UR	3 R	0.84 UJ	42 U	84 U
DIELDRIN	30	4.9	1.62 U	1.5 U	1.6 UR	6000 J	1.7 UJ	360	4200 J
ENDOSULFAN I	370000	119.27	0.778 U	0.73 U	0.75 UR	0.72 UJ	0.84 UJ	42 U	84 U
GAMMA-CHLORDANE	1600	5.98	9.6	20 J	260 J	860 J	0.84 UJ	73 J	540 J
HEPTACHLOR	110	151.88	0.778 UJ	0.73 U	0.75 UR	0.72 UJ	0.84 UJ	42 U	84 U
TOTAL AROCLOR	220	NA	0 U	0 U	70	0 U	0 U	0 U	0 U
Herbicides (ug/kg)									
2,4,5-T	61000	108.8							
2,4,5-TP (SILVEX)	49000	27.25							
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ	NA	NA							
PH (S.U.)	NA	NA							
TOTAL ORGANIC CARBON (mg/kg)	NA	NA							
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	NA	NA	22	95	38	200	12 J	13 J	360
OIL & GREASE - HEM	NA	NA	240 U						
OIL RANGE ORGANICS (C24-C40)	NA	NA	76						

TABLE 3-2

RESULTS FOR CHEMICALS DETECTED IN SURFACE SOIL AT FORMER BUILDING 55 PESTICIDE/FUEL AREA
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	04	04	04	04	04	05	05
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB071	09SB072	09SB073	09SB074	09SB075	09SB084	09SB085
SAMPLE NUMBER			09SS710002	09SS720002	09SS730002	09SS740002	09SS750002	09SS840002	09SS850002
SOIL CLASSIFICATION									
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			10/22/2006	10/21/2006	10/21/2006	10/21/2006	10/21/2006	8/29/2007	8/29/2007
Volatile Organics (ug/kg)									
METHYLENE CHLORIDE	9100	4690							
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE	5600	29000	4 U	4.2 U	3.9 U	9	3.9 U		
ACENAPHTHENE	370000	29000	4 U	4.2 U	3.9 U	3.5 U	3.9 U		
ACENAPHTHYLENE	370000	29000	4 U	4.2 U	3.9 U	3.5 U	3.9 U		
ANTHRACENE	2200000	29000	4 U	4.2 U	3.9 U	3.5 U	3.9 U		
BENZO(A)ANTHRACENE	150	1100	4 U	4.8 J	15	8.5 J	3.9 U		
BENZO(A)PYRENE	15	1100	4 UJ	4.2 U	19	3.5 UJ	3.9 U		
BENZO(B)FLUORANTHENE	150	1100	4 UJ	7.7 J	32	3.5 UJ	3.9 U		
BENZO(G,H,I)PERYLENE	230000	1100	4 UJ	4.2 U	14	3.5 UJ	3.9 U		
BENZO(K)FLUORANTHENE	1500	1100	4 UJ	4.2 U	8.8	3.5 UJ	3.9 U		
CHRYSENE	15000	1100	4 U	7.7 J	20	6.9 J	3.9 U		
FLUORANTHENE	230000	29000	4 U	11	37	5.3 J	3.9 U		
FLUORENE	270000	29000	4 U	4.2 U	3.9 U	3.5 U	3.9 U		
INDENO(1,2,3-CD)PYRENE	150	1100	4 UJ	4.2 U	11	3.5 UJ	3.9 U		
NAPHTHALENE	5600	29000	4 U	4.2 U	3.9 U	5.6 J	3.9 U		
PHENANTHRENE	230000	29000	4 U	4.8 J	14	7.4	3.9 U		
PYRENE	230000	1100	4 U	8.7	44	14 J	3.9 U		
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21	1.6 UJ	36 J	5.8	10	1.6 U	0.16 U	0.16 U
4,4'-DDE	1700	21	1.6 UJ	210	230	76	1.6 U	1.1 J	1.8 J
4,4'-DDT	1700	21	6.7 J	71	68	83	1.6 U	1.4 J	5.4
ALDRIN	29	99.39	0.79 UJ	0.84 U	0.77 U	0.69 U	0.77 U	0.068 U	0.07 U
ALPHA-CHLORDANE	1600	679.71	0.79 UJ	0.84 U	0.77 U	4.6	0.77 U	0.95 J	18
AROCLOR-1260	220	3.98	11 UJ	12 U	11 U	9.6 U	11 U		
BETA-BHC	320	9940	0.79 UJ	0.84 U	0.77 U	0.69 U	0.77 U	0.078 U	2.4
DELTA-BHC	90	2.38	0.79 UJ	0.84 U	0.77 U	0.69 U	0.77 U	0.6 J	0.078 U
DIELDRIN	30	4.9	1.6 UJ	67 R	1.6 U	3.5 R	1.6 U	0.11 U	0.12 U
ENDOSULFAN I	370000	119.27	0.79 UJ	0.84 U	0.77 U	0.69 U	0.77 U	0.086 U	0.088 U
GAMMA-CHLORDANE	1600	5.98	0.79 UJ	0.84 U	2.1	5.3	0.77 U	0.068 U	20
HEPTACHLOR	110	151.88	0.79 UJ	0.84 U	0.77 U	0.69 U	0.77 U	0.097 U	0.1 U
TOTAL AROCLOR	220	NA	0 U	0 U	0 U	0 U	0 U		
Herbicides (ug/kg)									
2,4,5-T	61000	108.8						0.24 U	0.25 U
2,4,5-TP (SILVEX)	49000	27.25						0.4 U	0.41 U
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ	NA	NA							
PH (S.U.)	NA	NA							
TOTAL ORGANIC CARBON (mg/kg)	NA	NA							
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	NA	NA	170	7.5	8	33	5.4 J		
OIL & GREASE - HEM	NA	NA							
OIL RANGE ORGANICS (C24-C40)	NA	NA							

TABLE 3-2

RESULTS FOR CHEMICALS DETECTED IN SURFACE SOIL AT FORMER BUILDING 55 PESTICIDE/FUEL AREA
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	05	05	05	05	05	05	05
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB086	09SB087	09SB088	09SB090	09SB090	09SB091	09SB092
SAMPLE NUMBER			09SS860002	09SS870002	09SS880002	09SS900002	09SS900002-D	09SS910002	09SS920002
SOIL CLASSIFICATION									
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	DUP	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			8/28/2007	8/28/2007	8/29/2007	8/29/2007	8/29/2007	8/28/2007	8/30/2007
Volatile Organics (ug/kg)									
METHYLENE CHLORIDE	9100	4690							
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE	5600	29000							
ACENAPHTHENE	370000	29000							
ACENAPHTHYLENE	370000	29000							
ANTHRACENE	2200000	29000							
BENZO(A)ANTHRACENE	150	1100							
BENZO(A)PYRENE	15	1100							
BENZO(B)FLUORANTHENE	150	1100							
BENZO(G,H,I)PERYLENE	230000	1100							
BENZO(K)FLUORANTHENE	1500	1100							
CHRYSENE	15000	1100							
FLUORANTHENE	230000	29000							
FLUORENE	270000	29000							
INDENO(1,2,3-CD)PYRENE	150	1100							
NAPHTHALENE	5600	29000							
PHENANTHRENE	230000	29000							
PYRENE	230000	1100							
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21	0.17 U						
4,4'-DDE	1700	21	2.7 J						
4,4'-DDT	1700	21	3.5						
ALDRIN	29	99.39	0.071 U						
ALPHA-CHLORDANE	1600	679.71	0.084 U						
AROCLOR-1260	220	3.98							
BETA-BHC	320	9940	0.081 U						
DELTA-BHC	90	2.38	0.079 U						
DIELDRIN	30	4.9	0.12 U						
ENDOSULFAN I	370000	119.27	0.089 U						
GAMMA-CHLORDANE	1600	5.98	0.071 U						
HEPTACHLOR	110	151.88	0.1 U						
TOTAL AROCLOR	220	NA							
Herbicides (ug/kg)									
2,4,5-T	61000	108.8	3.5 J	0.25 U	0.24 U	0.24 U	0.25 U	0.22 U	0.24 U
2,4,5-TP (SILVEX)	49000	27.25	2.9 J	0.41 U	0.4 U	0.4 U	0.42 U	0.37 U	0.4 U
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ	NA	NA							
PH (S.U.)	NA	NA							
TOTAL ORGANIC CARBON (mg/kg)	NA	NA							
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	NA	NA							
OIL & GREASE - HEM	NA	NA							
OIL RANGE ORGANICS (C24-C40)	NA	NA							

TABLE 3-2

RESULTS FOR CHEMICALS DETECTED IN SURFACE SOIL AT FORMER BUILDING 55 PESTICIDE/FUEL AREA
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	05	05	05	05	05	05	05
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB093	09SB094	09SB094	09SB095	09SB096	09SB096	09SB097
SAMPLE NUMBER			09SS930002	09SS940002	09SS940002-D	09SS950002	09SS960002	09SS960002-D	09SS970002
SOIL CLASSIFICATION									
SAMPLE CODE			NORMAL	NORMAL	DUP	NORMAL	NORMAL	DUP	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			8/29/2007	8/30/2007	8/30/2007	8/30/2007	8/30/2007	8/30/2007	8/29/2007
Volatile Organics (ug/kg)									
METHYLENE CHLORIDE	9100	4690							
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE	5600	29000							
ACENAPHTHENE	370000	29000							
ACENAPHTHYLENE	370000	29000							
ANTHRACENE	2200000	29000							
BENZO(A)ANTHRACENE	150	1100							
BENZO(A)PYRENE	15	1100							
BENZO(B)FLUORANTHENE	150	1100							
BENZO(G,H,I)PERYLENE	230000	1100							
BENZO(K)FLUORANTHENE	1500	1100							
CHRYSENE	15000	1100							
FLUORANTHENE	230000	29000							
FLUORENE	270000	29000							
INDENO(1,2,3-CD)PYRENE	150	1100							
NAPHTHALENE	5600	29000							
PHENANTHRENE	230000	29000							
PYRENE	230000	1100							
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21							
4,4'-DDE	1700	21							
4,4'-DDT	1700	21							
ALDRIN	29	99.39							
ALPHA-CHLORDANE	1600	679.71							
AROCLOR-1260	220	3.98							
BETA-BHC	320	9940							
DELTA-BHC	90	2.38							
DIELDRIN	30	4.9							
ENDOSULFAN I	370000	119.27							
GAMMA-CHLORDANE	1600	5.98							
HEPTACHLOR	110	151.88							
TOTAL AROCLOR	220	NA							
Herbicides (ug/kg)									
2,4,5-T	61000	108.8	0.24 U	0.23 U	0.23 U	0.23 U	0.24 U	0.26 U	0.25 U
2,4,5-TP (SILVEX)	49000	27.25	0.4 U	0.38 U	0.38 U	0.38 U	0.4 U	0.43 U	0.41 U
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ	NA	NA							
PH (S.U.)	NA	NA							
TOTAL ORGANIC CARBON (mg/kg)	NA	NA							
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	NA	NA							
OIL & GREASE - HEM	NA	NA							
OIL RANGE ORGANICS (C24-C40)	NA	NA							

TABLE 3-2

RESULTS FOR CHEMICALS DETECTED IN SURFACE SOIL AT FORMER BUILDING 55 PESTICIDE/FUEL AREA
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	05	05	05	05	05	05	05
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB098	09SB099	09SB099	09SB100	09SB101	09SB102	09SB103
SAMPLE NUMBER			09SS980002	09SS990002	09SS990002-D	09SS1000002	09SS1010002	09SS1020002	09SS1030002
SOIL CLASSIFICATION									
SAMPLE CODE			NORMAL	NORMAL	DUP	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			8/28/2007	8/30/2007	8/30/2007	8/29/2007	8/30/2007	8/29/2007	8/29/2007
Volatile Organics (ug/kg)									
METHYLENE CHLORIDE	9100	4690							
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE	5600	29000							
ACENAPHTHENE	370000	29000							
ACENAPHTHYLENE	370000	29000							
ANTHRACENE	2200000	29000							
BENZO(A)ANTHRACENE	150	1100							
BENZO(A)PYRENE	15	1100							
BENZO(B)FLUORANTHENE	150	1100							
BENZO(G,H,I)PERYLENE	230000	1100							
BENZO(K)FLUORANTHENE	1500	1100							
CHRYSENE	15000	1100							
FLUORANTHENE	230000	29000							
FLUORENE	270000	29000							
INDENO(1,2,3-CD)PYRENE	150	1100							
NAPHTHALENE	5600	29000							
PHENANTHRENE	230000	29000							
PYRENE	230000	1100							
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21							
4,4'-DDE	1700	21							
4,4'-DDT	1700	21							
ALDRIN	29	99.39							
ALPHA-CHLORDANE	1600	679.71							
AROCLOR-1260	220	3.98							
BETA-BHC	320	9940							
DELTA-BHC	90	2.38							
DIELDRIN	30	4.9							
ENDOSULFAN I	370000	119.27							
GAMMA-CHLORDANE	1600	5.98							
HEPTACHLOR	110	151.88							
TOTAL AROCLOR	220	NA							
Herbicides (ug/kg)									
2,4,5-T	61000	108.8	0.23 U	0.23 U	0.23 U	0.27 U	0.23 U	0.23 U	0.27 U
2,4,5-TP (SILVEX)	49000	27.25	0.38 U	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.45 U
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ	NA	NA							
PH (S.U.)	NA	NA							
TOTAL ORGANIC CARBON (mg/kg)	NA	NA							
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	NA	NA							
OIL & GREASE - HEM	NA	NA							
OIL RANGE ORGANICS (C24-C40)	NA	NA							

TABLE 3-2

RESULTS FOR CHEMICALS DETECTED IN SURFACE SOIL AT FORMER BUILDING 55 PESTICIDE/FUEL AREA
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	05	05	05	05	05
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB104	09SB105	09SB106	09SB107	09SB108
SAMPLE NUMBER			09SS1040002	09SS1050002	09SS1060002	09SS1070002	09SS1080002
SOIL CLASSIFICATION							
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			8/28/2007	8/28/2007	8/28/2007	8/29/2007	8/30/2007
Volatile Organics (ug/kg)							
METHYLENE CHLORIDE	9100	4690					
DRO Specific Semivolatile Organics (ug/kg)							
2-METHYLNAPHTHALENE	5600	29000					
ACENAPHTHENE	370000	29000					
ACENAPHTHYLENE	370000	29000					
ANTHRACENE	2200000	29000					
BENZO(A)ANTHRACENE	150	1100					
BENZO(A)PYRENE	15	1100					
BENZO(B)FLUORANTHENE	150	1100					
BENZO(G,H,I)PERYLENE	230000	1100					
BENZO(K)FLUORANTHENE	1500	1100					
CHRYSENE	15000	1100					
FLUORANTHENE	230000	29000					
FLUORENE	270000	29000					
INDENO(1,2,3-CD)PYRENE	150	1100					
NAPHTHALENE	5600	29000					
PHENANTHRENE	230000	29000					
PYRENE	230000	1100					
Pesticides/PCBs (ug/kg)							
4,4'-DDD	2400	21					
4,4'-DDE	1700	21					
4,4'-DDT	1700	21					
ALDRIN	29	99.39					
ALPHA-CHLORDANE	1600	679.71					
AROCLOR-1260	220	3.98					
BETA-BHC	320	9940					
DELTA-BHC	90	2.38					
DIELDRIN	30	4.9					
ENDOSULFAN I	370000	119.27					
GAMMA-CHLORDANE	1600	5.98					
HEPTACHLOR	110	151.88					
TOTAL AROCLOR	220	NA					
Herbicides (ug/kg)							
2,4,5-T	61000	108.8	0.24 U	0.25 U	0.25 U	0.24 U	0.24 U
2,4,5-TP (SILVEX)	49000	27.25	0.41 U	0.41 U	0.42 U	0.4 U	0.39 U
Miscellaneous Parameters							
CATION EXCHANGE CAPACITY (MEQ	NA	NA					
PH (S.U.)	NA	NA					
TOTAL ORGANIC CARBON (mg/kg)	NA	NA					
Petroleum Hydrocarbons (ug/kg)							
DIESEL RANGE ORGANICS	NA	NA					
OIL & GREASE - HEM	NA	NA					
OIL RANGE ORGANICS (C24-C40)	NA	NA					

TABLE 3-3

RESULTS FOR CHEMICALS DETECTED IN SURFACE SOIL AT BUILDING 150 AREA
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	03	03	03	03	03	03
AOC			BLDG 150 FUEL SPILLS	BLDG 150 FUEL SPILLS	BLDG 150 FUEL SPILLS	BLDG 150 FUEL SPILLS	BLDG 150 FUEL SPILLS	BLDG 150 FUEL SPILLS
LOCATION			09SB036	09SB037	09SB038	09SB039	09SB040	09SB041
SAMPLE NUMBER			09SS360002	09SS370002	09SS380002	09SS390002	09SS400002	09SS410002
SOIL CLASSIFICATION			3	3	3	3	3	3
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			9/28/2005	10/3/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005
Volatile Organics (ug/kg)								
1,1-DICHLOROETHANE	52000	89600	1.07 U	1.18 U	1.36 J	1.05 U	1.07 U	0.972 U
2-BUTANONE	2200000	12600	1.07 U	8 J	54 J	1.05 U	1.07 U	0.972 U
2-HEXANONE	NA	443000	1.07 U	1.18 U	1.36 U	1.05 J	1.07 U	0.972 U
4-METHYL-2-PENTANONE	530000	2500	1.07 U	1.18 U	4 J	1.05 U	1.07 U	0.972 U
ACETONE	1400000	254.62	1.07 U	45 BJ	320 J	5 BU	13 BU	0.972 U
CARBON DISULFIDE	36000	13100	1.07 U	1.18 U	5 J	1.05 U	1.07 U	0.972 U
METHYLENE CHLORIDE	9100	4690	1.07 UJ	2 J	1.36 UJ	1.05 UJ	3 J	1 J
TOLUENE	520000	10000	1.07 U	1.18 U	4 J	1.05 U	1.07 U	0.972 U
TOTAL XYLENES	27000	NA	1.07 U	1.18 U	6 J	1.05 U	1.07 U	0.972 U
DRO Specific Semivolatile Organics (ug/kg)								
2-METHYLNAPHTHALENE	5600	29000						
ACENAPHTHENE	370000	29000						
ACENAPHTHYLENE	370000	29000						
ANTHRACENE	2200000	29000						
BENZO(A)ANTHRACENE	150	1100						
BENZO(A)PYRENE	15	1100						
BENZO(B)FLUORANTHENE	150	1100						
BENZO(G,H,I)PERYLENE	230000	1100						
BENZO(K)FLUORANTHENE	1500	1100						
CHRYSENE	15000	1100						
DIBENZO(A,H)ANTHRACENE	15	1100						
FLUORANTHENE	230000	29000						
FLUORENE	270000	29000						
INDENO(1,2,3-CD)PYRENE	150	1100						
NAPHTHALENE	5600	29000						
PHENANTHRENE	230000	29000						
PYRENE	230000	1100						
Pesticides/PCBs (ug/kg)								
4,4'-DDD	2400	21	1.59 U	1.72 U	3 J	1.62 UJ	1.68 UJ	1.6 UJ
4,4'-DDT	1700	21	4.5 J	1.72 U	1.8 U	1.62 UJ	1.68 UJ	1.9 J
Petroleum Hydrocarbons (mg/kg)								
DIESEL RANGE ORGANICS	NA	NA	29	93	810	3 U	5800 J	25
GASOLINE RANGE ORGANICS	NA	NA	2.94 U	3.19 U	10.6	3 U	49.7	2.96 U
OIL & GREASE - HEM	NA	NA	760	3600	8500	240 U	9000	237 U
OIL RANGE ORGANICS (C24-C40)	NA	NA	110	230	460	12 U	570 J	69

TABLE 3-3

RESULTS FOR CHEMICALS DETECTED IN SURFACE SOIL AT BUILDING 150 AREA
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	04	04	04	04	04	04
AOC			BLDG 150 FUEL SPILLS	BLDG 150 FUEL SPILLS	BLDG 150 FUEL SPILLS	BLDG 150 FUEL SPILLS	BLDG 150 FUEL SPILLS	BLDG 150 FUEL SPILLS
LOCATION			09SB078	09SB079	09SB080	09SB081	09SB082	09SB083
SAMPLE NUMBER			09SS780002	09SS790002	09SS800002	09SS810002	09SS820002	09SS830002
SOIL CLASSIFICATION								
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			10/22/2006	10/22/2006	10/22/2006	10/22/2006	10/24/2006	10/21/2006
Volatile Organics (ug/kg)								
1,1-DICHLOROETHANE	52000	89600						
2-BUTANONE	2200000	12600						
2-HEXANONE	NA	443000						
4-METHYL-2-PENTANONE	530000	2500						
ACETONE	1400000	254.62						
CARBON DISULFIDE	36000	13100						
METHYLENE CHLORIDE	9100	4690						
TOLUENE	520000	10000						
TOTAL XYLENES	27000	NA						
DRO Specific Semivolatile Organics (ug/kg)								
2-METHYLNAPHTHALENE	5600	29000	29 J	4 U	13	4.1 U	3.9 U	130
ACENAPHTHENE	370000	29000	19 U	4 U	85	4.1 U	3.9 U	8 U
ACENAPHTHYLENE	370000	29000	19 U	4 U	5.1 J	4.1 U	3.9 U	8 U
ANTHRACENE	2200000	29000	24 J	4 U	130	4.1 U	3.9 U	8 U
BENZO(A)ANTHRACENE	150	1100	100 J	5.5 J	730 J	4.3 J	12 J	11 J
BENZO(A)PYRENE	15	1100	100 J	5.8 J	850 J	4.1 U	28	8 UJ
BENZO(B)FLUORANTHENE	150	1100	150 J	8.5	1300 J	4.3 J	61 J	8 UJ
BENZO(G,H,I)PERYLENE	230000	1100	710 J	14	760 J	4.1 U	32	140 J
BENZO(K)FLUORANTHENE	1500	1100	68 J	4 U	370 J	4.1 U	21 J	8 UJ
CHRYSENE	15000	1100	79 J	4.9 J	930 J	4.1 U	12 J	18 J
DIBENZO(A,H)ANTHRACENE	15	1100	19 UJ	4 U	150 J	4.1 U	9.5	8 UJ
FLUORANTHENE	230000	29000	66	11	1300	8.6	17 J	21
FLUORENE	270000	29000	19 U	4 U	62	4.1 U	3.9 U	8 U
INDENO(1,2,3-CD)PYRENE	150	1100	19 UJ	4 U	580 J	4.1 U	26	8 UJ
NAPHTHALENE	5600	29000	22 J	4 U	12	4.1 U	3.9 U	41
PHENANTHRENE	230000	29000	49	5.8 J	840	6.8 J	8 J	18
PYRENE	230000	1100	190 J	13	2500 J	6.8 J	28 J	57 J
Pesticides/PCBs (ug/kg)								
4,4'-DDD	2400	21						
4,4'-DDT	1700	21						
Petroleum Hydrocarbons (mg/kg)								
DIESEL RANGE ORGANICS	NA	NA	410	5.3 J	44	3.1 UJ	210	250
GASOLINE RANGE ORGANICS	NA	NA						
OIL & GREASE - HEM	NA	NA						
OIL RANGE ORGANICS (C24-C40)	NA	NA						

ug/kg = microgram per kilogram
mg/kg = milligram per kilogram
AOC = Area of concern
bgs = below ground surface

MEQ = milliequivalent
NA = Not available
PCB = polychlorinated bephenyl
SU = Standard unit

Qualifiers
U = nondetect
J = estimated
R = rejected

TABLE 3-4

RESULTS FOR CHEMICALS DETECTED IN SURFACE SOIL AT THE FORMER FIRE TRAINING AREA
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	02	02	02	02	02	03	03
AOC			FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING
LOCATION			09SB031/TW002	09SB032	09SB033	09SB034	09SB035	09SB050	09SB051
SAMPLE NUMBER			09SS310002	09SS320002	09SS330002	09SS340002	09SS350002	09SS500002	09SS510002
SOIL CLASSIFICATION			3	3	3	3	3	3	3
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005	9/30/2005	9/30/2005
Volatile Organics (ug/kg)									
2-BUTANONE	2200000	12600						0.866 U	1.03 U
2-HEXANONE	NA	443000						0.866 U	1.03 U
4-METHYL-2-PENTANONE	530000	2500						0.866 U	1.03 U
ACETONE	1400000	254.62						0.866 U	1.03 UR
METHYLENE CHLORIDE	9100	4690						2 J	1.03 UJ
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21	684 U	651 U	1.43 U	4116 U	1.57 U	1.7 J	2.4 J
4,4'-DDE	1700	21	684 U	651 U	1.43 U	4116 U	1.57 U	44 J	13
4,4'-DDT	1700	21	684 U	651 U	4.1	4116 U	1.57 U	8.9	19
AROCLOR-1242	220	679.71	100000 J	47000	9.52 U	260000	10.5 U	10.3 U	11 U
AROCLOR-1248	220	679.71	4557 U	4337 U	9.52 U	27439 U	42 J	10.3 U	880
AROCLOR-1254	220	679.71	4557 U	4337 U	72 J	27439 U	10.5 U	10.3 U	11 U
TOTAL AROCLOR	220	NA	100000	47000	72	260000	42	0 U	880
Dioxins (ug/kg)									
1,2,3,4,6,7,8,9-OCDD	NA	NA						4.7	2.2 J
Petroleum Hydrocarbons (mg/kg)									
DIESEL RANGE ORGANICS	NA	NA						2.86 U	3.05 U
OIL & GREASE - HEM	NA	NA						229 U	244 U
OIL RANGE ORGANICS (C24-C40)	NA	NA						11.4 U	12.2 U

TABLE 3-4

RESULTS FOR CHEMICALS DETECTED IN SURFACE SOIL AT THE FORMER FIRE TRAINING AREA
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	03	03	03	03	03	03
AOC			FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING
LOCATION			09SB052	09SB053	09SB054	09SB055	09SB056	09SB057
SAMPLE NUMBER			09SS520002	09SS530002	09SS540002	09SS550002	09SS560002	09SS570002
SOIL CLASSIFICATION			3	3	3	3	3	3
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			9/28/2005	9/28/2005	9/28/2005	9/30/2005	9/30/2005	9/30/2005
Volatile Organics (ug/kg)								
2-BUTANONE	2200000	12600	0.949 U	2 J	1.02 U	0.969 U	1.08 U	1.05 U
2-HEXANONE	NA	443000	0.949 U	2 J	1.02 U	0.969 U	1.08 U	1.05 J
4-METHYL-2-PENTANONE	530000	2500	0.949 U	1.06 J	1.02 U	0.969 U	1.08 U	1.05 U
ACETONE	1400000	254.62	0.949 UR	8 J	1.02 UR	0.969 UR	1.08 UR	3 J
METHYLENE CHLORIDE	9100	4690	0.949 UJ	1.06 UJ	1.02 UJ	0.969 UJ	1.08 UJ	1.05 UJ
Pesticides/PCBs (ug/kg)								
4,4'-DDD	2400	21	1.61 U	1.63 U	1.62 U	1.65 UJ	1.63 UJ	1.67 UJ
4,4'-DDE	1700	21	3.4	1.63 U	10	1.65 UJ	3.6 J	1.67 UJ
4,4'-DDT	1700	21	2.2 J	1.63 U	6.2	1.65 U	12	1.67 U
AROCLOR-1242	220	679.71	10.8 U	10.9 U	10.8 U	11 U	10.9 U	11.2 U
AROCLOR-1248	220	679.71	10.8 U	10.9 U	10.8 U	11 U	10.9 U	11.2 U
AROCLOR-1254	220	679.71	10.8 U	10.9 U	10.8 U	11 U	10.9 U	11.2 U
TOTAL AROCLOR	220	NA	0 U	0 U	0 U	0 U	0 U	0 U
Dioxins (ug/kg)								
1,2,3,4,6,7,8,9-OCDD	NA	NA	12	16	8.8	15	7.7	6.6
Petroleum Hydrocarbons (mg/kg)								
DIESEL RANGE ORGANICS	NA	NA	6.6	3.03 U	3 U	3.05 U	6.4	3.1 U
OIL & GREASE - HEM	NA	NA	630	242 U	240 U	244 U	242 U	248 U
OIL RANGE ORGANICS (C24-C40)	NA	NA	28	12.1 U	12 U	12.2 U	12.1 U	12.4 U

AOC = Area of concern.
bgs = below ground surface.
mg/kg = milligrams per kilogram.
NA = No applicable criterion.
ug/kg = micrograms per kilogram.
USEPA = United State Environmental Protection Agency.

Data Validation Qualifiers:
J = Estimated concentration.
U = Not detected.
R = Rejected

Chemicals detected at concentrations greater than screening criteria are identified by bold formating.

TABLE 3-5

RESULTS FOR CHEMICALS DETECTED IN SUBSURFACE SOIL AT FORMER BUILDING 55
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	01	01	01	01	01	01	01
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB012	09SB013	09SB014	09SB015/TW001	09SB016	09SB017	09SB018
SAMPLE NUMBER			09SS120002	09SS130002	09SS140002	09SS150002	09SS160002	09SS170002	09SS180002
SOIL CLASSIFICATION			3	3	3	3	3	3	3
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/4/2005
Volatile Organics (ug/kg)									
METHYLENE CHLORIDE	9100	4690							
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE	5600	29000							
ACENAPHTHENE	370000	29000							
ACENAPHTHYLENE	370000	29000							
ANTHRACENE	2200000	29000							
BENZO(A)ANTHRACENE	150	1100							
BENZO(A)PYRENE	15	1100							
BENZO(B)FLUORANTHENE	150	1100							
BENZO(G,H,I)PERYLENE	230000	1100							
BENZO(K)FLUORANTHENE	1500	1100							
CHRYSENE	15000	1100							
FLUORANTHENE	230000	29000							
FLUORENE	270000	29000							
INDENO(1,2,3-CD)PYRENE	150	1100							
NAPHTHALENE	5600	29000							
PHENANTHRENE	230000	29000							
PYRENE	230000	1100							
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21	3.3 U	3.2 U	3.2 U	49	5.1 J	3.1 U	22000 J
4,4'-DDE	1700	21	3.3 U	3.2 U	3.2 U	8.1 J	320	3.8	130000
4,4'-DDT	1700	21	3.3 U	3.2 U	1.2 J	81 J	140	1.5 J	2200000
ALDRIN	29	99.39	1.6 U	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U	1600 U
ALPHA-CHLORDANE	1600	679.71	1.6 U	1.5 U	2.4	1.5 U	3.3	1.5 U	170000
AROCLOR-1260	220	3.98	20 U	20 U	20 U	19 U	18 U	19 U	20000 U
BETA-BHC	320	9940	1.6 U	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U	1600 U
DELTA-BHC	90	2.38	1.6 U	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U	1600 U
DIELDRIN	30	4.9	3.3 U	3.2 U	3.2 U	3.1 U	8.1	3.1 U	3300 U
ENDOSULFAN I	370000	119.27	1.6 U	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U	1600 U
GAMMA-CHLORDANE	1600	5.98	1.6 U	1.5 U	3.9	1.5 U	1.4 U	1.5 U	210000
HEPTACHLOR	110	151.88	1.6 U	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U	48000
TOTAL AROCLOR	220	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U
Herbicides (ug/kg)									
2,4,5-T	61000	108.8							
2,4,5-TP (SILVEX)	49000	27.25							
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ/	NA	NA	16 J			6 J			
PH (S.U.)	NA	NA	6.9			9.9			
TOTAL ORGANIC CARBON (mg/kg)	NA	NA	5500 J			23000 J			
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	NA	NA							
OIL & GREASE - HEM	NA	NA							
OIL RANGE ORGANICS (C24-C40)	NA	NA							

TABLE 3-5

RESULTS FOR CHEMICALS DETECTED IN SUBSURFACE SOIL AT FORMER BUILDING 55
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	02	02	02	02	02	02	02
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB019	09SB020	09SB020	09SB021	09SB022	09SB023/TW004	09SB024/TW006
SAMPLE NUMBER			09SS190002	09SS200002	09SS200002-D	09SS210002	09SS220002	09SS230002	09SS240002
SOIL CLASSIFICATION			3	3		3	3	3	3
SAMPLE CODE			NORMAL	NORMAL	DUP	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005
Volatile Organics (ug/kg)									
METHYLENE CHLORIDE	9100	4690							
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE	5600	29000							
ACENAPHTHENE	370000	29000							
ACENAPHTHYLENE	370000	29000							
ANTHRACENE	2200000	29000							
BENZO(A)ANTHRACENE	150	1100							
BENZO(A)PYRENE	15	1100							
BENZO(B)FLUORANTHENE	150	1100							
BENZO(G,H,I)PERYLENE	230000	1100							
BENZO(K)FLUORANTHENE	1500	1100							
CHRYSENE	15000	1100							
FLUORANTHENE	230000	29000							
FLUORENE	270000	29000							
INDENO(1,2,3-CD)PYRENE	150	1100							
NAPHTHALENE	5600	29000							
PHENANTHRENE	230000	29000							
PYRENE	230000	1100							
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21	820 J	1700	1400	220	65	1.63 U	1.59 U
4,4'-DDE	1700	21	3100 J	670	520	45	10	1.63 U	70
4,4'-DDT	1700	21	27000 J	3500	3700	180	66	1.63 U	350
ALDRIN	29	99.39	0.778 UJ	6.9 J	6.33 U	0.794 U	0.812 U	0.784 U	0.767 U
ALPHA-CHLORDANE	1600	679.71	700 J	140	110	74	19	0.784 U	7.2 J
AROCLOR-1260	220	3.98	10.8 UJ	55 U	87.7 U	11 U	11.2 U	10.9 U	10.6 U
BETA-BHC	320	9940	0.778 UJ	5.6 J	6.33 U	2 J	0.812 U	0.784 U	0.767 U
DELTA-BHC	90	2.38	0.778 UJ	3.97 U	6.33 U	0.794 U	0.812 U	0.784 U	0.767 U
DIELDRIN	30	4.9	7 J	420	250 J	12	1.69 U	1.63 U	1.59 U
ENDOSULFAN I	370000	119.27	0.778 UJ	3.97 UJ	40 J	0.794 U	0.812 U	0.784 U	0.767 U
GAMMA-CHLORDANE	1600	5.98	700 J	150	120	50	11	0.784 U	16 J
HEPTACHLOR	110	151.88	3.4 J	3.97 U	6.33 U	0.794 U	0.812 U	0.784 U	0.767 U
TOTAL AROCLOR	220	NA	0 U	0 U		0 U	0 U	0 U	0 U
Herbicides (ug/kg)									
2,4,5-T	61000	108.8							
2,4,5-TP (SILVEX)	49000	27.25							
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ/	NA	NA		13				15	
PH (S.U.)	NA	NA		6.9				6.7	
TOTAL ORGANIC CARBON (mg/kg)	NA	NA		4000				1400	
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	NA	NA							
OIL & GREASE - HEM	NA	NA							
OIL RANGE ORGANICS (C24-C40)	NA	NA							

TABLE 3-5

RESULTS FOR CHEMICALS DETECTED IN SUBSURFACE SOIL AT FORMER BUILDING 55
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	02	02	02	02	02	02	03
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB025	09SB026	09SB027/TW005	09SB028	09SB029	09SB030	09SB042
SAMPLE NUMBER			09SS250002	09SS260002	09SS270002	09SS280002	09SS290002	09SS300002	09SS420002
SOIL CLASSIFICATION			3	3	3	3	3	3	3
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			5/9/2005	5/9/2005	5/9/2005	5/10/2005	5/10/2005	5/10/2005	10/3/2005
Volatile Organics (ug/kg)									
METHYLENE CHLORIDE	9100	4690							1.05 UJ
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE	5600	29000							
ACENAPHTHENE	370000	29000							
ACENAPHTHYLENE	370000	29000							
ANTHRACENE	2200000	29000							
BENZO(A)ANTHRACENE	150	1100							
BENZO(A)PYRENE	15	1100							
BENZO(B)FLUORANTHENE	150	1100							
BENZO(G,H,I)PERYLENE	230000	1100							
BENZO(K)FLUORANTHENE	1500	1100							
CHRYSENE	15000	1100							
FLUORANTHENE	230000	29000							
FLUORENE	270000	29000							
INDENO(1,2,3-CD)PYRENE	150	1100							
NAPHTHALENE	5600	29000							
PHENANTHRENE	230000	29000							
PYRENE	230000	1100							
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21	19 J	1800 J	83	1.57 U	1.65 U	1.77 U	1.67 U
4,4'-DDE	1700	21	400	30000 J	80	1.57 U	1.65 U	1.77 U	13 J
4,4'-DDT	1700	21	990	110000 J	47	6.6 J	1.65 U	1.77 U	13
ALDRIN	29	99.39	0.703 U	93.8 U	0.742 U	0.756 U	0.793 U	0.852 U	0.803 U
ALPHA-CHLORDANE	1600	679.71	800	1000 J	170	0.756 U	0.793 U	0.852 U	0.803 U
AROCLOR-1260	220	3.98	38.9 U	1299 U	10.3 U	10.5 U	11 U	11.8 U	11.1 UJ
BETA-BHC	320	9940	0.703 U	93.8 U	0.742 U	0.756 U	0.793 U	0.852 U	0.803 U
DELTA-BHC	90	2.38	0.703 U	93.8 U	0.742 U	0.756 U	0.793 U	0.852 U	0.803 UJ
DIELDRIN	30	4.9	17	210 J	1.54 U	1.57 U	1.65 U	1.77 U	1.67 U
ENDOSULFAN I	370000	119.27	0.703 U	93.8 U	0.742 U	0.756 U	0.793 U	0.852 U	0.803 U
GAMMA-CHLORDANE	1600	5.98	760	1100 J	190	0.756 U	0.793 U	0.852 U	0.803 U
HEPTACHLOR	110	151.88	59	93.8 U	0.742 U	0.756 U	0.793 U	0.852 U	0.803 U
TOTAL AROCLOR	220	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U
Herbicides (ug/kg)									
2,4,5-T	61000	108.8							
2,4,5-TP (SILVEX)	49000	27.25							
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ/	NA	NA		21			16		
PH (S.U.)	NA	NA	-	7.6			6.6		
TOTAL ORGANIC CARBON (mg/kg)	NA	NA		44000			1000 U		
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	NA	NA							10
OIL & GREASE - HEM	NA	NA							247 U
OIL RANGE ORGANICS (C24-C40)	NA	NA							36

TABLE 3-5

RESULTS FOR CHEMICALS DETECTED IN SUBSURFACE SOIL AT FORMER BUILDING 55
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	03	03	03	03	03	03	03
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB043	09SB044	09SB045	09SB046	09SB047	09SB048	09SB049
SAMPLE NUMBER			09SS430002	09SS440002	09SS450002	09SS460002	09SS470002	09SS480002	09SS490002
SOIL CLASSIFICATION			3	3	3	3	3	3	3
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			10/3/2005	10/3/2005	10/3/2005	10/3/2005	9/30/2005	9/30/2005	9/30/2005
Volatile Organics (ug/kg)									
METHYLENE CHLORIDE	9100	4690	0.905 UJ	1.09 UJ	0.973 UJ	1.04 UJ	1.06 UJ	1.22 UJ	1 J
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE	5600	29000							
ACENAPHTHENE	370000	29000							
ACENAPHTHYLENE	370000	29000							
ANTHRACENE	2200000	29000							
BENZO(A)ANTHRACENE	150	1100							
BENZO(A)PYRENE	15	1100							
BENZO(B)FLUORANTHENE	150	1100							
BENZO(G,H,I)PERYLENE	230000	1100							
BENZO(K)FLUORANTHENE	1500	1100							
CHRYSENE	15000	1100							
FLUORANTHENE	230000	29000							
FLUORENE	270000	29000							
INDENO(1,2,3-CD)PYRENE	150	1100							
NAPHTHALENE	5600	29000							
PHENANTHRENE	230000	29000							
PYRENE	230000	1100							
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21	1.56 U	1500 J	1.6 UJ	1034 U	120	250 J	1.63 UJ
4,4'-DDE	1700	21	60 J	2200	1.6 UJ	1900 J	300	560 J	28 J
4,4'-DDT	1700	21	66	570	1.6 U	130000 J	320	830 J	9.3
ALDRIN	29	99.39	0.753 U	0.806 U	0.771 UJ	498 U	0.799 UJ	0.853 UJ	0.787 UJ
ALPHA-CHLORDANE	1600	679.71	0.753 U	900	0.771 U	498 U	0.799 U	0.853 U	0.787 U
AROCLOR-1260	220	3.98	10.4 UJ	11.2 U	10.7 U	6893 U	11.1 U	11.8 U	21 J
BETA-BHC	320	9940	0.753 U	0.806 U	0.771 UJ	498 U	0.799 U	0.853 U	0.787 U
DELTA-BHC	90	2.38	0.753 UJ	0.806 U	0.771 UJ	498 U	0.799 UJ	0.853 UJ	0.787 UJ
DIELDRIN	30	4.9	1.56 U	1.67 U	1.6 UJ	1034 U	6.6	1.77 U	1.63 U
ENDOSULFAN I	370000	119.27	0.753 U	0.806 U	0.771 U	498 U	0.799 U	0.853 U	0.787 U
GAMMA-CHLORDANE	1600	5.98	3.3	820	0.771 U	498 U	0.799 U	0.853 U	0.787 U
HEPTACHLOR	110	151.88	0.753 U	0.806 U	0.771 UJ	498 U	0.799 UJ	0.853 UJ	0.787 UJ
TOTAL AROCLOR	220	NA	0 U	0 U	0 U	0 U	0 U	0 U	21
Herbicides (ug/kg)									
2,4,5-T	61000	108.8							
2,4,5-TP (SILVEX)	49000	27.25							
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ/	NA	NA							
PH (S.U.)	NA	NA							
TOTAL ORGANIC CARBON (mg/kg)	NA	NA							
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	NA	NA	35	120	2.97 U	58	3.07 U	180	3.03 U
OIL & GREASE - HEM	NA	NA	680	2700	237 U	440 J	246 U	3200	242 U
OIL RANGE ORGANICS (C24-C40)	NA	NA	78	720	11.9 U	81	12.3 U	730	12.1 U

TABLE 3-5

RESULTS FOR CHEMICALS DETECTED IN SUBSURFACE SOIL AT FORMER BUILDING 55
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	03	04	04	04	04	04	04
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB049A	09SB065	09SB066	09SB067	09SB068	09SB069	09SB070
SAMPLE NUMBER			09SS49A0002	09SS650002	09SS660002	09SS670002	09SS680002	09SS690002	09SS700002
SOIL CLASSIFICATION			3						
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			9/30/2005	10/21/2006	10/21/2006	10/21/2006	10/22/2006	10/22/2006	10/22/2006
Volatile Organics (ug/kg)									
METHYLENE CHLORIDE	9100	4690	1.05 UJ						
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE	5600	29000		850	5.5 J	66	4.3 U	4.2 U	4.3 U
ACENAPHTHENE	370000	29000		21	3.8 U	3.9 J	4.3 U	4.2 U	4.3 U
ACENAPHTHYLENE	370000	29000		3.7 U	3.8 U	4.4 J	4.3 U	4.2 U	4.3 U
ANTHRACENE	2200000	29000		27	6 J	6.9 J	4.3 U	4.2 U	4.3 U
BENZO(A)ANTHRACENE	150	1100		45	44 J	16 J	4.3 U	4.2 U	4.3 U
BENZO(A)PYRENE	15	1100		29 J	52 J	3.7 UJ	4.3 U	4.2 U	4.3 U
BENZO(B)FLUORANTHENE	150	1100		45 J	73 J	27 J	4.3 U	4.2 U	4.3 U
BENZO(G,H,I)PERYLENE	230000	1100		42 J	64 J	42 J	4.3 U	4.2 U	4.3 U
BENZO(K)FLUORANTHENE	1500	1100		11 J	26 J	3.7 UJ	4.3 U	4.2 U	4.3 U
CHRYSENE	15000	1100		44	52 J	28 J	4.3 U	4.2 U	4.3 U
FLUORANTHENE	230000	29000		46	72	16	4.3 U	4.2 U	4.3 U
FLUORENE	270000	29000		13	3.8 U	3.7 U	4.3 U	4.2 U	4.3 U
INDENO(1,2,3-CD)PYRENE	150	1100		23 J	46 J	3.7 UJ	4.3 U	4.2 U	4.3 U
NAPHTHALENE	5600	29000		330	3.8 U	26	4.3 U	4.2 U	4.3 U
PHENANTHRENE	230000	29000		160	40	57	4.3 U	4.2 U	4.3 U
PYRENE	230000	1100		87	140 J	44 J	4.3 U	4.2 U	4.3 U
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21	92 J	39 J	290 J	160 J	1.7 UJ	170 J	5400 J
4,4'-DDE	1700	21	900	48 J	730 J	1500 J	5.9 J	180	3700 J
4,4'-DDT	1700	21	690	34 J	2500 J	2000 J	17 J	6400	190000
ALDRIN	29	99.39	0.778 UJ	0.73 U	0.75 UR	0.72 UJ	0.84 UJ	42 U	84 U
ALPHA-CHLORDANE	1600	679.71	0.778 U	7.6	220 J	790 J	0.84 UJ	78 J	360 J
AROCLOR-1260	220	3.98	10.8 U	10 U	10 UR	10 UJ	12 UJ	580 U	1200 U
BETA-BHC	320	9940	0.778 U	0.73 U	0.75 UR	0.72 UJ	0.84 UJ	42 U	84 U
DELTA-BHC	90	2.38	0.778 UJ	0.73 U	0.75 UR	3 R	0.84 UJ	42 U	84 U
DIELDRIN	30	4.9	1.62 U	1.5 U	1.6 UR	6000 J	1.7 UJ	360	4200 J
ENDOSULFAN I	370000	119.27	0.778 U	0.73 U	0.75 UR	0.72 UJ	0.84 UJ	42 U	84 U
GAMMA-CHLORDANE	1600	5.98	9.6	20 J	260 J	860 J	0.84 UJ	73 J	540 J
HEPTACHLOR	110	151.88	0.778 UJ	0.73 U	0.75 UR	0.72 UJ	0.84 UJ	42 U	84 U
TOTAL AROCLOR	220	NA	0 U	0 U	70	0 U	0 U	0 U	0 U
Herbicides (ug/kg)									
2,4,5-T	61000	108.8							
2,4,5-TP (SILVEX)	49000	27.25							
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ/	NA	NA							
PH (S.U.)	NA	NA							
TOTAL ORGANIC CARBON (mg/kg)	NA	NA							
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	NA	NA	22	95	38	200	12 J	13 J	360
OIL & GREASE - HEM	NA	NA	240 U						
OIL RANGE ORGANICS (C24-C40)	NA	NA	76						

TABLE 3-5

RESULTS FOR CHEMICALS DETECTED IN SUBSURFACE SOIL AT FORMER BUILDING 55
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	04	04	04	04	04	05	05
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB071	09SB072	09SB073	09SB074	09SB075	09SB084	09SB085
SAMPLE NUMBER			09SS710002	09SS720002	09SS730002	09SS740002	09SS750002	09SS840002	09SS850002
SOIL CLASSIFICATION									
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			10/22/2006	10/21/2006	10/21/2006	10/21/2006	10/21/2006	8/29/2007	8/29/2007
Volatile Organics (ug/kg)									
METHYLENE CHLORIDE	9100	4690							
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE	5600	29000	4 U	4.2 U	3.9 U	9	3.9 U		
ACENAPHTHENE	370000	29000	4 U	4.2 U	3.9 U	3.5 U	3.9 U		
ACENAPHTHYLENE	370000	29000	4 U	4.2 U	3.9 U	3.5 U	3.9 U		
ANTHRACENE	2200000	29000	4 U	4.2 U	3.9 U	3.5 U	3.9 U		
BENZO(A)ANTHRACENE	150	1100	4 U	4.8 J	15	8.5 J	3.9 U		
BENZO(A)PYRENE	15	1100	4 UJ	4.2 U	19	3.5 UJ	3.9 U		
BENZO(B)FLUORANTHENE	150	1100	4 UJ	7.7 J	32	3.5 UJ	3.9 U		
BENZO(G,H,I)PERYLENE	230000	1100	4 UJ	4.2 U	14	3.5 UJ	3.9 U		
BENZO(K)FLUORANTHENE	1500	1100	4 UJ	4.2 U	8.8	3.5 UJ	3.9 U		
CHRYSENE	15000	1100	4 U	7.7 J	20	6.9 J	3.9 U		
FLUORANTHENE	230000	29000	4 U	11	37	5.3 J	3.9 U		
FLUORENE	270000	29000	4 U	4.2 U	3.9 U	3.5 U	3.9 U		
INDENO(1,2,3-CD)PYRENE	150	1100	4 UJ	4.2 U	11	3.5 UJ	3.9 U		
NAPHTHALENE	5600	29000	4 U	4.2 U	3.9 U	5.6 J	3.9 U		
PHENANTHRENE	230000	29000	4 U	4.8 J	14	7.4	3.9 U		
PYRENE	230000	1100	4 U	8.7	44	14 J	3.9 U		
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21	1.6 UJ	36 J	5.8	10	1.6 U	0.16 U	0.16 U
4,4'-DDE	1700	21	1.6 UJ	210	230	76	1.6 U	1.1 J	1.8 J
4,4'-DDT	1700	21	6.7 J	71	68	83	1.6 U	1.4 J	5.4
ALDRIN	29	99.39	0.79 UJ	0.84 U	0.77 U	0.69 U	0.77 U	0.068 U	0.07 U
ALPHA-CHLORDANE	1600	679.71	0.79 UJ	0.84 U	0.77 U	4.6	0.77 U	0.95 J	18
AROCLOR-1260	220	3.98	11 UJ	12 U	11 U	9.6 U	11 U		
BETA-BHC	320	9940	0.79 UJ	0.84 U	0.77 U	0.69 U	0.77 U	0.078 U	2.4
DELTA-BHC	90	2.38	0.79 UJ	0.84 U	0.77 U	0.69 U	0.77 U	0.6 J	0.078 U
DIELDRIN	30	4.9	1.6 UJ	67 R	1.6 U	3.5 R	1.6 U	0.11 U	0.12 U
ENDOSULFAN I	370000	119.27	0.79 UJ	0.84 U	0.77 U	0.69 U	0.77 U	0.086 U	0.088 U
GAMMA-CHLORDANE	1600	5.98	0.79 UJ	0.84 U	2.1	5.3	0.77 U	0.068 U	20
HEPTACHLOR	110	151.88	0.79 UJ	0.84 U	0.77 U	0.69 U	0.77 U	0.097 U	0.1 U
TOTAL AROCLOR	220	NA	0 U	0 U	0 U	0 U	0 U		
Herbicides (ug/kg)									
2,4,5-T	61000	108.8						0.24 U	0.25 U
2,4,5-TP (SILVEX)	49000	27.25						0.4 U	0.41 U
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ/	NA	NA							
PH (S.U.)	NA	NA							
TOTAL ORGANIC CARBON (mg/kg)	NA	NA							
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	NA	NA	170	7.5	8	33	5.4 J		
OIL & GREASE - HEM	NA	NA							
OIL RANGE ORGANICS (C24-C40)	NA	NA							

TABLE 3-5

RESULTS FOR CHEMICALS DETECTED IN SUBSURFACE SOIL AT FORMER BUILDING 55
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	05	05	05	05	05	05	05
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB086	09SB087	09SB088	09SB090	09SB090	09SB091	09SB092
SAMPLE NUMBER			09SS860002	09SS870002	09SS880002	09SS900002	09SS900002-D	09SS910002	09SS920002
SOIL CLASSIFICATION									
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	DUP	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			8/28/2007	8/28/2007	8/29/2007	8/29/2007	8/29/2007	8/28/2007	8/30/2007
Volatile Organics (ug/kg)									
METHYLENE CHLORIDE	9100	4690							
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE	5600	29000							
ACENAPHTHENE	370000	29000							
ACENAPHTHYLENE	370000	29000							
ANTHRACENE	2200000	29000							
BENZO(A)ANTHRACENE	150	1100							
BENZO(A)PYRENE	15	1100							
BENZO(B)FLUORANTHENE	150	1100							
BENZO(G,H,I)PERYLENE	230000	1100							
BENZO(K)FLUORANTHENE	1500	1100							
CHRYSENE	15000	1100							
FLUORANTHENE	230000	29000							
FLUORENE	270000	29000							
INDENO(1,2,3-CD)PYRENE	150	1100							
NAPHTHALENE	5600	29000							
PHENANTHRENE	230000	29000							
PYRENE	230000	1100							
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21	0.17 U						
4,4'-DDE	1700	21	2.7 J						
4,4'-DDT	1700	21	3.5						
ALDRIN	29	99.39	0.071 U						
ALPHA-CHLORDANE	1600	679.71	0.084 U						
AROCLOR-1260	220	3.98							
BETA-BHC	320	9940	0.081 U						
DELTA-BHC	90	2.38	0.079 U						
DIELDRIN	30	4.9	0.12 U						
ENDOSULFAN I	370000	119.27	0.089 U						
GAMMA-CHLORDANE	1600	5.98	0.071 U						
HEPTACHLOR	110	151.88	0.1 U						
TOTAL AROCLOR	220	NA							
Herbicides (ug/kg)									
2,4,5-T	61000	108.8	3.5 J	0.25 U	0.24 U	0.24 U	0.25 U	0.22 U	0.24 U
2,4,5-TP (SILVEX)	49000	27.25	2.9 J	0.41 U	0.4 U	0.4 U	0.42 U	0.37 U	0.4 U
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ/	NA	NA							
PH (S.U.)	NA	NA							
TOTAL ORGANIC CARBON (mg/kg)	NA	NA							
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	NA	NA							
OIL & GREASE - HEM	NA	NA							
OIL RANGE ORGANICS (C24-C40)	NA	NA							

TABLE 3-5

RESULTS FOR CHEMICALS DETECTED IN SUBSURFACE SOIL AT FORMER BUILDING 55
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	05	05	05	05	05	05	05
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB093	09SB094	09SB094	09SB095	09SB096	09SB096	09SB097
SAMPLE NUMBER			09SS930002	09SS940002	09SS940002-D	09SS950002	09SS960002	09SS960002-D	09SS970002
SOIL CLASSIFICATION									
SAMPLE CODE			NORMAL	NORMAL	DUP	NORMAL	NORMAL	DUP	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			8/29/2007	8/30/2007	8/30/2007	8/30/2007	8/30/2007	8/30/2007	8/29/2007
Volatile Organics (ug/kg)									
METHYLENE CHLORIDE	9100	4690							
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE	5600	29000							
ACENAPHTHENE	370000	29000							
ACENAPHTHYLENE	370000	29000							
ANTHRACENE	2200000	29000							
BENZO(A)ANTHRACENE	150	1100							
BENZO(A)PYRENE	15	1100							
BENZO(B)FLUORANTHENE	150	1100							
BENZO(G,H,I)PERYLENE	230000	1100							
BENZO(K)FLUORANTHENE	1500	1100							
CHRYSENE	15000	1100							
FLUORANTHENE	230000	29000							
FLUORENE	270000	29000							
INDENO(1,2,3-CD)PYRENE	150	1100							
NAPHTHALENE	5600	29000							
PHENANTHRENE	230000	29000							
PYRENE	230000	1100							
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21							
4,4'-DDE	1700	21							
4,4'-DDT	1700	21							
ALDRIN	29	99.39							
ALPHA-CHLORDANE	1600	679.71							
AROCLOR-1260	220	3.98							
BETA-BHC	320	9940							
DELTA-BHC	90	2.38							
DIELDRIN	30	4.9							
ENDOSULFAN I	370000	119.27							
GAMMA-CHLORDANE	1600	5.98							
HEPTACHLOR	110	151.88							
TOTAL AROCLOR	220	NA							
Herbicides (ug/kg)									
2,4,5-T	61000	108.8	0.24 U	0.23 U	0.23 U	0.23 U	0.24 U	0.26 U	0.25 U
2,4,5-TP (SILVEX)	49000	27.25	0.4 U	0.38 U	0.38 U	0.38 U	0.4 U	0.43 U	0.41 U
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ/	NA	NA							
PH (S.U.)	NA	NA							
TOTAL ORGANIC CARBON (mg/kg)	NA	NA							
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	NA	NA							
OIL & GREASE - HEM	NA	NA							
OIL RANGE ORGANICS (C24-C40)	NA	NA							

TABLE 3-5

RESULTS FOR CHEMICALS DETECTED IN SUBSURFACE SOIL AT FORMER BUILDING 55
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	05	05	05	05	05	05	05
AOC			BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION			09SB098	09SB099	09SB099	09SB100	09SB101	09SB102	09SB103
SAMPLE NUMBER			09SS980002	09SS990002	09SS990002-D	09SS1000002	09SS1010002	09SS1020002	09SS1030002
SOIL CLASSIFICATION									
SAMPLE CODE			NORMAL	NORMAL	DUP	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			8/28/2007	8/30/2007	8/30/2007	8/29/2007	8/30/2007	8/29/2007	8/29/2007
Volatile Organics (ug/kg)									
METHYLENE CHLORIDE	9100	4690							
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE	5600	29000							
ACENAPHTHENE	370000	29000							
ACENAPHTHYLENE	370000	29000							
ANTHRACENE	2200000	29000							
BENZO(A)ANTHRACENE	150	1100							
BENZO(A)PYRENE	15	1100							
BENZO(B)FLUORANTHENE	150	1100							
BENZO(G,H,I)PERYLENE	230000	1100							
BENZO(K)FLUORANTHENE	1500	1100							
CHRYSENE	15000	1100							
FLUORANTHENE	230000	29000							
FLUORENE	270000	29000							
INDENO(1,2,3-CD)PYRENE	150	1100							
NAPHTHALENE	5600	29000							
PHENANTHRENE	230000	29000							
PYRENE	230000	1100							
Pesticides/PCBs (ug/kg)									
4,4'-DDD	2400	21							
4,4'-DDE	1700	21							
4,4'-DDT	1700	21							
ALDRIN	29	99.39							
ALPHA-CHLORDANE	1600	679.71							
AROCLOR-1260	220	3.98							
BETA-BHC	320	9940							
DELTA-BHC	90	2.38							
DIELDRIN	30	4.9							
ENDOSULFAN I	370000	119.27							
GAMMA-CHLORDANE	1600	5.98							
HEPTACHLOR	110	151.88							
TOTAL AROCLOR	220	NA							
Herbicides (ug/kg)									
2,4,5-T	61000	108.8	0.23 U	0.23 U	0.23 U	0.27 U	0.23 U	0.23 U	0.27 U
2,4,5-TP (SILVEX)	49000	27.25	0.38 U	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.45 U
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ/	NA	NA							
PH (S.U.)	NA	NA							
TOTAL ORGANIC CARBON (mg/kg)	NA	NA							
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	NA	NA							
OIL & GREASE - HEM	NA	NA							
OIL RANGE ORGANICS (C24-C40)	NA	NA							

TABLE 3-5

RESULTS FOR CHEMICALS DETECTED IN SUBSURFACE SOIL AT FORMER BUILDING 55
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND AOC LOCATION SAMPLE NUMBER SOIL CLASSIFICATION SAMPLE CODE DEPTH RANGE (feet bgs) SAMPLE DATE	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	05 BLDG 55 PEST/FUEL 09SB104 09SS1040002 NORMAL 0 - 2 8/28/2007	05 BLDG 55 PEST/FUEL 09SB105 09SS1050002 NORMAL 0 - 2 8/28/2007	05 BLDG 55 PEST/FUEL 09SB106 09SS1060002 NORMAL 0 - 2 8/28/2007	05 BLDG 55 PEST/FUEL 09SB107 09SS1070002 NORMAL 0 - 2 8/29/2007	05 BLDG 55 PEST/FUEL 09SB108 09SS1080002 NORMAL 0 - 2 8/30/2007
Volatile Organics (ug/kg)							
METHYLENE CHLORIDE	9100	4690					
DRO Specific Semivolatile Organics (ug/kg)							
2-METHYLNAPHTHALENE	5600	29000					
ACENAPHTHENE	370000	29000					
ACENAPHTHYLENE	370000	29000					
ANTHRACENE	2200000	29000					
BENZO(A)ANTHRACENE	150	1100					
BENZO(A)PYRENE	15	1100					
BENZO(B)FLUORANTHENE	150	1100					
BENZO(G,H,I)PERYLENE	230000	1100					
BENZO(K)FLUORANTHENE	1500	1100					
CHRYSENE	15000	1100					
FLUORANTHENE	230000	29000					
FLUORENE	270000	29000					
INDENO(1,2,3-CD)PYRENE	150	1100					
NAPHTHALENE	5600	29000					
PHENANTHRENE	230000	29000					
PYRENE	230000	1100					
Pesticides/PCBs (ug/kg)							
4,4'-DDD	2400	21					
4,4'-DDE	1700	21					
4,4'-DDT	1700	21					
ALDRIN	29	99.39					
ALPHA-CHLORDANE	1600	679.71					
AROCLOR-1260	220	3.98					
BETA-BHC	320	9940					
DELTA-BHC	90	2.38					
DIELDRIN	30	4.9					
ENDOSULFAN I	370000	119.27					
GAMMA-CHLORDANE	1600	5.98					
HEPTACHLOR	110	151.88					
TOTAL AROCLOR	220	NA					
Herbicides (ug/kg)							
2,4,5-T	61000	108.8	0.24 U	0.25 U	0.25 U	0.24 U	0.24 U
2,4,5-TP (SILVEX)	49000	27.25	0.41 U	0.41 U	0.42 U	0.4 U	0.39 U
Miscellaneous Parameters							
CATION EXCHANGE CAPACITY (MEQ/	NA	NA					
PH (S.U.)	NA	NA					
TOTAL ORGANIC CARBON (mg/kg)	NA	NA					
Petroleum Hydrocarbons (ug/kg)							
DIESEL RANGE ORGANICS	NA	NA					
OIL & GREASE - HEM	NA	NA					
OIL RANGE ORGANICS (C24-C40)	NA	NA					

ug/kg = microgram per kilogram
mg/kg = milligram per kilogram
AOC = Area of concern
bgs = below ground surface

MEQ = milliequivalent
NA = Not available
PCB = polychlorinated bephenyl
SU = Standard unit

Qualifiers
U = nondetect
J = estimated
R = rejected

TABLE 3-6

RESULTS FOR CHECMICALS DETECTED IN SUBSURFACE SOIL AT BUILDING 150
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	03	03	03	03	03	03
AOC			BLDG 150 FUEL SPILLS	BLDG 150 FUEL SPILLS	BLDG 150 FUEL SPILLS	BLDG 150 FUEL SPILLS	BLDG 150 FUEL SPILLS	BLDG 150 FUEL SPILLS
LOCATION			09SB036	09SB037	09SB038	09SB039	09SB040	09SB041
SAMPLE NUMBER			09SS360002	09SS370002	09SS380002	09SS390002	09SS400002	09SS410002
SOIL CLASSIFICATION			3	3	3	3	3	3
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			9/28/2005	10/3/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005
Volatile Organics (ug/kg)								
1,1-DICHLOROETHANE	52000	89600	1.07 U	1.18 U	1.36 J	1.05 U	1.07 U	0.972 U
2-BUTANONE	2200000	12600	1.07 U	8 J	54 J	1.05 U	1.07 U	0.972 U
2-HEXANONE	NA	443000	1.07 U	1.18 U	1.36 U	1.05 J	1.07 U	0.972 U
4-METHYL-2-PENTANONE	530000	2500	1.07 U	1.18 U	4 J	1.05 U	1.07 U	0.972 U
ACETONE	1400000	254.62	1.07 U	45 BJ	320 J	5 BU	13 BU	0.972 U
CARBON DISULFIDE	36000	13100	1.07 U	1.18 U	5 J	1.05 U	1.07 U	0.972 U
METHYLENE CHLORIDE	9100	4690	1.07 UJ	2 J	1.36 UJ	1.05 UJ	3 J	1 J
TOLUENE	520000	10000	1.07 U	1.18 U	4 J	1.05 U	1.07 U	0.972 U
TOTAL XYLENES	27000	NA	1.07 U	1.18 U	6 J	1.05 U	1.07 U	0.972 U
DRO Specific Semivolatile Organics (ug/kg)								
2-METHYLNAPHTHALENE	5600	29000						
ACENAPHTHENE	370000	29000						
ACENAPHTHYLENE	370000	29000						
ANTHRACENE	2200000	29000						
BENZO(A)ANTHRACENE	150	1100						
BENZO(A)PYRENE	15	1100						
BENZO(B)FLUORANTHENE	150	1100						
BENZO(G,H,I)PERYLENE	230000	1100						
BENZO(K)FLUORANTHENE	1500	1100						
CHRYSENE	15000	1100						
DIBENZO(A,H)ANTHRACENE	15	1100						
FLUORANTHENE	230000	29000						
FLUORENE	270000	29000						
INDENO(1,2,3-CD)PYRENE	150	1100						
NAPHTHALENE	5600	29000						
PHENANTHRENE	230000	29000						
PYRENE	230000	1100						
Pesticides/PCBs (ug/kg)								
4,4'-DDD	2400	21	1.59 U	1.72 U	3 J	1.62 UJ	1.68 UJ	1.6 UJ
4,4'-DDT	1700	21	4.5 J	1.72 U	1.8 U	1.62 UJ	1.68 UJ	1.9 J
Petroleum Hydrocarbons (mg/kg)								
DIESEL RANGE ORGANICS	NA	NA	29	93	810	3 U	5800 J	25
GASOLINE RANGE ORGANICS	NA	NA	2.94 U	3.19 U	10.6	3 U	49.7	2.96 U
OIL & GREASE - HEM	NA	NA	760	3600	8500	240 U	9000	237 U
OIL RANGE ORGANICS (C24-C40)	NA	NA	110	230	460	12 U	570 J	69

TABLE 3-6

RESULTS FOR CHECMICALS DETECTED IN SUBSURFACE SOIL AT BUILDING 150
SWMU 9
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	04	04	04	04	04	04
AOC			BLDG 150 FUEL SPILLS	BLDG 150 FUEL SPILLS	BLDG 150 FUEL SPILLS	BLDG 150 FUEL SPILLS	BLDG 150 FUEL SPILLS	BLDG 150 FUEL SPILLS
LOCATION			09SB078	09SB079	09SB080	09SB081	09SB082	09SB083
SAMPLE NUMBER			09SS780002	09SS790002	09SS800002	09SS810002	09SS820002	09SS830002
SOIL CLASSIFICATION								
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet bgs)			0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE			10/22/2006	10/22/2006	10/22/2006	10/22/2006	10/24/2006	10/21/2006
Volatile Organics (ug/kg)								
1,1-DICHLOROETHANE	52000	89600						
2-BUTANONE	2200000	12600						
2-HEXANONE	NA	443000						
4-METHYL-2-PENTANONE	530000	2500						
ACETONE	1400000	254.62						
CARBON DISULFIDE	36000	13100						
METHYLENE CHLORIDE	9100	4690						
TOLUENE	520000	10000						
TOTAL XYLENES	27000	NA						
DRO Specific Semivolatile Organics (ug/kg)								
2-METHYLNAPHTHALENE	5600	29000	29 J	4 U	13	4.1 U	3.9 U	130
ACENAPHTHENE	370000	29000	19 U	4 U	85	4.1 U	3.9 U	8 U
ACENAPHTHYLENE	370000	29000	19 U	4 U	5.1 J	4.1 U	3.9 U	8 U
ANTHRACENE	2200000	29000	24 J	4 U	130	4.1 U	3.9 U	8 U
BENZO(A)ANTHRACENE	150	1100	100 J	5.5 J	730 J	4.3 J	12 J	11 J
BENZO(A)PYRENE	15	1100	100 J	5.8 J	850 J	4.1 U	28	8 UJ
BENZO(B)FLUORANTHENE	150	1100	150 J	8.5	1300 J	4.3 J	61 J	8 UJ
BENZO(G,H,I)PERYLENE	230000	1100	710 J	14	760 J	4.1 U	32	140 J
BENZO(K)FLUORANTHENE	1500	1100	68 J	4 U	370 J	4.1 U	21 J	8 UJ
CHRYSENE	15000	1100	79 J	4.9 J	930 J	4.1 U	12 J	18 J
DIBENZO(A,H)ANTHRACENE	15	1100	19 UJ	4 U	150 J	4.1 U	9.5	8 UJ
FLUORANTHENE	230000	29000	66	11	1300	8.6	17 J	21
FLUORENE	270000	29000	19 U	4 U	62	4.1 U	3.9 U	8 U
INDENO(1,2,3-CD)PYRENE	150	1100	19 UJ	4 U	580 J	4.1 U	26	8 UJ
NAPHTHALENE	5600	29000	22 J	4 U	12	4.1 U	3.9 U	41
PHENANTHRENE	230000	29000	49	5.8 J	840	6.8 J	8 J	18
PYRENE	230000	1100	190 J	13	2500 J	6.8 J	28 J	57 J
Pesticides/PCBs (ug/kg)								
4,4'-DDD	2400	21						
4,4'-DDT	1700	21						
Petroleum Hydrocarbons (mg/kg)								
DIESEL RANGE ORGANICS	NA	NA	410	5.3 J	44	3.1 UJ	210	250
GASOLINE RANGE ORGANICS	NA	NA						
OIL & GREASE - HEM	NA	NA						
OIL RANGE ORGANICS (C24-C40)	NA	NA						

ug/kg = microgram per kilogram
mg/kg = milligram per kilogram
AOC = Area of concern
bgs = below ground surface

MEQ = milliequivalent
NA = Not available
PCB = polychlorinated bephenyl
SU = Standard unit

Qualifiers
U = nondetect
J = estimated
R = rejected

TABLE 3-7

RESULTS FOR CHEMICALS DETECTED IN SUBSURFACE SOIL AT THE FORMER FIRE TRAINING AREA
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	03	03	03	03	03	03	03	03	03
AOC			FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING
LOCATION			09SB052	09SB052	09SB052	09SB053	09SB053	09SB053	09SB054	09SB054	09SB054
SAMPLE NUMBER			09SB520204	09SB520406	09SB520709	09SB530204	09SB530406	09SB530608	09SB540204	09SB540204-D	09SB540406
SOIL CLASSIFICATION			B	B	B	B	B	B	B		B
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	DUP	NORMAL
DEPTH RANGE (feet)			2 - 4	4 - 6	7 - 9	2 - 4	4 - 6	6 - 8	2 - 4	2 - 4	4 - 6
SAMPLE DATE			9/28/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005
Volatile Organics (ug/kg)											
2-BUTANONE	2200000	12600	1.04 U	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U
4-METHYL-2-PENTANONE	530000	2500	1.04 J	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U
ACETONE	1400000	254.62	9 BU	5 BU	5 BU	4 BU	7 BU	6 BU	6 BU	4 BU	6 BU
Pesticides/PCBs (ug/kg)											
4,4'-DDE	1700	21	1.65 U	1.59 U	1.58 U	1.56 U	1.58 U	1.58 U	1.58 U	1.6 U	1.59 U
4,4'-DDT	1700	21	1.65 U	1.59 U	1.58 U	1.56 U	1.58 U	1.58 U	1.58 U	1.6 U	1.59 U
AROCLOR-1016	390	679.71	11 U	10.6 U	10.5 U	10.4 U	10.6 U	10.5 U	10.5 U	10.7 U	10.6 U
AROCLOR-1232	220	679.71	11 U	10.6 U	10.5 U	10.4 U	10.6 U	10.5 U	10.5 U	10.7 U	10.6 U
AROCLOR-1242	220	679.71	11 U	10.6 U	10.5 U	10.4 U	10.6 U	10.5 U	10.5 U	10.7 U	10.6 U
AROCLOR-1248	220	679.71	11 U	24	10.5 U	10.4 U	10.6 U	10.5 U	10.5 U	10.7 U	10.6 U
AROCLOR-1260	220	3.98	11 U	10.6 U	10.5 U	10.4 U	10.6 U	10.5 U	10.5 U	10.7 U	10.6 U
TOTAL AROCLOR	220	NA	0 U	24	0 U	0 U	0 U	0 U	0 U		0 U
Petroleum Hydrocarbons (mg/kg)											
DIESEL RANGE ORGANICS	NA	NA	3.06 U	2.94 U	2.92 U	2.89 U	2.93 U	2.93 U	2.92 U	2.96 U	2.95 U
GASOLINE RANGE ORGANICS	NA	NA	3.06 U	2.94 U	2.92 U	2.89 U	2.93 U	2.93 U	2.92 U	2.96 U	2.95 U
OIL & GREASE - HEM	NA	NA	245 U	670	570	231 U	235 U	234 U	234 U	237 U	236 U
OIL RANGE ORGANICS (C24-C40)	NA	NA	12.2 U	11.8 U	11.7 U	11.6 U	11.7 U	11.7 U	11.7 U	11.8 U	11.8 U

TABLE 3-7

RESULTS FOR CHEMICALS DETECTED IN SUBSURFACE SOIL AT THE FORMER FIRE TRAINING AREA
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	Human Health Screening Criteria	USEPA Region 5 Ecological Screening Criteria	03	03	03	03	03	03	03	03	03	03
AOC			FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING
LOCATION			09SB054	09SB055	09SB055	09SB055	09SB056	09SB056	09SB056	09SB057	09SB057	09SB057
SAMPLE NUMBER			09SB540607	09SB550204	09SB550406	09SB550608	09SB560204	09SB560406	09SB560607	09SB570204	09SB570406	09SB570608
SOIL CLASSIFICATION			8	8	8	8	8	8	9	8	8	8
SAMPLE CODE			NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)			6 - 7	2 - 4	4 - 6	6 - 8	2 - 4	4 - 6	6 - 7	2 - 4	4 - 6	6 - 8
SAMPLE DATE			9/28/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005
Volatile Organics (ug/kg)												
2-BUTANONE	2200000	12600	0.983 U	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
4-METHYL-2-PENTANONE	530000	2500	1 J	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
ACETONE	1400000	254.62	14 BU	0.886 U	2 J	2 J	2 J	0.885 UR	1.01 UR	6 J	23 J	2 J
Pesticides/PCBs (ug/kg)												
4,4'-DDE	1700	21	1.54 U	1.58 U	1.7 UJ	1.53 UJ	1.61 UJ	1.55 UJ	1.6 UJ	1.56 UJ	1.59 UJ	1.64 UJ
4,4'-DDT	1700	21	1.54 U	1.58 U	1.7 U	1.53 U	1.61 U	1.55 U	1.6 U	1.56 U	1.59 U	1.64 U
AROCLOR-1016	390	679.71	10.3 U	10.5 U	11.4 UJ	10.2 U	10.8 U	10.4 U	23	10.4 U	900 J	10.9 U
AROCLOR-1232	220	679.71	1000	10.5 U	11.4 U	10.2 U	10.8 U	10.4 U	10.7 U	10.4 U	10.6 U	10.9 U
AROCLOR-1242	220	679.71	10.3 U	10.5 U	11.4 U	10.2 U	10.8 U	10.4 U	10.7 U	10.4 U	10.6 U	10.9 U
AROCLOR-1248	220	679.71	10.3 U	10.5 U	11.4 U	10.2 U	10.8 U	10.4 U	10.7 U	10.4 U	10.6 U	10.9 U
AROCLOR-1260	220	3.98	10.3 U	16 J	11.4 U	44	84	10.4 U	10.7 U	22	10.6 U	31
TOTAL AROCLOR	220	NA	1000	16	0 U	44	84	0 U	23	22	900	31
Petroleum Hydrocarbons (mg/kg)												
DIESEL RANGE ORGANICS	NA	NA	140	2.92 U	3.16 U	2.84 U	2.99 U	2.88 U	2.97 U	2.88 U	260	3.03 U
GASOLINE RANGE ORGANICS	NA	NA	12	2.92 U	3.16 U	2.84 U	2.99 U	2.88 U	2.97 U	2.88 U	13.6	3.03 U
OIL & GREASE - HEM	NA	NA	770	234 U	253 U	227 U	239 U	230 U	238 U	231 U	610	242 U
OIL RANGE ORGANICS (C24-C40)	NA	NA	62	11.7 U	12.6 U	11.4 U	11.9 U	11.5 U	11.9 U	11.5 U	180	12.1 U

ug/kg = microgram per kilogram
mg/kg = milligram per kilogram
AOC = Area of concern
bgs = below ground surface

MEQ = milliequivalent
NA = Not available
PCB = polychlorinated bephenyl
SU = Standard unit

Qualifiers
U = nondetect
J = estimated
R = rejected

REFERENCES

Tetra Tech (Tetra Tech NUS, Inc.), 2007a. Resource Conservation and Recovery Act Addendum No. 3 to the Quality Assurance Project Plan for SWMUs 8, 15, 18, 19, 20 and the Old Gun Tub Storage Lot for SWMU 9 (Pesticide Control/R-150 Tank Areas). Naval Surface Warfare Center, Crane. Crane, Indiana. September.

Tetra Tech, 2007b. Resource Conservation and Recovery Act Facility Investigation Report Addendum for SWMU 9 South (Pesticide Control/R-150 Tank Area). Naval Surface Warfare Center, Crane. Crane, Indiana. June.

Tetra Tech, 2004. Quality Assurance Project Plan for RCRA Facility Investigation at Building 106 Pond (SWMU 8) Roads and Grounds Area (SWMU 15) and Environmental Indicator Investigation for SWMU 18 (Load and Fill Area Buildings), SWMU 19 (Pyrotechnic Test Area), SWMU 20 (Crane Army Ammunition Activity Quality Assurance/Quality Control Test Area), and the Old Gun Tub Storage Lot. Naval Surface Warfare Center, Crane. Crane, Indiana. September.

APPENDIX A

BORING LOGS AND SOIL SAMPLE LOG SHEETS
PHASE 5

A.1 BORING LOGS

Tetra Tech NUS, Inc.

BORING LOG

Project Name: SWMU 9 Pesticide and Herbicide Delineation - August 2007 **Boring Number:** 09SB100

Project Number: 112G00477 **Date:** 8/29/07

Drilling Company: ***Geologist:*** *Stephanie Haney*

Drilling Rig: **Driller:**

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - Boring ID: 09SB100									Analytical Results - Screening
	Run		Lithology						
Depth (ft bgs)	No.	% Recov.	USCS	Primary Color	Secondary Color	Moisture	Primary Description	Secondary Descriptors	PID
0	1	0	OL	tan	-Select-	dry	TOPSOIL		
1			CL	dark orange	-Select-	damp	CLAY		
2	2	0							

Tetra Tech NUS, Inc.

BORING LOG

Project Name: SWMU 9 Pesticide and Herbicide Delineation - August 2007 **Boring Number:** 09SB101

Project Number: 112G00477 **Date:** 8/30/07

Drilling Company: **Geologist:** Stephanie Haney

Drilling Rig: **Driller:**

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - Boring ID: 09SB101									Analytical Results - Screening
	Run		Lithology						
Depth (ft bgs)	No.	% Recov	USCS	Primary Color	Secondary Color	Moisture	Primary Description	Secondary Descriptors	PID
0	1	0	OL	tan	-Select-	Dry	TOPSOIL		
1									
2	2	0							
3									

Tetra Tech NUS, Inc.

BORING LOG

Project Name: SWMU 9 Pesticide and Herbicide Delineation - August 2007 **Boring Number:** 09SB102

Project Number: 112G00477 **Date:** 8/29/07

Drilling Company: **Geologist:** Stephanie Haney

Drilling Rig: **Driller:**

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - Boring ID: 09SB102

Depth (ft bgs)	Run No.	Run % Recov	Lithology USCS	Primary Color	Secondary Color	Moisture	Primary Description	Secondary Descriptors	Analytical Results - Screening PID
0	1	0	OL	tan	-Select-	Dry	TOPSOIL		
1			CL	dark orange	-Select-	Damp	CLAY		
2	2	0							

Tetra Tech NUS, Inc.

BORING LOG

Project Name: SWMU 9 Pesticide and Herbicide Delineation - August 2007 **Boring Number:** 09SB103

Project Number: 112G00477 **Date:** 8/29/07

Drilling Company: **Geologist:** Stephanie Haney

Drilling Rig: **Driller:**

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - Boring ID: 09SB103

Depth (ft bgs)	Run No.	Run % Recov	Lithology USCS	Primary Color	Secondary Color	Moisture	Primary Description	Secondary Descriptors	Analytical Results - Screening PID
0	1	0	OL	tan	-Select-	damp	CLAY		
1									
2	2	0	CL	orange	-Select-	moist	CLAY		

Tetra Tech NUS, Inc.

BORING LOG

Project Name: SWMU 9 Pesticide and Herbicide Delineation - August 2007 **Boring Number:** 09SB104

Project Number: 112G00477 **Date:** 8/28/07

Drilling Company: **Geologist:** Stephanie Haney

Drilling Rig: geoprobe 6600 **Driller:** dave brenner

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - Boring ID: 09SB104

Depth (ft bgs)	Run No	Run % Recvy	Lithology USCS	Primary Color	Secondary Color	Moisture	Primary Description	Secondary Descriptors	Analytical Results - Screening PID
0	1	92	OTHER	grey	-Select-	dry	GRAVEL with minor fine sand and silt		0
1			CL	tan	Select	dry	CLAY		0
2			CL	dark brown	grey		CLAY with minor gravel	increasing moisture and mottling with depth	0
3									0
4	2	75							0
5									0
6									0
7						damp			0
8	3	87							0
9									0
10									0
11									0
12	4	100	CL	orange	grey		CLAY with sand		0
13						dry			0
14									0
15									0

Tetra Tech NUS, Inc.

BORING LOG

Project Name: SWMU 9 Pesticide and Herbicide Delineation - August 2007 **Boring Number:** 09SB105

Project Number: 112G00477 **Date:** 8/28/07

Drilling Company: **Geologist:** Stephanie Haney

Drilling Rig: geoprobe 6600 **Driller:** dave brenner

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - Boring ID: 09SB105

Depth (ft)	Run No.	Run % Recy	Lithology USCS	Primary Color	Secondary Color	Moisture	Primary Description	Secondary Descriptors	Analytical Results - Screening PID
	1	87	CL	dark brown	grey	damp	CLAY		0
									0
			CL	dark brown	-Select-		CLAY		0
									0
4	2	68							0
5									0
6						damp			0
7									0
8	3	100							0
9									0
10									0
			CL	dark orange	grey		CLAY with sand		
11									0
12	4	100				damp			0
13									0
14									0
									0

Tetra Tech NUS, Inc.

BORING LOG

Project Name: SWMU 9 Pesticide and Herbicide Delineation - August 2007 **Boring Number:** 09SB106

Project Number: 112G00477 **Date:** 8/28/07

Drilling Company: **Geologist:** Stephanie Haney

Drilling Rig: **Driller:**

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - Boring ID: 09SB106

Depth (ft bgs)	Run No	% Recov	Lithology USCS	Primary Color	Secondary Color	Moisture	Primary Description	Secondary Descriptors	Analytical Results - Screening PID
0	1	62	OTHER	grey	-Select-	dry	GRAVEL with minor fine sand and silt		0
1			CL	dark brown	-Select-		CLAY		0
2									0
3						damp			0
4	2	87							0
5			CL	dark orange	grey		CLAY		0
6									0
7									0
8	3	100							0
9						damp			0
10									0
1.									0
12	4	100							0
13									0

Tetra Tech NUS, Inc.

BORING LOG

Project Name: SWMU 9 Pesticide and Herbicide Delineation - August 2007 **Boring Number:** 09SB107

Project Number: 112G00477 **Date:** 8/29/07

Drilling Company: **Geologist:** Stephanie Haney

Drilling Rig: **Driller:**

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - Boring ID: 09SB107

Depth (ft bgs)	Run No.	% Recov	Lithology USCS	Primary Color	Secondary Color	Moisture	Primary Description	Secondary Descriptors	Analytical Results - Screening PID
0	1	0	CL-ML	light tan	-Select-	-Select-	SILTY CLAY		
1									

Tetra Tech NUS, Inc.

BORING LOG

Project Name: SWMU 9 Pesticide and Herbicide Delineation - August 2007 **Boring Number:** 09SB108

Project Number: 112G00477 **Date:** 8/30/07

Drilling Company: **Geologist:** Stephanie Haney

Drilling Rig: **Driller:**

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - Boring ID: 09SB108

Depth ft bgsl	Run No.	% Recov	USCS	Primary Color	Secondary Color	Moisture	Primary Description	Secondary Descriptors	Analytical Results - Screening PID
0	1	0	OL	tan	-Select-	dry	TOPSOIL		
1									
2	2	0							
3									

Tetra Tech NUS, Inc.

BORING LOG

Project Name: SWMU 9 Pesticide and Herbicide Delineation - August 2007 **Boring Number:** 09SB109

Project Number: 112G00477 **Date:** 8/28/07

Drilling Company: **Geologist:** Stephanie Haney

Drilling Rig: geoprobe 6600 **Driller:** dave brenner

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - Boring ID: 09SB109

Depth (ft bgl)	Run No.	Run % Recov	Lithology USCS	Primary Color	Secondary Color	Moisture	Primary Description	Secondary Descriptors	Analytical Results - Screening PID
0	1	92	OTHER	grey	-Select-	dry	GRAVEL with minor fine sand and silt		
1			SC	tan	-Select-	dry	CLAY with sand		
2			CL	dark brown	grey		CLAY with minor gravel	increasing moisture and mottling with depth	
3									
4	2	75							
5									
6									
7						damp			
8	2	87							
9									
10									
11									
12	4	100	SC	orange	tan	dry	CLAY with sand		
13									
14									
15									

Tetra Tech NUS, Inc.

BORING LOG

Project Name: SWMU 9 Pesticide and Herbicide Delineation - August 2007 **Boring Number:** 09SB110

Project Number: 112G00477 **Date:** 8/28/07

Drilling Company: **Geologist:** Stephanie Haney

Drilling Rig: **Driller:**

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - Boring ID 09SB110

Depth (ft bgs)	Run No.	Run % Recov	Lithology USCS	Primary Color	Secondary Color	Moisture	Primary Description	Secondary Descriptors	Analytical Results - Screening PID
0	1	87	CL	dark brown	grey-brown	damp	CLAY		
1									
2			CL	dark brown	-Select-		CLAY		
3									
4	2	68							
5									
6						damp			
7									
8	3	100							
9									
10									
			CL	dark orange	grey		CLAY with sand		
12	4	100							
13						damp			
14									
15									

A.2 SOIL SAMPLE LOG SHEETS

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

S U 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB84-SO-0002	**Created By**	John Wright
TtNUS Project #	112G00477	**Sample Location ID**	09SB84	**Created Date**	8/27/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/29/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/29/07	11:00	DPT	0.0	0-2	On Boring Log	

/ sis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/29/07	11:00	SW-846 8081 / 8151A	Pesticides / Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB84-SO-0204	**Created By**	John Wright
TtNUS Project #	112G00477	**Sample Location ID**	09SB84	**Created Date**	8/27/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/29/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/29/07	11:00	DPT	0.0	2-4	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/29/07	11:00	SW-846 8081 / 8151A	Pesticides / Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB84-SO-0406	**Created By**	John Wright
TtNUS Project #	112G00477	**Sample Location ID**	09SB84	**Created Date**	8/27/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/29/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/29/07	11:00	DPT	0.0	4-6	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/29/07	11:00	SW-846 8081 / 8151A	Pesticides / Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB84-SO-0607	**Created By**	John Wright
TtNUS Project #	112G00477	**Sample Location ID**	09SB84	**Created Date**	8/27/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/29/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/29/07	11:00	DPT	0.0	6-7	dark red	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/29/07	11:00	SW-846 8081 / 8151A	Pesticides / Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

WMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

ro' Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB85-SO-0002	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB85	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/29/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/29/07	10:30	DPT	0.0	0-2	On Boring Log	

Analysis Records

C ted	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/29/07	10:30	SW-846 8081 / 8151A	Pesticides / Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB85-SO-0204	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB85	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	James Goerdt
WBS Code #		**Concentration**	Not known	**Modified Date**	9/14/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/29/07	10:30	DPT	0.0	2-4	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/29/07	10:30	SW-846 8081 / 8151A	Pesticides / Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

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- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB85-SO-0406	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB85	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	James Goerdt
WBS Code #		**Concentration**	Not known	**Modified Date**	9/14/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/29/07	10:30	DPT	0.0	4-6	On Boring Log	

Analysis Records

Co ed	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/29/07	10:30	SW-846 8081 / 8151A	Pesticides / Herbicides	4°C	3	Glass - Clear	4 oz. wide-mouth w/Teflon cap	do MS/MSD	ED00000057-1

General Observations and Notes

MS/MSD

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB86-SO-0002	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB86	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	
WBS Code #		**Concentration**	Not known	**Modified Date**	
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/28/07	10:05	DPT	0.0	0.0-2.0	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/28/07	10:05	SW-846 8081 / 8151A	Pesticides / Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Pr ct Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB86-SO-0204	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB86	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/28/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/28/07	10:05	DPT	0.0	2.0-4.0	On Boring Log	

Analysis Records

C ted	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/28/07	10:05	SW-846 8081 / 8151A	Pesticides / Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB86-SO-0406	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB109	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/28/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/28/07	10:05	DPT	0.0	4.0-6.0	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/28/07	10:05	SW-846 8081 / 8151A	Pesticides / Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB86-SO-0810	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB86	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/28/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/28/07	10:05	DPT	0.0	8.0-10.0	On Boring Log	

Analysis Records

Cr ted	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/28/07	10:05	SW-846 8081 / 8151A	Pesticides / Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB87-SO-0.02.0	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB87	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/28/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/28/07	09:30	DPT	0.0	0.0-2.0	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/28/07	09:30	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB87-SO-2.04.0	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB87	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/28/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/28/07	09:30	DPT	0.0	2.0-4.0	On Boring Log	

Analysis Records

Cr[illegible]ted	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/28/07	09:30	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB88-SO-0002	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB88	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/29/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/29/07	11:20	DPT	0.0	0-2	dark red	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/29/07	11:20	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09S888-SO-0204	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09S888	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/29/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/29/07	11:20	DPT	0.0	2-4	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/29/07	11:20	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB88-SO-0406	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB88	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/29/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/29/07	11:20	DPT	0.0	4-6	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/29/07	11:20	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Pr[illegible]t Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB88-SO-0810	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB88	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/29/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/29/07	11:20	DPT	0.0	8-10	On Boring Log	

Analysis Records

C[illegible]ted	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/29/07	11:20	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB90-SO-0002	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB90	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	James Goerdt
WBS Code #		**Concentration**	Not known	**Modified Date**	9/14/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/29/07	10:10	DPT	0.0	0-2	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/29/07	10:10	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

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- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Pr t Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB90-SO-0204	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB90	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/29/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/29/07	10:10	DPT	0.0	2-4	On Boring Log	

Analysis Records

C ted	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/29/07	10:10	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB90-SO-0406	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB90	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	James Goerdt
WBS Code #		**Concentration**	Not known	**Modified Date**	9/14/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/29/07	10:10	DPT	0.0	4-6	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/29/07	10:10	SW-846 8151A	Herbicides	4°C	3	Glass - Amber	4 oz. wide-mouth w/Teflon cap	do MS/MSD	ED00000057-1

General Observations and Notes

MS/MSD

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB91-SO-0.02.0	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB91	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	
WBS Code #		**Concentration**	Not known	**Modified Date**	
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/28/07	13:50	DPT	0.0	0.0-2.0	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/28/07	13:50	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

WMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

roject Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB91-SO-2.04.0	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB91	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	
WBS Code #		**Concentration**	Not known	**Modified Date**	
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/28/07	13:50	DPT	0.0	2.0-4.0	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/28/07	13:50	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Pr + Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB91-SO-4.06.0	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB91	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/28/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/28/07	13:50	DPT	12.5	4.0-6.0	On Boring Log	strong fuel odor

Analysis Records

C ted	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/28/07	13:50	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB91-SO-14.016.0	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB91	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	
WBS Code #		**Concentration**	Not known	**Modified Date**	
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/28/07	13:50	DPT	0.0	14.0-16.0	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/28/07	13:50	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

MU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

ject Information

cility Name	CRANE NSWC	**Sample ID #**	09SB92-SO-0002	**Created By**	Stephanie Haney
IUS Project #	112G00477	**Sample Location ID**	09SB92	**Created Date**	8/28/07
sk/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
3S Code #		**Concentration**	Not known	**Modified Date**	8/30/07
Sample Type				**Printed By**	James Goerdt
atus	Working			**Printed Date**	10/22/07

mple Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
'30/07	11:24	Hand auger	0	0-2	On Boring Log	

nalysis Records

C ted	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/30/07	11:24	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-2

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

/MU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

ject Information

cility Name	CRANE NSWC	**Sample ID #**	09SB93-SO-0002	**Created By**	Stephanie Haney
NUS Project #	112G00477	**Sample Location ID**	09SB93	**Created Date**	8/28/07
sk/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
BS Code #		**Concentration**	Not known	**Modified Date**	8/29/07
A Sample Type				**Printed By**	James Goerdt
atus	Working			**Printed Date**	10/22/07

mple Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
/29/07	09:45	DPT	0.0	0-2	On Boring Log	

nalysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/29/07	09:45	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB93-SO-0204	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB93	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	
WBS Code #		**Concentration**	Not known	**Modified Date**	
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/29/07	09:45	DPT	0.0	2-4	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/29/07	09:45	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB93-SO-0406	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB93	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/29/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/29/07	09:45	DPT	0.0	4-6	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/29/07	09:45	SW-846 8151A	Herbicides	4°C	1	Glass - Amber	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB94-SO-0002	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB95	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/30/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/30/07	08:00	Hand auger	0	0-2	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/30/07	08:00	SW-846 8151A	Herbicides	4°C	3	Glass - Clear	4 oz. wide-mouth w/Teflon cap	do MS/MSD	ED00000057-2

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB94-SO-0204	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB95	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/30/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/30/07	08:00	Hand auger	0	2-4	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/30/07	08:00	SW-846 81S1A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-2

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB95-SO-0002	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB95	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	
WBS Code #		**Concentration**	Not known	**Modified Date**	
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/30/07	07:45	Hand auger	0	0-2	On Boring Log	

Analysis Records

Cr[illegible]ted	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/30/07	07:45	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-2

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB96-SO-0002	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB96	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/30/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/30/07	08:32	Hand auger	0	0-2	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/30/07	08:32	SW-846 8151A	Herbicides	4°C	3	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-2

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB96-SO-0204	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB96	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/30/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/30/07	08:32	Hand auger	0	2-4	On Boring Log	

Analysis Records

Coll'd	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/30/07	08:32	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-2

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB97-SO-0002	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB97	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/29/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/29/07	13:11	Hand auger	0.0	0-2	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/29/07	13:11	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

WMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

ro' ' Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB97-SO-0204	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB97	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/29/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/29/07	13:11	Hand auger	0.0	2-4	On Boring Log	

Analysis Records

C ted	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/29/07	13:11	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB98-SO-0.02.0	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB98	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/28/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/28/07	12:45	DPT	0.0	0.0-2.0	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/28/07	12:45	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB98-SO-2.04.0	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB98	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/28/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/28/07	12:45	DPT	0.0	2.0-4.0	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/28/07	12:45	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB98-SO-4.06.0	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB98	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/28/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/28/07	12:45	DPT	0.0	4.0-6.0	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/28/07	12:45	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1
✗	8/28/07	12:45	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Pr ᵉ Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB98-SO-16.018.0	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB98	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	
WBS Code #		**Concentration**	Not known	**Modified Date**	
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/28/07	12:45	DPT	0.0	16.0-18.0	On Boring Log	

Analysis Records

C -ted	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/28/07	12:45	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB99-SO-0002	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB99	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/30/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/30/07	10:00	Hand auger	0	0-2	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/30/07	10:00	SW-846 8151A	Herbicides	4°C	3	Glass - Clear	4 oz. wide-mouth w/Teflon cap	do MS/MSD	ED00000057-2

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB100-SO-0002	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB100	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/29/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/29/07	13:50	Hand auger	0	0-2	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/29/07	13:50	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB100-SO-0203	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB100	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/29/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/29/07	13:50	Hand auger	0	2-3	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/29/07	13:50	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Pr t Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB101-SO-0002	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB101	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/30/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/30/07	10:06	Hand auger	0	0-2	On Boring Log	

Analysis Records

C ted	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/30/07	10:06	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-2

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB101-SO-0204	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB101	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/30/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/30/07	10:06	Hand auger	0	2-4	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/30/07	10:06	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-2

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB102-SO-0002	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB102	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/29/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/29/07	13:30	Hand auger	0	0-2	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/29/07	13:30	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB102-SO-0203	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB102	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	
WBS Code #		**Concentration**	Not known	**Modified Date**	
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/29/07	13:30	Hand auger	0	2-3	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/29/07	13:30	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB103-SO-0002	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB103	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	
WBS Code #		**Concentration**	Not known	**Modified Date**	
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/29/07	14:00	Hand auger	0	0-2	orange	

Analysis Records

Cr ted	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/29/07	14:00	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB103-SO-0203	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB103	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/29/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/29/07	14:00	Hand auger	0	2-3	orange	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/29/07	14:00	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB104-SO-0.02.0	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB104	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/28/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/28/07	10:25	DPT	0.0	0002	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/28/07	10:25	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB104-SO-2.04.0	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB104	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	
WBS Code #		**Concentration**	Not known	**Modified Date**	
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/28/07	10:25	DPT	0.0	2.0-4.0	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/28/07	10:25	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB104-SO-4.06.0	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB104	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	
WBS Code #		**Concentration**	Not known	**Modified Date**	
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/28/07	10:25	DPT	0.0	4.0-6.0	On Boring Log	

Analysis Records

Co[illegible]ted	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/28/07	10:25	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB104-SO-10.012.0	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB104	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/28/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/28/07	10:25	DPT	0.0	10.0-12.0	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/28/07	10:25	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB105-SO-0.02.0	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB105	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	
WBS Code #		**Concentration**	Not known	**Modified Date**	
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/28/07	11:00	DPT	0.0	0.0-2.0	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/28/07	11:00	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB105-SO-2.04.0	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB105	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/28/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/28/07	11:00	DPT	0.0	2.0-4.0	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/28/07	11:00	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Pr[illegible] Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB105-SO-4.06.0	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB105	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/28/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/28/07	11:00	DPT	0.0	4.0-6.0	On Boring Log	

Analysis Records

[illegible]ted	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/28/07	11:00	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB105-SO-13.015.0	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB105	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/28/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/28/07	11:00	DPT	0.0	13.0-15.0	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/28/07	11:00	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB106-SO-0.02.0	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB106	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/28/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/28/07	11:25	DPT	0.0	0.0-2.0	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/28/07	11:25	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

WMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

roject Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB106-SO-2.04.0	**Created By**	Stephanie Haney
ftNUS Project #	112G00477	**Sample Location ID**	09SB106	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/28/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

ample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/28/07	11:25	DPT	0.0	2.0-4.0	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/28/07	11:25	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Pr[illegible] Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB106-SO-4.06.0	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB106	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	
WBS Code #		**Concentration**	Not known	**Modified Date**	
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/28/07	11:25	DPT	0.0	4.0-6.0	On Boring Log	

Analysis Records

[illegible]ted	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/28/07	11:25	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB106-SO-12.014.0	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB106	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/28/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/28/07	11:25	DPT	0.0	12.0-14.0	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/28/07	11:25	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Prr ' Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB107-SO-0002	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB107	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/29/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/29/07	14:40	Hand auger	0	0-2	On Boring Log	

Analysis Records

('ed	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/29/07	14:40	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-1

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB108-SO-0002	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB108	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	Stephanie Haney
WBS Code #		**Concentration**	Not known	**Modified Date**	8/30/07
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/30/07	10:26	Hand auger	0	0-2	On Boring Log	

Analysis Records

Collected	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/30/07	10:26	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-2

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

SOIL SEDIMENT SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Sample ID #**	09SB108-SO-0204	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Sample Location ID**	09SB108	**Created Date**	8/28/07
Task/Contract #	0042	**Sampled By**	Stephanie Haney	**Modified By**	
WBS Code #		**Concentration**	Not known	**Modified Date**	
QA Sample Type				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Sample Collection Records

Date	Time	Method	Monitor (ppm)	Depth (ft)	Color	Description
8/30/07	10:26	Hand auger	0	2-4	On Boring Log	

Analysis Records

Created	Date	Time	Analysis / Method	Description of Analysis	Preservative	Count	Type	Requirements	Comments	Chain#
✓	8/30/07	10:26	SW-846 8151A	Herbicides	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap		ED00000057-2

General Observations and Notes

No Notes

- End of Report -

A.3 QUALITY CONTROL LOGS

Tetra Tech NUS, Inc.

QUALITY CONTROL SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**QC Sample ID #**	09FD-08292007-01	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Corresponding Sample ID**	09SB90-SO-0002	**Created Date**	8/29/07
Task/Contract #	0042	**QA Sample Type**	Field Duplicate	**Modified By**	Stephanie Haney
WBS Code #		**Sample Location**	QC	**Modified Date**	8/29/07
Status	Working	**Sampled By**	Stephanie Haney	**Printed By**	James Goerdt
		Concentration	Not known	**Printed Date**	10/22/07

Log Entries

Collected	Date	Time	Analysis / Method	Description of Analysis	Count	Type	Requirements	Matrix	Preservative		Comments	Chain of Custody #
✓	8/29/07	00:00	SW-846 8151A	Herbicides	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	SO	4°C		ED00000057-1	

Tetra Tech NUS, Inc.

QUALITY CONTROL SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**QC Sample ID #**	09FD-08292007-02	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Corresponding Sample ID**	09SB85-SO-0204	**Created Date**	8/29/07
Task/Contract #	0042	**QA Sample Type**	Field Duplicate	**Modified By**	Stephanie Haney
WBS Code #		**Sample Location**	QC	**Modified Date**	8/29/07
Status	Working	**Sampled By**	Stephanie Haney	**Printed By**	James Goerdt
		Concentration	Not known	**Printed Date**	10/22/07

Log Entries

Collected	Date	Time	Analysis / Method	Description of Analysis	Count	Type	Requirements	Matrix	Preservative		Comments	Chain of Custody #
✓	8/29/07	00:00	SW-846 8081 / 8151A	Pesticides / Herbicides	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	SO	4°C		ED00000057-1	

Tetra Tech NUS, Inc.

QUALITY CONTROL SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**QC Sample ID #**	09FD-08302007-01	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Corresponding Sample ID**	09SB94-SO-0002	**Created Date**	8/30/07
Task/Contract #	0042	**QA Sample Type**	Field Duplicate	**Modified By**	Stephanie Haney
WBS Code #		**Sample Location**	QC	**Modified Date**	8/30/07
Status	Working	**Sampled By**	Stephanie Haney	**Printed By**	James Goerdt
		Concentration	Not known	**Printed Date**	10/22/07

Log Entries

Collected	Date	Time	Analysis / Method	Description of Analysis	Count	Type	Requirements	Matrix	Preservative		Comments	Chain of Custody #
✓	8/30/07	00:00	SW-846 8151A	Herbicides	3	Glass - Clear	4 oz. wide-mouth w/Teflon cap	SO	4°C	do MS/MSD	ED00000057-2	

Tetra Tech NUS, Inc.

QUALITY CONTROL SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**QC Sample ID #**	09FD-08302007-02	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Corresponding Sample ID**	09SB96-SO-0002	**Created Date**	8/30/07
Task/Contract #	0042	**QA Sample Type**	Field Duplicate	**Modified By**	Stephanie Haney
WBS Code #		**Sample Location**	QC	**Modified Date**	8/30/07
Status	Working	**Sampled By**	Stephanie Haney	**Printed By**	James Goerdt
		Concentration	Not known	**Printed Date**	10/22/07

Log Entries

Collected	Date	Time	Analysis / Method	Description of Analysis	Count	Type	Requirements	Matrix	Preservative		Comments	Chain of Custody #
✓	8/30/07	00:00	SW-846 8151A	Herbicides	3	Glass - Clear	4 oz. wide-mouth w/Teflon cap	SO	4°C		ED00000057-2	

Tetra Tech NUS, Inc.

QUALITY CONTROL SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**QC Sample ID #**	09FD-08302007-03	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Corresponding Sample ID**	09SB99-SO-0002	**Created Date**	8/30/07
Task/Contract #	0042	**QA Sample Type**	Field Duplicate	**Modified By**	Stephanie Haney
WBS Code #		**Sample Location**	QC	**Modified Date**	8/30/07
Status	Working	**Sampled By**	Stephanie Haney	**Printed By**	James Goerdt
		Concentration	Not known	**Printed Date**	10/22/07

Log Entries

Collected	Date	Time	Analysis / Method	Description of Analysis	Count	Type	Requirements	Matrix	Preservative		Comments	Chain of Custody #
✓	8/30/07	00:00	SW-846 8151A	Herbicides	3	Glass - Clear	4 oz. wide-mouth w/Teflon cap	SO	4°C	do MS/MSD	ED00000057-2	

Tetra Tech NUS, Inc.

QUALITY CONTROL SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**QC Sample ID #**	09RB-08302007-01	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Corresponding Sample ID**		**Created Date**	8/30/07
Task/Contract #	0042	**QA Sample Type**	Rinsate Blank	**Modified By**	Stephanie Haney
WBS Code #		**Sample Location**	QC	**Modified Date**	8/30/07
Status	Working	**Sampled By**	Stephanie Haney	**Printed By**	James Goerdt
		Concentration	Not known	**Printed Date**	10/22/07

Log Entries

Collected	Date	Time	Analysis / Method	Description of Analysis	Count	Type	Requirements	Matrix	Preservative		Comments	Chain of Custody #
✓	8/30/07	13:39	SW-846-8270C	OSDRO-specific COCs per IDEM	1	Glass - Clear	1L	AQ	4°C	analysis - pesticides (846-8081) and herbicides (846-8151A)	ED00000057-2	

Tetra Tech NUS, Inc.

QUALITY CONTROL SAMPLING LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**QC Sample ID #**	09-RB-08302007-02	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**Corresponding Sample ID**		**Created Date**	8/30/07
Task/Contract #	0042	**QA Sample Type**	Rinsate Blank	**Modified By**	Stephanie Haney
WBS Code #		**Sample Location**	QC	**Modified Date**	8/30/07
Status	Working	**Sampled By**	Stephanie Haney	**Printed By**	James Goerdt
		Concentration	Not known	**Printed Date**	10/22/07

Log Entries

Collected	Date	Time	Analysis / Method	Description of Analysis	Count	Type	Requirements	Matrix	Preservative		Comments	Chain of Custody #
	8/30/07	13:52	SW-846-8270C	OSDRO-specific COCs per IDEM	1	Glass - Clear	1L	AQ	4°C	analysis: Pesticides (SW-846-8081) and herbicides (SW-846-8151A)	ED00000057-2	

APPENDIX B

MISCELLANEOUS FIELD DOCUMENTATION
PHASE 5

Tetra Tech NUS, Inc.

CHAIN OF CUSTODY LOG

; ;U 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Project Manager (PM)**	Ralph Basinski	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**PM Telephone**		**Created Date**	8/29/07
Task/Contract #	0042	**Field Op Leader (FOL)**	James Goerdt	**Modified By**	
WBS Code #	04.0202	**FOL Phone**		**Modified Date**	
Chain of Custody ID	ED00000057-1	**Carrier**	Federal Express	**Printed By**	James Goerdt
		Carrier/Waybill No.	861658315680	**Printed Date**	10/22/07

Chain of Custody Information

Chain of Custody #	**ED00000057-1**	**Lab Name**	Laucks Testing Laboratories, Inc	**Relenquished By**	Stephanie Haney
Carrier	Federal Express	**Address**	940 South Harney Street	**Date**	08/29/2007
Carrier/Waybill No.	861658315680	**City, State, Zip**	Seattle, WA 98108	**Time**	18:00
		Lab Contact	Elaine Walker	**Received By:**	Federal Express
		Lab Telephone	NA	**Date**	8/29/07
				Time	18:00

Sample Records

Date	Sample ID#	Time	Analysis	Description	Loc ID	Matrix	Preservative	No.	Type	Requirements	Comments
8/28/07	09SB104-SO-0.02.0	10:25	SW-846 8151A	Herbicides	09SB104	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/28/07	09SB104-SO-10.012.0	10:25	SW-846 8151A	Herbicides	09SB104	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/28/07	09SB104-SO-2.04.0	10:25	SW-846 8151A	Herbicides	09SB104	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/28/07	09SB104-SO-4.06.0	10:25	SW-846 8151A	Herbicides	09SB104	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/28/07	09SB105-SO-0.02.0	11:00	SW-846 8151A	Herbicides	09SB105	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
	09SB105-									4 oz. wide-	

8/28/07	SO-13.015.0	11:00	SW-846 8151A	Herbicides	09SB105	SO	4°C	1	Glass - Clear	mouth w/Teflon cap	
8/28/07	09SB105-SO-2.04.0	11:00	SW-846 8151A	Herbicides	09SB105	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/28/07	09SB105-SO-4.06.0	11:00	SW-846 8151A	Herbicides	09SB105	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	

Tetra Tech NUS, Inc.

CHAIN OF CUSTODY LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Sample Records

Date	Sample ID#	Time	Analysis	Description	Loc ID	Matrix	Preservative	No.	Type	Requirements	Comments
8/28/07	09SB106-SO-0.02.0	11:25	SW-846 8151A	Herbicides	09SB106	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/28/07	09SB106-SO-12.014.0	11:25	SW-846 8151A	Herbicides	09SB106	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/28/07	09SB106-SO-2.04.0	11:25	SW-846 8151A	Herbicides	09SB106	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/28/07	09SB106-SO-4.06.0	11:25	SW-846 8151A	Herbicides	09SB106	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/28/07	09SB86-SO-0002	10:05	SW-846 8081 / 8151A	Pesticides / Herbicides	09SB86	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/28/07	09SB86-SO-0204	10:05	SW-846 8081 / 8151A	Pesticides / Herbicides	09SB86	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/28/07	09SB86-SO-0406	10:05	SW-846 8081 / 8151A	Pesticides / Herbicides	09SB109	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/28/07	09SB86-SO-0810	10:05	SW-846 8081 / 8151A	Pesticides / Herbicides	09SB86	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/28/07	09SB87-SO-0.02.0	09:30	SW-846 8151A	Herbicides	09SB87	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/28/07	09SB87-SO-10.012.0	09:30	SW-846 8151A	Herbicides	09SB87	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/28/07	09SB87-SO-2.04.0	09:30	SW-846 8151A	Herbicides	09SB87	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/28/07	09SB87-SO-4.06.0	09:30	SW-846 8151A	Herbicides	09SB87	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/28/07	09SB91-	13:50	SW-846	Herbicides	09SB91	SO	4°C	1	Glass -	4 oz. wide-	

	SO-0.02.0		8151A						Clear	w/Teflon cap	
8/28/07	09SB91-SO-14.016.0	13:50	SW-846 8151A	Herbicides	09SB91	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/28/07	09SB91-SO-2.04.0	13:50	SW-846 8151A	Herbicides	09SB91	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/28/07	09SB91-SO-4.06.0	13:50	SW-846 8151A	Herbicides	09SB91	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/28/07	09SB98-SO-0.02.0	12:45	SW-846 8151A	Herbicides	09SB98	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/28/07	09SB98-SO-16.018.0	12:45	SW-846 8151A	Herbicides	09SB98	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/28/07	09SB98-SO-2.04.0	12:45	SW-846 8151A	Herbicides	09SB98	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/28/07	09SB98-SO-4.06.0	12:45	SW-846 8151A	Herbicides	09SB98	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	

Tetra Tech NUS, Inc.

CHAIN OF CUSTODY LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Sample Records

Date	Sample ID#	Time	Analysis	Description	Loc ID	Matrix	Preservative	No.	Type	Requirements	Comments
8/29/07	09FD-08292007-01	00:00	SW-846 8151A	Herbicides	QC	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/29/07	09FD-08292007-02	00:00	SW-846 8081 / 8151A	Pesticides / Herbicides	QC	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/29/07	09SB100-SO-0002	13:50	SW-846 8151A	Herbicides	09SB100	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/29/07	09SB100-SO-0203	13:50	SW-846 8151A	Herbicides	09SB100	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/29/07	09SB102-SO-0002	13:30	SW-846 8151A	Herbicides	09SB102	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/29/07	09SB102-SO-0203	13:30	SW-846 8151A	Herbicides	09SB102	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/29/07	09SB103-SO-0002	14:00	SW-846 8151A	Herbicides	09SB103	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/29/07	09SB103-SO-0203	14:00	SW-846 8151A	Herbicides	09SB103	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/29/07	09SB107-SO-0002	14:40	SW-846 8151A	Herbicides	09SB107	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/29/07	09SB84-SO-0002	11:00	SW-846 8081 / 8151A	Pesticides / Herbicides	09SB84	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/29/07	09SB84-SO-0204	11:00	SW-846 8081 / 8151A	Pesticides / Herbicides	09SB84	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/29/07	09SB84-SO-0406	11:00	SW-846 8081 / 8151A	Pesticides / Herbicides	09SB84	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/29/07	09SB84-SO-	11:00	SW-846 8081 /	Pesticides /	09SB84	SO	4°C	1	Glass -	4 oz. wide-mouth	

	0607		8151A	Herbicides					Clear	w/Teflon cap	
8/29/07	09SB85-SO-0002	10:30	SW-846 8081 / 8151A	Pesticides / Herbicides	09SB85	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/29/07	09SB85-SO-0204	10:30	SW-846 8081 / 8151A	Pesticides / Herbicides	09SB85	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/29/07	09SB85-SO-0406	10:30	SW-846 8081 / 8151A	Pesticides / Herbicides	09SB85	SO	4°C	3	Glass - Clear	4 oz. wide-mouth w/Teflon cap	do MS/MSD
8/29/07	09SB88-SO-0002	11:20	SW-846 8151A	Herbicides	09SB88	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/29/07	09SB88-SO-0204	11:20	SW-846 8151A	Herbicides	09SB88	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/29/07	09SB88-SO-0406	11:20	SW-846 8151A	Herbicides	09SB88	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/29/07	09SB88-SO-0810	11:20	SW-846 8151A	Herbicides	09SB88	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	

Tetra Tech NUS, Inc.

CHAIN OF CUSTODY LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Sample Records

Date	Sample ID#	Time	Analysis	Description	Loc ID	Matrix	Preservative	No.	Type	Requirements	Comments
8/29/07	09SB89-SO-0002	14:25	SW-846 8151A	Herbicides	09SB89	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/29/07	09SB89-SO-0204	14:25	SW-846 8151A	Herbicides	09SB89	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/29/07	09SB90-SO-0002	10:10	SW-846 8151A	Herbicides	09SB90	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/29/07	09SB90-SO-0204	10:10	SW-846 8151A	Herbicides	09SB90	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/29/07	09SB90-SO-0406	10:10	SW-846 8151A	Herbicides	09SB90	SO	4°C	3	Glass - Amber	4 oz. wide-mouth w/Teflon cap	do MS/MSD
8/29/07	09SB93-SO-0002	09:45	SW-846 8151A	Herbicides	09SB93	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/29/07	09SB93-SO-0204	09:45	SW-846 8151A	Herbicides	09SB93	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/29/07	09SB93-SO-0406	09:45	SW-846 8151A	Herbicides	09SB93	SO	4°C	1	Glass - Amber	4 oz. wide-mouth w/Teflon cap	
8/29/07	09SB97-SO-0002	13:11	SW-846 8151A	Herbicides	09SB97	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/29/07	09SB97-SO-0204	13:11	SW-846 8151A	Herbicides	09SB97	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	

General Observations and Notes

No Notes

- End of Report -

Tetra Tech NUS, Inc.

CHAIN OF CUSTODY LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Project Manager (PM)**	Ralph Basinski	**Created By**	Stephanie Haney
TtNUS Project #	112G00477	**PM Telephone**		**Created Date**	8/30/07
Task/Contract #	0042	**Field Op Leader (FOL)**	James Goerdt	**Modified By**	
WBS Code #	04.0202	**FOL Phone**		**Modified Date**	
Chain of Custody ID	ED00000057-2	**Carrier**	Federal Express	**Printed By**	James Goerdt
		Carrier/Waybill No.	861658315691	**Printed Date**	10/22/07

Chain of Custody Information

Chain of Custody #	**ED00000057-2**	**Lab Name**	Laucks Testing Laboratories, Inc	**Relenquished By**	Stephanie Haney
Carrier	Federal Express	**Address**	940 South Harney Street	**Date**	08/30/2007
Carrier/Waybill No.	861658315691	**City, State, Zip**	Seattle, WA 98108	**Time**	17:00
		Lab Contact	Elaine Walker	**Received By:**	Federal Express
		Lab Telephone	NA	**Date**	8/30/07
				Time	17:00

Sample Records

Date	Sample ID#	Time	Analysis	Description	Loc ID	Matrix	Preservative	No.	Type	Requirements	Comments
8/30/07	09-RB-08302007-02	13:52	SW-846-8270C	OSDRO-specific COCs per IDEM	QC	AQ	4°C	1	Glass - Clear	1L	analysis: Pesticides (SW-846-8081) and herbicides (SW-846-8151A)
8/30/07	09FD-08302007-01	00:00	SW-846 8151A	Herbicides	QC	SO	4°C	3	Glass - Clear	4 oz. wide-mouth w/Teflon cap	do MS/MSD
8/30/07	09FD-08302007-02	00:00	SW-846 8151A	Herbicides	QC	SO	4°C	3	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/30/07	09FD-08302007-03	00:00	SW-846 8151A	Herbicides	QC	SO	4°C	3	Glass - Clear	4 oz. wide-mouth w/Teflon cap	do MS/MSD
8/30/07	09RB-08302007-01	13:39	SW-846-8270C	OSDRO-specific COCs per IDEM	QC	AQ	4°C	1	Glass - Clear	1L	analysis pesticides (846-8081) and herbicides (846-8151A)

8/30/07	09SB101-SO-0002	10:06	SW-846 8151A	Herbicides	09SB101	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
'07	09SB101-SO-0204	10:06	SW-846 8151A	Herbicides	09SB101	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/30/07	09SB108-SO-0002	10:26	SW-846 8151A	Herbicides	09SB108	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	

Tetra Tech NUS, Inc.

CHAIN OF CUSTODY LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Sample Records

Date	Sample ID#	Time	Analysis	Description	Loc ID	Matrix	Preservative	No.	Type	Requirements	Comments
8/30/07	09SB108-SO-0204	10:26	SW-846 8151A	Herbicides	09SB108	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/30/07	09SB92-SO-0002	11:24	SW-846 8151A	Herbicides	09SB92	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/30/07	09SB94-SO-0002	08:00	SW-846 8151A	Herbicides	09SB95	SO	4°C	3	Glass - Clear	4 oz. wide-mouth w/Teflon cap	do MS/MSD
8/30/07	09SB94-SO-0204	08:00	SW-846 8151A	Herbicides	09SB95	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/30/07	09SB95-SO-0002	07:45	SW-846 8151A	Herbicides	09SB95	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/30/07	09SB96-SO-0002	08:32	SW-846 8151A	Herbicides	09SB96	SO	4°C	3	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/30/07	09SB96-SO-0204	08:32	SW-846 8151A	Herbicides	09SB96	SO	4°C	1	Glass - Clear	4 oz. wide-mouth w/Teflon cap	
8/30/07	09SB99-SO-0002	10:00	SW-846 8151A	Herbicides	09SB99	SO	4°C	3	Glass - Clear	4 oz. wide-mouth w/Teflon cap	do MS/MSD

General Observations and Notes

No Notes

- End of Report -

B.2 EQUIPMENT CALIBRATION LOG

Tetra Tech NUS, Inc.

EQUIPMENT CALIBRATION LOG

1U 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Facility Name	CRANE NSWC	**Instrument**	2020 PRO	**Created By**	James Goerdt
TtNUS Project #	112G00477	**Manufacturer**	Photovac	**Created Date**	8/31/07
Task/Contract #	0042	**Serial Number**	unknown	**Modified By**	James Goerdt
WBS Code #	04.0202			**Modified Date**	9/19/07
Client				**Printed By**	James Goerdt
Status	Working			**Printed Date**	10/22/07

Calibration Records

Date	Calibrator	Isobutylene (100 ppm)	Comments
8/29/07	James Goerdt	Pre: 91.2 Post: 100 Std: NA Exp: NA	
8/28/07	James Goerdt	Pre: 88.3 Post: 100 Std: NA Exp: NA	

B.3 DAILY ACTIVITY LOGS

Tetra Tech NUS, Inc.

DAILY ACTIVITY LOG

S IU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Activity Date		**Weather/Temp**		**Created By**	James Goerdt
Facility Name	CRANE NSWC	**TtNUS Personnel**		**Created Date**	8/29/07
TtNUS Project #	112G00477	**Subcontractor Personnel**		**Modified By**	
Task/Contract #	0042	**Visitors**		**Modified Date**	
WBS Code #	04.0202	**Status**	New	**Printed By**	James Goerdt
Client				**Printed Date**	10/22/07

Daily Activity

Date	Time	Author	Notes

- End of Report -

Tetra Tech NUS, Inc.

DAILY ACTIVITY LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Activity Date	8/27/07	**Weather/Temp**	Sunny	**Created By**	James Goerdt
Facility Name	CRANE NSWC	**TtNUS Personnel**	JG = James Goerdt;SH = Stephanie Haney	**Created Date**	8/29/07
TtNUS Project #	112G00477			**Modified By**	James Goerdt
Task/Contract #	0042	**Subcontractor Personnel**	NA	**Modified Date**	8/31/07
WBS Code #	04.0202			**Printed By**	James Goerdt
Client		**Visitors**	NA	**Printed Date**	10/22/07
		Status	Working		

Daily Activity

Date	Time	Author	Notes
8/27/07	09:30	James Goerdt	JG travels from Pittsburgh to NSWC Crane late morning/early afternoon.
8/27/07	14:45	James Goerdt	JG arrived at Crane Visitors Center to obtain pass. Pass had not yet been approved so a temporary one-day pass was obtained. Tom Brent was notified.
8/27/07	15:00	James Goerdt	JG met up with Tom Brent. Tom asked that I also mark out UXO 5 and 7 with white construction flags as he had done at SWMU 9.
8/27/07	15:45	James Goerdt	Unpacking equipment.
8/27/07	17:00	James Goerdt	Arrived at SWMU 9 and began marking sample locations.
8/27/07	19:40	James Goerdt	Returned to Bldg 3245. Misc office duties.
8/27/07	20:00	James Goerdt	JG left Crane enroute to WalMart for

			filed supplies, and returned to hotel at 21:00.

- End of Report -

Tetra Tech NUS, Inc.

DAILY ACTIVITY LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Activity Date	8/28/07	**Weather/Temp**	Sunny	**Created By**	James Goerdt
Facility Name	CRANE NSWC	**TtNUS Personnel**	JG = James Goerdt;SH = Stephanie Haney	**Created Date**	9/13/07
TtNUS Project #	112G00477			**Modified By**	James Goerdt
Task/Contract #	0042	**Subcontractor Personnel**	DB = David Brenner (EFS)	**Modified Date**	9/13/07
WBS Code #	04.0202			**Printed By**	James Goerdt
Client		**Visitors**		**Printed Date**	10/22/07
		Status	Working		

Daily Activity

Date	Time	Author	Notes
8/28/07	06:40	James Goerdt	JG and SH arrive at the Crane vistors center to pick up passes. Had to wait a few minutes before it opened. Once it opened, we received our passes and proceeded through security.
8/28/07	07:00	James Goerdt	JG and SH arrive at Bldg 3245. Begin loading sampling equipment into vehicles and preparing for soil sampling. Callibrated the PID.
8/28/07	08:30	James Goerdt	DB with Environmental field Services arrived at Bldg 3245 after some misguided directions. JG had SH and DB complete their medical clearance forms and received their OSH certifications. Held a brief Health and Safety meeting to go over

			potential hazards at the site.
8/28/07	09:20	James Goerdt	Arrived at SWMU 9 to begin soil sampling via DPT. Began with sample locations on the top part of the SWMU.
8/28/07	09:30	James Goerdt	Begin boring the first sample location (09SB087). Continued boring locations 09SB086, 091, 098, 104, 105, and 106. At sample location 09SB092, the DPT rig hit refusal at 2 feet below ground surface 5 different times before abandoning the effort. Will try to collect a hand auger sample from that location tomorrow a little further inside the tree/weed line. Returned all unused cores to the sample location and topping off with bentonite chips if necessary. Completed sampling the last boring at 13:50. Began clean-up of area and returned to Bldg. 3245.
8/28/07	14:15	James Goerdt	JG and SH returned to Building 3245 to process (label) the samples and store in fridge.
[illegible] '07	17:50	James Goerdt	JG and SH leave Crane en-route to hotel.

- End of Report -

Tetra Tech NUS, Inc.

DAILY ACTIVITY LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Activity Date	8/29/07	**Weather/Temp**	Sun	**Created By**	James Goerdt
Facility Name	CRANE NSWC	**TtNUS Personnel**	JG = James Goerdt;SH = Stephanie Haney	**Created Date**	8/31/07
TtNUS Project #	112G00477			**Modified By**	James Goerdt
Task/Contract #	0042	**Subcontractor Personnel**	DB = David Breanner (EFS)	**Modified Date**	9/13/07
WBS Code #	04.0202			**Printed By**	James Goerdt
Client		**Visitors**		**Printed Date**	10/22/07
		Status	Working		

Daily Activity

Date	Time	Author	Notes
8/29/07	06:45	James Goerdt	JG and SH arrive at Crane. Begin loading vehicles with sample equipment and supplies. Callibrate the PID.
8/29/07	08:15	James Goerdt	DB with EFS arrives on-site. JG completes an equipment inspection of the DPT rig. Everything in good working condition. 08:30 - JG, SH, DB enroute to SWMU 9 to continue sampling.
			Arrived at SWMU 9 and planned to begin sampling at location 09SB102. While backing the box truck (DPT rig) between the above ground steam line and the tree line it got stuck in a small wet area. As we tried to get it out the truck began sliding toward a nearby monitoring well

8/29/07	08:30	James Goerdt	posts. After about an hour of manuvering we were able to free the truck with no damage to the truck or the guard posts. We then limited the DPT rig to areas that we were sure it would not get stuck. The first boring (09SB093) was sampled at 09:45 and followed by locations 09SB084, 085, 088, and 090. Again, all cores were returned to the respective boring and topped off with bentonite chips if necessary. We finished with the DPT rig at 11:45 and after lunch, DB exited Crane.
8/29/07	12:30	James Goerdt	JG and SH returned to SWMU 9 to begin HA of sample locations. Sampled locations 09SB097, 100, 103, and 107. Soil was very difficult to hand auger and refusal was met anywhere from 2-4 feet below ground surface.
8/29/07	15:20	James Goerdt	JG and SH return to Bldg 3245 to process samples for shipping and to unload/clean equipment.
8/29/07	18:15	James Goerdt	JG and SH leave Crane enroute to Fed Ex in Bloomington to drop off samples.

8/29/07	18:45	James Goerdt	Fed Ex and dropped off samples.
8/29/07	19:00	James Goerdt	JG stops at WalMart to purchase additional field supplies (water and batteries). Return to hotel.

- End of Report -

Tetra Tech NUS, Inc.

DAILY ACTIVITY LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Activity Date	8/30/07	**Weather/Temp**	Sun	**Created By**	James Goerdt
Facility Name	CRANE NSWC	**TtNUS Personnel**	JG = James Goerdt;SH = Stephanie Haney	**Created Date**	8/31/07
TtNUS Project #	112G00477			**Modified By**	James Goerdt
Task/Contract #	0042	**Subcontractor Personnel**	NA	**Modified Date**	9/13/07
WBS Code #	04.0202			**Printed By**	James Goerdt
Client		**Visitors**	NA	**Printed Date**	10/22/07
		Status	Working		

Daily Activity

Date	Time	Author	Notes
'07	06:45	James Goerdt	JG and SH arrive at Crane. Load equipment and supplies into vehicles for sampling at SWMU 9. Proceed to SWMU 9 and collected samples from sample locations 09SB92, 94, 95, 96, 99, 101, and 108. FD-1 collected at 09SS940002
8/30/07	11:45	James Goerdt	JG and SH return to Bldg 3245. Samples collected at locations 09SB92, 94, 95, 96, 99, 101, and 108. Sample location 09SB108 was added due to the misplacement of sample location 09SB089. Sample 09SB089 was misplaced and sampled on 8/29/07. Ed Sedlmyer was contacted and asked to contact the

			have them dispose of all samples associated with location 09SB089. Two rinsate blanks were also collected RB-1 was from DPT sleeve and RB-2 collected from hand auger bucket.
8/30/07	13:45	James Goerdt	JG met with Tom Brent regarding UXO 5 and UXO 7.
8/30/07	16:15	James Goerdt	JG and SH return to Bldg 3245. Clean out vehicles. Load sample cooler and equipment for shipping. Light clean of field office.
8/30/07	16:34	James Goerdt	SH leaves Crane enroute to Indianapolis.
8/30/07	16:55	James Goerdt	JG leaves Crane enroute to Fed Ex.
8/30/07	17:30	James Goerdt	JG arrives at Fed Ex to drop off sample cooler and equipment. Stopped for fuel on way back to hotel.

- End of Report -

Tetra Tech NUS, Inc.

DAILY ACTIVITY LOG

SWMU 9 Pesticide and Herbicide Delineation - August 2007 - CRANE NSWC

Project Information

Activity Date	8/31/07	**Weather/Temp**		**Created By**	James Goerdt
Facility Name	CRANE NSWC	**TtNUS Personnel**		**Created Date**	9/14/07
TtNUS Project #	112G00477	**Subcontractor Personnel**		**Modified By**	James Goerdt
Task/Contract #	0042	**Visitors**		**Modified Date**	9/14/07
WBS Code #	04.0202	**Status**	Working	**Printed By**	James Goerdt
Client				**Printed Date**	10/22/07

Daily Activity

Date	Time	Author	Notes
8/31/07	07:00	James Goerdt	JG completing paper work in the AM and traveling back to Pittsburgh in the afternoon.

- End of Report -

B.4 FIELD TASK MODIFICATION FORM

TETRA TECH NUS
FIELD TASK MODIFICATION REQUEST FORM

NSWC Crane
Swmu 9
Project/Installation Name

0042/112600477
CTO & Project Number

01
Task Mod. Number

RCRA QAPP
Addendum 3
Modification To (e.g. Work Plan)

09SB089
Site/Sample Location

1-4-08
Date

Activity Description: Boring location mistakenly placed in wrong location.

Reason for Change: Due to stake placed in wrong location, samples were discarded by laboratory. Sample ID was not used & replaced by 09SB108.

Recommended Disposition: Laboratory was notified not to analyze samples collected at 09SB089 & to discard samples.

Field Operations Leader (Signature)

1-4-08
Date

Approved Disposition:
Original samples from 09SB089 were discarded by the laboratory.

CTO 42
112600477
Project/Task Order Manager (Signature)

1/4/08
Date

Distribution:

Program/Project File –
Project/Task Order Manager –
Field Operations Leader –

Other:

*Original FTMR misplaced. This is a replacement

APPENDIX C

HEALTH AND SAFETY DOCUMENTATION
PHASE 5

SWMU 09
August '07

FIGURE 8-2

SITE-SPECIFIC TRAINING DOCUMENTATION

My signature below indicates that I am aware of the potential hazardous nature of performing investigation activities at NSWC Crane, and that I have received site-specific training that included the elements presented below:

- Names of personnel and alternates responsible for site safety and health
- Safety, health and other hazards present on site
- Use of personal protective equipment
- Work practices to minimize risks from hazards
- Safe use of engineering controls and equipment
- Medical surveillance requirements
- Signs and symptoms of overexposure
- The contents of the health and safety plan including Table 5-1 and 6-1
- Emergency response procedures (evacuation and assembly points)
- Review contents of relevant Material Safety Data Sheets
- Review of Safe Work Permits

I have been given the opportunity to ask questions and that my questions have been answered to my satisfaction. The dates of my training and my medical surveillance requirements are accurate and correct to the best of my knowledge.

Name (Printed and Signature)	Site-Specific Training Date	40-Hour Training (Date)	8-Hour Refresher Training (Date)	8-Hour Supervisory Training (Date)	Medical Exam
Jim Goerdt	8/28/07	12/91	2/07	8/07	11/05
Stephanie Haney	8/28/07	9/22/06	NA	NA	9/14/06
David Benner	8/28/07	6/6/07	NA	6/13	6/8/07

MEDICAL DATA SHEET

This Medical Data Sheet must be completed by all on-site personnel and kept in the command post during the conduct of site operations. This data sheet will accompany any personnel when medical assistance is needed or if transport to hospital facilities is required.

Project: Crane NSWC Swmu 9

Name: Jim Goerdt Home Telephone: 412-319-7303

Address: 5418 Forest Edge Drive

Age: 43 Height: 5'11" Weight: 175

Name of Next Kin: Shanan Goerdt

Drug or other Allergies: None

Particular Sensitivities: Poison Ivy

Do You Wear Contacts? No

Provide a Checklist of Previous Illnesses or Exposure to Hazardous Chemicals: None

What medications are you presently using? None

Do you have any medical restrictions? None

Name, Address, and Phone Number of personal physician:

Fabiagudi
412-343-1770

I am the individual described above. I have read and understand this HASP.

Signature Date: 8/28/07

CLICKSAFETY®

CERTIFICATE OF WEB BASED TRAINING

This is to certify that

JAMES GOERDT

Has successfully completed

C4 Hazwoper Supervisor

The course was developed and presented by ClickSafety

Serial Number: 1657569

Completed: 8/6/2007

APPLIED EDUCATIONAL SERIES

James D. Goerdt

APPLIED ASSOCIATES INTERNATIONAL INC.

CERTIFICATE

OSHA, 1910.120 Hazardous Waste Operations and Emergency Response 40 Hour Course

ISSUE DATE: December 13, 1991

EXPIRATION: December 13, 1992

CERTIFICATE: HAZ9112001058

STEVEN L. WILLIAMS
President

THOMAS O. MURRAY
Certified Industrial Hygenist

P. O. Box 300068
Fern Park, Florida 32730-0068

TETRA TECH NUS

CERTIFICATE OF TRAINING

THIS CERTIFIES THAT

Jim Goerdt

has successfully completed an 8-hour course of instruction in

OSHA 29 CFR 1910.120

GENERAL SITE WORKER
REFRESHER TRAINING

prepared and instructed by
Tetra Tech NUS, Inc.
Pittsburgh, Pennsylvania

February 2, 2007

Date of Award

Matthew M. Soltis, CIH, CSP
Manager
Health and Safety

MEDICAL DATA SHEET

This Medical Data Sheet must be completed by all on-site personnel and kept in the command post during the conduct of site operations. This data sheet will accompany any personnel when medical assistance is needed or if transport to hospital facilities is required.

Project: Crane NSWC SWMU 9 Pesticide and Herbicide Delineati

Name: Stephanie Haney Home Telephone: (330) 289-4889

Address: 1538 Hillsdale Ave, Pittsburgh PA 15216

Age: 28 Height: 5'6" Weight: 120 lbs

Name of Next Kin: Charlie Wanno

Drug or other Allergies: Sulfa drugs

Particular Sensitivities: —

Do You Wear Contacts? no

Provide a Checklist of Previous Illnesses or Exposure to Hazardous Chemicals: na

What medications are you presently using? na

Do you have any medical restrictions? no

Name, Address, and Phone Number of personal physician:

I am the individual described above. I have read and understand this HASP.

Signature Date: 8/28/07

WORK STATUS REPORT

Employer Copy

TYPE OF EXAMINATION: Baseline Examination

EMPLOYEE:	Haney, Stephanie	**COMPANY:**	TT/NUS
SSN:	XXX-XX-3148	**POSITION:**	Not Indicated
DATE OF EXAM:	09/14/2006	**LOCATION:**	TT/NUS-Pittsburgh
EXPIRATION DATE:	09/14/2008	**SITE:**	Pittsburgh

The following recommendations are based on a review of one or all of the following: a base history questionnaire, supporting diagnostic tests, physical examination, and the essential functions of the position applied for or occupied by the individual named above.

	Yes	No	Undecided
Has the employee any detected medical conditions that would increase his/her risk of material health impairment from occupational exposure in accordance with 29 CFR §1910.120?	☐	☒	☐
Does the employee have any limitations in the use of respirators in accordance with 29 CFR §1910.134?	☐	☒	☐

STATUS

1. ☒ **QUALIFIED** The examination indicates no significant medical condition. Employee can be assigned any work consistent with skills and training.

2. ☐ **QUALIFIED - WITH LIMITATIONS** The examination indicates that a medical condition currently exists that limits work assignments on the following basis:

3. ☐ **NOT QUALIFIED**

4. ☐ **DEFERRED** The examination indicated that additional information is necessary. The employee has been given the following instructions.

COMMENTS: ***Qualified for biennial status.***

I have reviewed the medical data of the above named employee, and informed the employee of the results of the medical examination and any medical conditions that require follow-up examination or treatment.

Name of Physician: Peter P. Greaney, M.D. Date: 09/20/06

Signature: Peter P Greaney MD

WorkCare
300 S. Harbor Blvd., Suite 600, Anaheim, CA 92805
(714) 978-7488 • (800) 455-6155 • FAX (714) 456-2154

CERTIFICATE OF TRAINING

This Certifies that

STEPHANIE HANEY

successfully completed 40 hours of instruction in

HAZARDOUS WASTE OPERATIONS AND EMERGENCY RESPONSE

Presented by the Center for Safety and Environmental Management

in compliance with OSHA standard 29 CFR 1910.120

Frank V. Quarato/Instructor

September 22, 2006

Completion Date

MEDICAL DATA SHEET

This Medical Data Sheet must be completed by all on-site personnel and kept in the command post during the conduct of site operations. This data sheet will accompany any personnel when medical assistance is needed or if transport to hospital facilities is required.

Project: Crane NSWC SWMU 9 pesticide/herbicide delination

Name: David Brenner Home Telephone: 314-856-3302

Address: 9312 Viking Hills Ct Apt F Indianapolis, IN 46250

Age: 23 Height: 6'2 Weight: 200

Name of Next Kin: Dawne Adduci

Drug or Other Allergies: N/A

Particular Sensitivities: N/A

Do you wear contacts? yes

Provide a checklist of Previous Illnesses or Exposure to Hazardous Chemicals: N/A

What medications are you currently using? N/A

Do you have any medical restrictions? N/A

Name, address, and phone number of your personal physician: Elizabeth Hanrahan
865 Westfield rd, Noblesville, IN 46062
317-776-3851

I am the individual described above. I have read and understood this HASP.

Signature: [signature] Date: 8/30

COMPLIANCE ENVIRONMENTAL RESOURCES, INC.

7002 Graham Road, Suite 202
Indianapolis, IN 46220
(317) 863-0008-*phone* (317) 863-0009-*fax*
www.esrstaffing.com

David Brenner

Has completed the 40 Hour Hazardous Waste Operations and Emergency Response (HAZWOPER) course in compliance with 29 CFR 1910.120 (e).
This individual will have met the criteria for certification upon completion of 24 hours of supervised training.

Instructor :
Christopher A. Kinsey, CHMM, CET

Completion Date :
June 6, 2007

EQUIPMENT INSPECTION

COMPANY: Environmental Field Services **UNIT NO.** 6600 GeoProbe

FREQUENCY: Inspect daily, document prior to use and as repairs are needed.

Inspection Date: 8/~~28~~ 29/07 Time: 0815 Equipment Type: DPT Rig (e.g., bulldozer)

	Good	Need Repair	N/A
Tires or tracks	X	☐	X
Hoses and belts	X	☐	☐
Cab, mirrors, safety glass	X	☐	☐
- Turn signals, lights, brake lights, etc. (front/rear) for equipment approved for highway use?	X	☐	☐
- Is the equipment equipped with audible back-up alarms and back-up lights?	X	☐	☐
Horn and gauges	X	☐	☐
Brake condition (dynamic, park, etc.)	X	☐	☐
Fire extinguisher (Type/Rating -_____)	X	☐	☐
Fluid Levels:			
- Engine oil	☐	☐	X
- Transmission fluid	☐	☐	X
- Brake fluid	☐	☐	X
- Cooling system fluid	☐	☐	X
- Windshield wipers	☐	☐	X
- Hydraulic oil	☐	☐	X
Oil leak/lube	☐	☐	X
Coupling devices and connectors	☐	☐	X
Exhaust system	X	☐	☐
Blade/boom/ripper condition	X	☐	☐
Accessways: Frame, hand holds, ladders, walkways (non-slip surfaces), guardrails?	☐	☐	X
Power cable and/or hoist cable	X	☐	☐
Steering (standard and emergency)	X	☐	☐

Safety Guards:

	Yes	No
– Around rotating apparatus (belts, pulleys, sprockets, spindles, drums, flywheels, chains) all points of operations protected from accidental contact? NA	☐	☐
– Hot pipes and surfaces exposed to accidental contact? NA	☐	☐
– All emergency shut offs have been identified and communicated to the field crew?	X	☐
– Have emergency shutoffs been field tested?	X	☐
– Results? OK	☐	☐
– Are any structural members bent, rusted, or otherwise show signs of damage?	☐	X
– Are fueling cans used with this equipment approved type safety cans?	X	☐

APPENDIX D

ANALYTICAL DATABASE
PHASES 1 THROUGH 5
(CD)

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	01	01	01	01	01	01	01	01
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB012	09SB012	09SB013	09SB013	09SB014	09SB014	09SB015/TW001	09SB015/TW001
SAMPLE NUMBER	09SB120204	09SB121315	09SB130204	09SB130911	09SB140204	09SB140809	09SB151112	09SB151416
SOIL CLASSIFICATION	8	8	8	8	8	8	8	8
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	2 - 4	13 - 15	2 - 4	9 - 11	2 - 4	8 - 9	11 - 12	14 - 16
SAMPLE DATE	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005
Volatile Organics (ug/kg)								
1,1,1,2-TETRACHLOROETHANE								
1,1,1-TRICHLOROETHANE								
1,1,2,2-TETRACHLOROETHANE								
1,1,2-TRICHLOROETHANE								
1,1-DICHLOROETHANE								
1,1-DICHLOROETHENE								
1,2,3-TRICHLOROPROPANE								
1,2-DIBROMO-3-CHLOROPROPANE								
1,2-DIBROMOETHANE								
1,2-DICHLOROETHANE								
1,2-DICHLOROPROPANE								
2-BUTANONE								
2-HEXANONE								
3-CHLOROPROPENE								
4-METHYL-2-PENTANONE								
ACETONE								
ACROLEIN								
ACRYLONITRILE								
BENZENE								
BROMODICHLOROMETHANE								
BROMOFORM								
BROMOMETHANE								
CARBON DISULFIDE								
CARBON TETRACHLORIDE								
CHLOROBENZENE								
CHLORODIBROMOMETHANE								
CHLOROETHANE								
CHLOROFORM								
CHLOROMETHANE								
CHLOROPRENE								
CIS-1,2-DICHLOROETHENE								
CIS-1,3-DICHLOROPROPENE								
DIBROMOMETHANE								
DICHLORODIFLUOROMETHANE								
ETHYL METHACRYLATE								
ETHYLBENZENE								
METHACRYLONITRILE								
METHYL IODIDE								
METHYL METHACRYLATE								
METHYL TERT-BUTYL ETHER								
METHYLENE CHLORIDE								
STYRENE								

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	01	01	01	01	01	01	01	01
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB012	09SB012	09SB013	09SB013	09SB014	09SB014	09SB015/TW001	09SB015/TW001
SAMPLE NUMBER	09SB120204	09SB121315	09SB130204	09SB130911	09SB140204	09SB140809	09SB151112	09SB151416
SOIL CLASSIFICATION	8	8	8	8	8	8	8	8
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	2 - 4	13 - 15	2 - 4	9 - 11	2 - 4	8 - 9	11 - 12	14 - 16
SAMPLE DATE	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005
TETRACHLOROETHENE								
TOLUENE								
TOTAL XYLENES								
TRANS-1,2-DICHLOROETHENE								
TRANS-1,3-DICHLOROPROPENE								
TRANS-1,4-DICHLORO-2-BUTENE								
TRICHLOROETHENE								
TRICHLOROFLUOROMETHANE								
VINYL ACETATE								
VINYL CHLORIDE								
DRO Specific Semivolatile Organics (ug/kg)								
2-METHYLNAPHTHALENE								
ACENAPHTHENE								
ACENAPHTHYLENE								
ANTHRACENE								
BENZO(A)ANTHRACENE								
BENZO(A)PYRENE								
BENZO(B)FLUORANTHENE								
BENZO(G,H,I)PERYLENE								
BENZO(K)FLUORANTHENE								
CHRYSENE								
DIBENZO(A,H)ANTHRACENE								
FLUORANTHENE								
FLUORENE								
INDENO(1,2,3-CD)PYRENE								
NAPHTHALENE								
PHENANTHRENE								
PYRENE								
Pesticides/PCBs (ug/kg)								
4,4'-DDD	3.3 U	3.1 U	3.5 U	3.1 U	3.4 U	3.1 U	1.2 J	3.3 U
4,4'-DDE	3.3 U	3.1 U	3.5 U	3.1 U	3.4 U	3.1 U	3.4 U	3.3 U
4,4'-DDT	3.3 U	3.1 U	3.5 U	3.1 U	3.4 U	3.1 U	3 J	3.3 U
ALDRIN	1.6 U	1.5 U	1.7 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U
ALPHA-BHC	1.6 U	1.5 U	1.7 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U
ALPHA-CHLORDANE	1.6 U	1.5 U	1.7 U	1.5 U	1.6	1.5 U	1.6 U	1.6 U
AROCLOR-1016	21 U	19 U	21 U	19 U	21 U	19 U	21 U	20 U
AROCLOR-1221	21 U	19 U	21 U	19 U	21 U	19 U	21 U	20 U
AROCLOR-1232	21 U	19 U	21 U	19 U	21 U	19 U	21 U	20 U
AROCLOR-1242	21 U	19 U	21 U	19 U	21 U	19 U	21 U	20 U
AROCLOR-1248	21 U	19 U	21 U	19 U	21 U	19 U	21 U	20 U
AROCLOR-1254	21 U	19 U	21 U	19 U	21 U	19 U	21 U	20 U
AROCLOR-1260	21 U	19 U	21 U	19 U	21 U	19 U	21 U	20 U
BETA-BHC	1.6 U	1.5 U	1.7 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	01	01	01	01	01	01	01	01
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB012	09SB012	09SB013	09SB013	09SB014	09SB014	09SB015/TW001	09SB015/TW001
SAMPLE NUMBER	09SB120204	09SB121315	09SB130204	09SB130911	09SB140204	09SB140809	09SB151112	09SB151416
SOIL CLASSIFICATION	8	8	8	8	8	8	8	8
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	2 - 4	13 - 15	2 - 4	9 - 11	2 - 4	8 - 9	11 - 12	14 - 16
SAMPLE DATE	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005
DELTA-BHC	1.6 U	1.5 U	1.7 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U
DIELDRIN	3.3 U	3.1 U	3.5 U	3.1 U	3.4 U	3.1 U	3.4 U	3.3 U
ENDOSULFAN I	1.6 U	1.5 U	1.7 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U
ENDOSULFAN II	3.3 U	3.1 U	3.5 U	3.1 U	3.4 U	3.1 U	3.4 U	3.3 U
ENDOSULFAN SULFATE	3.3 U	3.1 U	3.5 U	3.1 U	3.4 U	3.1 U	3.4 U	3.3 U
ENDRIN	3.3 U	3.1 U	3.5 U	3.1 U	3.4 U	3.1 U	3.4 U	3.3 U
ENDRIN ALDEHYDE	3.3 U	3.1 U	3.5 U	3.1 U	3.4 U	3.1 U	3.4 U	3.3 U
ENDRIN KETONE	3.3 U	3.1 U	3.5 U	3.1 U	3.4 U	3.1 U	3.4 U	3.3 U
GAMMA-BHC (LINDANE)	1.6 U	1.5 U	1.7 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U
GAMMA-CHLORDANE	1.6 U	1.5 U	1.7 U	1.5 U	2.3	1.5 U	1.7 J	1.6 U
HEPTACHLOR	1.6 U	1.5 U	1.7 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U
HEPTACHLOR EPOXIDE	1.6 U	1.5 U	1.7 U	1.5 U	1.6 U	1.5 U	1.6 U	1.6 U
METHOXYCHLOR	16 U	15 U	17 U	15 U	16 U	15 U	16 U	16 U
TOTAL AROCLOR	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U
TOXAPHENE	41 U	39 U	43 U	38 U	42 U	38 U	42 U	40 U
Herbicides (ug/kg)								
2,4,5-T								
2,4,5-TP (SILVEX)								
2,4-D								
DINOSEB								
Miscellaneous Parameters								
CATION EXCHANGE CAPACITY (MEQ/1)			14 J			9.7 J		
PH (S.U.)			7.1			5.9		
TOTAL ORGANIC CARBON (mg/kg)			3700 J			1000 UJ		
Petroleum Hydrocarbons (mg/kg)								
DIESEL RANGE ORGANICS								
GASOLINE RANGE ORGANICS								
OIL & GREASE - HEM								
OIL RANGE ORGANICS (C24-C40)								

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	01	01	01	01	01	02	02	02
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB015/TW001	09SB016	09SB016	09SB017	09SB017	09SB018	09SB018	09SB019
SAMPLE NUMBER	09SB151416-D	09SB160607	09SB161314	09SB170204	09SB170911	09SB180204	09SB180406	09SB190204
SOIL CLASSIFICATION		8	8	8	8	8	8	8
SAMPLE CODE	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	14 - 16	6 - 7	13 - 14	2 - 4	9 - 11	2 - 4	4 - 6	2 - 4
SAMPLE DATE	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005	5/9/2005	5/9/2005	5/9/2005
Volatile Organics (ug/kg)								
1,1,1,2-TETRACHLOROETHANE						1.25 U	1.57 U	
1,1,1-TRICHLOROETHANE						1.25 U	1.57 U	
1,1,2,2-TETRACHLOROETHANE						1.25 U	1.57 U	
1,1,2-TRICHLOROETHANE						1.25 U	1.57 U	
1,1-DICHLOROETHANE						1.25 U	1.57 U	
1,1-DICHLOROETHENE						1.25 U	1.57 U	
1,2,3-TRICHLOROPROPANE						1.25 U	1.57 U	
1,2-DIBROMO-3-CHLOROPROPANE						1.25 UJ	1.57 UJ	
1,2-DIBROMOETHANE						1.25 U	1.57 U	
1,2-DICHLOROETHANE						1.25 U	1.57 U	
1,2-DICHLOROPROPANE						1.25 U	1.57 U	
2-BUTANONE						1.25 U	1.57 U	
2-HEXANONE						1.25 U	1.57 U	
3-CHLOROPROPENE						1.25 U	1.57 U	
4-METHYL-2-PENTANONE						1.25 U	1.57 U	
ACETONE						1.25 U	35 U	
ACROLEIN						1.25 U	1.57 UR	
ACRYLONITRILE						1.25 U	1.57 U	
BENZENE						1.25 U	1.57 U	
BROMODICHLOROMETHANE						1.25 U	1.57 U	
BROMOFORM						1.25 U	1.57 U	
BROMOMETHANE						1.25 U	1.57 U	
CARBON DISULFIDE						1.25 U	1.57 U	
CARBON TETRACHLORIDE						1.25 U	1.57 U	
CHLOROBENZENE						1.25 U	1.57 U	
CHLORODIBROMOMETHANE						1.25 U	1.57 U	
CHLOROETHANE						1.25 U	1.57 U	
CHLOROFORM						1.25 U	1.57 U	
CHLOROMETHANE						1.25 U	1.57 U	
CHLOROPRENE						1.25 U	1.57 U	
CIS-1,2-DICHLOROETHENE						1.25 U	1.57 U	
CIS-1,3-DICHLOROPROPENE						1.25 U	1.57 U	
DIBROMOMETHANE						1.25 U	1.57 U	
DICHLORODIFLUOROMETHANE						1.25 U	1.57 U	
ETHYL METHACRYLATE						1.25 U	1.57 U	
ETHYLBENZENE						1.25 U	1.57 U	
METHACRYLONITRILE						1.25 U	1.57 U	
METHYL IODIDE						1.25 U	1.57 U	
METHYL METHACRYLATE						1.25 U	1.57 U	
METHYL TERT-BUTYL ETHER						1.25 U	1.57 U	
METHYLENE CHLORIDE						1.25 U	1.57 UJ	
STYRENE						1.25 U	1.57 U	

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	01	01	01	01	01	02	02	02
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB015/TW001	09SB016	09SB016	09SB017	09SB017	09SB018	09SB018	09SB019
SAMPLE NUMBER	09SB151416-D	09SB160607	09SB161314	09SB170204	09SB170911	09SB180204	09SB180406	09SB190204
SOIL CLASSIFICATION		8	8	8	8	8	8	8
SAMPLE CODE	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	14 - 16	6 - 7	13 - 14	2 - 4	9 - 11	2 - 4	4 - 6	2 - 4
SAMPLE DATE	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005	5/9/2005	5/9/2005	5/9/2005
TETRACHLOROETHENE						1.25 U	1.57 U	
TOLUENE						1.25 U	1.57 U	
TOTAL XYLENES						1.25 U	1.57 U	
TRANS-1,2-DICHLOROETHENE						1.25 U	1.57 U	
TRANS-1,3-DICHLOROPROPENE						1.25 U	1.57 U	
TRANS-1,4-DICHLORO-2-BUTENE						1.25 U	1.57 U	
TRICHLOROETHENE						1.25 U	1.57 U	
TRICHLOROFLUOROMETHANE						1.25 U	1.57 U	
VINYL ACETATE						1.25 U	1.57 U	
VINYL CHLORIDE						1.25 U	1.57 U	
DRO Specific Semivolatile Organics (ug								
2-METHYLNAPHTHALENE								
ACENAPHTHENE								
ACENAPHTHYLENE								
ANTHRACENE								
BENZO(A)ANTHRACENE								
BENZO(A)PYRENE								
BENZO(B)FLUORANTHENE								
BENZO(G,H,I)PERYLENE								
BENZO(K)FLUORANTHENE								
CHRYSENE								
DIBENZO(A,H)ANTHRACENE								
FLUORANTHENE								
FLUORENE								
INDENO(1,2,3-CD)PYRENE								
NAPHTHALENE								
PHENANTHRENE								
PYRENE								
Pesticides/PCBs (ug/kg)								
4,4'-DDD	3.3 U	3.3 U	3.1 U	3.3 U	3.1 U	1000	48	8.7
4,4'-DDE	3.3 U	2.6 J	3.1 U	3.3 U	3.1 U	87	73	17
4,4'-DDT	3.3 U	1.4 J	3.1 U	3.3 U	3.1 U	500	2200	380
ALDRIN	1.6 U	1.6 U	1.5 U	1.6 U	1.5 U	1.56 U	1.6 U	0.804 U
ALPHA-BHC	1.6 U	1.6 U	1.5 U	1.6 U	1.5 U	20	1.6 U	0.804 U
ALPHA-CHLORDANE	1.6 U	1.6 U	1.5 U	1.6 U	1.5 U	52	7.7	3.1
AROCLOR-1016	20 U	21 U	19 U	20 U	19 U	21.6 U	22.1 U	11.1 U
AROCLOR-1221	20 U	21 U	19 U	20 U	19 U	21.6 U	22.1 U	11.1 U
AROCLOR-1232	20 U	21 U	19 U	20 U	19 U	21.6 U	22.1 U	11.1 U
AROCLOR-1242	20 U	21 U	19 U	20 U	19 U	21.6 U	22.1 U	11.1 U
AROCLOR-1248	20 U	21 U	19 U	20 U	19 U	21.6 U	22.1 U	11.1 U
AROCLOR-1254	20 U	21 U	19 U	20 U	19 U	21.6 U	22.1 U	11.1 U
AROCLOR-1260	20 U	21 U	19 U	20 U	19 U	21.6 U	22.1 U	11.1 U
BETA-BHC	1.6 U	1.6 U	1.5 U	1.6 U	1.5 U	1.56 U	1.6 U	0.804 U

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	01	01	01	01	01	02	02	02
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB015/TW001	09SB016	09SB016	09SB017	09SB017	09SB018	09SB018	09SB019
SAMPLE NUMBER	09SB151416-D	09SB160607	09SB161314	09SB170204	09SB170911	09SB180204	09SB180406	09SB190204
SOIL CLASSIFICATION		8	8	8	8	8	8	8
SAMPLE CODE	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	14 - 16	6 - 7	13 - 14	2 - 4	9 - 11	2 - 4	4 - 6	2 - 4
SAMPLE DATE	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005	5/9/2005	5/9/2005	5/9/2005
DELTA-BHC	1.6 U	1.6 U	1.5 U	1.6 U	1.5 U	1.56 U	1.6 U	0.804 U
DIELDRIN	3.3 U	3.3 U	3.1 U	3.3 U	3.1 U	3.24 U	3.32 U	1.67 U
ENDOSULFAN I	1.6 U	1.6 U	1.5 U	1.6 U	1.5 U	1.56 U	1.6 U	0.804 U
ENDOSULFAN II	3.3 U	3.3 U	3.1 U	3.3 U	3.1 U	3.24 U	3.32 U	1.67 U
ENDOSULFAN SULFATE	3.3 U	3.3 U	3.1 U	3.3 U	3.1 U	3.24 U	3.32 U	1.67 U
ENDRIN	3.3 U	3.3 U	3.1 U	3.3 U	3.1 U	3.24 U	3.32 U	1.67 U
ENDRIN ALDEHYDE	3.3 U	3.3 U	3.1 U	3.3 U	3.1 U	3.24 U	3.32 U	1.67 U
ENDRIN KETONE	3.3 U	3.3 U	3.1 U	3.3 U	3.1 U	3.24 U	3.32 U	1.67 U
GAMMA-BHC (LINDANE)	1.6 U	1.6 U	1.5 U	1.6 U	1.5 U	1.56 U	1.6 U	0.804 U
GAMMA-CHLORDANE	1.6 U	1.6 U	1.5 U	1.6 U	1.5 U	63	8.6	2.7
HEPTACHLOR	1.6 U	1.6 U	1.5 U	1.6 U	1.5 U	1.56 U	1.6 U	0.804 U
HEPTACHLOR EPOXIDE	1.6 U	1.6 U	1.5 U	1.6 U	1.5 U	1.56 U	1.6 U	0.804 U
METHOXYCHLOR	16 U	16 U	15 U	16 U	15 U	15.6 U	16 U	8.04 U
TOTAL AROCLOR		0 U	0 U	0 U	0 U	0 U	0 U	0 U
TOXAPHENE	41 U	41 U	38 U	41 U	38 U	40.8 U	41.8 U	21 U
Herbicides (ug/kg)								
2,4,5-T								
2,4,5-TP (SILVEX)								
2,4-D								
DINOSEB								
Miscellaneous Parameters								
CATION EXCHANGE CAPACITY (MEQ/1		12 J			13 J	7.9		
PH (S.U.)		8.4			5.3	7.4		
TOTAL ORGANIC CARBON (mg/kg)		5700 J			1000 UJ	21000		
Petroleum Hydrocarbons (mg/kg)								
DIESEL RANGE ORGANICS						4000 J	61.5 U	
GASOLINE RANGE ORGANICS								
OIL & GREASE - HEM								
OIL RANGE ORGANICS (C24-C40)						10000 J	120 U	

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	02	02	02	02	02	02	02	02
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB019	09SB020	09SB020	09SB021	09SB021	09SB022	09SB022	09SB022
SAMPLE NUMBER	09SB190406	09SB200204	09SB200608	09SB210204	09SB210507	09SB220204	09SB220507	09SB220507-D
SOIL CLASSIFICATION	8	8	8	8	8	8	8	
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	DUP
DEPTH RANGE (feet)	4 - 6	2 - 4	6 - 8	2 - 4	5 - 7	2 - 4	5 - 7	5 - 7
SAMPLE DATE	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005
Volatile Organics (ug/kg)								
1,1,1,2-TETRACHLOROETHANE								
1,1,1-TRICHLOROETHANE								
1,1,2,2-TETRACHLOROETHANE								
1,1,2-TRICHLOROETHANE								
1,1-DICHLOROETHANE								
1,1-DICHLOROETHENE								
1,2,3-TRICHLOROPROPANE								
1,2-DIBROMO-3-CHLOROPROPANE								
1,2-DIBROMOETHANE								
1,2-DICHLOROETHANE								
1,2-DICHLOROPROPANE								
2-BUTANONE								
2-HEXANONE								
3-CHLOROPROPENE								
4-METHYL-2-PENTANONE								
ACETONE								
ACROLEIN								
ACRYLONITRILE								
BENZENE								
BROMODICHLOROMETHANE								
BROMOFORM								
BROMOMETHANE								
CARBON DISULFIDE								
CARBON TETRACHLORIDE								
CHLOROBENZENE								
CHLORODIBROMOMETHANE								
CHLOROETHANE								
CHLOROFORM								
CHLOROMETHANE								
CHLOROPRENE								
CIS-1,2-DICHLOROETHENE								
CIS-1,3-DICHLOROPROPENE								
DIBROMOMETHANE								
DICHLORODIFLUOROMETHANE								
ETHYL METHACRYLATE								
ETHYLBENZENE								
METHACRYLONITRILE								
METHYL IODIDE								
METHYL METHACRYLATE								
METHYL TERT-BUTYL ETHER								
METHYLENE CHLORIDE								
STYRENE								

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	02	02	02	02	02	02	02	02
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB019	09SB020	09SB020	09SB021	09SB021	09SB022	09SB022	09SB022
SAMPLE NUMBER	09SB190406	09SB200204	09SB200608	09SB210204	09SB210507	09SB220204	09SB220507	09SB220507-D
SOIL CLASSIFICATION	8	8	8	8	8	8	8	
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	DUP
DEPTH RANGE (feet)	4 - 6	2 - 4	6 - 8	2 - 4	5 - 7	2 - 4	5 - 7	5 - 7
SAMPLE DATE	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005
TETRACHLOROETHENE								
TOLUENE								
TOTAL XYLENES								
TRANS-1,2-DICHLOROETHENE								
TRANS-1,3-DICHLOROPROPENE								
TRANS-1,4-DICHLORO-2-BUTENE								
TRICHLOROETHENE								
TRICHLOROFLUOROMETHANE								
VINYL ACETATE								
VINYL CHLORIDE								
DRO Specific Semivolatile Organics (ug								
2-METHYLNAPHTHALENE								
ACENAPHTHENE								
ACENAPHTHYLENE								
ANTHRACENE								
BENZO(A)ANTHRACENE								
BENZO(A)PYRENE								
BENZO(B)FLUORANTHENE								
BENZO(G,H,I)PERYLENE								
BENZO(K)FLUORANTHENE								
CHRYSENE								
DIBENZO(A,H)ANTHRACENE								
FLUORANTHENE								
FLUORENE								
INDENO(1,2,3-CD)PYRENE								
NAPHTHALENE								
PHENANTHRENE								
PYRENE								
Pesticides/PCBs (ug/kg)								
4,4'-DDD	99	360	9.8	7.1	7.5	1.67 U	1.6 U	1.57 U
4,4'-DDE	300 J	89 J	1.61 U	0.89 J	1.61 U	1.67 U	1.6 U	1.57 U
4,4'-DDT	7100	1400	18	8.4	7.8	1.67 U	1.4 J	1.7 J
ALDRIN	3.89 U	0.789 U	0.775 U	0.79 U	0.774 U	0.804 U	0.771 U	0.755 U
ALPHA-BHC	3.89 U	0.789 U	0.775 U	0.79 U	0.774 U	0.804 U	0.771 U	0.755 U
ALPHA-CHLORDANE	25	18	0.775 U	1.1 J	0.774 U	0.804 U	0.771 U	0.755 U
AROCLOR-1016	53.9 U	10.9 U	10.7 U	10.9 U	10.7 U	11.1 U	10.7 U	10.5 U
AROCLOR-1221	53.9 U	10.9 U	10.7 U	10.9 U	10.7 U	11.1 U	10.7 U	10.5 U
AROCLOR-1232	53.9 U	10.9 U	10.7 U	10.9 U	10.7 U	11.1 U	10.7 U	10.5 U
AROCLOR-1242	53.9 U	10.9 U	10.7 U	10.9 U	10.7 U	11.1 U	10.7 U	10.5 U
AROCLOR-1248	53.9 U	10.9 U	10.7 U	10.9 U	10.7 U	11.1 U	10.7 U	10.5 U
AROCLOR-1254	53.9 U	10.9 U	10.7 U	10.9 U	10.7 U	11.1 U	10.7 U	10.5 U
AROCLOR-1260	53.9 U	10.9 U	10.7 U	10.9 U	10.7 U	11.1 U	10.7 U	10.5 U
BETA-BHC	3.89 U	1.5 J	0.775 U	0.79 U	0.774 U	0.804 U	0.771 U	0.755 U

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	02	02	02	02	02	02	02	02
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB019	09SB020	09SB020	09SB021	09SB021	09SB022	09SB022	09SB022
SAMPLE NUMBER	09SB190406	09SB200204	09SB200608	09SB210204	09SB210507	09SB220204	09SB220507	09SB220507-D
SOIL CLASSIFICATION	8	8	8	8	8	8	8	
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	DUP
DEPTH RANGE (feet)	4 - 6	2 - 4	6 - 8	2 - 4	5 - 7	2 - 4	5 - 7	5 - 7
SAMPLE DATE	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005
DELTA-BHC	3.89 U	0.789 U	0.775 U	0.79 U	0.774 U	0.804 U	0.771 U	0.755 U
DIELDRIN	16 J	29	1.61 U	1.64 U	1.61 U	1.67 U	1.6 U	1.57 U
ENDOSULFAN I	3.89 U	4	0.775 U	0.79 U	0.774 U	0.804 U	0.771 U	0.755 U
ENDOSULFAN II	8.08 U	1.64 U	1.61 U	1.64 U	1.61 U	1.67 U	1.6 U	1.57 U
ENDOSULFAN SULFATE	8.08 U	1.64 U	1.61 U	1.64 U	1.61 U	1.67 U	1.6 U	1.57 U
ENDRIN	8.08 U	1.64 U	1.61 U	1.64 U	1.61 U	1.67 U	1.6 U	1.57 U
ENDRIN ALDEHYDE	8.08 U	1.64 U	1.61 U	1.64 U	1.61 U	1.67 U	1.6 U	1.57 U
ENDRIN KETONE	8.08 U	1.64 U	1.61 U	1.64 U	1.61 U	1.67 U	1.6 U	1.57 U
GAMMA-BHC (LINDANE)	3.89 U	0.789 U	0.775 U	0.79 U	0.774 U	0.804 U	0.771 U	0.755 U
GAMMA-CHLORDANE	25	22	0.775 U	1 J	0.774 U	0.804 U	0.771 U	0.755 U
HEPTACHLOR	3.89 U	0.789 U	0.775 U	0.79 U	0.774 U	0.804 U	0.771 U	0.755 U
HEPTACHLOR EPOXIDE	3.89 U	6.7 R	0.775 U	0.79 U	0.774 U	0.804 U	0.771 U	0.755 U
METHOXYCHLOR	38.9 U	7.89 U	7.75 U	7.9 U	7.74 U	8.04 U	7.71 U	7.55 U
TOTAL AROCLOR	0 U	0 U	0 U	0 U	0 U	0 U	0 U	
TOXAPHENE	102 U	20.6 U	20.3 U	20.7 U	20.2 U	21 U	20.2 U	19.7 U
Herbicides (ug/kg)								
2,4,5-T								
2,4,5-TP (SILVEX)								
2,4-D								
DINOSEB								
Miscellaneous Parameters								
CATION EXCHANGE CAPACITY (MEQ/1	11			13			11	10
PH (S.U.)	5.6			4.1			4.3	4.1
TOTAL ORGANIC CARBON (mg/kg)	1400			2100			1000	1000 U
Petroleum Hydrocarbons (mg/kg)								
DIESEL RANGE ORGANICS								
GASOLINE RANGE ORGANICS								
OIL & GREASE - HEM								
OIL RANGE ORGANICS (C24-C40)								

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	02	02	02	02	02	02	02	02
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB023/TW004	09SB023/TW004	09SB024/TW006	09SB024/TW006	09SB025	09SB025	09SB026	09SB026
SAMPLE NUMBER	09SB230204	09SB230507	09SB240204	09SB240406	09SB250204	09SB250709	09SB260204	09SB260507
SOIL CLASSIFICATION	8	8	8	8	8	8	8	8
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	2 - 4	5 - 7	2 - 4	4 - 6	2 - 4	7 - 9	2 - 4	5 - 7
SAMPLE DATE	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005
Volatile Organics (ug/kg)								
1,1,1,2-TETRACHLOROETHANE				1.28 UJ		1.38 U		
1,1,1-TRICHLOROETHANE				1.28 U		1.38 U		
1,1,2,2-TETRACHLOROETHANE				1.28 U		1.38 U		
1,1,2-TRICHLOROETHANE				1.28 U		1.38 U		
1,1-DICHLOROETHANE				1.28 U		1.38 U		
1,1-DICHLOROETHENE				1.28 U		1.38 U		
1,2,3-TRICHLOROPROPANE				1.28 U		1.38 U		
1,2-DIBROMO-3-CHLOROPROPANE				1.28 UJ		1.38 UJ		
1,2-DIBROMOETHANE				1.28 U		1.38 U		
1,2-DICHLOROETHANE				1.28 U		1.38 U		
1,2-DICHLOROPROPANE				1.28 U		1.38 U		
2-BUTANONE				1.28 U		6 J		
2-HEXANONE				1.28 U		1.38 U		
3-CHLOROPROPENE				1.28 U		1.38 U		
4-METHYL-2-PENTANONE				1.28 U		1.38 U		
ACETONE				56 J		43 J		
ACROLEIN				1.28 UR		1.38 U		
ACRYLONITRILE				1.28 U		1.38 U		
BENZENE				1.28 U		1.38 U		
BROMODICHLOROMETHANE				1.28 U		1.38 U		
BROMOFORM				1.28 U		1.38 U		
BROMOMETHANE				1.28 U		1.38 U		
CARBON DISULFIDE				1.28 U		1.38 U		
CARBON TETRACHLORIDE				1.28 U		1.38 U		
CHLOROBENZENE				13		110		
CHLORODIBROMOMETHANE				1.28 U		1.38 U		
CHLOROETHANE				1.28 U		1.38 U		
CHLOROFORM				1.28 U		1.38 U		
CHLOROMETHANE				1.28 U		1.38 U		
CHLOROPRENE				1.28 U		1.38 U		
CIS-1,2-DICHLOROETHENE				1.28 U		1.38 U		
CIS-1,3-DICHLOROPROPENE				1.28 U		1.38 U		
DIBROMOMETHANE				1.28 U		1.38 U		
DICHLORODIFLUOROMETHANE				1.28 U		1.38 U		
ETHYL METHACRYLATE				1.28 U		1.38 U		
ETHYLBENZENE				1.28 UJ		1.38 U		
METHACRYLONITRILE				1.28 U		1.38 U		
METHYL IODIDE				1.28 U		1.38 U		
METHYL METHACRYLATE				1.28 U		1.38 U		
METHYL TERT-BUTYL ETHER				1.28 U		1.38 U		
METHYLENE CHLORIDE				1.28 UJ		1.38 U		
STYRENE				1.28 UJ		1.38 U		

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	02	02	02	02	02	02	02	02
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB023/TW004	09SB023/TW004	09SB024/TW006	09SB024/TW006	09SB025	09SB025	09SB026	09SB026
SAMPLE NUMBER	09SB230204	09SB230507	09SB240204	09SB240406	09SB250204	09SB250709	09SB260204	09SB260507
SOIL CLASSIFICATION	8	8	8	8	8	8	8	8
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	2 - 4	5 - 7	2 - 4	4 - 6	2 - 4	7 - 9	2 - 4	5 - 7
SAMPLE DATE	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005
TETRACHLOROETHENE				1.28 U		1.38 U		
TOLUENE				1.28 U		1.38 U		
TOTAL XYLENES				7 J		1.38 U		
TRANS-1,2-DICHLOROETHENE				1.28 U		1.38 U		
TRANS-1,3-DICHLOROPROPENE				1.28 U		1.38 U		
TRANS-1,4-DICHLORO-2-BUTENE				1.28 U		1.38 U		
TRICHLOROETHENE				1.28 U		1.38 U		
TRICHLOROFLUOROMETHANE				1.28 U		1.38 U		
VINYL ACETATE				1.28 U		1.38 U		
VINYL CHLORIDE				1.28 U		1.38 U		
DRO Specific Semivolatile Organics (ug								
2-METHYLNAPHTHALENE								
ACENAPHTHENE								
ACENAPHTHYLENE								
ANTHRACENE								
BENZO(A)ANTHRACENE								
BENZO(A)PYRENE								
BENZO(B)FLUORANTHENE								
BENZO(G,H,I)PERYLENE								
BENZO(K)FLUORANTHENE								
CHRYSENE								
DIBENZO(A,H)ANTHRACENE								
FLUORANTHENE								
FLUORENE								
INDENO(1,2,3-CD)PYRENE								
NAPHTHALENE								
PHENANTHRENE								
PYRENE								
Pesticides/PCBs (ug/kg)								
4,4'-DDD	1.66 U	1.72 U	40 J	58	1.63 U	1.67 U	1.57 U	2.9 J
4,4'-DDE	1.66 U	1.72 U	64 J	1800	1.63 U	2.4 J	7.2	51
4,4'-DDT	1.66 U	1.72 U	3.09 U	8600	12	1.67 U	20 J	160
ALDRIN	0.8 U	0.826 U	1.49 U	4.08 U	0.787 U	0.805 U	0.755 U	0.805 U
ALPHA-BHC	0.8 U	0.826 U	150	4.08 U	0.787 U	5.8	0.755 U	0.805 U
ALPHA-CHLORDANE	0.8 U	0.826 U	1.49 U	93	3.8	0.805 U	0.755 U	1.8
AROCLOR-1016	11.1 U	11.4 U	20.6 U	56.5 U	10.9 U	11.2 U	10.5 U	11.2 U
AROCLOR-1221	11.1 U	11.4 U	20.6 U	56.5 U	10.9 U	11.2 U	10.5 U	11.2 U
AROCLOR-1232	11.1 U	11.4 U	20.6 U	56.5 U	10.9 U	11.2 U	10.5 U	11.2 U
AROCLOR-1242	11.1 U	11.4 U	20.6 U	56.5 U	10.9 U	11.2 U	10.5 U	11.2 U
AROCLOR-1248	11.1 U	11.4 U	20.6 U	56.5 U	10.9 U	11.2 U	10.5 U	11.2 U
AROCLOR-1254	11.1 U	11.4 U	20.6 U	56.5 U	10.9 U	11.2 U	10.5 U	11.2 U
AROCLOR-1260	11.1 U	11.4 U	20.6 U	56.5 U	10.9 U	11.2 U	10.5 U	11.2 U
BETA-BHC	0.8 U	0.826 U	1.49 U	4.08 U	0.787 U	0.805 U	0.755 U	0.805 U

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	02	02	02	02	02	02	02	02
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB023/TW004	09SB023/TW004	09SB024/TW006	09SB024/TW006	09SB025	09SB025	09SB026	09SB026
SAMPLE NUMBER	09SB230204	09SB230507	09SB240204	09SB240406	09SB250204	09SB250709	09SB260204	09SB260507
SOIL CLASSIFICATION	8	8	8	8	8	8	8	8
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	2 - 4	5 - 7	2 - 4	4 - 6	2 - 4	7 - 9	2 - 4	5 - 7
SAMPLE DATE	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005
DELTA-BHC	0.8 U	0.826 U	1.49 U	4.08 U	0.787 U	0.805 U	0.755 U	0.805 U
DIELDRIN	1.66 U	1.72 U	3.09 U	8.48 U	1.63 U	1.67 U	1.57 U	1.67 U
ENDOSULFAN I	0.8 U	0.826 U	1.49 U	4.08 U	0.787 U	0.805 U	0.755 U	0.805 U
ENDOSULFAN II	1.66 U	1.72 U	3.09 U	8.48 U	1.63 U	1.67 U	1.57 U	1.67 U
ENDOSULFAN SULFATE	1.66 U	1.72 U	3.09 U	8.48 U	1.63 U	1.67 U	1.57 U	1.67 U
ENDRIN	1.66 U	1.72 U	3.09 U	8.48 U	1.63 U	1.67 U	1.57 U	1.67 U
ENDRIN ALDEHYDE	1.66 U	1.72 U	3.09 U	8.48 U	1.63 U	1.67 U	1.57 U	1.67 U
ENDRIN KETONE	1.66 U	1.72 U	3.09 U	8.48 U	1.63 U	1.67 U	1.57 U	1.67 U
GAMMA-BHC (LINDANE)	0.8 U	0.826 U	1.49 U	4.08 U	0.787 U	0.805 U	0.755 U	0.805 U
GAMMA-CHLORDANE	0.8 U	0.826 U	1.49 U	98	2.3	0.805 U	0.755 U	2.1
HEPTACHLOR	0.8 U	0.826 U	1.49 U	4.08 U	0.787 U	0.805 U	0.755 U	0.805 U
HEPTACHLOR EPOXIDE	0.8 U	0.826 U	1.49 U	28	2	0.805 U	0.755 U	0.805 U
METHOXYCHLOR	8 U	8.26 U	14.9 U	40.8 U	7.87 U	8.05 U	7.55 U	8.05 U
TOTAL AROCLOR	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U
TOXAPHENE	20.9 U	21.6 U	38.9 U	107 U	20.6 U	21.1 U	19.7 U	21.1 U
Herbicides (ug/kg)								
2,4,5-T								
2,4,5-TP (SILVEX)								
2,4-D								
DINOSEB								
Miscellaneous Parameters								
CATION EXCHANGE CAPACITY (MEQ/1			4.2			10		
PH (S.U.)			7.4			8.2		
TOTAL ORGANIC CARBON (mg/kg)			20000			3100		
Petroleum Hydrocarbons (mg/kg)								
DIESEL RANGE ORGANICS				1900 J		110 J		
GASOLINE RANGE ORGANICS								
OIL & GREASE - HEM								
OIL RANGE ORGANICS (C24-C40)				4800 J		270		

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	02	02	02	02	02	02	02	02
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB027/TW005	09SB027/TW005	09SB028	09SB028	09SB029	09SB029	09SB030	09SB030
SAMPLE NUMBER	09SB270204	09SB270507	09SB280204	09SB280608	09SB290204	09SB290507	09SB300204	09SB300507
SOIL CLASSIFICATION	8	8	8	8	8	9	8	8
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	2 - 4	5 - 7	2 - 4	6 - 8	2 - 4	5 - 7	2 - 4	5 - 7
SAMPLE DATE	5/9/2005	5/9/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005
Volatile Organics (ug/kg)								
1,1,1,2-TETRACHLOROETHANE		1.35 U						
1,1,1-TRICHLOROETHANE		1.35 U						
1,1,2,2-TETRACHLOROETHANE		1.35 U						
1,1,2-TRICHLOROETHANE		1.35 U						
1,1-DICHLOROETHANE		1.35 U						
1,1-DICHLOROETHENE		1.35 U						
1,2,3-TRICHLOROPROPANE		1.35 U						
1,2-DIBROMO-3-CHLOROPROPANE		1.35 UJ						
1,2-DIBROMOETHANE		1.35 U						
1,2-DICHLOROETHANE		1.35 U						
1,2-DICHLOROPROPANE		1.35 U						
2-BUTANONE		8 J						
2-HEXANONE		1.35 U						
3-CHLOROPROPENE		1.35 U						
4-METHYL-2-PENTANONE		1.35 U						
ACETONE		72 J						
ACROLEIN		1.35 UR						
ACRYLONITRILE		1.35 U						
BENZENE		1.35 U						
BROMODICHLOROMETHANE		1.35 U						
BROMOFORM		1.35 U						
BROMOMETHANE		1.35 U						
CARBON DISULFIDE		1.35 U						
CARBON TETRACHLORIDE		1.35 U						
CHLOROBENZENE		1.35 U						
CHLORODIBROMOMETHANE		1.35 U						
CHLOROETHANE		1.35 U						
CHLOROFORM		1.35 U						
CHLOROMETHANE		1.35 U						
CHLOROPRENE		1.35 U						
CIS-1,2-DICHLOROETHENE		1.35 U						
CIS-1,3-DICHLOROPROPENE		1.35 U						
DIBROMOMETHANE		1.35 U						
DICHLORODIFLUOROMETHANE		1.35 U						
ETHYL METHACRYLATE		1.35 U						
ETHYLBENZENE		1.35 U						
METHACRYLONITRILE		1.35 U						
METHYL IODIDE		1.35 U						
METHYL METHACRYLATE		1.35 U						
METHYL TERT-BUTYL ETHER		1.35 U						
METHYLENE CHLORIDE		1.35 UJ						
STYRENE		1.35 U						

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	02	02	02	02	02	02	02	02
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB027/TW005	09SB027/TW005	09SB028	09SB028	09SB029	09SB029	09SB030	09SB030
SAMPLE NUMBER	09SB270204	09SB270507	09SB280204	09SB280608	09SB290204	09SB290507	09SB300204	09SB300507
SOIL CLASSIFICATION	8	8	8	8	8	9	8	8
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	2 - 4	5 - 7	2 - 4	6 - 8	2 - 4	5 - 7	2 - 4	5 - 7
SAMPLE DATE	5/9/2005	5/9/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005
TETRACHLOROETHENE		1.35 U						
TOLUENE		1.35 U						
TOTAL XYLENES		1.35 U						
TRANS-1,2-DICHLOROETHENE		1.35 U						
TRANS-1,3-DICHLOROPROPENE		1.35 U						
TRANS-1,4-DICHLORO-2-BUTENE		1.35 U						
TRICHLOROETHENE		1.35 U						
TRICHLOROFLUOROMETHANE		1.35 U						
VINYL ACETATE		1.35 U						
VINYL CHLORIDE		1.35 U						
DRO Specific Semivolatile Organics (ug								
2-METHYLNAPHTHALENE								
ACENAPHTHENE								
ACENAPHTHYLENE								
ANTHRACENE								
BENZO(A)ANTHRACENE								
BENZO(A)PYRENE								
BENZO(B)FLUORANTHENE								
BENZO(G,H,I)PERYLENE								
BENZO(K)FLUORANTHENE								
CHRYSENE								
DIBENZO(A,H)ANTHRACENE								
FLUORANTHENE								
FLUORENE								
INDENO(1,2,3-CD)PYRENE								
NAPHTHALENE								
PHENANTHRENE								
PYRENE								
Pesticides/PCBs (ug/kg)								
4,4'-DDD	43	1.67 U	1.7 U	1.68 U	1.69 U	1.1 J	1.73 U	1.65 U
4,4'-DDE	4.4	1.67 U	1.7 U	1.68 U	1.69 U	0.93 J	1.73 U	2.2 J
4,4'-DDT	51	2.5 J	3.5	1.8 J	1.69 U	2.6 J	1.73 U	4.6
ALDRIN	0.789 U	0.802 U	0.819 U	0.807 U	0.815 U	0.817 U	0.832 U	0.793 U
ALPHA-BHC	0.789 U	0.802 U	0.819 U	0.807 U	0.815 U	0.817 U	0.832 U	0.793 U
ALPHA-CHLORDANE	14	0.98 J	0.819 U	0.807 U	0.815 U	0.817 U	0.832 U	0.793 U
AROCLOR-1016	10.9 U	11.1 U	11.3 U	11.2 U	11.3 U	11.3 U	11.5 U	11 U
AROCLOR-1221	10.9 U	11.1 U	11.3 U	11.2 U	11.3 U	11.3 U	11.5 U	11 U
AROCLOR-1232	10.9 U	11.1 U	11.3 U	11.2 U	11.3 U	11.3 U	11.5 U	11 U
AROCLOR-1242	10.9 U	11.1 U	11.3 U	11.2 U	11.3 U	11.3 U	11.5 U	11 U
AROCLOR-1248	10.9 U	11.1 U	11.3 U	11.2 U	11.3 U	11.3 U	11.5 U	11 U
AROCLOR-1254	10.9 U	11.1 U	11.3 U	11.2 U	11.3 U	11.3 U	11.5 U	11 U
AROCLOR-1260	10.9 U	11.1 U	11.3 U	11.2 U	11.3 U	11.3 U	11.5 U	11 U
BETA-BHC	0.789 U	0.802 U	0.819 U	0.807 U	0.815 U	0.817 U	0.832 U	0.793 U

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	02	02	02	02	02	02	02	02
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB027/TW005	09SB027/TW005	09SB028	09SB028	09SB029	09SB029	09SB030	09SB030
SAMPLE NUMBER	09SB270204	09SB270507	09SB280204	09SB280608	09SB290204	09SB290507	09SB300204	09SB300507
SOIL CLASSIFICATION	8	8	8	8	8	9	8	8
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	2 - 4	5 - 7	2 - 4	6 - 8	2 - 4	5 - 7	2 - 4	5 - 7
SAMPLE DATE	5/9/2005	5/9/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005
DELTA-BHC	0.789 U	0.802 U	0.819 U	0.807 U	0.815 U	0.817 U	0.832 U	0.793 U
DIELDRIN	1.64 U	1.67 U	1.7 U	1.68 U	1.69 U	1.7 U	1.73 U	1.65 U
ENDOSULFAN I	0.789 U	0.802 U	0.819 U	0.807 U	0.815 U	0.817 U	0.832 U	0.793 U
ENDOSULFAN II	1.64 U	1.67 U	1.7 U	1.68 U	1.69 U	1.7 U	1.73 U	1.65 U
ENDOSULFAN SULFATE	1.64 U	1.67 U	1.7 U	1.68 U	1.69 U	1.7 U	1.73 U	1.65 U
ENDRIN	1.64 U	1.67 U	1.7 U	1.68 U	1.69 U	1.7 U	1.73 U	1.65 U
ENDRIN ALDEHYDE	1.64 U	1.67 U	1.7 U	1.68 U	1.69 U	1.7 U	1.73 U	1.65 U
ENDRIN KETONE	1.64 U	1.67 U	1.7 U	1.68 U	1.69 U	1.7 U	1.73 U	1.65 U
GAMMA-BHC (LINDANE)	0.789 U	0.802 U	0.819 U	0.807 U	0.815 U	0.817 U	0.832 U	0.793 U
GAMMA-CHLORDANE	14	1.3 J	0.819 U	0.807 U	0.815 U	0.817 U	0.832 U	0.793 U
HEPTACHLOR	0.789 U	0.802 U	0.819 U	0.807 U	0.815 U	0.817 U	0.832 U	0.793 U
HEPTACHLOR EPOXIDE	0.789 U	0.802 U	0.819 U	0.807 U	0.815 U	0.817 U	0.832 U	0.793 U
METHOXYCHLOR	7.89 U	8.02 U	8.19 U	8.07 U	8.15 U	8.17 U	8.32 U	7.93 U
TOTAL AROCLOR	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U
TOXAPHENE	20.6 U	21 U	21.4 U	21.1 U	21.3 U	21.4 U	21.8 U	20.7 U
Herbicides (ug/kg)								
2,4,5-T								
2,4,5-TP (SILVEX)								
2,4-D								
DINOSEB								
Miscellaneous Parameters								
CATION EXCHANGE CAPACITY (MEQ/1	14			13			15	
PH (S.U.)	6.9			7.5			6.7	
TOTAL ORGANIC CARBON (mg/kg)	3800			8900			2200	
Petroleum Hydrocarbons (mg/kg)								
DIESEL RANGE ORGANICS		62 J						
GASOLINE RANGE ORGANICS								
OIL & GREASE - HEM								
OIL RANGE ORGANICS (C24-C40)		120 U						

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03	03	03	03	03
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB042	09SB042	09SB042	09SB043	09SB043	09SB043	09SB043	09SB044
SAMPLE NUMBER	09SB420204	09SB420406	09SB420607	09SB430204	09SB430406	09SB431618	09SB431618-D	09SB440204
SOIL CLASSIFICATION	8	8	8	8	8	8		8
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	DUP	NORMAL
DEPTH RANGE (feet)	2 - 4	4 - 6	6 - 7	2 - 4	4 - 6	16 - 18	16 - 18	2 - 4
SAMPLE DATE	10/3/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005
Volatile Organics (ug/kg)								
1,1,1,2-TETRACHLOROETHANE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
1,1,1-TRICHLOROETHANE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
1,1,2,2-TETRACHLOROETHANE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
1,1,2-TRICHLOROETHANE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
1,1-DICHLOROETHANE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
1,1-DICHLOROETHENE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
1,2,3-TRICHLOROPROPANE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
1,2-DIBROMO-3-CHLOROPROPANE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
1,2-DIBROMOETHANE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
1,2-DICHLOROETHANE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
1,2-DICHLOROPROPANE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
2-BUTANONE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
2-HEXANONE	1 J	0.914 U	0.952 U	1.02 J	1.07 U	1.02 J	1.05 U	1.14 U
3-CHLOROPROPENE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
4-METHYL-2-PENTANONE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
ACETONE	4 BU	3 BU	2 BU	3 BU	5 BU	4 BU	6 BU	16 BU
ACROLEIN	0.856 UR	0.914 UR	0.952 UR	1.02 UR	1.07 UR	1.02 UR	1.05 UR	1.14 UR
ACRYLONITRILE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
BENZENE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
BROMODICHLOROMETHANE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
BROMOFORM	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
BROMOMETHANE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
CARBON DISULFIDE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
CARBON TETRACHLORIDE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
CHLOROBENZENE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
CHLORODIBROMOMETHANE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
CHLOROETHANE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
CHLOROFORM	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
CHLOROMETHANE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
CHLOROPRENE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
CIS-1,2-DICHLOROETHENE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
CIS-1,3-DICHLOROPROPENE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
DIBROMOMETHANE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
DICHLORODIFLUOROMETHANE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
ETHYL METHACRYLATE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
ETHYLBENZENE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
METHACRYLONITRILE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
METHYL IODIDE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
METHYL METHACRYLATE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
METHYL TERT-BUTYL ETHER	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
METHYLENE CHLORIDE	0.856 UJ	0.914 UJ	0.952 UJ	1.02 UJ	1.07 UJ	1.02 UJ	1.05 UJ	1.14 UJ
STYRENE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03	03	03	03	03
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB042	09SB042	09SB042	09SB043	09SB043	09SB043	09SB043	09SB044
SAMPLE NUMBER	09SB420204	09SB420406	09SB420607	09SB430204	09SB430406	09SB431618	09SB431618-D	09SB440204
SOIL CLASSIFICATION	8	8	8	8	8	8		8
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	DUP	NORMAL
DEPTH RANGE (feet)	2 - 4	4 - 6	6 - 7	2 - 4	4 - 6	16 - 18	16 - 18	2 - 4
SAMPLE DATE	10/3/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005
TETRACHLOROETHENE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
TOLUENE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
TOTAL XYLENES	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
TRANS-1,2-DICHLOROETHENE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
TRANS-1,3-DICHLOROPROPENE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
TRANS-1,4-DICHLORO-2-BUTENE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
TRICHLOROETHENE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
TRICHLOROFLUOROMETHANE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
VINYL ACETATE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
VINYL CHLORIDE	0.856 U	0.914 U	0.952 U	1.02 U	1.07 U	1.02 U	1.05 U	1.14 U
DRO Specific Semivolatile Organics (ug								
2-METHYLNAPHTHALENE								
ACENAPHTHENE								
ACENAPHTHYLENE								
ANTHRACENE								
BENZO(A)ANTHRACENE								
BENZO(A)PYRENE								
BENZO(B)FLUORANTHENE								
BENZO(G,H,I)PERYLENE								
BENZO(K)FLUORANTHENE								
CHRYSENE								
DIBENZO(A,H)ANTHRACENE								
FLUORANTHENE								
FLUORENE								
INDENO(1,2,3-CD)PYRENE								
NAPHTHALENE								
PHENANTHRENE								
PYRENE								
Pesticides/PCBs (ug/kg)								
4,4'-DDD	1.52 UJ	1.55 UJ	1.62 UJ	1.6 UJ	1.56 UJ	1.63 UJ	1.64 UJ	1.64 U
4,4'-DDE	1.52 UJ	1.55 UJ	1.62 UJ	1.6 UJ	1.56 UJ	1.63 UJ	1.64 UJ	1.64 UJ
4,4'-DDT	1.52 U	1.55 U	1.62 U	1.6 U	1.56 U	1.63 UJ	23 J	1.64 U
ALDRIN	0.734 U	0.748 U	0.779 U	0.768 U	0.753 U	0.785 U	0.789 UJ	0.789 U
ALPHA-BHC	0.734 UJ	0.748 UJ	0.779 UJ	0.768 UJ	0.753 UJ	0.785 UJ	0.789 UJ	0.789 UJ
ALPHA-CHLORDANE	0.734 U	0.748 U	0.779 U	0.768 U	0.753 U	0.785 U	0.789 U	0.789 U
AROCLOR-1016	10.2 UJ	10.4 UJ	10.8 UJ	10.6 UJ	10.4 UJ	10.9 UJ	10.9 U	10.9 UJ
AROCLOR-1221	10.2 U	10.4 U	10.8 U	10.6 U	10.4 U	10.9 U	10.9 U	10.9 U
AROCLOR-1232	10.2 U	10.4 U	10.8 U	10.6 U	10.4 U	10.9 U	10.9 U	10.9 U
AROCLOR-1242	10.2 U	10.4 U	10.8 U	10.6 U	10.4 U	10.9 U	10.9 U	10.9 U
AROCLOR-1248	10.2 U	10.4 U	10.8 U	10.6 U	10.4 U	10.9 U	10.9 U	10.9 U
AROCLOR-1254	10.2 U	10.4 U	10.8 U	10.6 U	10.4 U	10.9 U	10.9 U	10.9 U
AROCLOR-1260	10.2 UJ	10.4 UJ	10.8 UJ	10.6 UJ	10.4 UJ	10.9 UJ	10.9 U	10.9 UJ
BETA-BHC	0.734 UJ	0.748 UJ	0.779 UJ	0.768 UJ	0.753 UJ	0.785 UJ	0.789 UJ	0.789 U

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03	03	03	03	03
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB042	09SB042	09SB042	09SB043	09SB043	09SB043	09SB043	09SB044
SAMPLE NUMBER	09SB420204	09SB420406	09SB420607	09SB430204	09SB430406	09SB431618	09SB431618-D	09SB440204
SOIL CLASSIFICATION	8	8	8	8	8	8		8
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	DUP	NORMAL
DEPTH RANGE (feet)	2 - 4	4 - 6	6 - 7	2 - 4	4 - 6	16 - 18	16 - 18	2 - 4
SAMPLE DATE	10/3/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005
DELTA-BHC	0.734 UJ	0.748 UJ	0.779 UJ	0.768 UJ	0.753 UJ	0.785 UJ	0.789 UJ	0.789 UJ
DIELDRIN	1.52 U	1.55 U	1.62 U	1.6 U	1.56 U	1.63 U	1.64 UJ	1.64 U
ENDOSULFAN I	0.734 U	0.748 U	0.779 U	0.768 U	0.753 U	0.785 U	0.789 U	0.789 U
ENDOSULFAN II	1.52 U	1.55 U	1.62 U	1.6 U	1.56 U	1.63 U	1.64 U	1.64 U
ENDOSULFAN SULFATE	1.52 UJ	1.55 UJ	1.62 UJ	1.6 UJ	1.56 UJ	1.63 UJ	1.64 UJ	1.64 U
ENDRIN	1.52 U	1.55 U	1.62 U	1.6 U	1.56 U	1.63 U	1.64 U	1.64 U
ENDRIN ALDEHYDE	1.52 U	1.55 U	1.62 U	1.6 U	1.56 U	1.63 U	1.64 U	1.64 U
ENDRIN KETONE	1.52 UJ	1.55 UJ	1.62 UJ	1.6 UJ	1.56 UJ	1.63 UJ	1.64 UJ	1.64 U
GAMMA-BHC (LINDANE)	0.734 UJ	0.748 UJ	0.779 UJ	0.768 UJ	0.753 UJ	0.785 UJ	0.789 UJ	0.789 U
GAMMA-CHLORDANE	0.734 U	0.748 U	0.779 U	0.768 U	0.753 U	0.785 U	0.789 U	0.789 U
HEPTACHLOR	0.734 U	0.748 U	0.779 U	0.768 U	0.753 U	0.785 U	0.789 UJ	0.789 U
HEPTACHLOR EPOXIDE	0.734 U	0.748 U	0.779 U	0.768 U	0.753 U	0.785 U	0.789 U	0.789 U
METHOXYCHLOR	7.34 UJ	7.48 UJ	7.79 UJ	7.68 UJ	7.53 UJ	7.85 UJ	7.89 U	7.89 UJ
TOTAL AROCLOR	0 U	0 U	0 U	0 U	0 U	0 U		0 U
TOXAPHENE	95.9 U	97.8 U	102 U	100 U	98.5 U	103 U	103 U	103 U
Herbicides (ug/kg)								
2,4,5-T								
2,4,5-TP (SILVEX)								
2,4-D								
DINOSEB								
Miscellaneous Parameters								
CATION EXCHANGE CAPACITY (MEQ/1								
PH (S.U.)								
TOTAL ORGANIC CARBON (mg/kg)								
Petroleum Hydrocarbons (mg/kg)								
DIESEL RANGE ORGANICS	2.82 U	2.88 U	3 U	2.96 U	2.9 U	8.4 J	3.03 UJ	3.03 U
GASOLINE RANGE ORGANICS	2.82 U	2.88 U	3 U	2.96 U	2.9 U	3.02 U	3.03 U	3.03 U
OIL & GREASE - HEM	226 U	230 U	240 U	236 U	232 U	242 U	243 U	243 U
OIL RANGE ORGANICS (C24-C40)	11.3 U	11.5 U	12 U	11.8 U	11.6 U	36 J	12.1 UJ	12.1 U

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03	03	03	03	03
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB044	09SB045	09SB045	09SB045	09SB046	09SB046	09SB046	09SB047
SAMPLE NUMBER	09SB440405	09SB450204	09SB450406	09SB451416	09SB460204	09SB460406	09SB460607	09SB470204
SOIL CLASSIFICATION	8	9	8	8	8	8	8	8
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	4 - 5	2 - 4	4 - 6	14 - 16	2 - 4	4 - 6	6 - 7	2 - 4
SAMPLE DATE	10/3/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005	9/30/2005
Volatile Organics (ug/kg)								
1,1,1,2-TETRACHLOROETHANE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
1,1,1-TRICHLOROETHANE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
1,1,2,2-TETRACHLOROETHANE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
1,1,2-TRICHLOROETHANE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
1,1-DICHLOROETHANE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
1,1-DICHLOROETHENE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
1,2,3-TRICHLOROPROPANE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
1,2-DIBROMO-3-CHLOROPROPANE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
1,2-DIBROMOETHANE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
1,2-DICHLOROETHANE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
1,2-DICHLOROPROPANE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
2-BUTANONE	5 J	0.96 U	3 J	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
2-HEXANONE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 J
3-CHLOROPROPENE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
4-METHYL-2-PENTANONE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
ACETONE	35 BU	2 BU	25 BU	6 BU	6 BU	6 BU	6 BU	28 J
ACROLEIN	3 R	0.96 UR	1.01 UR	0.921 UR	0.98 UR	0.941 UR	1.02 UR	1.11 UR
ACRYLONITRILE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
BENZENE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
BROMODICHLOROMETHANE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
BROMOFORM	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
BROMOMETHANE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
CARBON DISULFIDE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
CARBON TETRACHLORIDE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
CHLOROBENZENE	4	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
CHLORODIBROMOMETHANE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
CHLOROETHANE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
CHLOROFORM	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
CHLOROMETHANE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
CHLOROPRENE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
CIS-1,2-DICHLOROETHENE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
CIS-1,3-DICHLOROPROPENE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
DIBROMOMETHANE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
DICHLORODIFLUOROMETHANE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
ETHYL METHACRYLATE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
ETHYLBENZENE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
METHACRYLONITRILE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
METHYL IODIDE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
METHYL METHACRYLATE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
METHYL TERT-BUTYL ETHER	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
METHYLENE CHLORIDE	1.04 UJ	0.96 UJ	1.01 J	0.921 UJ	1 J	2 J	1.02 UJ	1.11 UJ
STYRENE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03	03	03	03	03
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB044	09SB045	09SB045	09SB045	09SB046	09SB046	09SB046	09SB047
SAMPLE NUMBER	09SB440405	09SB450204	09SB450406	09SB451416	09SB460204	09SB460406	09SB460607	09SB470204
SOIL CLASSIFICATION	8	9	8	8	8	8	8	8
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	4 - 5	2 - 4	4 - 6	14 - 16	2 - 4	4 - 6	6 - 7	2 - 4
SAMPLE DATE	10/3/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005	9/30/2005
TETRACHLOROETHENE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
TOLUENE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	4 J
TOTAL XYLENES	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
TRANS-1,2-DICHLOROETHENE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
TRANS-1,3-DICHLOROPROPENE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
TRANS-1,4-DICHLORO-2-BUTENE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
TRICHLOROETHENE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
TRICHLOROFLUOROMETHANE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
VINYL ACETATE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
VINYL CHLORIDE	1.04 U	0.96 U	1.01 U	0.921 U	0.98 U	0.941 U	1.02 U	1.11 U
DRO Specific Semivolatile Organics (ug								
2-METHYLNAPHTHALENE								
ACENAPHTHENE								
ACENAPHTHYLENE								
ANTHRACENE								
BENZO(A)ANTHRACENE								
BENZO(A)PYRENE								
BENZO(B)FLUORANTHENE								
BENZO(G,H,I)PERYLENE								
BENZO(K)FLUORANTHENE								
CHRYSENE								
DIBENZO(A,H)ANTHRACENE								
FLUORANTHENE								
FLUORENE								
INDENO(1,2,3-CD)PYRENE								
NAPHTHALENE								
PHENANTHRENE								
PYRENE								
Pesticides/PCBs (ug/kg)								
4,4'-DDD	1.68 U	1.61 U	1.64 U	1.59 U	6.8	400 U	1.59 U	1.56 UJ
4,4'-DDE	1.68 UJ	1.61 UJ	1.64 UJ	1.59 UJ	9.2 J	550 J	1.59 UJ	1.56 UJ
4,4'-DDT	1.68 U	1.61 U	1.64 U	1.59 U	68	10000	7.2 J	1.56 U
ALDRIN	0.81 U	0.774 U	0.792 U	0.767 U	0.777 U	193 U	0.767 U	0.749 UJ
ALPHA-BHC	0.81 UJ	0.774 UJ	0.792 UJ	0.767 UJ	0.777 UJ	193 U	0.767 U	0.749 UJ
ALPHA-CHLORDANE	0.81 U	0.774 U	0.792 U	0.767 U	0.777 U	193 U	0.767 U	0.749 U
AROCLOR-1016	11.2 UJ	10.7 UJ	11 UJ	10.6 UJ	10.8 UJ	2666 UJ	10.6 UJ	10.4 U
AROCLOR-1221	11.2 U	10.7 U	11 U	10.6 U	10.8 U	2666 U	10.6 U	10.4 U
AROCLOR-1232	11.2 U	10.7 U	11 U	10.6 U	10.8 U	2666 U	10.6 U	10.4 U
AROCLOR-1242	11.2 U	10.7 U	11 U	10.6 U	10.8 U	2666 U	10.6 U	10.4 U
AROCLOR-1248	11.2 U	10.7 U	11 U	10.6 U	10.8 U	2666 U	10.6 U	10.4 U
AROCLOR-1254	11.2 U	10.7 U	11 U	10.6 U	10.8 U	2666 U	10.6 U	10.4 U
AROCLOR-1260	11.2 UJ	10.7 UJ	11 UJ	10.6 UJ	10.8 UJ	2666 UJ	10.6 UJ	10.4 UJ
BETA-BHC	0.81 U	0.774 U	0.792 U	0.767 U	0.777 U	193 U	0.767 U	0.749 U

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03	03	03	03	03
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB044	09SB045	09SB045	09SB045	09SB046	09SB046	09SB046	09SB047
SAMPLE NUMBER	09SB440405	09SB450204	09SB450406	09SB451416	09SB460204	09SB460406	09SB460607	09SB470204
SOIL CLASSIFICATION	8	9	8	8	8	8	8	8
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	4 - 5	2 - 4	4 - 6	14 - 16	2 - 4	4 - 6	6 - 7	2 - 4
SAMPLE DATE	10/3/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005	9/30/2005
DELTA-BHC	0.81 UJ	0.774 UJ	0.792 UJ	0.767 UJ	0.777 UJ	193 UJ	0.767 UJ	0.749 UJ
DIELDRIN	1.68 U	1.61 U	1.64 U	1.59 U	12	400 U	1.59 U	1.56 U
ENDOSULFAN I	0.81 U	0.774 U	0.792 U	0.767 U	0.777 U	193 U	0.767 U	0.749 U
ENDOSULFAN II	1.68 U	1.61 U	1.64 U	1.59 U	1.61 U	400 U	1.59 U	1.56 U
ENDOSULFAN SULFATE	1.68 U	1.61 U	1.64 U	1.59 U	1.61 U	400 U	1.59 U	1.56 UJ
ENDRIN	1.68 U	1.61 U	1.64 U	1.59 U	1.61 U	400 U	1.59 U	1.56 U
ENDRIN ALDEHYDE	1.68 U	1.61 U	1.64 U	1.59 U	1.61 U	400 U	1.59 U	1.56 U
ENDRIN KETONE	1.68 U	1.61 U	1.64 U	1.59 U	1.61 U	400 U	1.59 U	1.56 UJ
GAMMA-BHC (LINDANE)	0.81 U	0.774 U	0.792 U	0.767 U	0.777 U	193 U	0.767 U	0.749 UJ
GAMMA-CHLORDANE	0.81 U	0.774 U	0.792 U	0.767 U	0.777 U	193 U	0.767 U	0.749 U
HEPTACHLOR	0.81 U	0.774 U	0.792 U	0.767 U	0.777 U	193 U	0.767 U	0.749 UJ
HEPTACHLOR EPOXIDE	0.81 U	0.774 U	0.792 U	0.767 U	0.777 U	193 U	0.767 U	0.749 U
METHOXYCHLOR	8.1 UJ	7.74 UJ	7.92 UJ	7.67 UJ	7.77 UJ	1925 UJ	7.67 UJ	7.49 U
TOTAL AROCLOR	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U
TOXAPHENE	106 U	101 U	104 U	100 U	102 U	25178 U	100 U	97.9 U
Herbicides (ug/kg)								
2,4,5-T								
2,4,5-TP (SILVEX)								
2,4-D								
DINOSEB								
Miscellaneous Parameters								
CATION EXCHANGE CAPACITY (MEQ/1								
PH (S.U.)								
TOTAL ORGANIC CARBON (mg/kg)								
Petroleum Hydrocarbons (mg/kg)								
DIESEL RANGE ORGANICS	3.12 UJ	2.98 U	3.05 U	2.95 U	2.99 U	6.6	2.95 U	2.88 U
GASOLINE RANGE ORGANICS	3.12 U	2.98 U	3.05 U	2.95 U	2.99 U	2.96 U	2.95 U	2.88 U
OIL & GREASE - HEM	249 U	238 U	244 U	236 U	239 U	237 U	236 U	230 U
OIL RANGE ORGANICS (C24-C40)	12.5 UJ	11.9 U	12.2 U	11.8 U	11.9 U	11.8 U	11.8 U	11.5 U

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03	03	03	03	03
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB047	09SB047	09SB047	09SB048	09SB048	09SB048	09SB049	09SB049
SAMPLE NUMBER	09SB470204-D	09SB470406	09SB470608	09SB480204	09SB480406	09SB480608	09SB490204	09SB490406
SOIL CLASSIFICATION		8	8	8	8	8	8	8
SAMPLE CODE	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	2 - 4	4 - 6	6 - 8	2 - 4	4 - 6	6 - 8	2 - 4	4 - 6
SAMPLE DATE	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005
Volatile Organics (ug/kg)								
1,1,1,2-TETRACHLOROETHANE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
1,1,1-TRICHLOROETHANE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
1,1,2,2-TETRACHLOROETHANE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
1,1,2-TRICHLOROETHANE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
1,1-DICHLOROETHANE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
1,1-DICHLOROETHENE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
1,2,3-TRICHLOROPROPANE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
1,2-DIBROMO-3-CHLOROPROPANE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
1,2-DIBROMOETHANE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
1,2-DICHLOROETHANE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
1,2-DICHLOROPROPANE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
2-BUTANONE	1.14 U	1.01 U	1.04 U	6 J	5 J	1.05 U	1 U	0.894 U
2-HEXANONE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
3-CHLOROPROPENE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
4-METHYL-2-PENTANONE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
ACETONE	1.14 J	3 J	2 J	64 J	45 J	1.05 U	3 J	0.894 U
ACROLEIN	1.14 UR	1.01 UR	1.04 UR	1 UR	1.08 UR	1.05 UR	1 UR	0.894 UR
ACRYLONITRILE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
BENZENE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
BROMODICHLOROMETHANE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
BROMOFORM	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
BROMOMETHANE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
CARBON DISULFIDE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
CARBON TETRACHLORIDE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
CHLOROBENZENE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
CHLORODIBROMOMETHANE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
CHLOROETHANE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
CHLOROFORM	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
CHLOROMETHANE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
CHLOROPRENE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
CIS-1,2-DICHLOROETHENE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
CIS-1,3-DICHLOROPROPENE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
DIBROMOMETHANE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
DICHLORODIFLUOROMETHANE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
ETHYL METHACRYLATE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
ETHYLBENZENE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
METHACRYLONITRILE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
METHYL IODIDE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
METHYL METHACRYLATE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
METHYL TERT-BUTYL ETHER	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
METHYLENE CHLORIDE	1.14 UJ	1.01 UJ	1.04 UJ	1 UJ	1.08 UJ	1.05 UJ	1 UJ	0.894 UJ
STYRENE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03	03	03	03	03
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB047	09SB047	09SB047	09SB048	09SB048	09SB048	09SB049	09SB049
SAMPLE NUMBER	09SB470204-D	09SB470406	09SB470608	09SB480204	09SB480406	09SB480608	09SB490204	09SB490406
SOIL CLASSIFICATION		8	8	8	8	8	8	8
SAMPLE CODE	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	2 - 4	4 - 6	6 - 8	2 - 4	4 - 6	6 - 8	2 - 4	4 - 6
SAMPLE DATE	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005
TETRACHLOROETHENE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
TOLUENE	1.14 UJ	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
TOTAL XYLENES	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
TRANS-1,2-DICHLOROETHENE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
TRANS-1,3-DICHLOROPROPENE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
TRANS-1,4-DICHLORO-2-BUTENE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
TRICHLOROETHENE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
TRICHLOROFLUOROMETHANE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
VINYL ACETATE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
VINYL CHLORIDE	1.14 U	1.01 U	1.04 U	1 U	1.08 U	1.05 U	1 U	0.894 U
DRO Specific Semivolatile Organics (ug								
2-METHYLNAPHTHALENE								
ACENAPHTHENE								
ACENAPHTHYLENE								
ANTHRACENE								
BENZO(A)ANTHRACENE								
BENZO(A)PYRENE								
BENZO(B)FLUORANTHENE								
BENZO(G,H,I)PERYLENE								
BENZO(K)FLUORANTHENE								
CHRYSENE								
DIBENZO(A,H)ANTHRACENE								
FLUORANTHENE								
FLUORENE								
INDENO(1,2,3-CD)PYRENE								
NAPHTHALENE								
PHENANTHRENE								
PYRENE								
Pesticides/PCBs (ug/kg)								
4,4'-DDD	1.54 UJ	1.55 J	1.62 UJ	1.65 UJ	45 J	1.64 U	1.68 U	1.57 U
4,4'-DDE	1.54 U	1.55 U	1.62 U	1.65 U	150	1.64 U	1.68 U	1.57 U
4,4'-DDT	1.54 R	1.9 J	1.62 U	1.65 U	440	1.64 J	1.9 J	1.57 U
ALDRIN	0.743 U	0.745 U	0.782 U	0.795 U	0.844 U	0.79 U	0.808 U	0.756 U
ALPHA-BHC	0.743 UJ	0.745 UJ	0.782 UJ	0.795 UJ	0.844 UJ	0.79 UJ	0.808 UJ	0.756 UJ
ALPHA-CHLORDANE	0.743 U	0.745 U	0.782 U	0.795 U	0.844 U	0.79 U	0.808 U	0.756 U
AROCLOR-1016	10.3 U	10.3 U	10.8 U	11 U	11.7 U	10.9 U	11.2 U	10.5 U
AROCLOR-1221	10.3 U	10.3 U	10.8 U	11 U	11.7 U	10.9 U	11.2 U	10.5 U
AROCLOR-1232	10.3 U	10.3 U	10.8 U	11 U	11.7 U	10.9 U	11.2 U	10.5 U
AROCLOR-1242	10.3 U	10.3 U	10.8 U	11 U	11.7 U	10.9 U	11.2 U	10.5 U
AROCLOR-1248	10.3 U	10.3 U	10.8 U	11 U	11.7 U	10.9 U	11.2 U	10.5 U
AROCLOR-1254	10.3 U	10.3 U	10.8 U	11 U	11.7 U	10.9 U	11.2 U	10.5 U
AROCLOR-1260	69 J	54	61	11 U	11.7 U	44	26 J	980
BETA-BHC	0.743 U	0.745 U	0.782 U	0.795 U	0.844 U	0.79 U	0.808 U	0.756 U

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03	03	03	03	03
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB047	09SB047	09SB047	09SB048	09SB048	09SB048	09SB049	09SB049
SAMPLE NUMBER	09SB470204-D	09SB470406	09SB470608	09SB480204	09SB480406	09SB480608	09SB490204	09SB490406
SOIL CLASSIFICATION		8	8	8	8	8	8	8
SAMPLE CODE	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	2 - 4	4 - 6	6 - 8	2 - 4	4 - 6	6 - 8	2 - 4	4 - 6
SAMPLE DATE	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005
DELTA-BHC	0.743 UJ	0.745 UJ	0.782 UJ	0.795 UJ	0.844 UJ	0.79 UJ	0.808 UJ	0.756 UJ
DIELDRIN	1.54 U	1.55 U	1.62 U	1.65 U	1.75 U	1.64 U	1.68 U	1.57 U
ENDOSULFAN I	0.743 U	0.745 U	0.782 U	0.795 U	0.844 U	0.79 U	0.808 U	0.756 U
ENDOSULFAN II	1.54 U	1.55 U	1.62 U	1.65 U	1.75 U	1.64 U	1.68 U	1.57 U
ENDOSULFAN SULFATE	1.54 UJ	1.55 UJ	1.62 UJ	1.65 UJ	1.75 UJ	1.64 UJ	1.68 UJ	1.57 UJ
ENDRIN	1.54 U	1.55 U	1.62 U	1.65 U	1.75 U	1.64 U	1.68 U	1.57 U
ENDRIN ALDEHYDE	1.54 U	1.55 U	1.62 U	1.65 U	1.75 U	1.64 U	1.68 U	1.57 U
ENDRIN KETONE	1.54 U	1.55 U	1.62 U	1.65 U	1.75 U	1.64 U	1.68 U	1.57 U
GAMMA-BHC (LINDANE)	0.743 UJ	0.745 UJ	0.782 UJ	0.795 UJ	0.844 UJ	0.79 UJ	0.808 UJ	0.756 UJ
GAMMA-CHLORDANE	0.743 U	0.745 U	0.782 U	0.795 U	0.844 U	0.79 U	0.808 U	0.756 U
HEPTACHLOR	0.743 U	0.745 U	0.782 U	0.795 U	0.844 U	0.79 U	0.808 U	0.756 U
HEPTACHLOR EPOXIDE	0.743 U	0.745 U	0.782 U	0.795 U	0.844 U	0.79 U	0.808 U	0.756 U
METHOXYCHLOR	7.43 U	7.45 U	7.82 U	7.95 U	8.44 U	7.9 U	8.08 U	7.56 U
TOTAL AROCLOR		54	61	0 U	0 U	44	26	980
TOXAPHENE	97.1 U	97.5 U	102 U	104 U	110 U	103 U	106 U	98.8 U
Herbicides (ug/kg)								
2,4,5-T								
2,4,5-TP (SILVEX)								
2,4-D								
DINOSEB								
Miscellaneous Parameters								
CATION EXCHANGE CAPACITY (MEQ/1								
PH (S.U.)								
TOTAL ORGANIC CARBON (mg/kg)								
Petroleum Hydrocarbons (mg/kg)								
DIESEL RANGE ORGANICS	2.86 U	2.87 U	3.01 U	6.2	49	21	3.11 U	2.91 U
GASOLINE RANGE ORGANICS	2.86 U	2.87 U	3.01 U	3.06 U	3.25 U	3.04 U	3.11 U	2.91 U
OIL & GREASE - HEM	229 U	229 U	241 U	244 U	3600	243 U	249 U	233 U
OIL RANGE ORGANICS (C24-C40)	11.4 U	11.5 U	12 U	12.2 U	180	56	12.4 U	11.6 U

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03	04	04	04	04
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB049	09SB049A	09SB049A	09SB049A	09SB065	09SB065	09SB065	09SB065
SAMPLE NUMBER	09SB490607	09SB49A0204	09SB49A0406	09SB49A1415	09SB650204	09SB650406	09SB651416	09SB651416-D
SOIL CLASSIFICATION	8	8	8	9				
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	DUP
DEPTH RANGE (feet)	6 - 7	2 - 4	4 - 6	14 - 15	2 - 4	4 - 6	14 - 16	14 - 16
SAMPLE DATE	9/30/2005	9/30/2005	9/30/2005	9/30/2005	10/21/2006	10/21/2006	10/21/2006	10/21/2006
Volatile Organics (ug/kg)								
1,1,1,2-TETRACHLOROETHANE	1.08 U	0.944 U	0.931 U	1.22 U				
1,1,1-TRICHLOROETHANE	1.08 U	0.944 U	0.931 U	1.22 U				
1,1,2,2-TETRACHLOROETHANE	1.08 U	0.944 U	0.931 U	1.22 U				
1,1,2-TRICHLOROETHANE	1.08 U	0.944 U	0.931 U	1.22 U				
1,1-DICHLOROETHANE	1.08 U	0.944 U	0.931 U	1.22 U				
1,1-DICHLOROETHENE	1.08 U	0.944 U	0.931 U	1.22 U				
1,2,3-TRICHLOROPROPANE	1.08 U	0.944 U	0.931 U	1.22 U				
1,2-DIBROMO-3-CHLOROPROPANE	1.08 U	0.944 U	0.931 U	1.22 U				
1,2-DIBROMOETHANE	1.08 U	0.944 U	0.931 U	1.22 U				
1,2-DICHLOROETHANE	1.08 U	0.944 U	0.931 U	1.22 U				
1,2-DICHLOROPROPANE	1.08 U	0.944 U	0.931 U	1.22 U				
2-BUTANONE	1.08 U	0.944 U	0.931 U	1.22 U				
2-HEXANONE	1.08 U	0.944 U	0.931 U	1.22 U				
3-CHLOROPROPENE	1.08 U	0.944 U	0.931 U	1.22 U				
4-METHYL-2-PENTANONE	1.08 U	0.944 U	0.931 U	1.22 U				
ACETONE	2 J	1 J	0.931 U	18 J				
ACROLEIN	1.08 UR	0.944 UR	0.931 UR	1.22 UR				
ACRYLONITRILE	1.08 U	0.944 U	0.931 U	1.22 U				
BENZENE	1.08 U	0.944 UJ	0.931 U	1.22 U				
BROMODICHLOROMETHANE	1.08 U	0.944 UJ	0.931 U	1.22 U				
BROMOFORM	1.08 U	0.944 U	0.931 U	1.22 U				
BROMOMETHANE	1.08 U	0.944 U	0.931 U	1.22 U				
CARBON DISULFIDE	1.08 U	0.944 U	0.931 U	1.22 U				
CARBON TETRACHLORIDE	1.08 U	0.944 U	0.931 U	1.22 U				
CHLOROBENZENE	1.08 U	0.944 UJ	0.931 U	1.22 U				
CHLORODIBROMOMETHANE	1.08 U	0.944 U	0.931 U	1.22 U				
CHLOROETHANE	1.08 U	0.944 U	0.931 U	1.22 U				
CHLOROFORM	1.08 U	0.944 U	0.931 U	1.22 U				
CHLOROMETHANE	1.08 U	0.944 U	0.931 U	1.22 U				
CHLOROPRENE	1.08 U	0.944 U	0.931 U	1.22 U				
CIS-1,2-DICHLOROETHENE	1.08 U	0.944 U	0.931 U	1.22 U				
CIS-1,3-DICHLOROPROPENE	1.08 U	0.944 U	0.931 U	1.22 U				
DIBROMOMETHANE	1.08 U	0.944 U	0.931 U	1.22 U				
DICHLORODIFLUOROMETHANE	1.08 U	0.944 U	0.931 U	1.22 U				
ETHYL METHACRYLATE	1.08 U	0.944 U	0.931 U	1.22 U				
ETHYLBENZENE	1.08 U	0.944 U	0.931 U	1.22 U				
METHACRYLONITRILE	1.08 U	0.944 U	0.931 U	1.22 U				
METHYL IODIDE	1.08 U	0.944 U	0.931 U	1.22 U				
METHYL METHACRYLATE	1.08 U	0.944 U	0.931 U	1.22 U				
METHYL TERT-BUTYL ETHER	1.08 U	0.944 U	0.931 U	1.22 U				
METHYLENE CHLORIDE	1.08 UJ	0.944 UJ	0.931 UJ	1.22 UJ				
STYRENE	1.08 U	0.944 UJ	0.931 U	1.22 U				

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03	04	04	04	04
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB049	09SB049A	09SB049A	09SB049A	09SB065	09SB065	09SB065	09SB065
SAMPLE NUMBER	09SB490607	09SB49A0204	09SB49A0406	09SB49A1415	09SB650204	09SB650406	09SB651416	09SB651416-D
SOIL CLASSIFICATION	8	8	8	9				
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	DUP
DEPTH RANGE (feet)	6 - 7	2 - 4	4 - 6	14 - 15	2 - 4	4 - 6	14 - 16	14 - 16
SAMPLE DATE	9/30/2005	9/30/2005	9/30/2005	9/30/2005	10/21/2006	10/21/2006	10/21/2006	10/21/2006
TETRACHLOROETHENE	1.08 U	0.944 U	0.931 U	1.22 U				
TOLUENE	1.08 U	0.944 U	0.931 U	1.22 U				
TOTAL XYLENES	1.08 U	0.944 U	0.931 U	1.22 U				
TRANS-1,2-DICHLOROETHENE	1.08 U	0.944 U	0.931 U	1.22 U				
TRANS-1,3-DICHLOROPROPENE	1.08 U	0.944 U	0.931 U	1.22 U				
TRANS-1,4-DICHLORO-2-BUTENE	1.08 U	0.944 U	0.931 U	1.22 U				
TRICHLOROETHENE	1.08 U	0.944 UJ	0.931 U	1.22 U				
TRICHLOROFLUOROMETHANE	1.08 U	0.944 U	0.931 U	1.22 U				
VINYL ACETATE	1.08 U	0.944 U	0.931 U	1.22 U				
VINYL CHLORIDE	1.08 U	0.944 U	0.931 U	1.22 U				
DRO Specific Semivolatile Organics (ug								
2-METHYLNAPHTHALENE					3.9 U	4 U	4 U	4.1 U
ACENAPHTHENE					3.9 U	4 U	4 U	4.1 U
ACENAPHTHYLENE					3.9 U	4 U	4 U	4.1 U
ANTHRACENE					3.9 U	4 U	4 U	4.1 U
BENZO(A)ANTHRACENE					3.9 U	4 U	4 U	4.1 U
BENZO(A)PYRENE					3.9 U	4 U	4 U	4.1 U
BENZO(B)FLUORANTHENE					3.9 U	4 U	4 U	4.1 U
BENZO(G,H,I)PERYLENE					3.9 U	4 U	4 U	4.1 U
BENZO(K)FLUORANTHENE					3.9 U	4 U	4 U	4.1 U
CHRYSENE					3.9 U	4 U	4 U	4.1 U
DIBENZO(A,H)ANTHRACENE					3.9 U	4 U	4 U	4.1 U
FLUORANTHENE					3.9 U	4 U	4 U	4.1 U
FLUORENE					3.9 U	4 U	4 U	4.1 U
INDENO(1,2,3-CD)PYRENE					3.9 U	4 U	4 U	4.1 U
NAPHTHALENE					3.9 U	4 U	4 U	4.1 U
PHENANTHRENE					4.4 J	4 U	4 U	4.1 U
PYRENE					3.9 U	4 U	4 U	4.1 U
Pesticides/PCBs (ug/kg)								
4,4'-DDD	1.64 U	1.61 U	1.9 J	1.71 U	1.6 U	1.6 UJ	1.6 U	1.7 U
4,4'-DDE	1.64 U	3.1 J	20	13 J	1.6 U	22 R	1.6 U	1.7 U
4,4'-DDT	1.64 U	8.6 J	11	1.71 U	1.6 U	1.6 UJ	1.6 U	1.7 U
ALDRIN	0.789 U	0.773 U	0.751 U	0.824 U	0.76 U	0.79 UJ	0.79 U	0.82 U
ALPHA-BHC	0.789 UJ	0.773 UJ	0.751 UJ	0.824 U	0.76 U	0.79 UJ	0.79 U	0.82 U
ALPHA-CHLORDANE	0.789 U	0.773 U	0.751 U	0.824 U	0.76 U	0.79 UJ	0.79 U	0.82 U
AROCLOR-1016	10.9 U	10.7 U	10.4 U	11.4 U	11 U	11 U	11 U	11 U
AROCLOR-1221	10.9 U	10.7 U	10.4 U	11.4 U	11 U	11 U	11 U	11 U
AROCLOR-1232	10.9 U	10.7 U	10.4 U	11.4 U	11 U	11 U	11 U	11 U
AROCLOR-1242	10.9 U	10.7 U	10.4 U	11.4 U	11 U	11 U	11 U	11 U
AROCLOR-1248	10.9 U	10.7 U	10.4 U	11.4 U	11 U	11 U	11 U	11 U
AROCLOR-1254	10.9 U	10.7 U	10.4 U	11.4 U	11 U	11 U	11 U	11 U
AROCLOR-1260	100	10.7 U	26	2200	11 U	11 U	11 U	11 U
BETA-BHC	0.789 U	0.773 U	0.751 U	0.824 U	0.76 U	0.79 UJ	0.79 U	0.82 U

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03	04	04	04	04
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB049	09SB049A	09SB049A	09SB049A	09SB065	09SB065	09SB065	09SB065
SAMPLE NUMBER	09SB490607	09SB49A0204	09SB49A0406	09SB49A1415	09SB650204	09SB650406	09SB651416	09SB651416-D
SOIL CLASSIFICATION	8	8	8	9				
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	DUP
DEPTH RANGE (feet)	6 - 7	2 - 4	4 - 6	14 - 15	2 - 4	4 - 6	14 - 16	14 - 16
SAMPLE DATE	9/30/2005	9/30/2005	9/30/2005	9/30/2005	10/21/2006	10/21/2006	10/21/2006	10/21/2006
DELTA-BHC	0.789 UJ	0.773 UJ	0.751 UJ	0.824 UJ	0.76 U	0.79 UJ	0.79 U	0.82 U
DIELDRIN	1.64 U	1.61 U	1.56 U	1.71 U	1.6 U	1.6 UJ	1.6 U	1.7 U
ENDOSULFAN I	0.789 U	0.773 U	0.751 U	0.824 U	0.76 U	0.79 UJ	0.79 U	0.82 U
ENDOSULFAN II	1.64 U	1.61 U	1.56 U	1.71 U	1.6 U	1.6 UJ	1.6 U	1.7 U
ENDOSULFAN SULFATE	1.64 UJ	1.61 UJ	1.56 UJ	1.71 U	1.6 U	1.6 UJ	1.6 U	1.7 U
ENDRIN	1.64 U	1.61 U	1.56 U	1.71 U	1.6 U	1.6 UJ	1.6 U	1.7 U
ENDRIN ALDEHYDE	1.64 U	1.61 U	1.56 U	1.71 U	1.6 U	1.6 UJ	1.6 U	1.7 U
ENDRIN KETONE	1.64 U	1.61 U	1.56 U	1.71 U	1.6 U	1.6 UJ	1.6 U	1.7 U
GAMMA-BHC (LINDANE)	0.789 UJ	0.773 UJ	0.751 UJ	0.824 U	0.76 U	0.79 UJ	0.79 U	0.82 U
GAMMA-CHLORDANE	0.789 U	0.773 U	0.751 U	0.824 U	0.76 U	0.79 UJ	0.79 U	0.82 U
HEPTACHLOR	0.789 U	0.773 U	0.751 U	0.824 U	0.76 U	0.79 UJ	0.79 U	0.82 U
HEPTACHLOR EPOXIDE	0.789 U	0.773 U	0.751 U	0.824 U	0.76 U	0.79 UJ	0.79 U	0.82 U
METHOXYCHLOR	7.89 U	7.73 U	7.51 U	32 J	7.6 U	7.9 UJ	7.9 U	8.2 U
TOTAL AROCLOR	100	0 U	26	2200	0 U	0 U	0 U	
TOXAPHENE	103 U	101 U	98.2 U	108 U	100 U	100 UJ	100 U	110 U
Herbicides (ug/kg)								
2,4,5-T								
2,4,5-TP (SILVEX)								
2,4-D								
DINOSEB								
Miscellaneous Parameters								
CATION EXCHANGE CAPACITY (MEQ/1								
PH (S.U.)								
TOTAL ORGANIC CARBON (mg/kg)								
Petroleum Hydrocarbons (mg/kg)								
DIESEL RANGE ORGANICS	3.03 U	2.97 U	2.89 U	130	4.3 J	5 J	3 U	3.1 UJ
GASOLINE RANGE ORGANICS	3.03 U	2.97 U	2.89 U	18				
OIL & GREASE - HEM	243 U	238 U	231 U	253 U				
OIL RANGE ORGANICS (C24-C40)	12.1 U	11.9 U	11.5 U	12.7 U				

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	04	04	04	04	04	04	04	04
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB066	09SB066	09SB066	09SB067	09SB067	09SB067	09SB067	09SB068
SAMPLE NUMBER	09SB660204	09SB660406	09SB661416	09SB670204	09SB670406	09SB670406-D	09SB671214	09SB680204
SOIL CLASSIFICATION								
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	DUP	NORMAL	NORMAL
DEPTH RANGE (feet)	2 - 4	4 - 6	14 - 16	2 - 4	4 - 6	4 - 6	12 - 14	2 - 4
SAMPLE DATE	10/21/2006	10/21/2006	10/21/2006	10/21/2006	10/21/2006	10/21/2006	10/21/2006	10/22/2006
Volatile Organics (ug/kg)								
1,1,1,2-TETRACHLOROETHANE								
1,1,1-TRICHLOROETHANE								
1,1,2,2-TETRACHLOROETHANE								
1,1,2-TRICHLOROETHANE								
1,1-DICHLOROETHANE								
1,1-DICHLOROETHENE								
1,2,3-TRICHLOROPROPANE								
1,2-DIBROMO-3-CHLOROPROPANE								
1,2-DIBROMOETHANE								
1,2-DICHLOROETHANE								
1,2-DICHLOROPROPANE								
2-BUTANONE								
2-HEXANONE								
3-CHLOROPROPENE								
4-METHYL-2-PENTANONE								
ACETONE								
ACROLEIN								
ACRYLONITRILE								
BENZENE								
BROMODICHLOROMETHANE								
BROMOFORM								
BROMOMETHANE								
CARBON DISULFIDE								
CARBON TETRACHLORIDE								
CHLOROBENZENE								
CHLORODIBROMOMETHANE								
CHLOROETHANE								
CHLOROFORM								
CHLOROMETHANE								
CHLOROPRENE								
CIS-1,2-DICHLOROETHENE								
CIS-1,3-DICHLOROPROPENE								
DIBROMOMETHANE								
DICHLORODIFLUOROMETHANE								
ETHYL METHACRYLATE								
ETHYLBENZENE								
METHACRYLONITRILE								
METHYL IODIDE								
METHYL METHACRYLATE								
METHYL TERT-BUTYL ETHER								
METHYLENE CHLORIDE								
STYRENE								

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	04	04	04	04	04	04	04	04
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB066	09SB066	09SB066	09SB067	09SB067	09SB067	09SB067	09SB068
SAMPLE NUMBER	09SB660204	09SB660406	09SB661416	09SB670204	09SB670406	09SB670406-D	09SB671214	09SB680204
SOIL CLASSIFICATION								
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	DUP	NORMAL	NORMAL
DEPTH RANGE (feet)	2 - 4	4 - 6	14 - 16	2 - 4	4 - 6	4 - 6	12 - 14	2 - 4
SAMPLE DATE	10/21/2006	10/21/2006	10/21/2006	10/21/2006	10/21/2006	10/21/2006	10/21/2006	10/22/2006
TETRACHLOROETHENE								
TOLUENE								
TOTAL XYLENES								
TRANS-1,2-DICHLOROETHENE								
TRANS-1,3-DICHLOROPROPENE								
TRANS-1,4-DICHLORO-2-BUTENE								
TRICHLOROETHENE								
TRICHLOROFLUOROMETHANE								
VINYL ACETATE								
VINYL CHLORIDE								
DRO Specific Semivolatile Organics (ug								
2-METHYLNAPHTHALENE	4.5 U	4 U	4.3 U	220	540	500	3.8 U	4 U
ACENAPHTHENE	4.5 U	4 U	4.3 U	11	12	12	3.8 U	4 U
ACENAPHTHYLENE	4.5 U	4 U	4.3 U	4.1 U	4 U	4.1 U	3.8 U	4 U
ANTHRACENE	4.5 U	4 U	4.3 U	7.4 J	4 U	4.1 U	3.8 U	4 U
BENZO(A)ANTHRACENE	4.5 U	4 U	24	12	4 U	4.1 U	3.8 U	4 U
BENZO(A)PYRENE	4.5 U	4 U	16	5.6 J	4 U	4.1 U	3.8 U	4 U
BENZO(B)FLUORANTHENE	4.5 U	4 U	170	4.1 U	4 U	4.1 U	3.8 U	4 U
BENZO(G,H,I)PERYLENE	4.5 U	4 U	38	4.1 U	4 U	4.1 U	3.8 U	4 U
BENZO(K)FLUORANTHENE	4.5 U	4 U	18	4.1 U	4 U	4.1 U	3.8 U	4 U
CHRYSENE	4.5 U	4 U	31	10	4 U	4.1 U	3.8 U	4 U
DIBENZO(A,H)ANTHRACENE	4.5 U	4 U	4.3 U	4.1 U	4 U	4.1 U	3.8 U	4 U
FLUORANTHENE	4.5 U	4 U	100	11	4 U	4.1 U	3.8 U	4 U
FLUORENE	4.5 U	4 U	4.3 U	21	21	23	12	4 U
INDENO(1,2,3-CD)PYRENE	4.5 U	4 U	13	4.1 U	4 U	4.1 U	3.8 U	4 U
NAPHTHALENE	4.5 U	4 U	4.3 U	78	130	99	3.8 U	4 U
PHENANTHRENE	4.5 U	4 U	17	29	4.3 J	5.6 J	11	4 U
PYRENE	4.7 J	4 U	480	16	4 U	4.1 U	3.8 U	4 U
Pesticides/PCBs (ug/kg)								
4,4'-DDD	1.8 UJ	45 J	1.8 U	1.7 UJ	1.7 UJ	1.7 U	1.5 U	1.6 U
4,4'-DDE	1.8 UJ	100	1.8 U	2 J	1.7 UJ	4 J	1.5 U	1.6 U
4,4'-DDT	1.8 UJ	340	1.8 U	2.9 J	1.7 UJ	6.1 J	1.5 U	1.8 J
ALDRIN	0.88 UJ	0.8 U	0.85 U	0.8 UJ	0.79 UJ	0.81 U	0.74 U	0.78 U
ALPHA-BHC	0.88 UJ	0.8 U	0.85 U	0.8 UJ	0.79 UJ	0.81 U	0.74 U	0.78 U
ALPHA-CHLORDANE	0.88 UJ	15	0.85 U	0.8 UJ	0.79 UJ	0.81 U	0.74 U	0.78 U
AROCLOR-1016	12 U	11 U	12 U	11 U	11 U	11 U	10 U	11 U
AROCLOR-1221	12 U	11 U	12 U	11 U	11 U	11 U	10 U	11 U
AROCLOR-1232	12 U	11 U	12 U	11 U	11 U	11 U	10 U	11 U
AROCLOR-1242	12 U	11 U	12 U	11 U	11 U	11 U	10 U	11 U
AROCLOR-1248	12 U	11 U	12 U	11 U	11 U	11 U	10 U	11 U
AROCLOR-1254	12 U	11 U	12 U	11 U	11 U	11 U	10 U	11 U
AROCLOR-1260	12 U	11 U	12 U	11 U	11 U	11 U	10 U	11 U
BETA-BHC	0.88 UJ	0.8 U	0.85 U	0.8 UJ	0.79 UJ	0.81 U	0.74 U	0.78 U

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	04	04	04	04	04	04	04	04
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB066	09SB066	09SB066	09SB067	09SB067	09SB067	09SB067	09SB068
SAMPLE NUMBER	09SB660204	09SB660406	09SB661416	09SB670204	09SB670406	09SB670406-D	09SB671214	09SB680204
SOIL CLASSIFICATION								
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	DUP	NORMAL	NORMAL
DEPTH RANGE (feet)	2 - 4	4 - 6	14 - 16	2 - 4	4 - 6	4 - 6	12 - 14	2 - 4
SAMPLE DATE	10/21/2006	10/21/2006	10/21/2006	10/21/2006	10/21/2006	10/21/2006	10/21/2006	10/22/2006
DELTA-BHC	0.88 UJ	0.8 U	0.85 U	0.8 UJ	0.79 UJ	0.81 U	0.74 U	0.78 U
DIELDRIN	1.8 UJ	1.7 UJ	1.8 U	1.9 J	1.7 UJ	3.8 J	1.5 U	1.6 U
ENDOSULFAN I	0.88 UJ	0.8 U	0.85 U	0.8 UJ	0.79 UJ	0.81 U	0.74 U	0.78 U
ENDOSULFAN II	1.8 UJ	1.7 U	1.8 U	1.7 UJ	1.7 UJ	1.7 U	1.5 U	1.6 U
ENDOSULFAN SULFATE	1.8 UJ	1.7 U	1.8 U	1.7 UJ	1.7 UJ	1.7 U	1.5 U	1.6 U
ENDRIN	1.8 UJ	1.7 U	1.8 U	1.7 UJ	1.7 UJ	1.7 U	1.5 U	1.6 U
ENDRIN ALDEHYDE	1.8 UJ	1.7 U	1.8 U	1.7 UJ	1.7 UJ	1.7 U	1.5 U	1.6 U
ENDRIN KETONE	1.8 UJ	1.7 U	1.8 U	1.7 UJ	1.7 UJ	1.7 U	1.5 U	1.6 U
GAMMA-BHC (LINDANE)	0.88 UJ	0.8 U	0.85 U	0.8 UJ	0.79 UJ	0.81 U	0.74 U	0.78 U
GAMMA-CHLORDANE	0.88 UJ	19 J	0.85 U	0.8 UJ	0.79 UJ	0.81 U	0.74 U	0.78 U
HEPTACHLOR	0.88 UJ	0.8 U	0.85 U	0.8 UJ	0.79 UJ	0.81 U	0.74 U	0.78 U
HEPTACHLOR EPOXIDE	0.88 UJ	0.8 U	0.85 U	0.8 UJ	0.79 UJ	0.81 U	0.74 U	0.78 U
METHOXYCHLOR	8.8 UJ	8 U	8.5 U	8 UJ	7.9 UJ	8.1 U	7.4 U	7.8 U
TOTAL AROCLOR	0 U	0 U	0 U	0 U	0 U		0 U	0 U
TOXAPHENE	120 UJ	100 U	110 U	100 UJ	100 UJ	110 U	97 U	100 U
Herbicides (ug/kg)								
2,4,5-T								
2,4,5-TP (SILVEX)								
2,4-D								
DINOSEB								
Miscellaneous Parameters								
CATION EXCHANGE CAPACITY (MEQ/1								
PH (S.U.)								
TOTAL ORGANIC CARBON (mg/kg)								
Petroleum Hydrocarbons (mg/kg)								
DIESEL RANGE ORGANICS	3.5 J	3 U	52	33	21	27	53	3 U
GASOLINE RANGE ORGANICS								
OIL & GREASE - HEM								
OIL RANGE ORGANICS (C24-C40)								

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	04	04	04	04	04	04	04	04
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB069	09SB069	09SB070	09SB070	09SB071	09SB071	09SB072	09SB072
SAMPLE NUMBER	09SB690204	09SB690406	09SB700204	09SB700406	09SB710204	09SB710406	09SB720204	09SB720406
SOIL CLASSIFICATION								
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	2 - 4	4 - 6	2 - 4	4 - 6	2 - 4	4 - 6	2 - 4	4 - 6
SAMPLE DATE	10/22/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006	10/21/2006	10/21/2006
Volatile Organics (ug/kg)								
1,1,1,2-TETRACHLOROETHANE								
1,1,1-TRICHLOROETHANE								
1,1,2,2-TETRACHLOROETHANE								
1,1,2-TRICHLOROETHANE								
1,1-DICHLOROETHANE								
1,1-DICHLOROETHENE								
1,2,3-TRICHLOROPROPANE								
1,2-DIBROMO-3-CHLOROPROPANE								
1,2-DIBROMOETHANE								
1,2-DICHLOROETHANE								
1,2-DICHLOROPROPANE								
2-BUTANONE								
2-HEXANONE								
3-CHLOROPROPENE								
4-METHYL-2-PENTANONE								
ACETONE								
ACROLEIN								
ACRYLONITRILE								
BENZENE								
BROMODICHLOROMETHANE								
BROMOFORM								
BROMOMETHANE								
CARBON DISULFIDE								
CARBON TETRACHLORIDE								
CHLOROBENZENE								
CHLORODIBROMOMETHANE								
CHLOROETHANE								
CHLOROFORM								
CHLOROMETHANE								
CHLOROPRENE								
CIS-1,2-DICHLOROETHENE								
CIS-1,3-DICHLOROPROPENE								
DIBROMOMETHANE								
DICHLORODIFLUOROMETHANE								
ETHYL METHACRYLATE								
ETHYLBENZENE								
METHACRYLONITRILE								
METHYL IODIDE								
METHYL METHACRYLATE								
METHYL TERT-BUTYL ETHER								
METHYLENE CHLORIDE								
STYRENE								

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	04	04	04	04	04	04	04	04
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB069	09SB069	09SB070	09SB070	09SB071	09SB071	09SB072	09SB072
SAMPLE NUMBER	09SB690204	09SB690406	09SB700204	09SB700406	09SB710204	09SB710406	09SB720204	09SB720406
SOIL CLASSIFICATION								
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	2 - 4	4 - 6	2 - 4	4 - 6	2 - 4	4 - 6	2 - 4	4 - 6
SAMPLE DATE	10/22/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006	10/21/2006	10/21/2006
TETRACHLOROETHENE								
TOLUENE								
TOTAL XYLENES								
TRANS-1,2-DICHLOROETHENE								
TRANS-1,3-DICHLOROPROPENE								
TRANS-1,4-DICHLORO-2-BUTENE								
TRICHLOROETHENE								
TRICHLOROFLUOROMETHANE								
VINYL ACETATE								
VINYL CHLORIDE								
DRO Specific Semivolatile Organics (ug								
2-METHYLNAPHTHALENE	3.8 U	3.8 U	3.9 U	4 U	3.8 U	5.1 U	5.2 J	4 UJ
ACENAPHTHENE	3.8 U	3.8 U	3.9 U	4 U	3.8 U	5.1 U	4.1 U	4 UJ
ACENAPHTHYLENE	3.8 U	3.8 U	3.9 U	4 U	3.8 U	5.1 U	4.1 U	4 UJ
ANTHRACENE	3.8 U	3.8 U	3.9 U	4 U	3.8 U	5.1 U	4.1 U	4 UJ
BENZO(A)ANTHRACENE	3.8 U	3.8 U	3.9 U	4 U	3.8 U	5.1 U	4.1 U	4 UJ
BENZO(A)PYRENE	3.8 U	3.8 U	3.9 U	4 U	3.8 U	5.1 U	4.1 U	4 UJ
BENZO(B)FLUORANTHENE	3.8 U	3.8 U	3.9 U	4 U	3.8 U	5.1 U	4.1 U	4 UJ
BENZO(G,H,I)PERYLENE	3.8 U	3.8 U	3.9 U	4 U	3.8 U	5.1 U	4.1 U	4 UJ
BENZO(K)FLUORANTHENE	3.8 U	3.8 U	3.9 U	4 U	3.8 U	5.1 U	4.1 U	4 UJ
CHRYSENE	3.8 U	3.8 U	3.9 U	4 U	3.8 U	5.1 U	4.1 U	4 UJ
DIBENZO(A,H)ANTHRACENE	3.8 U	3.8 U	3.9 U	4 U	3.8 U	5.1 U	4.1 U	4 UJ
FLUORANTHENE	3.8 U	3.8 U	3.9 U	4 U	3.8 U	5.1 U	4.1 U	4 UJ
FLUORENE	3.8 U	3.8 U	3.9 U	4 U	3.8 U	5.1 U	4.1 U	4 UJ
INDENO(1,2,3-CD)PYRENE	3.8 U	3.8 U	3.9 U	4 U	3.8 U	5.1 U	4.1 U	4 UJ
NAPHTHALENE	3.8 U	3.8 U	3.9 U	4 U	3.8 U	5.1 U	4.1 U	4 UJ
PHENANTHRENE	3.8 U	3.8 U	3.9 U	4 U	3.8 U	5.1 U	4.1 U	4 UJ
PYRENE	3.8 U	3.8 U	3.9 U	4 U	3.8 U	5.1 U	4.1 U	4 UJ
Pesticides/PCBs (ug/kg)								
4,4'-DDD	1.6 U	1.6 U	53 J	6.6 J	1.6 U	2.1 U	1.7 UJ	1.6 U
4,4'-DDE	1.6 U	1.6 U	17	4.4	1.6 U	2.1 U	1.7 UJ	1.6 U
4,4'-DDT	66	100	170	85	1.6 U	2.1 U	1.7 UJ	1.6 U
ALDRIN	0.75 U	0.75 U	0.78 U	0.78 U	0.75 U	1 U	0.81 UJ	0.78 U
ALPHA-BHC	0.75 U	0.75 U	0.78 U	0.78 U	0.75 U	1 U	0.81 UJ	0.78 U
ALPHA-CHLORDANE	0.75 U	0.75 U	8.7	0.92 J	0.75 U	1 U	0.81 UJ	0.78 U
AROCLOR-1016	10 U	10 U	11 U	11 U	10 U	14 U	11 U	11 U
AROCLOR-1221	10 U	10 U	11 U	11 U	10 U	14 U	11 U	11 U
AROCLOR-1232	10 U	10 U	11 U	11 U	10 U	14 U	11 U	11 U
AROCLOR-1242	10 U	10 U	11 U	11 U	10 U	14 U	11 U	11 U
AROCLOR-1248	10 U	10 U	11 U	11 U	10 U	14 U	11 U	11 U
AROCLOR-1254	10 U	10 U	11 U	11 U	10 U	14 U	11 U	11 U
AROCLOR-1260	10 U	10 U	11 U	11 U	10 U	14 U	11 U	11 U
BETA-BHC	0.75 U	0.75 U	1.9	0.78 U	0.75 U	1 U	0.81 UJ	0.78 U

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	04	04	04	04	04	04	04	04
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB069	09SB069	09SB070	09SB070	09SB071	09SB071	09SB072	09SB072
SAMPLE NUMBER	09SB690204	09SB690406	09SB700204	09SB700406	09SB710204	09SB710406	09SB720204	09SB720406
SOIL CLASSIFICATION								
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	2 - 4	4 - 6	2 - 4	4 - 6	2 - 4	4 - 6	2 - 4	4 - 6
SAMPLE DATE	10/22/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006	10/21/2006	10/21/2006
DELTA-BHC	0.75 U	0.75 U	0.78 U	0.78 U	0.75 U	1 U	0.81 UJ	0.78 U
DIELDRIN	1.6 J	1.6 U	59 J	6.9 J	1.6 U	2.1 U	1.7 UJ	1.6 U
ENDOSULFAN I	0.75 U	0.75 U	0.78 U	0.78 U	0.75 U	1 U	0.81 UJ	0.78 U
ENDOSULFAN II	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	2.1 U	1.7 UJ	1.6 U
ENDOSULFAN SULFATE	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	2.1 U	1.7 UJ	1.6 U
ENDRIN	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	2.1 U	1.7 UJ	1.6 U
ENDRIN ALDEHYDE	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	2.1 U	1.7 UJ	1.6 U
ENDRIN KETONE	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	2.1 U	1.7 UJ	1.6 U
GAMMA-BHC (LINDANE)	0.75 U	0.75 U	0.78 U	0.78 U	0.75 U	1 U	0.81 UJ	0.78 U
GAMMA-CHLORDANE	0.75 U	0.75 U	9.2 J	0.78 U	0.75 U	1 U	0.81 UJ	0.78 U
HEPTACHLOR	0.75 U	0.75 U	0.78 U	0.78 U	0.75 U	1 U	0.81 UJ	0.78 U
HEPTACHLOR EPOXIDE	0.75 U	0.75 U	0.78 U	0.78 U	0.75 U	1 U	0.81 UJ	0.78 U
METHOXYCHLOR	7.5 U	7.5 U	7.8 U	7.8 U	7.5 U	10 U	8.1 UJ	7.8 U
TOTAL AROCLOR	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U
TOXAPHENE	98 U	99 U	100 U	100 U	99 U	130 U	110 UJ	100 U
Herbicides (ug/kg)								
2,4,5-T								
2,4,5-TP (SILVEX)								
2,4-D								
DINOSEB								
Miscellaneous Parameters								
CATION EXCHANGE CAPACITY (MEQ/1								
PH (S.U.)								
TOTAL ORGANIC CARBON (mg/kg)								
Petroleum Hydrocarbons (mg/kg)								
DIESEL RANGE ORGANICS	2.9 UJ	2.9 U	3 U	3 U	2.9 U	6.9 J	3.1 U	3 UJ
GASOLINE RANGE ORGANICS								
OIL & GREASE - HEM								
OIL RANGE ORGANICS (C24-C40)								

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	04	04	04	04	04	04	04	04
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB072	09SB073	09SB073	09SB073	09SB074	09SB074	09SB074	09SB075
SAMPLE NUMBER	09SB720810	09SB730204	09SB730406	09SB730810	09SB740204	09SB740406	09SB741416	09SB750204
SOIL CLASSIFICATION								
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	8 - 10	2 - 4	4 - 6	8 - 10	2 - 4	4 - 6	14 - 16	2 - 4
SAMPLE DATE	10/21/2006	10/21/2006	10/21/2006	10/21/2006	10/21/2006	10/21/2006	10/21/2006	10/21/2006
Volatile Organics (ug/kg)								
1,1,1,2-TETRACHLOROETHANE								
1,1,1-TRICHLOROETHANE								
1,1,2,2-TETRACHLOROETHANE								
1,1,2-TRICHLOROETHANE								
1,1-DICHLOROETHANE								
1,1-DICHLOROETHENE								
1,2,3-TRICHLOROPROPANE								
1,2-DIBROMO-3-CHLOROPROPANE								
1,2-DIBROMOETHANE								
1,2-DICHLOROETHANE								
1,2-DICHLOROPROPANE								
2-BUTANONE								
2-HEXANONE								
3-CHLOROPROPENE								
4-METHYL-2-PENTANONE								
ACETONE								
ACROLEIN								
ACRYLONITRILE								
BENZENE								
BROMODICHLOROMETHANE								
BROMOFORM								
BROMOMETHANE								
CARBON DISULFIDE								
CARBON TETRACHLORIDE								
CHLOROBENZENE								
CHLORODIBROMOMETHANE								
CHLOROETHANE								
CHLOROFORM								
CHLOROMETHANE								
CHLOROPRENE								
CIS-1,2-DICHLOROETHENE								
CIS-1,3-DICHLOROPROPENE								
DIBROMOMETHANE								
DICHLORODIFLUOROMETHANE								
ETHYL METHACRYLATE								
ETHYLBENZENE								
METHACRYLONITRILE								
METHYL IODIDE								
METHYL METHACRYLATE								
METHYL TERT-BUTYL ETHER								
METHYLENE CHLORIDE								
STYRENE								

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	04	04	04	04	04	04	04	04
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB072	09SB073	09SB073	09SB073	09SB074	09SB074	09SB074	09SB075
SAMPLE NUMBER	09SB720810	09SB730204	09SB730406	09SB730810	09SB740204	09SB740406	09SB741416	09SB750204
SOIL CLASSIFICATION								
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	8 - 10	2 - 4	4 - 6	8 - 10	2 - 4	4 - 6	14 - 16	2 - 4
SAMPLE DATE	10/21/2006	10/21/2006	10/21/2006	10/21/2006	10/21/2006	10/21/2006	10/21/2006	10/21/2006
TETRACHLOROETHENE								
TOLUENE								
TOTAL XYLENES								
TRANS-1,2-DICHLOROETHENE								
TRANS-1,3-DICHLOROPROPENE								
TRANS-1,4-DICHLORO-2-BUTENE								
TRICHLOROETHENE								
TRICHLOROFLUOROMETHANE								
VINYL ACETATE								
VINYL CHLORIDE								
DRO Specific Semivolatile Organics (ug								
2-METHYLNAPHTHALENE	3.8 U	4.1 U	4 U	3.8 U	4.7 J	3.9 U	3.7 U	3.8 U
ACENAPHTHENE	3.8 U	4.1 U	4 U	3.8 U	3.8 U	3.9 U	3.7 U	3.8 U
ACENAPHTHYLENE	3.8 U	4.1 U	4 U	3.8 U	3.8 U	3.9 U	3.7 U	3.8 U
ANTHRACENE	3.8 U	4.1 U	4 U	3.8 U	3.8 UJ	3.9 U	3.7 U	3.8 U
BENZO(A)ANTHRACENE	3.8 U	4.1 U	4 U	3.8 U	3.8 UJ	11	15	3.8 U
BENZO(A)PYRENE	3.8 U	4.1 U	4 U	3.8 U	3.8 U	8.2	14	3.8 U
BENZO(B)FLUORANTHENE	3.8 U	4.1 U	4 U	3.8 U	3.8 U	20	28	3.8 U
BENZO(G,H,I)PERYLENE	3.8 U	4.1 U	4 U	3.8 U	3.8 U	16	16	3.8 U
BENZO(K)FLUORANTHENE	3.8 U	4.1 U	4 U	3.8 U	3.8 U	3.9 U	3.7 U	3.8 U
CHRYSENE	3.8 U	4.1 U	4 U	3.8 U	3.8 UJ	13	20	3.8 U
DIBENZO(A,H)ANTHRACENE	3.8 U	4.1 U	4 U	3.8 U	3.8 U	3.9 U	3.7 U	3.8 U
FLUORANTHENE	3.8 U	4.1 U	4 U	3.8 U	3.8 UJ	16	54	3.8 U
FLUORENE	3.8 U	4.1 U	4 U	3.8 U	3.8 U	3.9 U	3.7 U	3.8 U
INDENO(1,2,3-CD)PYRENE	3.8 U	4.1 U	4 U	3.8 U	3.8 U	6.8 J	7.3 J	3.8 U
NAPHTHALENE	3.8 U	4.1 U	4 U	3.8 U	3.8 U	3.9 U	3.7 U	3.8 U
PHENANTHRENE	3.8 U	4.1 U	4 U	3.8 U	3.8 UJ	3.9 U	3.7 U	3.8 U
PYRENE	3.8 U	4.1 U	4 U	3.8 U	3.8 UJ	16	46	3.8 U
Pesticides/PCBs (ug/kg)								
4,4'-DDD	1.6 U	1.7 UJ	1.6 U	1.6 U	1.6 U	1.6 UJ	1.5 UJ	1.6 U
4,4'-DDE	1.6 U	33 J	1.6 U	1.6 U	1.6 U	2.8 J	1.8 J	1.6 U
4,4'-DDT	2.6 J	12 J	1.6 U	1.6 U	1.6 U	6.1 J	2.5 J	1.6 U
ALDRIN	0.75 U	0.81 UJ	0.78 U	0.76 U	0.75 U	0.76 UJ	0.73 UJ	0.76 U
ALPHA-BHC	0.75 U	0.81 UJ	0.78 U	0.76 U	0.75 U	0.76 UJ	0.73 UJ	0.76 U
ALPHA-CHLORDANE	0.75 U	0.81 UJ	0.78 U	0.76 U	0.75 U	0.76 UJ	0.73 UJ	0.76 U
AROCLOR-1016	10 U	11 U	11 U	10 U	10 U	11 U	10 U	10 U
AROCLOR-1221	10 U	11 U	11 U	10 U	10 U	11 U	10 U	10 U
AROCLOR-1232	10 U	11 U	11 U	10 U	10 U	11 U	10 U	10 U
AROCLOR-1242	10 U	11 U	11 U	10 U	10 U	11 U	10 U	10 U
AROCLOR-1248	10 U	11 U	11 U	10 U	10 U	11 U	10 U	10 U
AROCLOR-1254	10 U	11 U	11 U	10 U	10 U	11 U	10 U	10 U
AROCLOR-1260	10 U	11 U	11 U	10 U	10 U	11 U	10 U	10 U
BETA-BHC	0.75 U	0.81 UJ	0.78 U	0.76 U	0.75 U	0.76 UJ	0.73 UJ	0.76 U

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	04	04	04	04	04	04	04	04
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB072	09SB073	09SB073	09SB073	09SB074	09SB074	09SB074	09SB075
SAMPLE NUMBER	09SB720810	09SB730204	09SB730406	09SB730810	09SB740204	09SB740406	09SB741416	09SB750204
SOIL CLASSIFICATION								
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	8 - 10	2 - 4	4 - 6	8 - 10	2 - 4	4 - 6	14 - 16	2 - 4
SAMPLE DATE	10/21/2006	10/21/2006	10/21/2006	10/21/2006	10/21/2006	10/21/2006	10/21/2006	10/21/2006
DELTA-BHC	0.75 U	0.81 UJ	0.78 U	0.76 U	0.75 U	0.76 UJ	0.73 UJ	0.76 U
DIELDRIN	1.6 U	1.7 UJ	1.6 U	1.6 U	1.6 U	1.6 UJ	1.5 UJ	1.6 U
ENDOSULFAN I	0.75 U	0.81 UJ	0.78 U	0.76 UJ	0.75 U	0.76 UJ	0.73 UJ	0.76 U
ENDOSULFAN II	1.6 U	1.7 UJ	1.6 U	1.6 U	1.6 U	1.6 UJ	1.5 UJ	1.6 U
ENDOSULFAN SULFATE	1.6 U	1.7 UJ	1.6 U	1.6 U	1.6 U	1.6 UJ	1.5 UJ	1.6 U
ENDRIN	1.6 U	1.7 UJ	1.6 U	1.6 U	1.6 U	1.6 UJ	1.5 UJ	1.6 U
ENDRIN ALDEHYDE	1.6 U	1.7 UJ	1.6 U	1.6 U	1.6 U	1.6 UJ	1.5 UJ	1.6 U
ENDRIN KETONE	1.6 U	1.7 UJ	1.6 U	1.6 U	1.6 U	1.6 UJ	1.5 UJ	1.6 U
GAMMA-BHC (LINDANE)	0.75 U	0.81 UJ	0.78 U	0.76 U	0.75 U	0.76 UJ	0.73 UJ	0.76 U
GAMMA-CHLORDANE	0.75 U	0.81 UJ	0.78 U	0.76 U	0.75 U	0.76 UJ	0.73 UJ	0.76 U
HEPTACHLOR	0.75 U	0.81 UJ	0.78 U	0.76 U	0.75 U	0.76 UJ	0.73 UJ	0.76 U
HEPTACHLOR EPOXIDE	0.75 U	0.81 UJ	0.78 U	0.76 U	0.75 U	0.76 UJ	0.73 UJ	0.76 U
METHOXYCHLOR	7.5 U	8.1 UJ	7.8 U	7.6 U	7.5 U	7.6 UJ	7.3 UJ	7.6 U
TOTAL AROCLOR	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U
TOXAPHENE	98 U	110 UJ	100 U	99 U	98 U	100 UJ	96 UJ	99 U
Herbicides (ug/kg)								
2,4,5-T								
2,4,5-TP (SILVEX)								
2,4-D								
DINOSEB								
Miscellaneous Parameters								
CATION EXCHANGE CAPACITY (MEQ/1								
PH (S.U.)								
TOTAL ORGANIC CARBON (mg/kg)								
Petroleum Hydrocarbons (mg/kg)								
DIESEL RANGE ORGANICS	2.9 U	3.1 U	3 U	2.9 U	1400	4.8 J	20	2.9 U
GASOLINE RANGE ORGANICS								
OIL & GREASE - HEM								
OIL RANGE ORGANICS (C24-C40)								

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	04	04	05	05	05	05	05	05
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB075	09SB075	09SB100	09SB101	09SB102	09SB103	09SB104	09SB104
SAMPLE NUMBER	09SB750406	09SB750709	09SB100-SO-0203	09SB101-SO-0204	09SB102-SO-0203	09SB103-SO-0203	09SB104-SO-0204	09SB104-SO-0406
SOIL CLASSIFICATION								
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	4 - 6	7 - 9	2 - 3	2 - 4	2 - 3	2 - 3	2 - 4	4 - 6
SAMPLE DATE	10/21/2006	10/21/2006	8/29/2007	8/30/2007	8/29/2007	8/29/2007	8/28/2007	8/28/2007
Volatile Organics (ug/kg)								
1,1,1,2-TETRACHLOROETHANE								
1,1,1-TRICHLOROETHANE								
1,1,2,2-TETRACHLOROETHANE								
1,1,2-TRICHLOROETHANE								
1,1-DICHLOROETHANE								
1,1-DICHLOROETHENE								
1,2,3-TRICHLOROPROPANE								
1,2-DIBROMO-3-CHLOROPROPANE								
1,2-DIBROMOETHANE								
1,2-DICHLOROETHANE								
1,2-DICHLOROPROPANE								
2-BUTANONE								
2-HEXANONE								
3-CHLOROPROPENE								
4-METHYL-2-PENTANONE								
ACETONE								
ACROLEIN								
ACRYLONITRILE								
BENZENE								
BROMODICHLOROMETHANE								
BROMOFORM								
BROMOMETHANE								
CARBON DISULFIDE								
CARBON TETRACHLORIDE								
CHLOROBENZENE								
CHLORODIBROMOMETHANE								
CHLOROETHANE								
CHLOROFORM								
CHLOROMETHANE								
CHLOROPRENE								
CIS-1,2-DICHLOROETHENE								
CIS-1,3-DICHLOROPROPENE								
DIBROMOMETHANE								
DICHLORODIFLUOROMETHANE								
ETHYL METHACRYLATE								
ETHYLBENZENE								
METHACRYLONITRILE								
METHYL IODIDE								
METHYL METHACRYLATE								
METHYL TERT-BUTYL ETHER								
METHYLENE CHLORIDE								
STYRENE								

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	04	04	05	05	05	05	05	05
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB075	09SB075	09SB100	09SB101	09SB102	09SB103	09SB104	09SB104
SAMPLE NUMBER	09SB750406	09SB750709	09SB100-SO-0203	09SB101-SO-0204	09SB102-SO-0203	09SB103-SO-0203	09SB104-SO-0204	09SB104-SO-0406
SOIL CLASSIFICATION								
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	4 - 6	7 - 9	2 - 3	2 - 4	2 - 3	2 - 3	2 - 4	4 - 6
SAMPLE DATE	10/21/2006	10/21/2006	8/29/2007	8/30/2007	8/29/2007	8/29/2007	8/28/2007	8/28/2007
TETRACHLOROETHENE								
TOLUENE								
TOTAL XYLENES								
TRANS-1,2-DICHLOROETHENE								
TRANS-1,3-DICHLOROPROPENE								
TRANS-1,4-DICHLORO-2-BUTENE								
TRICHLOROETHENE								
TRICHLOROFLUOROMETHANE								
VINYL ACETATE								
VINYL CHLORIDE								
DRO Specific Semivolatile Organics (ug								
2-METHYLNAPHTHALENE	3.8 U	3.7 U						
ACENAPHTHENE	3.8 U	3.7 U						
ACENAPHTHYLENE	3.8 U	3.7 U						
ANTHRACENE	3.8 U	3.7 U						
BENZO(A)ANTHRACENE	3.8 U	3.7 U						
BENZO(A)PYRENE	3.8 U	3.7 U						
BENZO(B)FLUORANTHENE	3.8 U	3.7 U						
BENZO(G,H,I)PERYLENE	3.8 U	3.7 U						
BENZO(K)FLUORANTHENE	3.8 U	3.7 U						
CHRYSENE	3.8 U	3.7 U						
DIBENZO(A,H)ANTHRACENE	3.8 U	3.7 U						
FLUORANTHENE	3.8 U	3.7 U						
FLUORENE	3.8 U	3.7 U						
INDENO(1,2,3-CD)PYRENE	3.8 U	3.7 U						
NAPHTHALENE	3.8 U	3.7 U						
PHENANTHRENE	3.8 U	3.7 U						
PYRENE	3.8 U	3.7 U						
Pesticides/PCBs (ug/kg)								
4,4'-DDD	1.5 U	1.5 U						
4,4'-DDE	1.5 U	1.5 U						
4,4'-DDT	1.5 U	1.5 U						
ALDRIN	0.74 U	0.72 U						
ALPHA-BHC	0.74 U	0.72 U						
ALPHA-CHLORDANE	0.74 U	0.72 U						
AROCLOR-1016	10 U	10 U						
AROCLOR-1221	10 U	10 U						
AROCLOR-1232	10 U	10 U						
AROCLOR-1242	10 U	10 U						
AROCLOR-1248	10 U	10 U						
AROCLOR-1254	10 U	10 U						
AROCLOR-1260	10 U	10 U						
BETA-BHC	0.74 U	0.72 U						

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	04	04	05	05	05	05	05	05
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB075	09SB075	09SB100	09SB101	09SB102	09SB103	09SB104	09SB104
SAMPLE NUMBER	09SB750406	09SB750709	09SB100-SO-0203	09SB101-SO-0204	09SB102-SO-0203	09SB103-SO-0203	09SB104-SO-0204	09SB104-SO-0406
SOIL CLASSIFICATION								
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	4 - 6	7 - 9	2 - 3	2 - 4	2 - 3	2 - 3	2 - 4	4 - 6
SAMPLE DATE	10/21/2006	10/21/2006	8/29/2007	8/30/2007	8/29/2007	8/29/2007	8/28/2007	8/28/2007
DELTA-BHC	0.74 U	0.72 U						
DIELDRIN	1.5 U	1.5 U						
ENDOSULFAN I	0.74 U	0.72 U						
ENDOSULFAN II	1.5 U	1.5 U						
ENDOSULFAN SULFATE	1.5 U	1.5 U						
ENDRIN	1.5 U	1.5 U						
ENDRIN ALDEHYDE	1.5 U	1.5 U						
ENDRIN KETONE	1.5 U	1.5 U						
GAMMA-BHC (LINDANE)	0.74 U	0.72 U						
GAMMA-CHLORDANE	0.74 U	0.72 U						
HEPTACHLOR	0.74 U	0.72 U						
HEPTACHLOR EPOXIDE	0.74 U	0.72 U						
METHOXYCHLOR	7.4 U	7.2 U						
TOTAL AROCLOR	0 U	0 U						
TOXAPHENE	96 U	94 U						
Herbicides (ug/kg)								
2,4,5-T			0.27 U	0.23 U	0.25 U	0.26 U	2.8 J	0.27 U
2,4,5-TP (SILVEX)			0.44 U	0.38 U	0.42 U	0.43 U	0.42 U	0.44 U
2,4-D			0.38 U	0.33 U	0.36 U	0.37 U	0.36 U	0.38 U
DINOSEB			0.58 U	0.5 U	0.55 U	0.57 U	0.55 U	0.58 U
Miscellaneous Parameters								
CATION EXCHANGE CAPACITY (MEQ/1								
PH (S.U.)								
TOTAL ORGANIC CARBON (mg/kg)								
Petroleum Hydrocarbons (mg/kg)								
DIESEL RANGE ORGANICS	2.8 U	2.8 U						
GASOLINE RANGE ORGANICS								
OIL & GREASE - HEM								
OIL RANGE ORGANICS (C24-C40)								

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	05	05	05	05	05	05	05	05
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB104	09SB105	09SB105	09SB105	09SB106	09SB106	09SB106	09SB108
SAMPLE NUMBER	09SB104-SO-1012	09SB105-SO-0204	09SB105-SO-0406	09SB105-SO-1315	09SB106-SO-0204	09SB106-SO-0406	09SB106-SO-1214	09SB108-SO-0204
SOIL CLASSIFICATION								
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	10 - 12	2 - 4	4 - 6	13 - 15	2 - 4	4 - 6	12 - 14	2 - 4
SAMPLE DATE	8/28/2007	8/28/2007	8/28/2007	8/28/2007	8/28/2007	8/28/2007	8/28/2007	8/30/2007
Volatile Organics (ug/kg)								
1,1,1,2-TETRACHLOROETHANE								
1,1,1-TRICHLOROETHANE								
1,1,2,2-TETRACHLOROETHANE								
1,1,2-TRICHLOROETHANE								
1,1-DICHLOROETHANE								
1,1-DICHLOROETHENE								
1,2,3-TRICHLOROPROPANE								
1,2-DIBROMO-3-CHLOROPROPANE								
1,2-DIBROMOETHANE								
1,2-DICHLOROETHANE								
1,2-DICHLOROPROPANE								
2-BUTANONE								
2-HEXANONE								
3-CHLOROPROPENE								
4-METHYL-2-PENTANONE								
ACETONE								
ACROLEIN								
ACRYLONITRILE								
BENZENE								
BROMODICHLOROMETHANE								
BROMOFORM								
BROMOMETHANE								
CARBON DISULFIDE								
CARBON TETRACHLORIDE								
CHLOROBENZENE								
CHLORODIBROMOMETHANE								
CHLOROETHANE								
CHLOROFORM								
CHLOROMETHANE								
CHLOROPRENE								
CIS-1,2-DICHLOROETHENE								
CIS-1,3-DICHLOROPROPENE								
DIBROMOMETHANE								
DICHLORODIFLUOROMETHANE								
ETHYL METHACRYLATE								
ETHYLBENZENE								
METHACRYLONITRILE								
METHYL IODIDE								
METHYL METHACRYLATE								
METHYL TERT-BUTYL ETHER								
METHYLENE CHLORIDE								
STYRENE								

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	05	05	05	05	05	05	05	05
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB104	09SB105	09SB105	09SB105	09SB106	09SB106	09SB106	09SB108
SAMPLE NUMBER	09SB104-SO-1012	09SB105-SO-0204	09SB105-SO-0406	09SB105-SO-1315	09SB106-SO-0204	09SB106-SO-0406	09SB106-SO-1214	09SB108-SO-0204
SOIL CLASSIFICATION								
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	10 - 12	2 - 4	4 - 6	13 - 15	2 - 4	4 - 6	12 - 14	2 - 4
SAMPLE DATE	8/28/2007	8/28/2007	8/28/2007	8/28/2007	8/28/2007	8/28/2007	8/28/2007	8/30/2007
TETRACHLOROETHENE								
TOLUENE								
TOTAL XYLENES								
TRANS-1,2-DICHLOROETHENE								
TRANS-1,3-DICHLOROPROPENE								
TRANS-1,4-DICHLORO-2-BUTENE								
TRICHLOROETHENE								
TRICHLOROFLUOROMETHANE								
VINYL ACETATE								
VINYL CHLORIDE								
DRO Specific Semivolatile Organics (ug								
2-METHYLNAPHTHALENE								
ACENAPHTHENE								
ACENAPHTHYLENE								
ANTHRACENE								
BENZO(A)ANTHRACENE								
BENZO(A)PYRENE								
BENZO(B)FLUORANTHENE								
BENZO(G,H,I)PERYLENE								
BENZO(K)FLUORANTHENE								
CHRYSENE								
DIBENZO(A,H)ANTHRACENE								
FLUORANTHENE								
FLUORENE								
INDENO(1,2,3-CD)PYRENE								
NAPHTHALENE								
PHENANTHRENE								
PYRENE								
Pesticides/PCBs (ug/kg)								
4,4'-DDD								
4,4'-DDE								
4,4'-DDT								
ALDRIN								
ALPHA-BHC								
ALPHA-CHLORDANE								
AROCLOR-1016								
AROCLOR-1221								
AROCLOR-1232								
AROCLOR-1242								
AROCLOR-1248								
AROCLOR-1254								
AROCLOR-1260								
BETA-BHC								

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	05	05	05	05	05	05	05	05
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB104	09SB105	09SB105	09SB105	09SB106	09SB106	09SB106	09SB108
SAMPLE NUMBER	09SB104-SO-1012	09SB105-SO-0204	09SB105-SO-0406	09SB105-SO-1315	09SB106-SO-0204	09SB106-SO-0406	09SB106-SO-1214	09SB108-SO-0204
SOIL CLASSIFICATION								
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	10 - 12	2 - 4	4 - 6	13 - 15	2 - 4	4 - 6	12 - 14	2 - 4
SAMPLE DATE	8/28/2007	8/28/2007	8/28/2007	8/28/2007	8/28/2007	8/28/2007	8/28/2007	8/30/2007
DELTA-BHC								
DIELDRIN								
ENDOSULFAN I								
ENDOSULFAN II								
ENDOSULFAN SULFATE								
ENDRIN								
ENDRIN ALDEHYDE								
ENDRIN KETONE								
GAMMA-BHC (LINDANE)								
GAMMA-CHLORDANE								
HEPTACHLOR								
HEPTACHLOR EPOXIDE								
METHOXYCHLOR								
TOTAL AROCLOR								
TOXAPHENE								
Herbicides (ug/kg)								
2,4,5-T	0.25 U	0.26 U	0.25 U	0.25 U	0.26 U	0.26 U	0.25 U	0.23 U
2,4,5-TP (SILVEX)	0.42 U	0.43 U	0.42 U	0.42 U	0.43 U	0.44 U	0.42 U	0.39 U
2,4-D	0.36 U	0.37 U	0.36 U	0.36 U	0.37 U	5.1 J	0.36 U	0.33 U
DINOSEB	0.55 U	0.56 U	0.55 U	0.55 U	0.56 U	0.58 U	0.55 U	0.51 U
Miscellaneous Parameters								
CATION EXCHANGE CAPACITY (MEQ/1								
PH (S.U.)								
TOTAL ORGANIC CARBON (mg/kg)								
Petroleum Hydrocarbons (mg/kg)								
DIESEL RANGE ORGANICS								
GASOLINE RANGE ORGANICS								
OIL & GREASE - HEM								
OIL RANGE ORGANICS (C24-C40)								

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	01	01	01	01	01	01	01	02	02
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB012	09SB013	09SB014	09SB015/TW001	09SB016	09SB017	09SB018	09SB019	09SB020
SAMPLE NUMBER	09SS120002	09SS130002	09SS140002	09SS150002	09SS160002	09SS170002	09SS180002	09SS190002	09SS200002
SOIL CLASSIFICATION	3	3	3	3	3	3	3	3	3
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/4/2005	5/9/2005	5/9/2005
Volatile Organics (ug/kg)									
1,1,1,2-TETRACHLOROETHANE									
1,1,1-TRICHLOROETHANE									
1,1,2,2-TETRACHLOROETHANE									
1,1,2-TRICHLOROETHANE									
1,1-DICHLOROETHANE									
1,1-DICHLOROETHENE									
1,2,3-TRICHLOROPROPANE									
1,2-DIBROMO-3-CHLOROPROPANE									
1,2-DIBROMOETHANE									
1,2-DICHLOROETHANE									
1,2-DICHLOROPROPANE									
2-BUTANONE									
2-HEXANONE									
3-CHLOROPROPENE									
4-METHYL-2-PENTANONE									
ACETONE									
ACROLEIN									
ACRYLONITRILE									
BENZENE									
BROMODICHLOROMETHANE									
BROMOFORM									
BROMOMETHANE									
CARBON DISULFIDE									
CARBON TETRACHLORIDE									
CHLOROBENZENE									
CHLORODIBROMOMETHANE									
CHLOROETHANE									
CHLOROFORM									
CHLOROMETHANE									
CHLOROPRENE									
CIS-1,2-DICHLOROETHENE									
CIS-1,3-DICHLOROPROPENE									
DIBROMOMETHANE									
DICHLORODIFLUOROMETHANE									
ETHYL METHACRYLATE									
ETHYLBENZENE									
METHACRYLONITRILE									
METHYL IODIDE									
METHYL METHACRYLATE									
METHYL TERT-BUTYL ETHER									
METHYLENE CHLORIDE									

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	01	01	01	01	01	01	01	02	02
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB012	09SB013	09SB014	09SB015/TW001	09SB016	09SB017	09SB018	09SB019	09SB020
SAMPLE NUMBER	09SS120002	09SS130002	09SS140002	09SS150002	09SS160002	09SS170002	09SS180002	09SS190002	09SS200002
SOIL CLASSIFICATION	3	3	3	3	3	3	3	3	3
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/4/2005	5/9/2005	5/9/2005
STYRENE									
TETRACHLOROETHENE									
TOLUENE									
TOTAL XYLENES									
TRANS-1,2-DICHLOROETHENE									
TRANS-1,3-DICHLOROPROPENE									
TRANS-1,4-DICHLORO-2-BUTENE									
TRICHLOROETHENE									
TRICHLOROFLUOROMETHANE									
VINYL ACETATE									
VINYL CHLORIDE									
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE									
ACENAPHTHENE									
ACENAPHTHYLENE									
ANTHRACENE									
BENZO(A)ANTHRACENE									
BENZO(A)PYRENE									
BENZO(B)FLUORANTHENE									
BENZO(G,H,I)PERYLENE									
BENZO(K)FLUORANTHENE									
CHRYSENE									
DIBENZO(A,H)ANTHRACENE									
FLUORANTHENE									
FLUORENE									
INDENO(1,2,3-CD)PYRENE									
NAPHTHALENE									
PHENANTHRENE									
PYRENE									
Pesticides/PCBs (ug/kg)									
4,4'-DDD	3.3 U	3.2 U	3.2 U	49	5.1 J	3.1 U	22000 J	820 J	1700
4,4'-DDE	3.3 U	3.2 U	3.2 U	8.1 J	320	3.8	130000	3100 J	670
4,4'-DDT	3.3 U	3.2 U	1.2 J	81 J	140	1.5 J	2200000	27000 J	3500
ALDRIN	1.6 U	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U	1600 U	0.778 UJ	6.9 J
ALPHA-BHC	1.6 U	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U	1600 U	0.778 UJ	3.97 U
ALPHA-CHLORDANE	1.6 U	1.5 U	2.4	1.5 U	3.3	1.5 U	170000	700 J	140
AROCLOR-1016	20 U	20 U	20 U	19 U	18 U	19 U	20000 U	10.8 UJ	55 U
AROCLOR-1221	20 U	20 U	20 U	19 U	18 U	19 U	20000 U	10.8 UJ	55 U
AROCLOR-1232	20 U	20 U	20 U	19 U	18 U	19 U	20000 U	10.8 UJ	55 U
AROCLOR-1242	20 U	20 U	20 U	19 U	18 U	19 U	20000 U	10.8 UJ	55 U
AROCLOR-1248	20 U	20 U	20 U	19 U	18 U	19 U	20000 U	10.8 UJ	55 U
AROCLOR-1254	20 U	20 U	20 U	19 U	18 U	19 U	20000 U	10.8 UJ	55 U

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	01	01	01	01	01	01	01	02	02
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB012	09SB013	09SB014	09SB015/TW001	09SB016	09SB017	09SB018	09SB019	09SB020
SAMPLE NUMBER	09SS120002	09SS130002	09SS140002	09SS150002	09SS160002	09SS170002	09SS180002	09SS190002	09SS200002
SOIL CLASSIFICATION	3	3	3	3	3	3	3	3	3
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/1/2005	3/4/2005	5/9/2005	5/9/2005
AROCLOR-1260	20 U	20 U	20 U	19 U	18 U	19 U	20000 U	10.8 UJ	55 U
BETA-BHC	1.6 U	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U	1600 U	0.778 UJ	5.6 J
DELTA-BHC	1.6 U	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U	1600 U	0.778 UJ	3.97 U
DIELDRIN	3.3 U	3.2 U	3.2 U	3.1 U	8.1	3.1 U	3300 U	7 J	420
ENDOSULFAN I	1.6 U	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U	1600 U	0.778 UJ	3.97 UJ
ENDOSULFAN II	3.3 U	3.2 U	3.2 U	3.1 U	2.9 U	3.1 U	3300 U	1.62 UJ	8.25 U
ENDOSULFAN SULFATE	3.3 U	3.2 U	3.2 U	3.1 U	2.9 U	3.1 U	3300 U	1.62 UJ	8.25 U
ENDRIN	3.3 U	3.2 U	3.2 U	3.1 U	2.9 U	3.1 U	3300 U	1.62 UJ	8.25 U
ENDRIN ALDEHYDE	3.3 U	3.2 U	3.2 U	3.1 U	2.9 U	3.1 U	3300 U	1.62 UJ	8.25 U
ENDRIN KETONE	3.3 U	3.2 U	3.2 U	3.1 U	2.9 U	3.1 U	3300 U	1.62 UJ	8.25 U
GAMMA-BHC (LINDANE)	1.6 U	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U	1600 U	0.778 UJ	3.97 U
GAMMA-CHLORDANE	1.6 U	1.5 U	3.9	1.5 U	1.4 U	1.5 U	210000	700 J	150
HEPTACHLOR	1.6 U	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U	48000	3.4 J	3.97 U
HEPTACHLOR EPOXIDE	1.6 U	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U	1600 U	15 J	3.97 U
METHOXYCHLOR	16 U	15 U	15 U	15 U	14 U	15 U	16000 U	7.78 UJ	39.7 U
TOTAL AROCLOR	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U
TOXAPHENE	41 U	40 U	39 U	38 U	36 U	39 U	41000 U	20.4 UJ	104 U
Herbicides (ug/kg)									
2,4,5-T									
2,4,5-TP (SILVEX)									
2,4-D									
DINOSEB									
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ	16 J			6 J					13
PH (S.U.)	6.9			9.9					6.9
TOTAL ORGANIC CARBON (mg/kg)	5500 J			23000 J					4000
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS									
GASOLINE RANGE ORGANICS									
OIL & GREASE - HEM									
OIL RANGE ORGANICS (C24-C40)									

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	02	02	02	02	02	02	02	02	02
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB020	09SB021	09SB022	09SB023/TW004	09SB024/TW006	09SB025	09SB026	09SB027/TW005	09SB028
SAMPLE NUMBER	09SS200002-D	09SS210002	09SS220002	09SS230002	09SS240002	09SS250002	09SS260002	09SS270002	09SS280002
SOIL CLASSIFICATION		3	3	3	3	3	3	3	3
SAMPLE CODE	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/10/2005
Volatile Organics (ug/kg)									
1,1,1,2-TETRACHLOROETHANE									
1,1,1-TRICHLOROETHANE									
1,1,2,2-TETRACHLOROETHANE									
1,1,2-TRICHLOROETHANE									
1,1-DICHLOROETHANE									
1,1-DICHLOROETHENE									
1,2,3-TRICHLOROPROPANE									
1,2-DIBROMO-3-CHLOROPROPANE									
1,2-DIBROMOETHANE									
1,2-DICHLOROETHANE									
1,2-DICHLOROPROPANE									
2-BUTANONE									
2-HEXANONE									
3-CHLOROPROPENE									
4-METHYL-2-PENTANONE									
ACETONE									
ACROLEIN									
ACRYLONITRILE									
BENZENE									
BROMODICHLOROMETHANE									
BROMOFORM									
BROMOMETHANE									
CARBON DISULFIDE									
CARBON TETRACHLORIDE									
CHLOROBENZENE									
CHLORODIBROMOMETHANE									
CHLOROETHANE									
CHLOROFORM									
CHLOROMETHANE									
CHLOROPRENE									
CIS-1,2-DICHLOROETHENE									
CIS-1,3-DICHLOROPROPENE									
DIBROMOMETHANE									
DICHLORODIFLUOROMETHANE									
ETHYL METHACRYLATE									
ETHYLBENZENE									
METHACRYLONITRILE									
METHYL IODIDE									
METHYL METHACRYLATE									
METHYL TERT-BUTYL ETHER									
METHYLENE CHLORIDE									

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	02	02	02	02	02	02	02	02	02
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB020	09SB021	09SB022	09SB023/TW004	09SB024/TW006	09SB025	09SB026	09SB027/TW005	09SB028
SAMPLE NUMBER	09SS200002-D	09SS210002	09SS220002	09SS230002	09SS240002	09SS250002	09SS260002	09SS270002	09SS280002
SOIL CLASSIFICATION		3	3	3	3	3	3	3	3
SAMPLE CODE	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/10/2005
STYRENE									
TETRACHLOROETHENE									
TOLUENE									
TOTAL XYLENES									
TRANS-1,2-DICHLOROETHENE									
TRANS-1,3-DICHLOROPROPENE									
TRANS-1,4-DICHLORO-2-BUTENE									
TRICHLOROETHENE									
TRICHLOROFLUOROMETHANE									
VINYL ACETATE									
VINYL CHLORIDE									
DRO Specific Semivolatile Organics (									
2-METHYLNAPHTHALENE									
ACENAPHTHENE									
ACENAPHTHYLENE									
ANTHRACENE									
BENZO(A)ANTHRACENE									
BENZO(A)PYRENE									
BENZO(B)FLUORANTHENE									
BENZO(G,H,I)PERYLENE									
BENZO(K)FLUORANTHENE									
CHRYSENE									
DIBENZO(A,H)ANTHRACENE									
FLUORANTHENE									
FLUORENE									
INDENO(1,2,3-CD)PYRENE									
NAPHTHALENE									
PHENANTHRENE									
PYRENE									
Pesticides/PCBs (ug/kg)									
4,4'-DDD	1400	220	65	1.63 U	1.59 U	19 J	1800 J	83	1.57 U
4,4'-DDE	520	45	10	1.63 U	70	400	30000 J	80	1.57 U
4,4'-DDT	3700	180	66	1.63 U	350	990	110000 J	47	6.6 J
ALDRIN	6.33 U	0.794 U	0.812 U	0.784 U	0.767 U	0.703 U	93.8 U	0.742 U	0.756 U
ALPHA-BHC	6.33 U	0.794 U	0.812 U	0.784 U	0.767 U	0.703 U	93.8 U	0.742 U	0.756 U
ALPHA-CHLORDANE	110	74	19	0.784 U	7.2 J	800	1000 J	170	0.756 U
AROCLOR-1016	87.7 U	11 U	11.2 U	10.9 U	10.6 U	38.9 U	1299 U	10.3 U	10.5 U
AROCLOR-1221	87.7 U	11 U	11.2 U	10.9 U	10.6 U	38.9 U	1299 U	10.3 U	10.5 U
AROCLOR-1232	87.7 U	11 U	11.2 U	10.9 U	10.6 U	38.9 U	1299 U	10.3 U	10.5 U
AROCLOR-1242	87.7 U	11 U	11.2 U	10.9 U	10.6 U	38.9 U	1299 U	10.3 U	10.5 U
AROCLOR-1248	87.7 U	11 U	11.2 U	10.9 U	10.6 U	38.9 U	1299 U	10.3 U	10.5 U
AROCLOR-1254	87.7 U	11 U	11.2 U	10.9 U	10.6 U	38.9 U	1299 U	10.3 U	10.5 U

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	02	02	02	02	02	02	02	02	02
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB020	09SB021	09SB022	09SB023/TW004	09SB024/TW006	09SB025	09SB026	09SB027/TW005	09SB028
SAMPLE NUMBER	09SS200002-D	09SS210002	09SS220002	09SS230002	09SS240002	09SS250002	09SS260002	09SS270002	09SS280002
SOIL CLASSIFICATION		3	3	3	3	3	3	3	3
SAMPLE CODE	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/9/2005	5/10/2005
AROCLOR-1260	87.7 U	11 U	11.2 U	10.9 U	10.6 U	38.9 U	1299 U	10.3 U	10.5 U
BETA-BHC	6.33 U	2 J	0.812 U	0.784 U	0.767 U	0.703 U	93.8 U	0.742 U	0.756 U
DELTA-BHC	6.33 U	0.794 U	0.812 U	0.784 U	0.767 U	0.703 U	93.8 U	0.742 U	0.756 U
DIELDRIN	250 J	12	1.69 U	1.63 U	1.59 U	17	210 J	1.54 U	1.57 U
ENDOSULFAN I	40 J	0.794 U	0.812 U	0.784 U	0.767 U	0.703 U	93.8 U	0.742 U	0.756 U
ENDOSULFAN II	13.2 U	1.65 U	1.69 U	1.63 U	1.59 U	1.46 U	195 U	1.54 U	1.57 U
ENDOSULFAN SULFATE	13.2 U	1.65 U	1.69 U	1.63 U	1.59 U	1.46 U	195 U	1.54 U	1.57 U
ENDRIN	13.2 U	1.65 U	1.69 U	1.63 U	1.59 U	1.46 U	195 U	1.54 U	1.57 U
ENDRIN ALDEHYDE	13.2 U	1.65 U	1.69 U	1.63 U	1.59 U	1.46 U	195 U	1.54 U	1.57 U
ENDRIN KETONE	13.2 U	1.65 U	1.69 U	1.63 U	1.59 U	1.46 U	195 U	1.54 U	1.57 U
GAMMA-BHC (LINDANE)	6.33 U	0.794 U	0.812 U	0.784 U	0.767 U	0.703 U	93.8 U	0.742 U	0.756 U
GAMMA-CHLORDANE	120	50	11	0.784 U	16 J	760	1100 J	190	0.756 U
HEPTACHLOR	6.33 U	0.794 U	0.812 U	0.784 U	0.767 U	59	93.8 U	0.742 U	0.756 U
HEPTACHLOR EPOXIDE	6.33 U	11 J	5.7 J	0.784 U	0.767 U	94	93.8 U	0.742 U	0.756 U
METHOXYCHLOR	63.3 U	7.94 U	8.12 U	7.84 U	7.67 U	7.03 U	938 U	7.42 U	7.56 U
TOTAL AROCLOR		0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U
TOXAPHENE	166 U	20.8 U	21.2 U	20.5 U	20 U	18.4 U	2453 U	19.4 U	19.8 U
Herbicides (ug/kg)									
2,4,5-T									
2,4,5-TP (SILVEX)									
2,4-D									
DINOSEB									
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ				15			21		
PH (S.U.)				6.7			7.6		
TOTAL ORGANIC CARBON (mg/kg)				1400			44000		
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS									
GASOLINE RANGE ORGANICS									
OIL & GREASE - HEM									
OIL RANGE ORGANICS (C24-C40)									

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	02	02	03	03	03	03	03	03	03
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB029	09SB030	09SB042	09SB043	09SB044	09SB045	09SB046	09SB047	09SB048
SAMPLE NUMBER	09SS290002	09SS300002	09SS420002	09SS430002	09SS440002	09SS450002	09SS460002	09SS470002	09SS480002
SOIL CLASSIFICATION	3	3	3	3	3	3	3	3	3
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	5/10/2005	5/10/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005	9/30/2005	9/30/2005
Volatile Organics (ug/kg)									
1,1,1,2-TETRACHLOROETHANE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
1,1,1-TRICHLOROETHANE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
1,1,2,2-TETRACHLOROETHANE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
1,1,2-TRICHLOROETHANE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
1,1-DICHLOROETHANE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
1,1-DICHLOROETHENE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
1,2,3-TRICHLOROPROPANE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
1,2-DIBROMO-3-CHLOROPROPANE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
1,2-DIBROMOETHANE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
1,2-DICHLOROETHANE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
1,2-DICHLOROPROPANE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
2-BUTANONE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
2-HEXANONE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
3-CHLOROPROPENE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
4-METHYL-2-PENTANONE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
ACETONE			9 BU	0.905 U	1.09 U	0.973 U	2 BU	1.06 UR	1.22 UR
ACROLEIN			1.05 UR	0.905 UR	1.09 UR	0.973 UR	1.04 UR	1.06 UR	1.22 UR
ACRYLONITRILE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
BENZENE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
BROMODICHLOROMETHANE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
BROMOFORM			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
BROMOMETHANE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
CARBON DISULFIDE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
CARBON TETRACHLORIDE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
CHLOROBENZENE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
CHLORODIBROMOMETHANE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
CHLOROETHANE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
CHLOROFORM			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
CHLOROMETHANE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
CHLOROPRENE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
CIS-1,2-DICHLOROETHENE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
CIS-1,3-DICHLOROPROPENE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
DIBROMOMETHANE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
DICHLORODIFLUOROMETHANE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
ETHYL METHACRYLATE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
ETHYLBENZENE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
METHACRYLONITRILE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
METHYL IODIDE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
METHYL METHACRYLATE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
METHYL TERT-BUTYL ETHER			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
METHYLENE CHLORIDE			1.05 UJ	0.905 UJ	1.09 UJ	0.973 UJ	1.04 UJ	1.06 UJ	1.22 UJ

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	02	02	03	03	03	03	03	03	03
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB029	09SB030	09SB042	09SB043	09SB044	09SB045	09SB046	09SB047	09SB048
SAMPLE NUMBER	09SS290002	09SS300002	09SS420002	09SS430002	09SS440002	09SS450002	09SS460002	09SS470002	09SS480002
SOIL CLASSIFICATION	3	3	3	3	3	3	3	3	3
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	5/10/2005	5/10/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005	9/30/2005	9/30/2005
STYRENE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
TETRACHLOROETHENE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
TOLUENE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
TOTAL XYLENES			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
TRANS-1,2-DICHLOROETHENE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
TRANS-1,3-DICHLOROPROPENE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
TRANS-1,4-DICHLORO-2-BUTENE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
TRICHLOROETHENE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
TRICHLOROFLUOROMETHANE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
VINYL ACETATE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
VINYL CHLORIDE			1.05 U	0.905 U	1.09 U	0.973 U	1.04 U	1.06 U	1.22 U
DRO Specific Semivolatile Organics (									
2-METHYLNAPHTHALENE									
ACENAPHTHENE									
ACENAPHTHYLENE									
ANTHRACENE									
BENZO(A)ANTHRACENE									
BENZO(A)PYRENE									
BENZO(B)FLUORANTHENE									
BENZO(G,H,I)PERYLENE									
BENZO(K)FLUORANTHENE									
CHRYSENE									
DIBENZO(A,H)ANTHRACENE									
FLUORANTHENE									
FLUORENE									
INDENO(1,2,3-CD)PYRENE									
NAPHTHALENE									
PHENANTHRENE									
PYRENE									
Pesticides/PCBs (ug/kg)									
4,4'-DDD	1.65 U	1.77 U	1.67 U	1.56 U	1500 J	1.6 UJ	1034 U	120	250 J
4,4'-DDE	1.65 U	1.77 U	13 J	60 J	2200	1.6 UJ	1900 J	300	560 J
4,4'-DDT	1.65 U	1.77 U	13	66	570	1.6 U	130000 J	320	830 J
ALDRIN	0.793 U	0.852 U	0.803 U	0.753 U	0.806 U	0.771 UJ	498 U	0.799 UJ	0.853 UJ
ALPHA-BHC	0.793 U	0.852 U	0.803 UJ	0.753 UJ	0.806 U	0.771 UJ	498 U	0.799 UJ	0.853 UJ
ALPHA-CHLORDANE	0.793 U	0.852 U	0.803 U	0.753 U	900	0.771 U	498 U	0.799 U	0.853 U
AROCLOR-1016	11 U	11.8 U	11.1 UJ	10.4 UJ	11.2 U	10.7 U	6893 U	11.1 U	11.8 U
AROCLOR-1221	11 U	11.8 U	11.1 U	10.4 U	11.2 U	10.7 U	6893 U	11.1 U	11.8 U
AROCLOR-1232	11 U	11.8 U	11.1 U	10.4 U	11.2 U	10.7 U	6893 U	11.1 U	11.8 U
AROCLOR-1242	11 U	11.8 U	11.1 U	10.4 U	11.2 U	10.7 U	6893 U	11.1 U	11.8 U
AROCLOR-1248	11 U	11.8 U	11.1 U	10.4 U	11.2 U	10.7 U	6893 U	11.1 U	11.8 U
AROCLOR-1254	11 U	11.8 U	11.1 U	10.4 U	11.2 U	10.7 U	6893 U	11.1 U	11.8 U

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	02	02	03	03	03	03	03	03	03
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB029	09SB030	09SB042	09SB043	09SB044	09SB045	09SB046	09SB047	09SB048
SAMPLE NUMBER	09SS290002	09SS300002	09SS420002	09SS430002	09SS440002	09SS450002	09SS460002	09SS470002	09SS480002
SOIL CLASSIFICATION	3	3	3	3	3	3	3	3	3
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	5/10/2005	5/10/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005	10/3/2005	9/30/2005	9/30/2005
AROCLOR-1260	11 U	11.8 U	11.1 UJ	10.4 UJ	11.2 U	10.7 U	6893 U	11.1 U	11.8 U
BETA-BHC	0.793 U	0.852 U	0.803 U	0.753 U	0.806 U	0.771 UJ	498 U	0.799 U	0.853 U
DELTA-BHC	0.793 U	0.852 U	0.803 UJ	0.753 UJ	0.806 U	0.771 UJ	498 U	0.799 UJ	0.853 UJ
DIELDRIN	1.65 U	1.77 U	1.67 U	1.56 U	1.67 U	1.6 UJ	1034 U	6.6	1.77 U
ENDOSULFAN I	0.793 U	0.852 U	0.803 U	0.753 U	0.806 U	0.771 U	498 U	0.799 U	0.853 U
ENDOSULFAN II	1.65 U	1.77 U	1.67 U	1.56 U	1.67 U	1.6 U	1034 U	1.66 U	1.77 U
ENDOSULFAN SULFATE	1.65 U	1.77 U	1.67 U	1.56 U	1.67 U	1.6 UJ	1034 U	1.66 UJ	1.77 UJ
ENDRIN	1.65 U	1.77 U	1.67 U	1.56 U	1.67 U	1.6 U	1034 U	1.66 U	1.77 U
ENDRIN ALDEHYDE	1.65 U	1.77 U	1.67 U	1.56 U	1.67 U	1.6 U	1034 U	1.66 U	1.77 U
ENDRIN KETONE	1.65 U	1.77 U	1.67 U	1.56 U	1.67 U	1.6 UJ	1034 U	1.66 UJ	1.77 UJ
GAMMA-BHC (LINDANE)	0.793 U	0.852 U	0.803 U	0.753 U	0.806 U	0.771 UJ	498 U	0.799 UJ	0.853 UJ
GAMMA-CHLORDANE	0.793 U	0.852 U	0.803 U	3.3	820	0.771 U	498 U	0.799 U	0.853 U
HEPTACHLOR	0.793 U	0.852 U	0.803 U	0.753 U	0.806 U	0.771 UJ	498 U	0.799 UJ	0.853 UJ
HEPTACHLOR EPOXIDE	0.793 U	0.852 U	0.803 U	1.7 J	66	0.771 U	498 U	0.799 U	0.853 U
METHOXYCHLOR	7.93 U	8.52 U	8.03 UJ	7.53 UJ	8.06 U	7.71 U	4979 U	7.99 U	8.53 U
TOTAL AROCLOR	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U
TOXAPHENE	20.7 U	22.3 U	105 U	98.5 U	105 U	101 U	65100 U	104 U	112 U
Herbicides (ug/kg)									
2,4,5-T									
2,4,5-TP (SILVEX)									
2,4-D									
DINOSEB									
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ	16								
PH (S.U.)	6.6								
TOTAL ORGANIC CARBON (mg/kg)	1000 U								
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS			10	35	120	2.97 U	58	3.07 U	180
GASOLINE RANGE ORGANICS			3.09 U	2.9 U	3.1 U	2.97 U	3.06 U	3.07 U	3.28 U
OIL & GREASE - HEM			247 U	680	2700	237 U	440 J	246 U	3200
OIL RANGE ORGANICS (C24-C40)			36	78	720	11.9 U	81	12.3 U	730

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	04	04	04	04	04	04	04
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB049	09SB049A	09SB065	09SB066	09SB067	09SB068	09SB069	09SB070	09SB071
SAMPLE NUMBER	09SS490002	09SS49A0002	09SS650002	09SS660002	09SS670002	09SS680002	09SS690002	09SS700002	09SS710002
SOIL CLASSIFICATION	3	3							
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	9/30/2005	9/30/2005	10/21/2006	10/21/2006	10/21/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006
Volatile Organics (ug/kg)									
1,1,1,2-TETRACHLOROETHANE	0.976 U	1.05 U							
1,1,1-TRICHLOROETHANE	0.976 U	1.05 U							
1,1,2,2-TETRACHLOROETHANE	0.976 U	1.05 U							
1,1,2-TRICHLOROETHANE	0.976 U	1.05 U							
1,1-DICHLOROETHANE	0.976 U	1.05 U							
1,1-DICHLOROETHENE	0.976 U	1.05 U							
1,2,3-TRICHLOROPROPANE	0.976 U	1.05 U							
1,2-DIBROMO-3-CHLOROPROPANE	0.976 U	1.05 U							
1,2-DIBROMOETHANE	0.976 U	1.05 U							
1,2-DICHLOROETHANE	0.976 U	1.05 U							
1,2-DICHLOROPROPANE	0.976 U	1.05 U							
2-BUTANONE	0.976 U	1.05 U							
2-HEXANONE	0.976 U	1.05 U							
3-CHLOROPROPENE	0.976 U	1.05 U							
4-METHYL-2-PENTANONE	0.976 U	1.05 U							
ACETONE	0.976 U	1.05 UR							
ACROLEIN	0.976 UR	1.05 UR							
ACRYLONITRILE	0.976 U	1.05 U							
BENZENE	0.976 U	1.05 U							
BROMODICHLOROMETHANE	0.976 U	1.05 U							
BROMOFORM	0.976 U	1.05 U							
BROMOMETHANE	0.976 U	1.05 U							
CARBON DISULFIDE	0.976 U	1.05 U							
CARBON TETRACHLORIDE	0.976 U	1.05 U							
CHLOROBENZENE	0.976 U	1.05 U							
CHLORODIBROMOMETHANE	0.976 U	1.05 U							
CHLOROETHANE	0.976 U	1.05 U							
CHLOROFORM	0.976 U	1.05 U							
CHLOROMETHANE	0.976 U	1.05 U							
CHLOROPRENE	0.976 U	1.05 U							
CIS-1,2-DICHLOROETHENE	0.976 U	1.05 U							
CIS-1,3-DICHLOROPROPENE	0.976 U	1.05 U							
DIBROMOMETHANE	0.976 U	1.05 U							
DICHLORODIFLUOROMETHANE	0.976 UJ	1.05 U							
ETHYL METHACRYLATE	0.976 U	1.05 U							
ETHYLBENZENE	0.976 U	1.05 U							
METHACRYLONITRILE	0.976 U	1.05 U							
METHYL IODIDE	0.976 U	1.05 U							
METHYL METHACRYLATE	0.976 U	1.05 U							
METHYL TERT-BUTYL ETHER	0.976 U	1.05 U							
METHYLENE CHLORIDE	1 J	1.05 UJ							

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	04	04	04	04	04	04	04
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB049	09SB049A	09SB065	09SB066	09SB067	09SB068	09SB069	09SB070	09SB071
SAMPLE NUMBER	09SS490002	09SS49A0002	09SS650002	09SS660002	09SS670002	09SS680002	09SS690002	09SS700002	09SS710002
SOIL CLASSIFICATION	3	3							
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	9/30/2005	9/30/2005	10/21/2006	10/21/2006	10/21/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006
STYRENE	0.976 U	1.05 U							
TETRACHLOROETHENE	0.976 U	1.05 U							
TOLUENE	0.976 U	1.05 U							
TOTAL XYLENES	0.976 U	1.05 U							
TRANS-1,2-DICHLOROETHENE	0.976 U	1.05 U							
TRANS-1,3-DICHLOROPROPENE	0.976 U	1.05 U							
TRANS-1,4-DICHLORO-2-BUTENE	0.976 U	1.05 U							
TRICHLOROETHENE	0.976 U	1.05 U							
TRICHLOROFLUOROMETHANE	0.976 U	1.05 U							
VINYL ACETATE	0.976 U	1.05 U							
VINYL CHLORIDE	0.976 U	1.05 U							
DRO Specific Semivolatile Organics (									
2-METHYLNAPHTHALENE			850	5.5 J	66	4.3 U	4.2 U	4.3 U	4 U
ACENAPHTHENE			21	3.8 U	3.9 J	4.3 U	4.2 U	4.3 U	4 U
ACENAPHTHYLENE			3.7 U	3.8 U	4.4 J	4.3 U	4.2 U	4.3 U	4 U
ANTHRACENE			27	6 J	6.9 J	4.3 U	4.2 U	4.3 U	4 U
BENZO(A)ANTHRACENE			45	44 J	16 J	4.3 U	4.2 U	4.3 U	4 U
BENZO(A)PYRENE			29 J	52 J	3.7 UJ	4.3 U	4.2 U	4.3 U	4 UJ
BENZO(B)FLUORANTHENE			45 J	73 J	27 J	4.3 U	4.2 U	4.3 U	4 UJ
BENZO(G,H,I)PERYLENE			42 J	64 J	42 J	4.3 U	4.2 U	4.3 U	4 UJ
BENZO(K)FLUORANTHENE			11 J	26 J	3.7 UJ	4.3 U	4.2 U	4.3 U	4 UJ
CHRYSENE			44	52 J	28 J	4.3 U	4.2 U	4.3 U	4 U
DIBENZO(A,H)ANTHRACENE			3.7 UJ	3.8 UJ	3.7 UJ	4.3 U	4.2 U	4.3 U	4 UJ
FLUORANTHENE			46	72	16	4.3 U	4.2 U	4.3 U	4 U
FLUORENE			13	3.8 U	3.7 U	4.3 U	4.2 U	4.3 U	4 U
INDENO(1,2,3-CD)PYRENE			23 J	46 J	3.7 UJ	4.3 U	4.2 U	4.3 U	4 UJ
NAPHTHALENE			330	3.8 U	26	4.3 U	4.2 U	4.3 U	4 U
PHENANTHRENE			160	40	57	4.3 U	4.2 U	4.3 U	4 U
PYRENE			87	140 J	44 J	4.3 U	4.2 U	4.3 U	4 U
Pesticides/PCBs (ug/kg)									
4,4'-DDD	1.63 UJ	92 J	39 J	290 J	160 J	1.7 UJ	170 J	5400 J	1.6 UJ
4,4'-DDE	28 J	900	48 J	730 J	1500 J	5.9 J	180	3700 J	1.6 UJ
4,4'-DDT	9.3	690	34 J	2500 J	2000 J	17 J	6400	190000	6.7 J
ALDRIN	0.787 UJ	0.778 UJ	0.73 U	0.75 UR	0.72 UJ	0.84 UJ	42 U	84 U	0.79 UJ
ALPHA-BHC	0.787 UJ	0.778 UJ	0.73 U	0.75 UR	0.72 UJ	0.84 UJ	42 U	84 U	0.79 UJ
ALPHA-CHLORDANE	0.787 U	0.778 U	7.6	220 J	790 J	0.84 UJ	78 J	360 J	0.79 UJ
AROCLOR-1016	10.9 U	10.8 U	10 U	10 UR	10 UJ	12 UJ	580 U	1200 U	11 UJ
AROCLOR-1221	10.9 U	10.8 U	10 U	10 UR	10 UJ	12 UJ	580 U	1200 U	11 UJ
AROCLOR-1232	10.9 U	10.8 U	10 U	10 UR	10 UJ	12 UJ	580 U	1200 U	11 UJ
AROCLOR-1242	10.9 U	10.8 U	10 U	10 UR	10 UJ	12 UJ	580 U	1200 U	11 UJ
AROCLOR-1248	10.9 U	10.8 U	10 U	10 UR	10 UJ	12 UJ	580 U	1200 U	11 UJ
AROCLOR-1254	10.9 U	10.8 U	10 U	10 UR	10 UJ	12 UJ	580 U	1200 U	11 UJ

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	04	04	04	04	04	04	04
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB049	09SB049A	09SB065	09SB066	09SB067	09SB068	09SB069	09SB070	09SB071
SAMPLE NUMBER	09SS490002	09SS49A0002	09SS650002	09SS660002	09SS670002	09SS680002	09SS690002	09SS700002	09SS710002
SOIL CLASSIFICATION	3	3							
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	9/30/2005	9/30/2005	10/21/2006	10/21/2006	10/21/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006
AROCLOR-1260	21 J	10.8 U	10 U	10 UR	10 UJ	12 UJ	580 U	1200 U	11 UJ
BETA-BHC	0.787 U	0.778 U	0.73 U	0.75 UR	0.72 UJ	0.84 UJ	42 U	84 U	0.79 UJ
DELTA-BHC	0.787 UJ	0.778 UJ	0.73 U	0.75 UR	3 R	0.84 UJ	42 U	84 U	0.79 UJ
DIELDRIN	1.63 U	1.62 U	1.5 U	1.6 UR	6000 J	1.7 UJ	360	4200 J	1.6 UJ
ENDOSULFAN I	0.787 U	0.778 U	0.73 U	0.75 UR	0.72 UJ	0.84 UJ	42 U	84 U	0.79 UJ
ENDOSULFAN II	1.63 U	1.62 U	1.5 U	1.6 UR	1.5 UJ	1.7 UJ	86 U	170 U	1.6 UJ
ENDOSULFAN SULFATE	1.63 UJ	1.62 UJ	1.5 U	1.6 UR	1.5 UJ	1.7 UJ	86 U	470 R	1.6 UJ
ENDRIN	1.63 U	1.62 U	1.5 U	1.6 UR	1.5 UJ	1.7 UJ	86 U	170 U	1.6 UJ
ENDRIN ALDEHYDE	1.63 U	1.62 U	1.5 U	1.6 UR	1.5 UJ	1.7 UJ	86 U	170 U	1.6 UJ
ENDRIN KETONE	1.63 UJ	1.62 UJ	1.5 U	1.6 UR	1.5 UJ	1.7 UJ	86 U	170 U	1.6 UJ
GAMMA-BHC (LINDANE)	0.787 UJ	0.778 UJ	0.73 U	0.75 UR	0.72 UJ	0.84 UJ	42 U	84 U	0.79 UJ
GAMMA-CHLORDANE	0.787 U	9.6	20 J	260 J	860 J	0.84 UJ	73 J	540 J	0.79 UJ
HEPTACHLOR	0.787 UJ	0.778 UJ	0.73 U	0.75 UR	0.72 UJ	0.84 UJ	42 U	84 U	0.79 UJ
HEPTACHLOR EPOXIDE	0.787 U	0.778 U	0.73 U	0.75 UR	0.72 UJ	0.84 UJ	42 U	84 U	0.79 UJ
METHOXYCHLOR	7.87 U	7.78 U	7.3 U	7.5 UR	7.2 UJ	8.4 UJ	420 U	840 U	7.9 UJ
TOTAL AROCLOR	21	0 U	0 U	70	0 U	0 U	0 U	0 U	0 U
TOXAPHENE	103 U	102 U	96 U	98 UR	94 UJ	110 UJ	5400 U	11000 U	100 UJ
Herbicides (ug/kg)									
2,4,5-T									
2,4,5-TP (SILVEX)									
2,4-D									
DINOSEB									
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ									
PH (S.U.)									
TOTAL ORGANIC CARBON (mg/kg)									
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	3.03 U	22	95	38	200	12 J	13 J	360	170
GASOLINE RANGE ORGANICS	3.03 U	2.99 U							
OIL & GREASE - HEM	242 U	240 U							
OIL RANGE ORGANICS (C24-C40)	12.1 U	76							

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	04	04	04	04	05	05	05	05	05
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB072	09SB073	09SB074	09SB075	09SB084	09SB085	09SB086	09SB087	09SB088
SAMPLE NUMBER	09SS720002	09SS730002	09SS740002	09SS750002	09SB84-SO-0002	09SB85-SO-0002	09SB86-SO-0002	09SB87-SO-0002	09SB88-SO-0002
SOIL CLASSIFICATION									
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	10/21/2006	10/21/2006	10/21/2006	10/21/2006	8/29/2007	8/29/2007	8/28/2007	8/28/2007	8/29/2007
Volatile Organics (ug/kg)									
1,1,1,2-TETRACHLOROETHANE									
1,1,1-TRICHLOROETHANE									
1,1,2,2-TETRACHLOROETHANE									
1,1,2-TRICHLOROETHANE									
1,1-DICHLOROETHANE									
1,1-DICHLOROETHENE									
1,2,3-TRICHLOROPROPANE									
1,2-DIBROMO-3-CHLOROPROPANE									
1,2-DIBROMOETHANE									
1,2-DICHLOROETHANE									
1,2-DICHLOROPROPANE									
2-BUTANONE									
2-HEXANONE									
3-CHLOROPROPENE									
4-METHYL-2-PENTANONE									
ACETONE									
ACROLEIN									
ACRYLONITRILE									
BENZENE									
BROMODICHLOROMETHANE									
BROMOFORM									
BROMOMETHANE									
CARBON DISULFIDE									
CARBON TETRACHLORIDE									
CHLOROBENZENE									
CHLORODIBROMOMETHANE									
CHLOROETHANE									
CHLOROFORM									
CHLOROMETHANE									
CHLOROPRENE									
CIS-1,2-DICHLOROETHENE									
CIS-1,3-DICHLOROPROPENE									
DIBROMOMETHANE									
DICHLORODIFLUOROMETHANE									
ETHYL METHACRYLATE									
ETHYLBENZENE									
METHACRYLONITRILE									
METHYL IODIDE									
METHYL METHACRYLATE									
METHYL TERT-BUTYL ETHER									
METHYLENE CHLORIDE									

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	04	04	04	04	05	05	05	05	05
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB072	09SB073	09SB074	09SB075	09SB084	09SB085	09SB086	09SB087	09SB088
SAMPLE NUMBER	09SS720002	09SS730002	09SS740002	09SS750002	09SB84-SO-0002	09SB85-SO-0002	09SB86-SO-0002	09SB87-SO-0002	09SB88-SO-0002
SOIL CLASSIFICATION									
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	10/21/2006	10/21/2006	10/21/2006	10/21/2006	8/29/2007	8/29/2007	8/28/2007	8/28/2007	8/29/2007
STYRENE									
TETRACHLOROETHENE									
TOLUENE									
TOTAL XYLENES									
TRANS-1,2-DICHLOROETHENE									
TRANS-1,3-DICHLOROPROPENE									
TRANS-1,4-DICHLORO-2-BUTENE									
TRICHLOROETHENE									
TRICHLOROFLUOROMETHANE									
VINYL ACETATE									
VINYL CHLORIDE									
DRO Specific Semivolatile Organics (									
2-METHYLNAPHTHALENE	4.2 U	3.9 U	9	3.9 U					
ACENAPHTHENE	4.2 U	3.9 U	3.5 U	3.9 U					
ACENAPHTHYLENE	4.2 U	3.9 U	3.5 U	3.9 U					
ANTHRACENE	4.2 U	3.9 U	3.5 U	3.9 U					
BENZO(A)ANTHRACENE	4.8 J	15	8.5 J	3.9 U					
BENZO(A)PYRENE	4.2 U	19	3.5 UJ	3.9 U					
BENZO(B)FLUORANTHENE	7.7 J	32	3.5 UJ	3.9 U					
BENZO(G,H,I)PERYLENE	4.2 U	14	3.5 UJ	3.9 U					
BENZO(K)FLUORANTHENE	4.2 U	8.8	3.5 UJ	3.9 U					
CHRYSENE	7.7 J	20	6.9 J	3.9 U					
DIBENZO(A,H)ANTHRACENE	4.2 U	3.9 U	3.5 UJ	3.9 U					
FLUORANTHENE	11	37	5.3 J	3.9 U					
FLUORENE	4.2 U	3.9 U	3.5 U	3.9 U					
INDENO(1,2,3-CD)PYRENE	4.2 U	11	3.5 UJ	3.9 U					
NAPHTHALENE	4.2 U	3.9 U	5.6 J	3.9 U					
PHENANTHRENE	4.8 J	14	7.4	3.9 U					
PYRENE	8.7	44	14 J	3.9 U					
Pesticides/PCBs (ug/kg)									
4,4'-DDD	36 J	5.8	10	1.6 U	0.16 U	0.16 U	0.17 U		
4,4'-DDE	210	230	76	1.6 U	1.1 J	1.8 J	2.7 J		
4,4'-DDT	71	68	83	1.6 U	1.4 J	5.4	3.5		
ALDRIN	0.84 U	0.77 U	0.69 U	0.77 U	0.068 U	0.07 U	0.071 U		
ALPHA-BHC	0.84 U	0.77 U	0.69 U	0.77 U	0.078 U	0.08 U	0.081 U		
ALPHA-CHLORDANE	0.84 U	0.77 U	4.6	0.77 U	0.95 J	18	0.084 U		
AROCLOR-1016	12 U	11 U	9.6 U	11 U					
AROCLOR-1221	12 U	11 U	9.6 U	11 U					
AROCLOR-1232	12 U	11 U	9.6 U	11 U					
AROCLOR-1242	12 U	11 U	9.6 U	11 U					
AROCLOR-1248	12 U	11 U	9.6 U	11 U					
AROCLOR-1254	12 U	11 U	9.6 U	11 U					

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	04	04	04	04	05	05	05	05	05
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB072	09SB073	09SB074	09SB075	09SB084	09SB085	09SB086	09SB087	09SB088
SAMPLE NUMBER	09SS720002	09SS730002	09SS740002	09SS750002	09SB84-SO-0002	09SB85-SO-0002	09SB86-SO-0002	09SB87-SO-0002	09SB88-SO-0002
SOIL CLASSIFICATION									
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	10/21/2006	10/21/2006	10/21/2006	10/21/2006	8/29/2007	8/29/2007	8/28/2007	8/28/2007	8/29/2007
AROCLOR-1260	12 U	11 U	9.6 U	11 U					
BETA-BHC	0.84 U	0.77 U	0.69 U	0.77 U	0.078 U	2.4	0.081 U		
DELTA-BHC	0.84 U	0.77 U	0.69 U	0.77 U	0.6 J	0.078 U	0.079 U		
DIELDRIN	67 R	1.6 U	3.5 R	1.6 U	0.11 U	0.12 U	0.12 U		
ENDOSULFAN I	0.84 U	0.77 U	0.69 U	0.77 U	0.086 U	0.088 U	0.089 U		
ENDOSULFAN II	1.7 U	1.6 U	1.4 U	1.6 U	0.21 U	0.21 U	0.21 U		
ENDOSULFAN SULFATE	1.7 U	1.6 U	1.4 U	1.6 U	0.19 U	0.2 U	0.2 U		
ENDRIN	1.7 U	1.6 U	1.4 U	1.6 U	0.13 U	0.13 U	0.13 U		
ENDRIN ALDEHYDE	1.7 U	1.6 U	1.4 U	1.6 U	0.21 U	0.21 U	0.21 U		
ENDRIN KETONE	1.7 U	1.6 U	1.4 U	1.6 U	0.22 U	0.22 U	0.23 U		
GAMMA-BHC (LINDANE)	0.84 U	0.77 U	0.69 U	0.77 U	0.078 U	0.08 U	0.081 U		
GAMMA-CHLORDANE	0.84 U	2.1	5.3	0.77 U	0.068 U	20	0.071 U		
HEPTACHLOR	0.84 U	0.77 U	0.69 U	0.77 U	0.097 U	0.1 U	0.1 U		
HEPTACHLOR EPOXIDE	0.84 U	0.77 U	0.69 U	0.77 U	0.084 U	1.4 J	0.088 U		
METHOXYCHLOR	8.4 U	7.7 U	6.9 U	7.7 U	1.1 U	1.2 U	1.2 U		
TOTAL AROCLOR	0 U	0 U	0 U	0 U					
TOXAPHENE	110 U	100 U	91 U	100 U	7.3 U	7.5 U	7.6 U		
Herbicides (ug/kg)									
2,4,5-T					0.24 U	0.25 U	3.5 J	0.25 U	0.24 U
2,4,5-TP (SILVEX)					0.4 U	0.41 U	2.9 J	0.41 U	0.4 U
2,4-D					0.34 U	0.35 U	0.36 U	0.35 U	0.34 U
DINOSEB					0.52 U	0.54 U	0.55 U	0.54 U	0.53 U
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ									
PH (S.U.)									
TOTAL ORGANIC CARBON (mg/kg)									
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS	7.5	8	33	5.4 J					
GASOLINE RANGE ORGANICS									
OIL & GREASE - HEM									
OIL RANGE ORGANICS (C24-C40)									

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	05	05	05	05	05	05	05	05	05
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB090	09SB090	09SB091	09SB092	09SB093	09SB094	09SB094	09SB095	09SB096
SAMPLE NUMBER	09SB90-SO-0002	09SB90-SO-0002-D	09SB91-SO-0002	09SB92-SO-0002	09SB93-SO-0002	09SB94-SO-0002	09SB94-SO-0002-D	09SB95-SO-0002	09SB96-SO-0002
SOIL CLASSIFICATION									
SAMPLE CODE	NORMAL	DUP	NORMAL	NORMAL	NORMAL	NORMAL	DUP	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	8/29/2007	8/29/2007	8/28/2007	8/30/2007	8/29/2007	8/30/2007	8/30/2007	8/30/2007	8/30/2007
Volatile Organics (ug/kg)									
1,1,1,2-TETRACHLOROETHANE									
1,1,1-TRICHLOROETHANE									
1,1,2,2-TETRACHLOROETHANE									
1,1,2-TRICHLOROETHANE									
1,1-DICHLOROETHANE									
1,1-DICHLOROETHENE									
1,2,3-TRICHLOROPROPANE									
1,2-DIBROMO-3-CHLOROPROPANE									
1,2-DIBROMOETHANE									
1,2-DICHLOROETHANE									
1,2-DICHLOROPROPANE									
2-BUTANONE									
2-HEXANONE									
3-CHLOROPROPENE									
4-METHYL-2-PENTANONE									
ACETONE									
ACROLEIN									
ACRYLONITRILE									
BENZENE									
BROMODICHLOROMETHANE									
BROMOFORM									
BROMOMETHANE									
CARBON DISULFIDE									
CARBON TETRACHLORIDE									
CHLOROBENZENE									
CHLORODIBROMOMETHANE									
CHLOROETHANE									
CHLOROFORM									
CHLOROMETHANE									
CHLOROPRENE									
CIS-1,2-DICHLOROETHENE									
CIS-1,3-DICHLOROPROPENE									
DIBROMOMETHANE									
DICHLORODIFLUOROMETHANE									
ETHYL METHACRYLATE									
ETHYLBENZENE									
METHACRYLONITRILE									
METHYL IODIDE									
METHYL METHACRYLATE									
METHYL TERT-BUTYL ETHER									
METHYLENE CHLORIDE									

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	05	05	05	05	05	05	05	05	05
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB090	09SB090	09SB091	09SB092	09SB093	09SB094	09SB094	09SB095	09SB096
SAMPLE NUMBER	09SB90-SO-0002	09SB90-SO-0002-D	09SB91-SO-0002	09SB92-SO-0002	09SB93-SO-0002	09SB94-SO-0002	09SB94-SO-0002-D	09SB95-SO-0002	09SB96-SO-0002
SOIL CLASSIFICATION									
SAMPLE CODE	NORMAL	DUP	NORMAL	NORMAL	NORMAL	NORMAL	DUP	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	8/29/2007	8/29/2007	8/28/2007	8/30/2007	8/29/2007	8/30/2007	8/30/2007	8/30/2007	8/30/2007
STYRENE									
TETRACHLOROETHENE									
TOLUENE									
TOTAL XYLENES									
TRANS-1,2-DICHLOROETHENE									
TRANS-1,3-DICHLOROPROPENE									
TRANS-1,4-DICHLORO-2-BUTENE									
TRICHLOROETHENE									
TRICHLOROFLUOROMETHANE									
VINYL ACETATE									
VINYL CHLORIDE									
DRO Specific Semivolatile Organics (									
2-METHYLNAPHTHALENE									
ACENAPHTHENE									
ACENAPHTHYLENE									
ANTHRACENE									
BENZO(A)ANTHRACENE									
BENZO(A)PYRENE									
BENZO(B)FLUORANTHENE									
BENZO(G,H,I)PERYLENE									
BENZO(K)FLUORANTHENE									
CHRYSENE									
DIBENZO(A,H)ANTHRACENE									
FLUORANTHENE									
FLUORENE									
INDENO(1,2,3-CD)PYRENE									
NAPHTHALENE									
PHENANTHRENE									
PYRENE									
Pesticides/PCBs (ug/kg)									
4,4'-DDD									
4,4'-DDE									
4,4'-DDT									
ALDRIN									
ALPHA-BHC									
ALPHA-CHLORDANE									
AROCLOR-1016									
AROCLOR-1221									
AROCLOR-1232									
AROCLOR-1242									
AROCLOR-1248									
AROCLOR-1254									

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	05	05	05	05	05	05	05	05	05
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB090	09SB090	09SB091	09SB092	09SB093	09SB094	09SB094	09SB095	09SB096
SAMPLE NUMBER	09SB90-SO-0002	09SB90-SO-0002-D	09SB91-SO-0002	09SB92-SO-0002	09SB93-SO-0002	09SB94-SO-0002	09SB94-SO-0002-D	09SB95-SO-0002	09SB96-SO-0002
SOIL CLASSIFICATION									
SAMPLE CODE	NORMAL	DUP	NORMAL	NORMAL	NORMAL	NORMAL	DUP	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	8/29/2007	8/29/2007	8/28/2007	8/30/2007	8/29/2007	8/30/2007	8/30/2007	8/30/2007	8/30/2007
AROCLOR-1260									
BETA-BHC									
DELTA-BHC									
DIELDRIN									
ENDOSULFAN I									
ENDOSULFAN II									
ENDOSULFAN SULFATE									
ENDRIN									
ENDRIN ALDEHYDE									
ENDRIN KETONE									
GAMMA-BHC (LINDANE)									
GAMMA-CHLORDANE									
HEPTACHLOR									
HEPTACHLOR EPOXIDE									
METHOXYCHLOR									
TOTAL AROCLOR									
TOXAPHENE									
Herbicides (ug/kg)									
2,4,5-T	0.24 U	0.25 U	0.22 U	0.24 U	0.24 U	0.23 U	0.23 U	0.23 U	0.24 U
2,4,5-TP (SILVEX)	0.4 U	0.42 U	0.37 U	0.4 U	0.4 U	0.38 U	0.38 U	0.38 U	0.4 U
2,4-D	0.34 U	0.36 U	0.32 U	0.34 U	0.34 U	0.33 U	0.33 U	0.33 U	0.34 U
DINOSEB	0.52 U	0.55 U	0.49 U	0.52 U	0.53 U	0.51 U	0.5 U	0.51 U	0.53 U
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ									
PH (S.U.)									
TOTAL ORGANIC CARBON (mg/kg)									
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS									
GASOLINE RANGE ORGANICS									
OIL & GREASE - HEM									
OIL RANGE ORGANICS (C24-C40)									

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	05	05	05	05	05	05	05	05	05
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB096	09SB097	09SB098	09SB099	09SB099	09SB100	09SB101	09SB102	09SB103
SAMPLE NUMBER	09SB96-SO-0002-D	09SB97-SO-0002	09SB98-SO-0002	09SB99-SO-0002	09SB99-SO-0002-D	09SB100-SO-0002	09SB101-SO-0002	09SB102-SO-0002	09SB103-SO-0002
SOIL CLASSIFICATION									
SAMPLE CODE	DUP	NORMAL	NORMAL	NORMAL	DUP	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	8/30/2007	8/29/2007	8/28/2007	8/30/2007	8/30/2007	8/29/2007	8/30/2007	8/29/2007	8/29/2007
Volatile Organics (ug/kg)									
1,1,1,2-TETRACHLOROETHANE									
1,1,1-TRICHLOROETHANE									
1,1,2,2-TETRACHLOROETHANE									
1,1,2-TRICHLOROETHANE									
1,1-DICHLOROETHANE									
1,1-DICHLOROETHENE									
1,2,3-TRICHLOROPROPANE									
1,2-DIBROMO-3-CHLOROPROPANE									
1,2-DIBROMOETHANE									
1,2-DICHLOROETHANE									
1,2-DICHLOROPROPANE									
2-BUTANONE									
2-HEXANONE									
3-CHLOROPROPENE									
4-METHYL-2-PENTANONE									
ACETONE									
ACROLEIN									
ACRYLONITRILE									
BENZENE									
BROMODICHLOROMETHANE									
BROMOFORM									
BROMOMETHANE									
CARBON DISULFIDE									
CARBON TETRACHLORIDE									
CHLOROBENZENE									
CHLORODIBROMOMETHANE									
CHLOROETHANE									
CHLOROFORM									
CHLOROMETHANE									
CHLOROPRENE									
CIS-1,2-DICHLOROETHENE									
CIS-1,3-DICHLOROPROPENE									
DIBROMOMETHANE									
DICHLORODIFLUOROMETHANE									
ETHYL METHACRYLATE									
ETHYLBENZENE									
METHACRYLONITRILE									
METHYL IODIDE									
METHYL METHACRYLATE									
METHYL TERT-BUTYL ETHER									
METHYLENE CHLORIDE									

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	05	05	05	05	05	05	05	05	05
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB096	09SB097	09SB098	09SB099	09SB099	09SB100	09SB101	09SB102	09SB103
SAMPLE NUMBER	09SB96-SO-0002-D	09SB97-SO-0002	09SB98-SO-0002	09SB99-SO-0002	09SB99-SO-0002-D	09SB100-SO-0002	09SB101-SO-0002	09SB102-SO-0002	09SB103-SO-0002
SOIL CLASSIFICATION									
SAMPLE CODE	DUP	NORMAL	NORMAL	NORMAL	DUP	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	8/30/2007	8/29/2007	8/28/2007	8/30/2007	8/30/2007	8/29/2007	8/30/2007	8/29/2007	8/29/2007
STYRENE									
TETRACHLOROETHENE									
TOLUENE									
TOTAL XYLENES									
TRANS-1,2-DICHLOROETHENE									
TRANS-1,3-DICHLOROPROPENE									
TRANS-1,4-DICHLORO-2-BUTENE									
TRICHLOROETHENE									
TRICHLOROFLUOROMETHANE									
VINYL ACETATE									
VINYL CHLORIDE									
DRO Specific Semivolatile Organics (									
2-METHYLNAPHTHALENE									
ACENAPHTHENE									
ACENAPHTHYLENE									
ANTHRACENE									
BENZO(A)ANTHRACENE									
BENZO(A)PYRENE									
BENZO(B)FLUORANTHENE									
BENZO(G,H,I)PERYLENE									
BENZO(K)FLUORANTHENE									
CHRYSENE									
DIBENZO(A,H)ANTHRACENE									
FLUORANTHENE									
FLUORENE									
INDENO(1,2,3-CD)PYRENE									
NAPHTHALENE									
PHENANTHRENE									
PYRENE									
Pesticides/PCBs (ug/kg)									
4,4'-DDD									
4,4'-DDE									
4,4'-DDT									
ALDRIN									
ALPHA-BHC									
ALPHA-CHLORDANE									
AROCLOR-1016									
AROCLOR-1221									
AROCLOR-1232									
AROCLOR-1242									
AROCLOR-1248									
AROCLOR-1254									

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	05	05	05	05	05	05	05	05	05
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB096	09SB097	09SB098	09SB099	09SB099	09SB100	09SB101	09SB102	09SB103
SAMPLE NUMBER	09SB96-SO-0002-D	09SB97-SO-0002	09SB98-SO-0002	09SB99-SO-0002	09SB99-SO-0002-D	09SB100-SO-0002	09SB101-SO-0002	09SB102-SO-0002	09SB103-SO-0002
SOIL CLASSIFICATION									
SAMPLE CODE	DUP	NORMAL	NORMAL	NORMAL	DUP	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	8/30/2007	8/29/2007	8/28/2007	8/30/2007	8/30/2007	8/29/2007	8/30/2007	8/29/2007	8/29/2007
AROCLOR-1260									
BETA-BHC									
DELTA-BHC									
DIELDRIN									
ENDOSULFAN I									
ENDOSULFAN II									
ENDOSULFAN SULFATE									
ENDRIN									
ENDRIN ALDEHYDE									
ENDRIN KETONE									
GAMMA-BHC (LINDANE)									
GAMMA-CHLORDANE									
HEPTACHLOR									
HEPTACHLOR EPOXIDE									
METHOXYCHLOR									
TOTAL AROCLOR									
TOXAPHENE									
Herbicides (ug/kg)									
2,4,5-T	0.26 U	0.25 U	0.23 U	0.23 U	0.23 U	0.27 U	0.23 U	0.23 U	0.27 U
2,4,5-TP (SILVEX)	0.43 U	0.41 U	0.38 U	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.45 U
2,4-D	0.37 U	0.35 U	0.33 U	0.33 U	0.33 U	0.38 U	0.33 U	0.33 U	0.38 U
DINOSEB	0.57 U	0.54 U	0.5 U	0.5 U	0.51 U	4.1 R	0.51 U	0.51 U	0.59 U
Miscellaneous Parameters									
CATION EXCHANGE CAPACITY (MEQ									
PH (S.U.)									
TOTAL ORGANIC CARBON (mg/kg)									
Petroleum Hydrocarbons (ug/kg)									
DIESEL RANGE ORGANICS									
GASOLINE RANGE ORGANICS									
OIL & GREASE - HEM									
OIL RANGE ORGANICS (C24-C40)									

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	05	05	05	05	05
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB104	09SB105	09SB106	09SB107	09SB108
SAMPLE NUMBER	09SB104-SO-0002	09SB105-SO-0002	09SB106-SO-0002	09SB107-SO-0002	09SB108-SO-0002
SOIL CLASSIFICATION					
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	8/28/2007	8/28/2007	8/28/2007	8/29/2007	8/30/2007
Volatile Organics (ug/kg)					
1,1,1,2-TETRACHLOROETHANE					
1,1,1-TRICHLOROETHANE					
1,1,2,2-TETRACHLOROETHANE					
1,1,2-TRICHLOROETHANE					
1,1-DICHLOROETHANE					
1,1-DICHLOROETHENE					
1,2,3-TRICHLOROPROPANE					
1,2-DIBROMO-3-CHLOROPROPANE					
1,2-DIBROMOETHANE					
1,2-DICHLOROETHANE					
1,2-DICHLOROPROPANE					
2-BUTANONE					
2-HEXANONE					
3-CHLOROPROPENE					
4-METHYL-2-PENTANONE					
ACETONE					
ACROLEIN					
ACRYLONITRILE					
BENZENE					
BROMODICHLOROMETHANE					
BROMOFORM					
BROMOMETHANE					
CARBON DISULFIDE					
CARBON TETRACHLORIDE					
CHLOROBENZENE					
CHLORODIBROMOMETHANE					
CHLOROETHANE					
CHLOROFORM					
CHLOROMETHANE					
CHLOROPRENE					
CIS-1,2-DICHLOROETHENE					
CIS-1,3-DICHLOROPROPENE					
DIBROMOMETHANE					
DICHLORODIFLUOROMETHANE					
ETHYL METHACRYLATE					
ETHYLBENZENE					
METHACRYLONITRILE					
METHYL IODIDE					
METHYL METHACRYLATE					
METHYL TERT-BUTYL ETHER					
METHYLENE CHLORIDE					

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	05	05	05	05	05
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB104	09SB105	09SB106	09SB107	09SB108
SAMPLE NUMBER	09SB104-SO-0002	09SB105-SO-0002	09SB106-SO-0002	09SB107-SO-0002	09SB108-SO-0002
SOIL CLASSIFICATION					
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	8/28/2007	8/28/2007	8/28/2007	8/29/2007	8/30/2007
STYRENE					
TETRACHLOROETHENE					
TOLUENE					
TOTAL XYLENES					
TRANS-1,2-DICHLOROETHENE					
TRANS-1,3-DICHLOROPROPENE					
TRANS-1,4-DICHLORO-2-BUTENE					
TRICHLOROETHENE					
TRICHLOROFLUOROMETHANE					
VINYL ACETATE					
VINYL CHLORIDE					
DRO Specific Semivolatile Organics (					
2-METHYLNAPHTHALENE					
ACENAPHTHENE					
ACENAPHTHYLENE					
ANTHRACENE					
BENZO(A)ANTHRACENE					
BENZO(A)PYRENE					
BENZO(B)FLUORANTHENE					
BENZO(G,H,I)PERYLENE					
BENZO(K)FLUORANTHENE					
CHRYSENE					
DIBENZO(A,H)ANTHRACENE					
FLUORANTHENE					
FLUORENE					
INDENO(1,2,3-CD)PYRENE					
NAPHTHALENE					
PHENANTHRENE					
PYRENE					
Pesticides/PCBs (ug/kg)					
4,4'-DDD					
4,4'-DDE					
4,4'-DDT					
ALDRIN					
ALPHA-BHC					
ALPHA-CHLORDANE					
AROCLOR-1016					
AROCLOR-1221					
AROCLOR-1232					
AROCLOR-1242					
AROCLOR-1248					
AROCLOR-1254					

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 55
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	05	05	05	05	05
AOC	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL	BLDG 55 PEST/FUEL
LOCATION	09SB104	09SB105	09SB106	09SB107	09SB108
SAMPLE NUMBER	09SB104-SO-0002	09SB105-SO-0002	09SB106-SO-0002	09SB107-SO-0002	09SB108-SO-0002
SOIL CLASSIFICATION					
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	8/28/2007	8/28/2007	8/28/2007	8/29/2007	8/30/2007
AROCLOR-1260					
BETA-BHC					
DELTA-BHC					
DIELDRIN					
ENDOSULFAN I					
ENDOSULFAN II					
ENDOSULFAN SULFATE					
ENDRIN					
ENDRIN ALDEHYDE					
ENDRIN KETONE					
GAMMA-BHC (LINDANE)					
GAMMA-CHLORDANE					
HEPTACHLOR					
HEPTACHLOR EPOXIDE					
METHOXYCHLOR					
TOTAL AROCLOR					
TOXAPHENE					
Herbicides (ug/kg)					
2,4,5-T	0.24 U	0.25 U	0.25 U	0.24 U	0.24 U
2,4,5-TP (SILVEX)	0.41 U	0.41 U	0.42 U	0.4 U	0.39 U
2,4-D	0.35 U	0.35 U	0.36 U	0.34 U	0.34 U
DINOSEB	0.53 U	0.54 U	0.55 U	0.52 U	0.52 U
Miscellaneous Parameters					
CATION EXCHANGE CAPACITY (MEQ					
PH (S.U.)					
TOTAL ORGANIC CARBON (mg/kg)					
Petroleum Hydrocarbons (ug/kg)					
DIESEL RANGE ORGANICS					
GASOLINE RANGE ORGANICS					
OIL & GREASE - HEM					
OIL RANGE ORGANICS (C24-C40)					

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 150
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03	03	03	03	03	03	0
AOC	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 F
LOCATION	09SB036	09SB037	09SB037	09SB037	09SB039	09SB039	09SB039	09SB041	09SB041	09SE
SAMPLE NUMBER	09SB360204	09SB370204	09SB370406	09SB370810	09SB390204	09SB390406	09SB390608	09SB410204	09SB410405	09SB7
SOIL CLASSIFICATION	8	8	8	8	8	8	8	8	8	
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NOR
DEPTH RANGE (feet)	2 - 4	2 - 4	4 - 6	8 - 10	2 - 4	4 - 6	6 - 8	2 - 4	4 - 5	2 -
SAMPLE DATE	9/28/2005	10/3/2005	10/3/2005	10/3/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005	10/22
Volatile Organics (ug/kg)										
1,1,1,2-TETRACHLOROETHANE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
1,1,1-TRICHLOROETHANE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
1,1,2,2-TETRACHLOROETHANE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
1,1,2-TRICHLOROETHANE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
1,1-DICHLOROETHANE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
1,1-DICHLOROETHENE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
1,2,3-TRICHLOROPROPANE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
1,2-DIBROMO-3-CHLOROPROPANE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
1,2-DIBROMOETHANE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
1,2-DICHLOROETHANE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
1,2-DICHLOROPROPANE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
2-BUTANONE	2 J	3 J	4 J	5 J	1.18 U	2 J	1.19 U	1.02 U	1.26 U	
2-HEXANONE	4 J	2 J	2 J	1.42 U	1.18 U	3 J	1.19 U	1.02 U	1.26 J	
3-CHLOROPROPENE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
4-METHYL-2-PENTANONE	2 J	1.05 U	1.12 U	1.42 U	1.18 U	2 J	1.19 U	1.02 U	1.26 U	
ACETONE	15 BU	14 BU	20 BU	56 BJ	1.18 U	14 BU	7 BU	5 BU	8 BU	
ACROLEIN	1.27 UR	1.05 R	2 R	1.42 UR	1.18 UR	1.32 UR	1.19 UR	1.02 UR	1.26 UR	
ACRYLONITRILE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
BENZENE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
BROMODICHLOROMETHANE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
BROMOFORM	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
BROMOMETHANE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
CARBON DISULFIDE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
CARBON TETRACHLORIDE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
CHLOROBENZENE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
CHLORODIBROMOMETHANE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
CHLOROETHANE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
CHLOROFORM	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
CHLOROMETHANE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
CHLOROPRENE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
CIS-1,2-DICHLOROETHENE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
CIS-1,3-DICHLOROPROPENE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
DIBROMOMETHANE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
DICHLORODIFLUOROMETHANE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
ETHYL METHACRYLATE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
ETHYLBENZENE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
METHACRYLONITRILE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
METHYL IODIDE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
METHYL METHACRYLATE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
METHYL TERT-BUTYL ETHER	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
METHYLENE CHLORIDE	1.27 UJ	1.05 UJ	1.12 UJ	1.42 UJ	3 J	1.32 UJ	1.19 UJ	1.02 UJ	1.26 UJ	

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 150
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03	03	03	03	03	03	0
AOC	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 F
LOCATION	09SB036	09SB037	09SB037	09SB037	09SB039	09SB039	09SB039	09SB041	09SB041	09SE
SAMPLE NUMBER	09SB360204	09SB370204	09SB370406	09SB370810	09SB390204	09SB390406	09SB390608	09SB410204	09SB410405	09SB7
SOIL CLASSIFICATION	8	8	8	8	8	8	8	8	8	
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NOR
DEPTH RANGE (feet)	2 - 4	2 - 4	4 - 6	8 - 10	2 - 4	4 - 6	6 - 8	2 - 4	4 - 5	2 -
SAMPLE DATE	9/28/2005	10/3/2005	10/3/2005	10/3/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005	10/22
STYRENE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
TETRACHLOROETHENE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
TOLUENE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
TOTAL XYLENES	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
TRANS-1,2-DICHLOROETHENE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
TRANS-1,3-DICHLOROPROPENE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
TRANS-1,4-DICHLORO-2-BUTENE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
TRICHLOROETHENE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
TRICHLOROFLUOROMETHANE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
VINYL ACETATE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
VINYL CHLORIDE	1.27 U	1.05 U	1.12 U	1.42 U	1.18 U	1.32 U	1.19 U	1.02 U	1.26 U	
DRO Specific Semivolatile Organics (ug/kg)										
2-METHYLNAPHTHALENE										4
ACENAPHTHENE										4
ACENAPHTHYLENE										4
ANTHRACENE										4
BENZO(A)ANTHRACENE										4
BENZO(A)PYRENE										4
BENZO(B)FLUORANTHENE										4
BENZO(G,H,I)PERYLENE										4
BENZO(K)FLUORANTHENE										4
CHRYSENE										4
DIBENZO(A,H)ANTHRACENE										4
FLUORANTHENE										4
FLUORENE										4
INDENO(1,2,3-CD)PYRENE										4
NAPHTHALENE										4
PHENANTHRENE										4
PYRENE										4
Pesticides/PCBs (ug/kg)										
4,4'-DDD	1.69 U	1.7 UJ	1.75 UJ	1.88 UJ	1.65 UJ	1.61 U	1.67 U	1.57 U	1.63 U	
4,4'-DDE	1.69 U	1.7 UJ	1.75 UJ	1.88 UJ	1.65 UJ	1.61 U	1.67 U	1.57 U	1.63 U	
4,4'-DDT	1.69 U	3.6	1.75 U	1.88 U	1.65 UJ	1.61 U	1.67 U	1.57 U	1.63 U	
ALDRIN	0.812 U	0.818 U	0.841 U	0.905 U	0.796 UJ	0.773 U	0.804 U	0.758 U	0.786 U	
ALPHA-BHC	0.812 U	1.5 J	0.841 UJ	0.905 UJ	0.796 UJ	0.773 U	0.804 U	0.758 U	0.786 U	
ALPHA-CHLORDANE	0.812 U	0.818 U	0.841 U	0.905 U	0.796 U	0.773 U	0.804 U	0.758 U	0.786 U	
AROCLOR-1016	11.2 U	11.3 UJ	11.6 UJ	12.5 UJ	11 U	10.7 U	11.1 U	10.5 U	10.9 U	
AROCLOR-1221	11.2 U	11.3 U	11.6 U	12.5 U	11 U	10.7 U	11.1 U	10.5 U	10.9 U	
AROCLOR-1232	11.2 U	11.3 U	11.6 U	12.5 U	11 U	10.7 U	11.1 U	10.5 U	10.9 U	
AROCLOR-1242	11.2 U	11.3 U	11.6 U	12.5 U	11 U	10.7 U	11.1 U	10.5 U	10.9 U	
AROCLOR-1248	11.2 U	11.3 U	11.6 U	12.5 U	11 U	10.7 U	11.1 U	10.5 U	10.9 U	
AROCLOR-1254	11.2 U	11.3 U	11.6 U	12.5 U	11 U	10.7 U	11.1 U	10.5 U	10.9 U	

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 150
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03	03	03	03	03	03	0
AOC	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 F
LOCATION	09SB036	09SB037	09SB037	09SB037	09SB039	09SB039	09SB039	09SB041	09SB041	09SE
SAMPLE NUMBER	09SB360204	09SB370204	09SB370406	09SB370810	09SB390204	09SB390406	09SB390608	09SB410204	09SB410405	09SB7
SOIL CLASSIFICATION	8	8	8	8	8	8	8	8	8	
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NOR
DEPTH RANGE (feet)	2 - 4	2 - 4	4 - 6	8 - 10	2 - 4	4 - 6	6 - 8	2 - 4	4 - 5	2 -
SAMPLE DATE	9/28/2005	10/3/2005	10/3/2005	10/3/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005	10/22
AROCLOR-1260	11.2 U	41 J	11.6 UJ	12.5 UJ	11 U	10.7 U	11.1 U	10.5 U	10.9 U	
BETA-BHC	0.812 U	0.818 UJ	0.841 UJ	0.905 UJ	0.796 UJ	0.773 U	0.804 U	0.758 U	0.786 U	
DELTA-BHC	0.812 U	0.818 UJ	0.841 UJ	0.905 UJ	0.796 UJ	0.773 U	0.804 U	0.758 U	0.786 U	
DIELDRIN	1.69 U	1.7 U	1.75 U	1.88 U	1.65 UJ	1.61 U	1.67 U	1.57 U	1.63 U	
ENDOSULFAN I	0.812 U	0.818 U	0.841 U	0.905 U	0.796 UJ	0.773 U	0.804 U	0.758 U	0.786 U	
ENDOSULFAN II	1.69 U	1.7 U	1.75 U	1.88 U	1.65 UJ	1.61 U	1.67 U	1.57 U	1.63 U	
ENDOSULFAN SULFATE	1.69 U	1.7 UJ	1.75 UJ	1.88 UJ	1.65 UJ	1.61 U	1.67 U	1.57 U	1.63 U	
ENDRIN	1.69 U	1.7 U	1.75 U	1.88 U	1.65 UJ	1.61 U	1.67 U	1.57 U	1.63 U	
ENDRIN ALDEHYDE	1.69 U	1.7 U	1.75 U	1.88 U	1.65 U	1.61 U	1.67 U	1.57 U	1.63 U	
ENDRIN KETONE	1.69 U	1.7 UJ	1.75 UJ	1.88 UJ	1.65 UJ	1.61 U	1.67 U	1.57 U	1.63 U	
GAMMA-BHC (LINDANE)	0.812 U	0.818 UJ	0.841 UJ	0.905 U	0.796 UJ	0.773 U	0.804 U	0.758 U	0.786 U	
GAMMA-CHLORDANE	0.812 U	0.818 U	0.841 U	0.905 U	0.796 UJ	0.773 U	0.804 U	0.758 U	0.786 U	
HEPTACHLOR	0.812 U	0.818 U	0.841 U	0.905 U	0.796 UJ	0.773 U	0.804 U	0.758 U	0.786 U	
HEPTACHLOR EPOXIDE	0.812 U	0.818 U	0.841 U	0.905 U	0.796 UJ	0.773 U	0.804 U	0.758 U	0.786 U	
METHOXYCHLOR	8.12 U	8.18 UJ	8.41 UJ	9.05 UJ	7.96 UJ	7.73 U	8.04 U	7.58 U	7.86 U	
TOTAL AROCLOR	0 U	41	0 U	0 U	0 U	0 U	0 U	0 U	0 U	
TOXAPHENE	106 U	107 U	110 U	118 U	104 UJ	101 U	105 U	99.1 U	103 U	
Petroleum Hydrocarbons (mg/kg)										
DIESEL RANGE ORGANICS	3.12 U	260	120	39	3.06 U	2.97 U	3.09 U	2.91 U	3.02 U	12
GASOLINE RANGE ORGANICS	3.12 U	3.14 U	14	3.48 U	3.06 U	2.97 U	3.09 U	2.91 U	3.02 U	
OIL & GREASE - HEM	250 U	1700	430 J	279 U	245 U	238 U	248 U	233 U	990	
OIL RANGE ORGANICS (C24-C40)	12.5 U	45	36	61	12.2 U	11.9 U	12.4 U	11.7 U	12.1 U	

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 150
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	4	04	04	04	04	04	04	04	04	04
AOC	UEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL
LOCATION	3078	09SB078	09SB078	09SB079	09SB079	09SB079	09SB080	09SB080	09SB081	09SB081
SAMPLE NUMBER	80204	09SB780406	09SB780810	09SB790204	09SB790406	09SB790810	09SB800204	09SB800406	09SB810204	09SB810406
SOIL CLASSIFICATION										
SAMPLE CODE	MAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	- 4	4 - 6	8 - 10	2 - 4	4 - 6	8 - 10	2 - 4	4 - 6	2 - 4	4 - 6
SAMPLE DATE	/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006
Volatile Organics (ug/kg)										
1,1,1,2-TETRACHLOROETHANE										
1,1,1-TRICHLOROETHANE										
1,1,2,2-TETRACHLOROETHANE										
1,1,2-TRICHLOROETHANE										
1,1-DICHLOROETHANE										
1,1-DICHLOROETHENE										
1,2,3-TRICHLOROPROPANE										
1,2-DIBROMO-3-CHLOROPROPANE										
1,2-DIBROMOETHANE										
1,2-DICHLOROETHANE										
1,2-DICHLOROPROPANE										
2-BUTANONE										
2-HEXANONE										
3-CHLOROPROPENE										
4-METHYL-2-PENTANONE										
ACETONE										
ACROLEIN										
ACRYLONITRILE										
BENZENE										
BROMODICHLOROMETHANE										
BROMOFORM										
BROMOMETHANE										
CARBON DISULFIDE										
CARBON TETRACHLORIDE										
CHLOROBENZENE										
CHLORODIBROMOMETHANE										
CHLOROETHANE										
CHLOROFORM										
CHLOROMETHANE										
CHLOROPRENE										
CIS-1,2-DICHLOROETHENE										
CIS-1,3-DICHLOROPROPENE										
DIBROMOMETHANE										
DICHLORODIFLUOROMETHANE										
ETHYL METHACRYLATE										
ETHYLBENZENE										
METHACRYLONITRILE										
METHYL IODIDE										
METHYL METHACRYLATE										
METHYL TERT-BUTYL ETHER										
METHYLENE CHLORIDE										

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 150
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	4	04	04	04	04	04	04	04	04	04
AOC	UEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL
LOCATION	3078	09SB078	09SB078	09SB079	09SB079	09SB079	09SB080	09SB080	09SB081	09SB081
SAMPLE NUMBER	80204	09SB780406	09SB780810	09SB790204	09SB790406	09SB790810	09SB800204	09SB800406	09SB810204	09SB810406
SOIL CLASSIFICATION										
SAMPLE CODE	MAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	- 4	4 - 6	8 - 10	2 - 4	4 - 6	8 - 10	2 - 4	4 - 6	2 - 4	4 - 6
SAMPLE DATE	/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006
STYRENE										
TETRACHLOROETHENE										
TOLUENE										
TOTAL XYLENES										
TRANS-1,2-DICHLOROETHENE										
TRANS-1,3-DICHLOROPROPENE										
TRANS-1,4-DICHLORO-2-BUTENE										
TRICHLOROETHENE										
TRICHLOROFLUOROMETHANE										
VINYL ACETATE										
VINYL CHLORIDE										
DRO Specific Semivolatile Organics										
2-METHYLNAPHTHALENE	U	3.9 U	3.8 U	7.8 J	96	7.1 J	3.9 U	3.9 U	3.8 U	3.8 U
ACENAPHTHENE	U	3.9 U	3.8 U	5.9 J	50	4.3 J	3.9 U	3.9 U	3.8 U	3.8 U
ACENAPHTHYLENE	U	3.9 U	3.8 U	4.1 U	4.1 U	4.1 U	3.9 U	3.9 U	3.8 U	3.8 U
ANTHRACENE	U	3.9 U	3.8 U	4.1 U	4.1 U	5.2 J	3.9 U	3.9 U	3.8 U	3.8 U
BENZO(A)ANTHRACENE	U	3.9 U	3.8 U	4.1 U	16	31	3.9 U	3.9 U	3.8 U	3.8 U
BENZO(A)PYRENE	U	3.9 U	3.8 U	4.1 UJ	14 J	33 J	3.9 U	3.9 U	3.8 U	3.8 U
BENZO(B)FLUORANTHENE	U	3.9 U	3.8 U	4.1 UJ	4.1 UJ	140 J	3.9 U	3.9 U	3.8 U	3.8 U
BENZO(G,H,I)PERYLENE	U	3.9 U	3.8 U	4.1 UJ	22 J	170 J	3.9 U	3.9 U	3.8 U	3.8 U
BENZO(K)FLUORANTHENE	U	3.9 U	3.8 U	4.1 UJ	4.1 UJ	23 J	3.9 U	3.9 U	3.8 U	3.8 U
CHRYSENE	U	3.9 U	3.8 U	4.1 U	16 J	90	3.9 U	3.9 U	3.8 U	3.8 U
DIBENZO(A,H)ANTHRACENE	U	3.9 U	3.8 U	4.1 UJ	4.1 UJ	16 J	3.9 U	3.9 U	3.8 U	3.8 U
FLUORANTHENE	U	3.9 U	3.8 U	4.1 U	7.1 J	260	3.9 U	3.9 U	3.8 U	3.8 U
FLUORENE	U	3.9 U	3.8 U	13	64	4.1 U	3.9 U	3.9 U	3.8 U	3.8 U
INDENO(1,2,3-CD)PYRENE	U	3.9 U	3.8 U	4.1 UJ	4.1 UJ	28 J	3.9 U	3.9 U	3.8 U	3.8 U
NAPHTHALENE	U	3.9 U	3.8 U	4.4 J	4.1 U	13	3.9 U	3.9 U	3.8 U	3.8 U
PHENANTHRENE	U	3.9 U	3.8 U	7.5 J	63	230	3.9 U	3.9 U	3.8 U	3.8 U
PYRENE	U	3.9 U	3.8 U	17	140 J	490	3.9 U	3.9 U	3.8 U	3.8 U
Pesticides/PCBs (ug/kg)										
4,4'-DDD										
4,4'-DDE										
4,4'-DDT										
ALDRIN										
ALPHA-BHC										
ALPHA-CHLORDANE										
AROCLOR-1016										
AROCLOR-1221										
AROCLOR-1232										
AROCLOR-1242										
AROCLOR-1248										
AROCLOR-1254										

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 150
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	4	04	04	04	04	04	04	04	04	04
AOC	UEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL
LOCATION	3078	09SB078	09SB078	09SB079	09SB079	09SB079	09SB080	09SB080	09SB081	09SB081
SAMPLE NUMBER	80204	09SB780406	09SB780810	09SB790204	09SB790406	09SB790810	09SB800204	09SB800406	09SB810204	09SB810406
SOIL CLASSIFICATION										
SAMPLE CODE	MAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	- 4	4 - 6	8 - 10	2 - 4	4 - 6	8 - 10	2 - 4	4 - 6	2 - 4	4 - 6
SAMPLE DATE	/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006	10/22/2006
AROCLOR-1260										
BETA-BHC										
DELTA-BHC										
DIELDRIN										
ENDOSULFAN I										
ENDOSULFAN II										
ENDOSULFAN SULFATE										
ENDRIN										
ENDRIN ALDEHYDE										
ENDRIN KETONE										
GAMMA-BHC (LINDANE)										
GAMMA-CHLORDANE										
HEPTACHLOR										
HEPTACHLOR EPOXIDE										
METHOXYCHLOR										
TOTAL AROCLOR										
TOXAPHENE										
Petroleum Hydrocarbons (mg/kg)										
DIESEL RANGE ORGANICS	J	2.9 U	2.9 U	32 J	20 J	63	2.9 U	3 U	2.9 U	2.9 U
GASOLINE RANGE ORGANICS										
OIL & GREASE - HEM										
OIL RANGE ORGANICS (C24-C40)										

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 150
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	04	04	04	04
AOC	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL
LOCATION	09SB081	09SB081	09SB083	09SB083
SAMPLE NUMBER	09SB810709	09SB810709-D	09SB830204	09SB830406
SOIL CLASSIFICATION				
SAMPLE CODE	NORMAL	DUP	NORMAL	NORMAL
DEPTH RANGE (feet)	7 - 9	7 - 9	2 - 4	4 - 6
SAMPLE DATE	10/22/2006	10/22/2006	10/21/2006	10/21/2006
Volatile Organics (ug/kg)				
1,1,1,2-TETRACHLOROETHANE				
1,1,1-TRICHLOROETHANE				
1,1,2,2-TETRACHLOROETHANE				
1,1,2-TRICHLOROETHANE				
1,1-DICHLOROETHANE				
1,1-DICHLOROETHENE				
1,2,3-TRICHLOROPROPANE				
1,2-DIBROMO-3-CHLOROPROPANE				
1,2-DIBROMOETHANE				
1,2-DICHLOROETHANE				
1,2-DICHLOROPROPANE				
2-BUTANONE				
2-HEXANONE				
3-CHLOROPROPENE				
4-METHYL-2-PENTANONE				
ACETONE				
ACROLEIN				
ACRYLONITRILE				
BENZENE				
BROMODICHLOROMETHANE				
BROMOFORM				
BROMOMETHANE				
CARBON DISULFIDE				
CARBON TETRACHLORIDE				
CHLOROBENZENE				
CHLORODIBROMOMETHANE				
CHLOROETHANE				
CHLOROFORM				
CHLOROMETHANE				
CHLOROPRENE				
CIS-1,2-DICHLOROETHENE				
CIS-1,3-DICHLOROPROPENE				
DIBROMOMETHANE				
DICHLORODIFLUOROMETHANE				
ETHYL METHACRYLATE				
ETHYLBENZENE				
METHACRYLONITRILE				
METHYL IODIDE				
METHYL METHACRYLATE				
METHYL TERT-BUTYL ETHER				
METHYLENE CHLORIDE				

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 150
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	04	04	04	04
AOC	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL
LOCATION	09SB081	09SB081	09SB083	09SB083
SAMPLE NUMBER	09SB810709	09SB810709-D	09SB830204	09SB830406
SOIL CLASSIFICATION				
SAMPLE CODE	NORMAL	DUP	NORMAL	NORMAL
DEPTH RANGE (feet)	7 - 9	7 - 9	2 - 4	4 - 6
SAMPLE DATE	10/22/2006	10/22/2006	10/21/2006	10/21/2006
STYRENE				
TETRACHLOROETHENE				
TOLUENE				
TOTAL XYLENES				
TRANS-1,2-DICHLOROETHENE				
TRANS-1,3-DICHLOROPROPENE				
TRANS-1,4-DICHLORO-2-BUTENE				
TRICHLOROETHENE				
TRICHLOROFLUOROMETHANE				
VINYL ACETATE				
VINYL CHLORIDE				
DRO Specific Semivolatile Organics				
2-METHYLNAPHTHALENE	9 J	5.6 U	3.9 U	4.5 U
ACENAPHTHENE	6.2 U	5.6 U	3.9 U	4.5 U
ACENAPHTHYLENE	6.2 U	5.6 U	3.9 U	4.5 U
ANTHRACENE	6.2 U	5.6 U	3.9 U	4.5 U
BENZO(A)ANTHRACENE	110	150	3.9 U	4.5 U
BENZO(A)PYRENE	6.2 UJ	5.6 UJ	3.9 UJ	4.5 U
BENZO(B)FLUORANTHENE	350 J	350 J	3.9 UJ	4.5 U
BENZO(G,H,I)PERYLENE	53 J	110 J	32 J	4.5 U
BENZO(K)FLUORANTHENE	32 J	33 J	3.9 UJ	4.5 U
CHRYSENE	92	96	3.9 U	4.5 U
DIBENZO(A,H)ANTHRACENE	6.2 UJ	29 J	3.9 UJ	4.5 U
FLUORANTHENE	130	190	3.9 U	4.5 U
FLUORENE	6.2 U	5.6 U	3.9 U	4.5 U
INDENO(1,2,3-CD)PYRENE	30 J	41 J	3.9 UJ	4.5 U
NAPHTHALENE	7.1 J	7.2 J	3.9 U	4.5 U
PHENANTHRENE	29	26	3.9 U	4.5 U
PYRENE	630	580	3.9 U	4.5 U
Pesticides/PCBs (ug/kg)				
4,4'-DDD				
4,4'-DDE				
4,4'-DDT				
ALDRIN				
ALPHA-BHC				
ALPHA-CHLORDANE				
AROCLOR-1016				
AROCLOR-1221				
AROCLOR-1232				
AROCLOR-1242				
AROCLOR-1248				
AROCLOR-1254				

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - BUILDING 150
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	04	04	04	04
AOC	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL
LOCATION	09SB081	09SB081	09SB083	09SB083
SAMPLE NUMBER	09SB810709	09SB810709-D	09SB830204	09SB830406
SOIL CLASSIFICATION				
SAMPLE CODE	NORMAL	DUP	NORMAL	NORMAL
DEPTH RANGE (feet)	7 - 9	7 - 9	2 - 4	4 - 6
SAMPLE DATE	10/22/2006	10/22/2006	10/21/2006	10/21/2006
AROCLOR-1260				
BETA-BHC				
DELTA-BHC				
DIELDRIN				
ENDOSULFAN I				
ENDOSULFAN II				
ENDOSULFAN SULFATE				
ENDRIN				
ENDRIN ALDEHYDE				
ENDRIN KETONE				
GAMMA-BHC (LINDANE)				
GAMMA-CHLORDANE				
HEPTACHLOR				
HEPTACHLOR EPOXIDE				
METHOXYCHLOR				
TOTAL AROCLOR				
TOXAPHENE				
Petroleum Hydrocarbons (mg/kg)				
DIESEL RANGE ORGANICS	59	51	26	4.3 J
GASOLINE RANGE ORGANICS				
OIL & GREASE - HEM				
OIL RANGE ORGANICS (C24-C40)				

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 150
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03	03	03	04	04	04
AOC	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL
LOCATION	09SB036	09SB037	09SB038	09SB039	09SB040	09SB041	09SB078	09SB079	09SB080
SAMPLE NUMBER	09SS360002	09SS370002	09SS380002	09SS390002	09SS400002	09SS410002	09SS780002	09SS790002	09SS800002
SOIL CLASSIFICATION	3	3	3	3	3	3			
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	9/28/2005	10/3/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005	10/22/2006	10/22/2006	10/22/2006
Volatile Organics (ug/kg)									
1,1,1,2-TETRACHLOROETHANE	1.07 U	1.18 U	1.36 UJ	1.05 U	1.07 U	0.972 U			
1,1,1-TRICHLOROETHANE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
1,1,2,2-TETRACHLOROETHANE	1.07 U	1.18 U	1.36 UJ	1.05 U	1.07 U	0.972 U			
1,1,2-TRICHLOROETHANE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
1,1-DICHLOROETHANE	1.07 U	1.18 U	1.36 J	1.05 U	1.07 U	0.972 U			
1,1-DICHLOROETHENE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
1,2,3-TRICHLOROPROPANE	1.07 U	1.18 U	1.36 UJ	1.05 U	1.07 U	0.972 U			
1,2-DIBROMO-3-CHLOROPROPANE	1.07 U	1.18 U	1.36 UJ	1.05 U	1.07 U	0.972 U			
1,2-DIBROMOETHANE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
1,2-DICHLOROETHANE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
1,2-DICHLOROPROPANE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
2-BUTANONE	1.07 U	8 J	54 J	1.05 U	1.07 U	0.972 U			
2-HEXANONE	1.07 U	1.18 U	1.36 U	1.05 J	1.07 U	0.972 U			
3-CHLOROPROPENE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
4-METHYL-2-PENTANONE	1.07 U	1.18 U	4 J	1.05 U	1.07 U	0.972 U			
ACETONE	1.07 U	45 BJ	320 J	5 BU	13 BU	0.972 U			
ACROLEIN	1.07 UR	1.18 UR	1.36 UR	1.05 UR	1.07 UR	0.972 UR			
ACRYLONITRILE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
BENZENE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
BROMODICHLOROMETHANE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
BROMOFORM	1.07 U	1.18 U	1.36 UJ	1.05 U	1.07 U	0.972 U			
BROMOMETHANE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
CARBON DISULFIDE	1.07 U	1.18 U	5 J	1.05 U	1.07 U	0.972 U			
CARBON TETRACHLORIDE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
CHLOROBENZENE	1.07 U	1.18 U	1.36 UJ	1.05 U	1.07 U	0.972 U			
CHLORODIBROMOMETHANE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
CHLOROETHANE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
CHLOROFORM	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
CHLOROMETHANE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
CHLOROPRENE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
CIS-1,2-DICHLOROETHENE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
CIS-1,3-DICHLOROPROPENE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
DIBROMOMETHANE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
DICHLORODIFLUOROMETHANE	1.07 U	1.18 U	1.36 UJ	1.05 U	1.07 U	0.972 U			
ETHYL METHACRYLATE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
ETHYLBENZENE	1.07 U	1.18 U	1.36 UJ	1.05 U	1.07 U	0.972 U			
METHACRYLONITRILE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
METHYL IODIDE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
METHYL METHACRYLATE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
METHYL TERT-BUTYL ETHER	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
METHYLENE CHLORIDE	1.07 UJ	2 J	1.36 UJ	1.05 UJ	3 J	1 J			

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 150
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03	03	03	04	04	04
AOC	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL
LOCATION	09SB036	09SB037	09SB038	09SB039	09SB040	09SB041	09SB078	09SB079	09SB080
SAMPLE NUMBER	09SS360002	09SS370002	09SS380002	09SS390002	09SS400002	09SS410002	09SS780002	09SS790002	09SS800002
SOIL CLASSIFICATION	3	3	3	3	3	3			
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	9/28/2005	10/3/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005	10/22/2006	10/22/2006	10/22/2006
STYRENE	1.07 U	1.18 U	1.36 UJ	1.05 U	1.07 U	0.972 U			
TETRACHLOROETHENE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
TOLUENE	1.07 U	1.18 U	4 J	1.05 U	1.07 U	0.972 U			
TOTAL XYLENES	1.07 U	1.18 U	6 J	1.05 U	1.07 U	0.972 U			
TRANS-1,2-DICHLOROETHENE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
TRANS-1,3-DICHLOROPROPENE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
TRANS-1,4-DICHLORO-2-BUTENE	1.07 U	1.18 U	1.36 UJ	1.05 U	1.07 U	0.972 U			
TRICHLOROETHENE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
TRICHLOROFLUOROMETHANE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
VINYL ACETATE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
VINYL CHLORIDE	1.07 U	1.18 U	1.36 U	1.05 U	1.07 U	0.972 U			
DRO Specific Semivolatile Organics (ug/kg)									
2-METHYLNAPHTHALENE							29 J	4 U	13
ACENAPHTHENE							19 U	4 U	85
ACENAPHTHYLENE							19 U	4 U	5.1 J
ANTHRACENE							24 J	4 U	130
BENZO(A)ANTHRACENE							100 J	5.5 J	730 J
BENZO(A)PYRENE							100 J	5.8 J	850 J
BENZO(B)FLUORANTHENE							150 J	8.5	1300 J
BENZO(G,H,I)PERYLENE							710 J	14	760 J
BENZO(K)FLUORANTHENE							68 J	4 U	370 J
CHRYSENE							79 J	4.9 J	930 J
DIBENZO(A,H)ANTHRACENE							19 UJ	4 U	150 J
FLUORANTHENE							66	11	1300
FLUORENE							19 U	4 U	62
INDENO(1,2,3-CD)PYRENE							19 UJ	4 U	580 J
NAPHTHALENE							22 J	4 U	12
PHENANTHRENE							49	5.8 J	840
PYRENE							190 J	13	2500 J
Pesticides/PCBs (ug/kg)									
4,4'-DDD	1.59 U	1.72 U	3 J	1.62 UJ	1.68 UJ	1.6 UJ			
4,4'-DDE	1.59 U	1.72 UJ	1.8 U	1.62 UJ	1.68 UJ	1.6 UJ			
4,4'-DDT	4.5 J	1.72 U	1.8 U	1.62 UJ	1.68 UJ	1.9 J			
ALDRIN	0.765 U	0.83 U	0.866 U	0.779 UJ	0.808 UJ	0.77 UJ			
ALPHA-BHC	0.765 UJ	0.83 UJ	0.866 UJ	0.779 UJ	0.808 UJ	0.77 UJ			
ALPHA-CHLORDANE	0.765 U	0.83 U	0.866 U	0.779 U	0.808 U	0.77 U			
AROCLOR-1016	10.6 U	11.5 UJ	12 U	10.8 U	11.2 U	10.7 U			
AROCLOR-1221	10.6 U	11.5 U	12 U	10.8 U	11.2 U	10.7 U			
AROCLOR-1232	10.6 U	11.5 U	12 U	10.8 U	11.2 U	10.7 U			
AROCLOR-1242	10.6 U	11.5 U	12 U	10.8 U	11.2 U	10.7 U			
AROCLOR-1248	10.6 U	11.5 U	12 U	10.8 U	11.2 U	10.7 U			
AROCLOR-1254	10.6 U	11.5 U	12 U	10.8 U	11.2 U	10.7 U			

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 150
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03	03	03	04	04	04
AOC	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL
LOCATION	09SB036	09SB037	09SB038	09SB039	09SB040	09SB041	09SB078	09SB079	09SB080
SAMPLE NUMBER	09SS360002	09SS370002	09SS380002	09SS390002	09SS400002	09SS410002	09SS780002	09SS790002	09SS800002
SOIL CLASSIFICATION	3	3	3	3	3	3			
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	9/28/2005	10/3/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005	10/22/2006	10/22/2006	10/22/2006
AROCLOR-1260	10.6 U	11.5 UJ	12 UJ	10.8 U	11.2 U	10.7 U			
BETA-BHC	0.765 U	0.83 U	0.866 U	0.779 UJ	0.808 UJ	0.77 UJ			
DELTA-BHC	0.765 UJ	0.83 UJ	0.866 UJ	0.779 UJ	0.808 UJ	0.77 UJ			
DIELDRIN	1.59 U	1.72 U	1.8 U	1.62 UJ	1.68 UJ	1.6 UJ			
ENDOSULFAN I	0.765 U	0.83 U	0.866 U	0.779 UJ	0.808 UJ	0.77 UJ			
ENDOSULFAN II	1.59 U	1.72 U	1.8 U	1.62 UJ	1.68 UJ	1.6 UJ			
ENDOSULFAN SULFATE	1.59 U	1.72 U	1.8 U	1.62 UJ	1.68 UJ	1.6 UJ			
ENDRIN	1.59 U	1.72 U	1.8 U	1.62 UJ	1.68 UJ	1.6 UJ			
ENDRIN ALDEHYDE	1.59 U	1.72 U	1.8 U	1.62 U	1.68 U	1.6 U			
ENDRIN KETONE	1.59 U	1.72 U	1.8 U	1.62 UJ	1.68 UJ	1.6 UJ			
GAMMA-BHC (LINDANE)	0.765 UJ	0.83 U	0.866 UJ	0.779 UJ	0.808 UJ	0.77 UJ			
GAMMA-CHLORDANE	0.765 U	0.83 U	0.866 U	0.779 UJ	0.808 UJ	0.77 UJ			
HEPTACHLOR	0.765 U	0.83 U	0.866 U	0.779 UJ	0.808 UJ	0.77 UJ			
HEPTACHLOR EPOXIDE	0.765 U	0.83 U	0.866 U	0.779 UJ	0.808 UJ	0.77 UJ			
METHOXYCHLOR	7.65 U	8.3 UJ	8.66 U	7.79 UJ	8.08 UJ	7.7 UJ			
TOTAL AROCLOR	0 U	0 U	0 U	0 U	0 U	0 U			
TOXAPHENE	100 U	109 U	113 U	102 UJ	106 UJ	101 UJ			
Petroleum Hydrocarbons (mg/kg)									
DIESEL RANGE ORGANICS	29	93	810	3 U	5800 J	25	410	5.3 J	44
GASOLINE RANGE ORGANICS	2.94 U	3.19 U	10.6	3 U	49.7	2.96 U			
OIL & GREASE - HEM	760	3600	8500	240 U	9000	237 U			
OIL RANGE ORGANICS (C24-C40)	110	230	460	12 U	570 J	69			

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 150
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	04	04	04
AOC	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL
LOCATION	09SB081	09SB082	09SB083
SAMPLE NUMBER	09SS810002	09SS820002	09SS830002
SOIL CLASSIFICATION			
SAMPLE CODE	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2
SAMPLE DATE	10/22/2006	10/24/2006	10/21/2006
Volatile Organics (ug/kg)			
1,1,1,2-TETRACHLOROETHANE			
1,1,1-TRICHLOROETHANE			
1,1,2,2-TETRACHLOROETHANE			
1,1,2-TRICHLOROETHANE			
1,1-DICHLOROETHANE			
1,1-DICHLOROETHENE			
1,2,3-TRICHLOROPROPANE			
1,2-DIBROMO-3-CHLOROPROPANE			
1,2-DIBROMOETHANE			
1,2-DICHLOROETHANE			
1,2-DICHLOROPROPANE			
2-BUTANONE			
2-HEXANONE			
3-CHLOROPROPENE			
4-METHYL-2-PENTANONE			
ACETONE			
ACROLEIN			
ACRYLONITRILE			
BENZENE			
BROMODICHLOROMETHANE			
BROMOFORM			
BROMOMETHANE			
CARBON DISULFIDE			
CARBON TETRACHLORIDE			
CHLOROBENZENE			
CHLORODIBROMOMETHANE			
CHLOROETHANE			
CHLOROFORM			
CHLOROMETHANE			
CHLOROPRENE			
CIS-1,2-DICHLOROETHENE			
CIS-1,3-DICHLOROPROPENE			
DIBROMOMETHANE			
DICHLORODIFLUOROMETHANE			
ETHYL METHACRYLATE			
ETHYLBENZENE			
METHACRYLONITRILE			
METHYL IODIDE			
METHYL METHACRYLATE			
METHYL TERT-BUTYL ETHER			
METHYLENE CHLORIDE			

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 150
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	04	04	04
AOC	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL
LOCATION	09SB081	09SB082	09SB083
SAMPLE NUMBER	09SS810002	09SS820002	09SS830002
SOIL CLASSIFICATION			
SAMPLE CODE	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2
SAMPLE DATE	10/22/2006	10/24/2006	10/21/2006
STYRENE			
TETRACHLOROETHENE			
TOLUENE			
TOTAL XYLENES			
TRANS-1,2-DICHLOROETHENE			
TRANS-1,3-DICHLOROPROPENE			
TRANS-1,4-DICHLORO-2-BUTENE			
TRICHLOROETHENE			
TRICHLOROFLUOROMETHANE			
VINYL ACETATE			
VINYL CHLORIDE			
DRO Specific Semivolatile Organics (u			
2-METHYLNAPHTHALENE	4.1 U	3.9 U	130
ACENAPHTHENE	4.1 U	3.9 U	8 U
ACENAPHTHYLENE	4.1 U	3.9 U	8 U
ANTHRACENE	4.1 U	3.9 U	8 U
BENZO(A)ANTHRACENE	4.3 J	12 J	11 J
BENZO(A)PYRENE	4.1 U	28	8 UJ
BENZO(B)FLUORANTHENE	4.3 J	61 J	8 UJ
BENZO(G,H,I)PERYLENE	4.1 U	32	140 J
BENZO(K)FLUORANTHENE	4.1 U	21 J	8 UJ
CHRYSENE	4.1 U	12 J	18 J
DIBENZO(A,H)ANTHRACENE	4.1 U	9.5	8 UJ
FLUORANTHENE	8.6	17 J	21
FLUORENE	4.1 U	3.9 U	8 U
INDENO(1,2,3-CD)PYRENE	4.1 U	26	8 UJ
NAPHTHALENE	4.1 U	3.9 U	41
PHENANTHRENE	6.8 J	8 J	18
PYRENE	6.8 J	28 J	57 J
Pesticides/PCBs (ug/kg)			
4,4'-DDD			
4,4'-DDE			
4,4'-DDT			
ALDRIN			
ALPHA-BHC			
ALPHA-CHLORDANE			
AROCLOR-1016			
AROCLOR-1221			
AROCLOR-1232			
AROCLOR-1242			
AROCLOR-1248			
AROCLOR-1254			

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - BUILDING 150
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	04	04	04
AOC	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL	LDG 150 FUEL SPILL
LOCATION	09SB081	09SB082	09SB083
SAMPLE NUMBER	09SS810002	09SS820002	09SS830002
SOIL CLASSIFICATION			
SAMPLE CODE	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2
SAMPLE DATE	10/22/2006	10/24/2006	10/21/2006
AROCLOR-1260			
BETA-BHC			
DELTA-BHC			
DIELDRIN			
ENDOSULFAN I			
ENDOSULFAN II			
ENDOSULFAN SULFATE			
ENDRIN			
ENDRIN ALDEHYDE			
ENDRIN KETONE			
GAMMA-BHC (LINDANE)			
GAMMA-CHLORDANE			
HEPTACHLOR			
HEPTACHLOR EPOXIDE			
METHOXYCHLOR			
TOTAL AROCLOR			
TOXAPHENE			
Petroleum Hydrocarbons (mg/kg)			
DIESEL RANGE ORGANICS	3.1 UJ	210	250
GASOLINE RANGE ORGANICS			
OIL & GREASE - HEM			
OIL RANGE ORGANICS (C24-C40)			

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - FORMER FIRE TRAINING AREA
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	02	02	02	02	02	02	02	02	02
AOC	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING
LOCATION	09SB031/TW002	09SB031/TW002	09SB032	09SB032	09SB033	09SB033	09SB034	09SB034	09SB035
SAMPLE NUMBER	09SB310204	09SB310507	09SB320204	09SB320406	09SB330204	09SB330507	09SB340204	09SB340406	09SB350204
SOIL CLASSIFICATION	8	9	8	8	8	8	8	9	9
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	2 - 4	5 - 7	2 - 4	4 - 6	2 - 4	5 - 7	2 - 4	4 - 6	2 - 4
SAMPLE DATE	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005
Volatile Organics (ug/kg)									
1,1,1,2-TETRACHLOROETHANE									
1,1,1-TRICHLOROETHANE									
1,1,2,2-TETRACHLOROETHANE									
1,1,2-TRICHLOROETHANE									
1,1-DICHLOROETHANE									
1,1-DICHLOROETHENE									
1,2,3-TRICHLOROPROPANE									
1,2-DIBROMO-3-CHLOROPROPANE									
1,2-DIBROMOETHANE									
1,2-DICHLOROETHANE									
1,2-DICHLOROPROPANE									
2-BUTANONE									
2-HEXANONE									
3-CHLOROPROPENE									
4-METHYL-2-PENTANONE									
ACETONE									
ACROLEIN									
ACRYLONITRILE									
BENZENE									
BROMODICHLOROMETHANE									
BROMOFORM									
BROMOMETHANE									
CARBON DISULFIDE									
CARBON TETRACHLORIDE									
CHLOROBENZENE									
CHLORODIBROMOMETHANE									
CHLOROETHANE									
CHLOROFORM									
CHLOROMETHANE									
CHLOROPRENE									
CIS-1,2-DICHLOROETHENE									
CIS-1,3-DICHLOROPROPENE									
DIBROMOMETHANE									
DICHLORODIFLUOROMETHANE									
ETHYL METHACRYLATE									
ETHYLBENZENE									
METHACRYLONITRILE									
METHYL IODIDE									
METHYL METHACRYLATE									
METHYL TERT-BUTYL ETHER									
METHYLENE CHLORIDE									
STYRENE									

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - FORMER FIRE TRAINING AREA
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	02	02	02	02	02	02	02	02	02
AOC	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING
LOCATION	09SB031/TW002	09SB031/TW002	09SB032	09SB032	09SB033	09SB033	09SB034	09SB034	09SB035
SAMPLE NUMBER	09SB310204	09SB310507	09SB320204	09SB320406	09SB330204	09SB330507	09SB340204	09SB340406	09SB350204
SOIL CLASSIFICATION	8	9	8	8	8	8	8	9	9
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	2 - 4	5 - 7	2 - 4	4 - 6	2 - 4	5 - 7	2 - 4	4 - 6	2 - 4
SAMPLE DATE	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005
TETRACHLOROETHENE									
TOLUENE									
TOTAL XYLENES									
TRANS-1,2-DICHLOROETHENE									
TRANS-1,3-DICHLOROPROPENE									
TRANS-1,4-DICHLORO-2-BUTENE									
TRICHLOROETHENE									
TRICHLOROFLUOROMETHANE									
VINYL ACETATE									
VINYL CHLORIDE									
Pesticides/PCBs (ug/kg)									
4,4'-DDD	1.82 U	1.67 U	1.67 U	333 U	1.74 U	1.65 U	1.71 U	1.67 U	1.67 U
4,4'-DDE	1.82 U	1.67 U	1.67 U	333 U	1.74 U	1.65 U	1.71 U	1.67 U	1.67 U
4,4'-DDT	1.82 U	1.67 U	1.67 U	333 U	1.74 U	1.65 U	1.71 U	1.67 U	1.67 U
ALDRIN	0.878 U	0.802 U	0.802 U	160 U	0.835 U	0.794 U	0.823 U	0.802 U	0.802 U
ALPHA-BHC	0.878 U	0.802 U	0.802 U	160 U	0.835 U	0.794 U	0.823 U	0.802 U	0.802 U
ALPHA-CHLORDANE	0.878 U	0.802 U	0.802 U	160 U	0.835 U	0.794 U	0.823 U	0.802 U	0.802 U
AROCLOR-1016	12.2 U	11.1 U	11.1 U	2222 U	11.6 U	11 U	11.4 U	11.1 U	11.1 U
AROCLOR-1221	12.2 U	11.1 U	11.1 U	2222 U	11.6 U	11 U	11.4 U	11.1 U	11.1 U
AROCLOR-1232	12.2 U	11.1 U	11.1 U	2222 U	11.6 U	11 U	11.4 U	11.1 U	11.1 U
AROCLOR-1242	2000	29000	7900	38000	11.6 U	11 U	5900	20000	11.1 U
AROCLOR-1248	12.2 U	11.1 U	11.1 U	2222 U	100	11 U	11.4 U	11.1 U	68
AROCLOR-1254	12.2 U	11.1 U	11.1 U	2222 U	11.6 U	11 U	11.4 U	11.1 U	11.1 U
AROCLOR-1260	12.2 U	11.1 U	11.1 U	2222 U	11.6 U	11 U	11.4 U	11.1 U	11.1 U
BETA-BHC	0.878 U	0.802 U	0.802 U	160 U	0.835 U	0.794 U	0.823 U	0.802 U	0.802 U
DELTA-BHC	0.878 U	0.802 U	0.802 U	160 U	0.835 U	0.794 U	0.823 U	0.802 U	0.802 U
DIELDRIN	1.82 U	1.67 U	1.67 U	333 U	1.74 U	1.65 U	1.71 U	1.67 U	1.67 U
ENDOSULFAN I	0.878 U	0.802 U	0.802 U	160 U	0.835 U	0.794 U	0.823 U	0.802 U	0.802 U
ENDOSULFAN II	1.82 U	1.67 U	1.67 U	333 U	1.74 U	1.65 U	1.71 U	1.67 U	1.67 U
ENDOSULFAN SULFATE	1.82 U	1.67 U	1.67 U	333 U	1.74 U	1.65 U	1.71 U	1.67 U	1.67 U
ENDRIN	1.82 U	1.67 U	1.67 U	333 U	1.74 U	1.65 U	1.71 U	1.67 U	1.67 U
ENDRIN ALDEHYDE	1.82 U	1.67 U	1.67 U	333 U	1.74 U	1.65 U	1.71 U	1.67 U	1.67 U
ENDRIN KETONE	1.82 U	1.67 U	1.67 U	333 U	1.74 U	1.65 U	1.71 U	1.67 U	1.67 U
GAMMA-BHC (LINDANE)	0.878 U	0.802 U	0.802 U	160 U	0.835 U	0.794 U	0.823 U	0.802 U	0.802 U
GAMMA-CHLORDANE	0.878 U	0.802 U	0.802 U	160 U	0.835 U	0.794 U	0.823 U	0.802 U	0.802 U
HEPTACHLOR	0.878 U	0.802 U	0.802 U	160 U	0.835 U	0.794 U	0.823 U	0.802 U	0.802 U
HEPTACHLOR EPOXIDE	0.878 U	0.802 U	0.802 U	160 U	0.835 U	0.794 U	0.823 U	0.802 U	0.802 U
METHOXYCHLOR	8.78 U	8.02 U	8.02 U	1605 U	8.35 U	7.94 U	8.23 U	8.02 U	8.02 U
TOTAL AROCLOR	2000	29000	7900	38000	100	0 U	5900	20000	68
TOXAPHENE	23 U	21 U	21 U	4198 U	21.9 U	20.8 U	21.5 U	21 U	21 U
Petroleum Hydrocarbons (mg/kg)									
DIESEL RANGE ORGANICS									
GASOLINE RANGE ORGANICS									

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - FORMER FIRE TRAINING AREA
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	02	02	02	02	02	02	02	02	02
AOC	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING
LOCATION	09SB031/TW002	09SB031/TW002	09SB032	09SB032	09SB033	09SB033	09SB034	09SB034	09SB035
SAMPLE NUMBER	09SB310204	09SB310507	09SB320204	09SB320406	09SB330204	09SB330507	09SB340204	09SB340406	09SB350204
SOIL CLASSIFICATION	8	9	8	8	8	8	8	9	9
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	2 - 4	5 - 7	2 - 4	4 - 6	2 - 4	5 - 7	2 - 4	4 - 6	2 - 4
SAMPLE DATE	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005
OIL & GREASE - HEM									
OIL RANGE ORGANICS (C24-C40)									

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - FORMER FIRE TRAINING AREA
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	02	03	03	03	03	03	03	03	03
AOC	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING
LOCATION	09SB035	09SB050	09SB050	09SB050	09SB050	09SB051	09SB051	09SB051	09SB052
SAMPLE NUMBER	09SB350406	09SB500204	09SB500406	09SB500406-D	09SB500608	09SB510204	09SB510406	09SB510608	09SB520204
SOIL CLASSIFICATION	9	8	8		8	8	8	8	8
SAMPLE CODE	NORMAL	NORMAL	NORMAL	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	4 - 6	2 - 4	4 - 6	4 - 6	6 - 8	2 - 4	4 - 6	6 - 8	2 - 4
SAMPLE DATE	5/10/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/28/2005
Volatile Organics (ug/kg)									
1,1,1,2-TETRACHLOROETHANE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
1,1,1-TRICHLOROETHANE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
1,1,2,2-TETRACHLOROETHANE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
1,1,2-TRICHLOROETHANE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
1,1-DICHLOROETHANE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
1,1-DICHLOROETHENE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
1,2,3-TRICHLOROPROPANE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
1,2-DIBROMO-3-CHLOROPROPANE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
1,2-DIBROMOETHANE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
1,2-DICHLOROETHANE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
1,2-DICHLOROPROPANE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
2-BUTANONE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	3 J	6 J	1.04 U
2-HEXANONE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	2 J
3-CHLOROPROPENE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
4-METHYL-2-PENTANONE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 J
ACETONE		11 J	0.955 U	2 J	0.917 U	1.08 U	25 J	66 J	9 BU
ACROLEIN		1.04 UR	0.955 UR	0.9 UR	0.917 UR	1.08 UR	1.26 UR	1.04 UR	1.04 UR
ACRYLONITRILE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
BENZENE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
BROMODICHLOROMETHANE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
BROMOFORM		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
BROMOMETHANE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
CARBON DISULFIDE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
CARBON TETRACHLORIDE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
CHLOROBENZENE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
CHLORODIBROMOMETHANE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
CHLOROETHANE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
CHLOROFORM		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
CHLOROMETHANE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
CHLOROPRENE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
CIS-1,2-DICHLOROETHENE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
CIS-1,3-DICHLOROPROPENE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
DIBROMOMETHANE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
DICHLORODIFLUOROMETHANE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
ETHYL METHACRYLATE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
ETHYLBENZENE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
METHACRYLONITRILE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
METHYL IODIDE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
METHYL METHACRYLATE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
METHYL TERT-BUTYL ETHER		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
METHYLENE CHLORIDE		1.04 UJ	0.955 UJ	0.9 UJ	0.917 UJ	1.08 UJ	1.26 UJ	1.04 UJ	1.04 UJ
STYRENE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - FORMER FIRE TRAINING AREA
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	02	03	03	03	03	03	03	03	03
AOC	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING
LOCATION	09SB035	09SB050	09SB050	09SB050	09SB050	09SB051	09SB051	09SB051	09SB052
SAMPLE NUMBER	09SB350406	09SB500204	09SB500406	09SB500406-D	09SB500608	09SB510204	09SB510406	09SB510608	09SB520204
SOIL CLASSIFICATION	9	8	8		8	8	8	8	8
SAMPLE CODE	NORMAL	NORMAL	NORMAL	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	4 - 6	2 - 4	4 - 6	4 - 6	6 - 8	2 - 4	4 - 6	6 - 8	2 - 4
SAMPLE DATE	5/10/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/28/2005
TETRACHLOROETHENE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
TOLUENE		1.04 U	0.955 UJ	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
TOTAL XYLENES		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
TRANS-1,2-DICHLOROETHENE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
TRANS-1,3-DICHLOROPROPENE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
TRANS-1,4-DICHLORO-2-BUTENE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
TRICHLOROETHENE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
TRICHLOROFLUOROMETHANE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
VINYL ACETATE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
VINYL CHLORIDE		1.04 U	0.955 U	0.9 U	0.917 U	1.08 U	1.26 U	1.04 U	1.04 U
Pesticides/PCBs (ug/kg)									
4,4'-DDD	1.59 U	1.57 U	1.55 U	1.56 UJ	1.54 U	1.67 U	1.76 U	1.66 U	1.65 U
4,4'-DDE	1.59 U	1.57 U	1.55 U	1.6 J	1.54 U	1.67 U	1.76 U	1.66 U	1.65 U
4,4'-DDT	1.59 U	1.57 U	1.55 U	1.7 J	1.54 U	1.67 U	1.76 U	1.66 U	1.65 U
ALDRIN	0.765 U	0.758 U	0.745 U	0.749 U	0.739 U	0.803 U	0.85 U	0.798 U	0.796 U
ALPHA-BHC	0.765 U	0.758 U	0.745 U	0.749 UJ	0.739 U	0.803 U	0.85 UJ	0.798 U	0.796 U
ALPHA-CHLORDANE	0.765 U	0.758 U	0.745 U	0.749 U	0.739 U	0.803 U	0.85 U	0.798 U	0.796 U
AROCLOR-1016	10.6 U	10.5 U	10.3 U	10.4 U	10.2 U	11.1 U	11.8 U	11 U	11 U
AROCLOR-1221	10.6 U	10.5 U	10.3 U	10.4 U	10.2 U	11.1 U	11.8 U	11 U	11 U
AROCLOR-1232	10.6 U	10.5 U	10.3 U	10.4 U	10.2 U	11.1 U	11.8 U	11 U	11 U
AROCLOR-1242	10.6 U	10.5 U	10.3 U	10.4 U	10.2 U	11.1 U	11.8 U	11 U	11 U
AROCLOR-1248	43	10.5 U	10.3 U	10.4 U	10.2 U	11.1 U	11.8 U	11 U	11 U
AROCLOR-1254	10.6 U	10.5 U	10.3 U	10.4 U	10.2 U	11.1 U	11.8 U	11 U	11 U
AROCLOR-1260	10.6 U	10.5 U	17 J	66 J	21	11.1 U	36	11 U	11 U
BETA-BHC	0.765 U	0.758 U	0.745 U	0.749 U	0.739 U	0.803 U	0.85 U	0.798 U	0.796 U
DELTA-BHC	0.765 U	0.758 UJ	0.745 UJ	0.749 UJ	0.739 UJ	0.803 UJ	0.85 UJ	0.798 UJ	0.796 U
DIELDRIN	1.59 U	1.57 U	1.55 U	1.56 U	1.54 U	1.67 U	1.76 U	1.66 U	1.65 U
ENDOSULFAN I	0.765 U	0.758 U	0.745 U	0.749 U	0.739 U	0.803 U	0.85 U	0.798 U	0.796 U
ENDOSULFAN II	1.59 U	1.57 U	1.55 U	1.56 U	1.54 U	1.67 U	1.76 U	1.66 U	1.65 U
ENDOSULFAN SULFATE	1.59 U	1.57 U	1.55 U	1.56 UJ	1.54 U	1.67 U	1.76 U	1.66 U	1.65 U
ENDRIN	1.59 U	1.57 U	1.55 U	1.56 U	1.54 U	1.67 U	1.76 U	1.66 U	1.65 U
ENDRIN ALDEHYDE	1.59 U	1.57 U	1.55 U	1.56 U	1.54 U	1.67 U	1.76 U	1.66 U	1.65 U
ENDRIN KETONE	1.59 U	1.57 U	1.55 U	1.56 U	1.54 U	1.67 U	1.76 U	1.66 U	1.65 U
GAMMA-BHC (LINDANE)	0.765 U	0.758 U	0.745 U	0.749 UJ	0.739 U	0.803 U	0.85 U	0.798 U	0.796 U
GAMMA-CHLORDANE	0.765 U	0.758 U	0.745 U	0.749 U	0.739 U	0.803 U	0.85 U	0.798 U	0.796 U
HEPTACHLOR	0.765 U	0.758 U	0.745 U	0.749 U	0.739 U	0.803 U	0.85 U	0.798 U	0.796 U
HEPTACHLOR EPOXIDE	0.765 U	0.758 U	0.745 U	0.749 U	0.739 U	0.803 U	0.85 U	0.798 U	0.796 U
METHOXYCHLOR	7.65 U	7.58 U	7.45 U	7.49 U	7.39 U	8.03 U	8.5 U	7.98 U	7.96 U
TOTAL AROCLOR	43	0 U	17		21	0 U	36	0 U	0 U
TOXAPHENE	20 U	99.1 U	97.5 U	97.9 U	96.7 U	105 U	111 U	104 U	104 U
Petroleum Hydrocarbons (mg/kg)									
DIESEL RANGE ORGANICS		2.91 U	2.87 U	2.88 U	2.84 U	3.09 U	3.27 U	3.07 U	3.06 U
GASOLINE RANGE ORGANICS		2.91 U	2.87 U	2.88 U	2.84 U	3.09 U	3.27 U	3.07 U	3.06 U

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - FORMER FIRE TRAINING AREA
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	02	03	03	03	03	03	03	03	03
AOC	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING
LOCATION	09SB035	09SB050	09SB050	09SB050	09SB050	09SB051	09SB051	09SB051	09SB052
SAMPLE NUMBER	09SB350406	09SB500204	09SB500406	09SB500406-D	09SB500608	09SB510204	09SB510406	09SB510608	09SB520204
SOIL CLASSIFICATION	9	8	8		8	8	8	8	8
SAMPLE CODE	NORMAL	NORMAL	NORMAL	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	4 - 6	2 - 4	4 - 6	4 - 6	6 - 8	2 - 4	4 - 6	6 - 8	2 - 4
SAMPLE DATE	5/10/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/28/2005
OIL & GREASE - HEM		233 U	229 U	230 U	228 U	247 U	261 U	245 U	245 U
OIL RANGE ORGANICS (C24-C40)		11.7 U	11.5 U	11.5 U	11.4 U	12.4 U	13.1 U	12.3 U	12.2 U

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - FORMER FIRE TRAINING AREA
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03	03	03	03	03	03
AOC	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING
LOCATION	09SB052	09SB052	09SB053	09SB053	09SB053	09SB054	09SB054	09SB054	09SB054
SAMPLE NUMBER	09SB520406	09SB520709	09SB530204	09SB530406	09SB530608	09SB540204	09SB540204-D	09SB540406	09SB540607
SOIL CLASSIFICATION	8	8	8	8	8	8		8	8
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	DUP	NORMAL	NORMAL
DEPTH RANGE (feet)	4 - 6	7 - 9	2 - 4	4 - 6	6 - 8	2 - 4	2 - 4	4 - 6	6 - 7
SAMPLE DATE	9/28/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005
Volatile Organics (ug/kg)									
1,1,1,2-TETRACHLOROETHANE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
1,1,1-TRICHLOROETHANE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
1,1,2,2-TETRACHLOROETHANE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
1,1,2-TRICHLOROETHANE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
1,1-DICHLOROETHANE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
1,1-DICHLOROETHENE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
1,2,3-TRICHLOROPROPANE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
1,2-DIBROMO-3-CHLOROPROPANE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
1,2-DIBROMOETHANE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
1,2-DICHLOROETHANE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
1,2-DICHLOROPROPANE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
2-BUTANONE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
2-HEXANONE	0.995 U	0.942 U	0.877 U	1 J	1.03 J	1 J	0.941 U	1 J	2 J
3-CHLOROPROPENE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
4-METHYL-2-PENTANONE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	1 J
ACETONE	5 BU	5 BU	4 BU	7 BU	6 BU	6 BU	4 BU	6 BU	14 BU
ACROLEIN	0.995 UR	0.942 UR	0.877 UR	0.962 UR	1.03 UR	0.974 UR	0.941 UR	0.967 UR	0.983 UR
ACRYLONITRILE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
BENZENE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
BROMODICHLOROMETHANE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
BROMOFORM	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
BROMOMETHANE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
CARBON DISULFIDE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
CARBON TETRACHLORIDE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
CHLOROBENZENE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
CHLORODIBROMOMETHANE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
CHLOROETHANE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
CHLOROFORM	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
CHLOROMETHANE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
CHLOROPRENE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
CIS-1,2-DICHLOROETHENE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
CIS-1,3-DICHLOROPROPENE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
DIBROMOMETHANE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
DICHLORODIFLUOROMETHANE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
ETHYL METHACRYLATE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
ETHYLBENZENE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
METHACRYLONITRILE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
METHYL IODIDE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
METHYL METHACRYLATE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
METHYL TERT-BUTYL ETHER	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
METHYLENE CHLORIDE	0.995 UJ	0.942 UJ	0.877 UJ	0.962 UJ	1.03 UJ	0.974 UJ	0.941 UJ	0.967 UJ	0.983 UJ
STYRENE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - FORMER FIRE TRAINING AREA
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03	03	03	03	03	03
AOC	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING
LOCATION	09SB052	09SB052	09SB053	09SB053	09SB053	09SB054	09SB054	09SB054	09SB054
SAMPLE NUMBER	09SB520406	09SB520709	09SB530204	09SB530406	09SB530608	09SB540204	09SB540204-D	09SB540406	09SB540607
SOIL CLASSIFICATION	8	8	8	8	8	8		8	8
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	DUP	NORMAL	NORMAL
DEPTH RANGE (feet)	4 - 6	7 - 9	2 - 4	4 - 6	6 - 8	2 - 4	2 - 4	4 - 6	6 - 7
SAMPLE DATE	9/28/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005
TETRACHLOROETHENE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
TOLUENE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
TOTAL XYLENES	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
TRANS-1,2-DICHLOROETHENE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
TRANS-1,3-DICHLOROPROPENE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
TRANS-1,4-DICHLORO-2-BUTENE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
TRICHLOROETHENE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
TRICHLOROFLUOROMETHANE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
VINYL ACETATE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
VINYL CHLORIDE	0.995 U	0.942 U	0.877 U	0.962 U	1.03 U	0.974 U	0.941 U	0.967 U	0.983 U
Pesticides/PCBs (ug/kg)									
4,4'-DDD	1.59 U	1.58 U	1.56 U	1.58 U	1.58 U	1.58 U	1.6 U	1.59 U	1.54 U
4,4'-DDE	1.59 U	1.58 U	1.56 U	1.58 U	1.58 U	1.58 U	1.6 U	1.59 U	1.54 U
4,4'-DDT	1.59 U	1.58 U	1.56 U	1.58 U	1.58 U	1.58 U	1.6 U	1.59 U	1.54 U
ALDRIN	0.764 U	0.759 U	0.752 U	0.763 U	0.761 U	0.76 U	0.77 U	0.767 U	0.741 U
ALPHA-BHC	0.764 U	0.759 U	0.752 U	0.763 UJ	0.761 UJ	0.76 UJ	0.77 U	0.767 UJ	0.741 U
ALPHA-CHLORDANE	0.764 U	0.759 U	0.752 U	0.763 U	0.761 U	0.76 U	0.77 U	0.767 U	0.741 U
AROCLOR-1016	10.6 U	10.5 U	10.4 U	10.6 U	10.5 U	10.5 U	10.7 U	10.6 U	10.3 U
AROCLOR-1221	10.6 U	10.5 U	10.4 U	10.6 U	10.5 U	10.5 U	10.7 U	10.6 U	10.3 U
AROCLOR-1232	10.6 U	10.5 U	10.4 U	10.6 U	10.5 U	10.5 U	10.7 U	10.6 U	1000
AROCLOR-1242	10.6 U	10.5 U	10.4 U	10.6 U	10.5 U	10.5 U	10.7 U	10.6 U	10.3 U
AROCLOR-1248	24	10.5 U	10.4 U	10.6 U	10.5 U	10.5 U	10.7 U	10.6 U	10.3 U
AROCLOR-1254	10.6 U	10.5 U	10.4 U	10.6 U	10.5 U	10.5 U	10.7 U	10.6 U	10.3 U
AROCLOR-1260	10.6 U	10.5 U	10.4 U	10.6 U	10.5 U	10.5 U	10.7 U	10.6 U	10.3 U
BETA-BHC	0.764 U	0.759 U	0.752 U	0.763 U	0.761 U	0.76 U	0.77 U	0.767 U	0.741 U
DELTA-BHC	0.764 U	0.759 U	0.752 U	0.763 UJ	0.761 UJ	0.76 UJ	0.77 U	0.767 UJ	0.741 U
DIELDRIN	1.59 U	1.58 U	1.56 U	1.58 U	1.58 U	1.58 U	1.6 U	1.59 U	1.54 U
ENDOSULFAN I	0.764 U	0.759 U	0.752 U	0.763 U	0.761 U	0.76 U	0.77 U	0.767 U	0.741 U
ENDOSULFAN II	1.59 U	1.58 U	1.56 U	1.58 U	1.58 U	1.58 U	1.6 U	1.59 U	1.54 U
ENDOSULFAN SULFATE	1.59 U	1.58 U	1.56 U	1.58 U	1.58 U	1.58 U	1.6 U	1.59 U	1.54 U
ENDRIN	1.59 U	1.58 U	1.56 U	1.58 U	1.58 U	1.58 U	1.6 U	1.59 U	1.54 U
ENDRIN ALDEHYDE	1.59 U	1.58 U	1.56 U	1.58 U	1.58 U	1.58 U	1.6 U	1.59 U	1.54 U
ENDRIN KETONE	1.59 U	1.58 U	1.56 U	1.58 U	1.58 U	1.58 U	1.6 U	1.59 U	1.54 U
GAMMA-BHC (LINDANE)	0.764 U	0.759 U	0.752 U	0.763 UJ	0.761 UJ	0.76 UJ	0.77 U	0.767 UJ	0.741 U
GAMMA-CHLORDANE	0.764 U	0.759 U	0.752 U	0.763 U	0.761 U	0.76 U	0.77 U	0.767 U	0.741 U
HEPTACHLOR	0.764 U	0.759 U	0.752 U	0.763 U	0.761 U	0.76 U	0.77 U	0.767 U	0.741 U
HEPTACHLOR EPOXIDE	0.764 U	0.759 U	0.752 U	0.763 U	0.761 U	0.76 U	0.77 U	0.767 U	0.741 U
METHOXYCHLOR	7.64 U	7.59 U	7.52 U	7.63 U	7.61 U	7.6 U	7.7 U	7.67 U	7.41 U
TOTAL AROCLOR	24	0 U	0 U	0 U	0 U	0 U		0 U	1000
TOXAPHENE	99.9 U	99.3 U	98.4 U	99.8 U	99.5 U	99.4 U	101 U	100 U	96.9 U
Petroleum Hydrocarbons (mg/kg)									
DIESEL RANGE ORGANICS	2.94 U	2.92 U	2.89 U	2.93 U	2.93 U	2.92 U	2.96 U	2.95 U	140
GASOLINE RANGE ORGANICS	2.94 U	2.92 U	2.89 U	2.93 U	2.93 U	2.92 U	2.96 U	2.95 U	12

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - FORMER FIRE TRAINING AREA
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03	03	03	03	03	03
AOC	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING
LOCATION	09SB052	09SB052	09SB053	09SB053	09SB053	09SB054	09SB054	09SB054	09SB054
SAMPLE NUMBER	09SB520406	09SB520709	09SB530204	09SB530406	09SB530608	09SB540204	09SB540204-D	09SB540406	09SB540607
SOIL CLASSIFICATION	8	8	8	8	8	8		8	8
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	DUP	NORMAL	NORMAL
DEPTH RANGE (feet)	4 - 6	7 - 9	2 - 4	4 - 6	6 - 8	2 - 4	2 - 4	4 - 6	6 - 7
SAMPLE DATE	9/28/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005	9/28/2005
OIL & GREASE - HEM	670	570	231 U	235 U	234 U	234 U	237 U	236 U	770
OIL RANGE ORGANICS (C24-C40)	11.8 U	11.7 U	11.6 U	11.7 U	11.7 U	11.7 U	11.8 U	11.8 U	62

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - FORMER FIRE TRAINING AREA
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03	03	03	03	03	03
AOC	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING
LOCATION	09SB055	09SB055	09SB055	09SB056	09SB056	09SB056	09SB057	09SB057	09SB057
SAMPLE NUMBER	09SB550204	09SB550406	09SB550608	09SB560204	09SB560406	09SB560607	09SB570204	09SB570406	09SB570608
SOIL CLASSIFICATION	8	8	8	8	8	9	8	8	8
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	2 - 4	4 - 6	6 - 8	2 - 4	4 - 6	6 - 7	2 - 4	4 - 6	6 - 8
SAMPLE DATE	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005
Volatile Organics (ug/kg)									
1,1,1,2-TETRACHLOROETHANE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
1,1,1-TRICHLOROETHANE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
1,1,2,2-TETRACHLOROETHANE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
1,1,2-TRICHLOROETHANE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
1,1-DICHLOROETHANE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
1,1-DICHLOROETHENE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
1,2,3-TRICHLOROPROPANE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
1,2-DIBROMO-3-CHLOROPROPANE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
1,2-DIBROMOETHANE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
1,2-DICHLOROETHANE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
1,2-DICHLOROPROPANE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
2-BUTANONE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
2-HEXANONE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	1 J	2 J
3-CHLOROPROPENE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
4-METHYL-2-PENTANONE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
ACETONE	0.886 U	2 J	2 J	2 J	0.885 UR	1.01 UR	6 J	23 J	2 J
ACROLEIN	0.886 UR	1.07 UR	0.961 UR	0.98 UR	0.885 UR	1.01 UR	0.946 UR	0.981 UR	1.04 UR
ACRYLONITRILE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
BENZENE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
BROMODICHLOROMETHANE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
BROMOFORM	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
BROMOMETHANE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
CARBON DISULFIDE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
CARBON TETRACHLORIDE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
CHLOROBENZENE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
CHLORODIBROMOMETHANE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
CHLOROETHANE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
CHLOROFORM	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
CHLOROMETHANE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
CHLOROPRENE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
CIS-1,2-DICHLOROETHENE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
CIS-1,3-DICHLOROPROPENE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
DIBROMOMETHANE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
DICHLORODIFLUOROMETHANE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
ETHYL METHACRYLATE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
ETHYLBENZENE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
METHACRYLONITRILE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
METHYL IODIDE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
METHYL METHACRYLATE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
METHYL TERT-BUTYL ETHER	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
METHYLENE CHLORIDE	0.886 UJ	1.07 UJ	0.961 UJ	0.98 UJ	0.885 UJ	1.01 UJ	0.946 UJ	0.981 UJ	1.04 UJ
STYRENE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - FORMER FIRE TRAINING AREA
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03	03	03	03	03	03
AOC	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING
LOCATION	09SB055	09SB055	09SB055	09SB056	09SB056	09SB056	09SB057	09SB057	09SB057
SAMPLE NUMBER	09SB550204	09SB550406	09SB550608	09SB560204	09SB560406	09SB560607	09SB570204	09SB570406	09SB570608
SOIL CLASSIFICATION	8	8	8	8	8	9	8	8	8
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	2 - 4	4 - 6	6 - 8	2 - 4	4 - 6	6 - 7	2 - 4	4 - 6	6 - 8
SAMPLE DATE	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005
TETRACHLOROETHENE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
TOLUENE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
TOTAL XYLENES	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
TRANS-1,2-DICHLOROETHENE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
TRANS-1,3-DICHLOROPROPENE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
TRANS-1,4-DICHLORO-2-BUTENE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
TRICHLOROETHENE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
TRICHLOROFLUOROMETHANE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
VINYL ACETATE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
VINYL CHLORIDE	0.886 U	1.07 U	0.961 U	0.98 U	0.885 U	1.01 U	0.946 U	0.981 U	1.04 U
Pesticides/PCBs (ug/kg)									
4,4'-DDD	1.58 U	1.7 UJ	1.53 UJ	1.61 UJ	1.55 UJ	1.6 UJ	1.56 UJ	1.59 UJ	1.64 UJ
4,4'-DDE	1.58 U	1.7 UJ	1.53 UJ	1.61 UJ	1.55 UJ	1.6 UJ	1.56 UJ	1.59 UJ	1.64 UJ
4,4'-DDT	1.58 U	1.7 U	1.53 U	1.61 U	1.55 U	1.6 U	1.56 U	1.59 U	1.64 U
ALDRIN	0.759 U	0.821 UJ	0.738 UJ	0.777 UJ	0.748 UJ	0.772 UJ	0.75 UJ	0.766 UJ	0.788 UJ
ALPHA-BHC	0.759 U	0.821 UJ	0.738 UJ	0.777 UJ	0.748 UJ	0.772 UJ	0.75 UJ	0.766 UJ	0.788 UJ
ALPHA-CHLORDANE	0.759 U	0.821 U	0.738 U	0.777 U	0.748 U	0.772 U	0.75 U	0.766 U	0.788 U
AROCLOR-1016	10.5 U	11.4 UJ	10.2 U	10.8 U	10.4 U	23	10.4 U	900 J	10.9 U
AROCLOR-1221	10.5 U	11.4 U	10.2 U	10.8 U	10.4 U	10.7 U	10.4 U	10.6 U	10.9 U
AROCLOR-1232	10.5 U	11.4 U	10.2 U	10.8 U	10.4 U	10.7 U	10.4 U	10.6 U	10.9 U
AROCLOR-1242	10.5 U	11.4 U	10.2 U	10.8 U	10.4 U	10.7 U	10.4 U	10.6 U	10.9 U
AROCLOR-1248	10.5 U	11.4 U	10.2 U	10.8 U	10.4 U	10.7 U	10.4 U	10.6 U	10.9 U
AROCLOR-1254	10.5 U	11.4 U	10.2 U	10.8 U	10.4 U	10.7 U	10.4 U	10.6 U	10.9 U
AROCLOR-1260	16 J	11.4 U	44	84	10.4 U	10.7 U	22	10.6 U	31
BETA-BHC	0.759 U	0.821 U	0.738 U	0.777 U	0.748 U	0.772 U	0.75 U	0.766 U	0.788 U
DELTA-BHC	0.759 UJ	0.821 UJ	0.738 UJ	0.777 UJ	0.748 UJ	0.772 UJ	0.75 UJ	0.766 UJ	0.788 UJ
DIELDRIN	1.58 U	1.7 U	1.53 U	1.61 U	1.55 U	1.6 U	1.56 U	1.59 U	1.64 U
ENDOSULFAN I	0.759 U	0.821 U	0.738 U	0.777 U	0.748 U	0.772 U	0.75 U	0.766 U	0.788 U
ENDOSULFAN II	1.58 U	1.7 U	1.53 U	1.61 U	1.55 U	1.6 U	1.56 U	1.59 U	1.64 U
ENDOSULFAN SULFATE	1.58 U	1.7 UJ	1.53 UJ	1.61 UJ	1.55 UJ	1.6 UJ	1.56 UJ	1.59 UJ	1.64 UJ
ENDRIN	1.58 U	1.7 U	1.53 U	1.61 U	1.55 U	1.6 U	1.56 U	1.59 U	1.64 U
ENDRIN ALDEHYDE	1.58 U	1.7 U	1.53 U	1.61 U	1.55 U	1.6 U	1.56 U	1.59 U	1.64 U
ENDRIN KETONE	1.58 U	1.7 UJ	1.53 UJ	1.61 UJ	1.55 UJ	1.6 UJ	1.56 UJ	1.59 UJ	1.64 UJ
GAMMA-BHC (LINDANE)	0.759 U	0.821 UJ	0.738 UJ	0.777 UJ	0.748 UJ	0.772 UJ	0.75 UJ	0.766 UJ	0.788 UJ
GAMMA-CHLORDANE	0.759 U	0.821 U	0.738 U	0.777 U	0.748 U	0.772 U	0.75 U	0.766 U	0.788 U
HEPTACHLOR	0.759 U	0.821 UJ	0.738 UJ	0.777 UJ	0.748 UJ	0.772 UJ	0.75 UJ	0.766 UJ	0.788 UJ
HEPTACHLOR EPOXIDE	0.759 U	0.821 U	0.738 U	0.777 U	0.748 U	0.772 U	0.75 U	0.766 U	0.788 U
METHOXYCHLOR	7.59 U	8.21 U	7.38 U	7.77 U	7.48 U	7.72 U	7.5 U	7.66 U	7.88 U
TOTAL AROCLOR	16	0 U	44	84	0 U	23	22	900	31
TOXAPHENE	99.3 U	107 U	96.5 U	102 U	97.8 U	101 U	98 U	100 U	103 U
Petroleum Hydrocarbons (mg/kg)									
DIESEL RANGE ORGANICS	2.92 U	3.16 U	2.84 U	2.99 U	2.88 U	2.97 U	2.88 U	260	3.03 U
GASOLINE RANGE ORGANICS	2.92 U	3.16 U	2.84 U	2.99 U	2.88 U	2.97 U	2.88 U	13.6	3.03 U

SUMMARY OF ANALYTICAL RESULTS
SUBSURFACE SOIL
SWMU 9 - FORMER FIRE TRAINING AREA
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03	03	03	03	03	03
AOC	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING
LOCATION	09SB055	09SB055	09SB055	09SB056	09SB056	09SB056	09SB057	09SB057	09SB057
SAMPLE NUMBER	09SB550204	09SB550406	09SB550608	09SB560204	09SB560406	09SB560607	09SB570204	09SB570406	09SB570608
SOIL CLASSIFICATION	8	8	8	8	8	9	8	8	8
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	2 - 4	4 - 6	6 - 8	2 - 4	4 - 6	6 - 7	2 - 4	4 - 6	6 - 8
SAMPLE DATE	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005	9/30/2005
OIL & GREASE - HEM	234 U	253 U	227 U	239 U	230 U	238 U	231 U	610	242 U
OIL RANGE ORGANICS (C24-C40)	11.7 U	12.6 U	11.4 U	11.9 U	11.5 U	11.9 U	11.5 U	180	12.1 U

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - FORMER FIRE TRAINING AREA
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	02	02	02	02	02	03	03	03	03
AOC	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING
LOCATION	09SB031/TW002	09SB032	09SB033	09SB034	09SB035	09SB050	09SB051	09SB052	09SB053
SAMPLE NUMBER	09SS310002	09SS320002	09SS330002	09SS340002	09SS350002	09SS500002	09SS510002	09SS520002	09SS530002
SOIL CLASSIFICATION	3	3	3	3	3	3	3	3	3
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005	9/30/2005	9/30/2005	9/28/2005	9/28/2005
Volatile Organics (ug/kg)									
1,1,1,2-TETRACHLOROETHANE						0.866 U	1.03 U	0.949 U	1.06 U
1,1,1-TRICHLOROETHANE						0.866 U	1.03 U	0.949 U	1.06 U
1,1,2,2-TETRACHLOROETHANE						0.866 U	1.03 U	0.949 U	1.06 U
1,1,2-TRICHLOROETHANE						0.866 U	1.03 U	0.949 U	1.06 U
1,1-DICHLOROETHANE						0.866 U	1.03 U	0.949 U	1.06 U
1,1-DICHLOROETHENE						0.866 U	1.03 U	0.949 U	1.06 U
1,2,3-TRICHLOROPROPANE						0.866 U	1.03 U	0.949 U	1.06 U
1,2-DIBROMO-3-CHLOROPROPANE						0.866 U	1.03 U	0.949 U	1.06 U
1,2-DIBROMOETHANE						0.866 U	1.03 U	0.949 U	1.06 U
1,2-DICHLOROETHANE						0.866 U	1.03 U	0.949 U	1.06 U
1,2-DICHLOROPROPANE						0.866 U	1.03 U	0.949 U	1.06 U
2-BUTANONE						0.866 U	1.03 U	0.949 U	2 J
2-HEXANONE						0.866 U	1.03 U	0.949 U	2 J
3-CHLOROPROPENE						0.866 U	1.03 U	0.949 U	1.06 U
4-METHYL-2-PENTANONE						0.866 U	1.03 U	0.949 U	1.06 J
ACETONE						0.866 U	1.03 UR	0.949 UR	8 J
ACROLEIN						0.866 UR	1.03 UR	0.949 UR	1.06 UR
ACRYLONITRILE						0.866 U	1.03 U	0.949 U	1.06 U
BENZENE						0.866 U	1.03 U	0.949 U	1.06 U
BROMODICHLOROMETHANE						0.866 U	1.03 U	0.949 U	1.06 U
BROMOFORM						0.866 U	1.03 U	0.949 U	1.06 U
BROMOMETHANE						0.866 U	1.03 U	0.949 U	1.06 U
CARBON DISULFIDE						0.866 U	1.03 U	0.949 U	1.06 U
CARBON TETRACHLORIDE						0.866 U	1.03 U	0.949 U	1.06 U
CHLOROBENZENE						0.866 U	1.03 U	0.949 U	1.06 U
CHLORODIBROMOMETHANE						0.866 U	1.03 U	0.949 U	1.06 U
CHLOROETHANE						0.866 U	1.03 U	0.949 U	1.06 U
CHLOROFORM						0.866 U	1.03 U	0.949 U	1.06 U
CHLOROMETHANE						0.866 U	1.03 U	0.949 U	1.06 U
CHLOROPRENE						0.866 U	1.03 U	0.949 U	1.06 U
CIS-1,2-DICHLOROETHENE						0.866 U	1.03 U	0.949 U	1.06 U
CIS-1,3-DICHLOROPROPENE						0.866 U	1.03 U	0.949 U	1.06 U
DIBROMOMETHANE						0.866 U	1.03 U	0.949 U	1.06 U
DICHLORODIFLUOROMETHANE						0.866 UJ	1.03 U	0.949 UJ	1.06 UJ
ETHYL METHACRYLATE						0.866 U	1.03 U	0.949 U	1.06 U
ETHYLBENZENE						0.866 U	1.03 U	0.949 U	1.06 U
METHACRYLONITRILE						0.866 U	1.03 U	0.949 U	1.06 U
METHYL IODIDE						0.866 U	1.03 U	0.949 U	1.06 U
METHYL METHACRYLATE						0.866 U	1.03 U	0.949 U	1.06 U
METHYL TERT-BUTYL ETHER						0.866 U	1.03 U	0.949 U	1.06 U

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - FORMER FIRE TRAINING AREA
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	02	02	02	02	02	03	03	03	03
AOC	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING
LOCATION	09SB031/TW002	09SB032	09SB033	09SB034	09SB035	09SB050	09SB051	09SB052	09SB053
SAMPLE NUMBER	09SS310002	09SS320002	09SS330002	09SS340002	09SS350002	09SS500002	09SS510002	09SS520002	09SS530002
SOIL CLASSIFICATION	3	3	3	3	3	3	3	3	3
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005	9/30/2005	9/30/2005	9/28/2005	9/28/2005
METHYLENE CHLORIDE						2 J	1.03 UJ	0.949 UJ	1.06 UJ
STYRENE						0.866 U	1.03 U	0.949 U	1.06 U
TETRACHLOROETHENE						0.866 U	1.03 U	0.949 U	1.06 U
TOLUENE						0.866 U	1.03 U	0.949 U	1.06 U
TOTAL XYLENES						0.866 U	1.03 U	0.949 U	1.06 U
TRANS-1,2-DICHLOROETHENE						0.866 U	1.03 U	0.949 U	1.06 U
TRANS-1,3-DICHLOROPROPENE						0.866 U	1.03 U	0.949 U	1.06 U
TRANS-1,4-DICHLORO-2-BUTENE						0.866 U	1.03 U	0.949 U	1.06 U
TRICHLOROETHENE						0.866 U	1.03 U	0.949 U	1.06 U
TRICHLOROFLUOROMETHANE						0.866 U	1.03 U	0.949 U	1.06 U
VINYL ACETATE						0.866 U	1.03 U	0.949 U	1.06 U
VINYL CHLORIDE						0.866 U	1.03 U	0.949 U	1.06 U
Pesticides/PCBs (ug/kg)									
4,4'-DDD	684 U	651 U	1.43 U	4116 U	1.57 U	1.7 J	2.4 J	1.61 U	1.63 U
4,4'-DDE	684 U	651 U	1.43 U	4116 U	1.57 U	44 J	13	3.4	1.63 U
4,4'-DDT	684 U	651 U	4.1	4116 U	1.57 U	8.9	19	2.2 J	1.63 U
ALDRIN	329 U	313 U	0.688 U	1982 U	0.756 U	0.743 UJ	0.792 U	0.777 U	0.787 U
ALPHA-BHC	329 U	313 U	0.688 U	1982 U	0.756 U	0.743 UJ	0.792 U	0.777 UJ	0.787 UJ
ALPHA-CHLORDANE	329 U	313 U	0.688 U	1982 U	0.756 U	0.743 U	0.792 U	0.777 U	0.787 U
AROCLOR-1016	4557 U	4337 U	9.52 U	27439 U	10.5 U	10.3 U	11 U	10.8 U	10.9 U
AROCLOR-1221	4557 U	4337 U	9.52 U	27439 U	10.5 U	10.3 U	11 U	10.8 U	10.9 U
AROCLOR-1232	4557 U	4337 U	9.52 U	27439 U	10.5 U	10.3 U	11 U	10.8 U	10.9 U
AROCLOR-1242	100000 J	47000	9.52 U	260000	10.5 U	10.3 U	11 U	10.8 U	10.9 U
AROCLOR-1248	4557 U	4337 U	9.52 U	27439 U	42 J	10.3 U	880	10.8 U	10.9 U
AROCLOR-1254	4557 U	4337 U	72 J	27439 U	10.5 U	10.3 U	11 U	10.8 U	10.9 U
AROCLOR-1260	4557 U	4337 U	9.52 U	27439 U	10.5 U	10.3 U	11 U	10.8 U	10.9 U
BETA-BHC	329 U	313 U	0.688 U	1982 U	0.756 U	0.743 U	0.792 U	0.777 U	0.787 U
DELTA-BHC	329 U	313 U	0.688 U	1982 U	0.756 U	0.743 UJ	0.792 U	0.777 UJ	0.787 UJ
DIELDRIN	684 U	651 U	1.43 U	4116 U	1.57 U	1.54 U	1.64 U	1.61 U	1.63 U
ENDOSULFAN I	329 U	313 U	0.688 U	1982 U	0.756 U	0.743 U	0.792 U	0.777 U	0.787 U
ENDOSULFAN II	684 U	651 U	1.43 U	4116 U	1.57 U	1.54 U	1.64 U	1.61 U	1.63 U
ENDOSULFAN SULFATE	684 U	651 U	1.43 U	4116 U	1.57 U	1.54 UJ	1.64 U	1.61 U	1.63 U
ENDRIN	684 U	651 U	1.43 U	4116 U	1.57 U	1.54 U	1.64 U	1.61 U	1.63 U
ENDRIN ALDEHYDE	684 U	651 U	1.43 U	4116 U	1.57 U	1.54 U	1.64 U	1.61 U	1.63 U
ENDRIN KETONE	684 U	651 U	1.43 U	4116 U	1.57 U	1.54 UJ	1.64 U	1.61 U	1.63 U
GAMMA-BHC (LINDANE)	329 U	313 U	0.688 U	1982 U	0.756 U	0.743 UJ	0.792 U	0.777 UJ	0.787 UJ
GAMMA-CHLORDANE	329 U	313 U	0.688 U	1982 U	0.756 U	0.743 U	0.792 U	0.777 U	0.787 U
HEPTACHLOR	329 U	313 U	0.688 U	1982 U	0.756 U	0.743 UJ	0.792 U	0.777 U	0.787 U
HEPTACHLOR EPOXIDE	329 U	313 U	0.688 U	1982 U	0.756 U	0.743 U	0.792 U	0.777 U	0.787 U
METHOXYCHLOR	3291 U	3133 U	6.88 U	19817 U	7.56 U	7.43 U	7.92 U	7.77 U	7.87 U
TOTAL AROCLOR	100000	47000	72	260000	42	0 U	880	0 U	0 U

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - FORMER FIRE TRAINING AREA
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	02	02	02	02	02	03	03	03	03
AOC	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING
LOCATION	09SB031/TW002	09SB032	09SB033	09SB034	09SB035	09SB050	09SB051	09SB052	09SB053
SAMPLE NUMBER	09SS310002	09SS320002	09SS330002	09SS340002	09SS350002	09SS500002	09SS510002	09SS520002	09SS530002
SOIL CLASSIFICATION	3	3	3	3	3	3	3	3	3
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	5/10/2005	5/10/2005	5/10/2005	5/10/2005	5/10/2005	9/30/2005	9/30/2005	9/28/2005	9/28/2005
TOXAPHENE	8608 U	8193 U	18 U	51829 U	19.8 U	97.1 U	104 U	102 U	103 U
Dioxins (ug/kg)									
1,2,3,4,6,7,8,9-OCDD						4.7	2.2 J	12	16
1,2,3,4,6,7,8,9-OCDF						0.063 U	0.073 U	1.1 U	0.33 U
1,2,3,4,6,7,8-HPCDD						0.085 U	0.077 U	0.76 U	0.26 U
1,2,3,4,6,7,8-HPCDF						0.028 U	0.046 U	0.71 U	0.2 U
1,2,3,4,7,8,9-HPCDF						0.027 U	0.032 U	0.45 U	0.17 U
1,2,3,4,7,8-HXCDD						0.026 U	0.033 U	0.12 U	0.14 U
1,2,3,4,7,8-HXCDF						0.015 U	0.02 U	0.69 U	0.21 U
1,2,3,6,7,8-HXCDD						0.025 U	0.035 U	0.13 U	0.21 U
1,2,3,6,7,8-HXCDF						0.014 U	0.019 U	0.64 U	0.2 U
1,2,3,7,8,9-HXCDD						0.022 U	0.031 U	0.11 U	0.19 U
1,2,3,7,8,9-HXCDF						0.018 U	0.02 U	0.22 U	0.2 U
1,2,3,7,8-PECDD						0.036 U	0.05 U	0.61 U	0.21 U
1,2,3,7,8-PECDF						0.019 U	0.024 U	0.42 U	0.21 U
2,3,4,6,7,8-HXCDF						0.016 U	0.024 U	0.62 U	0.21 U
2,3,4,7,8-PECDF						0.02 U	0.021 U	0.55 U	0.2 U
2,3,7,8-TCDD						0.023 U	0.026 U	0.27 U	0.08 U
2,3,7,8-TCDF						0.018 U	0.018 U	0.24 U	0.095 U
Petroleum Hydrocarbons (mg/kg)									
DIESEL RANGE ORGANICS						2.86 U	3.05 U	6.6	3.03 U
GASOLINE RANGE ORGANICS						2.86 U	3.05 U	2.99 U	3.03 U
OIL & GREASE - HEM						229 U	244 U	630	242 U
OIL RANGE ORGANICS (C24-C40)						11.4 U	12.2 U	28	12.1 U

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - FORMER FIRE TRAINING AREA
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03
AOC	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING
LOCATION	09SB054	09SB055	09SB056	09SB057
SAMPLE NUMBER	09SS540002	09SS550002	09SS560002	09SS570002
SOIL CLASSIFICATION	3	3	3	3
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	9/28/2005	9/30/2005	9/30/2005	9/30/2005
Volatile Organics (ug/kg)				
1,1,1,2-TETRACHLOROETHANE	1.02 U	0.969 U	1.08 U	1.05 U
1,1,1-TRICHLOROETHANE	1.02 U	0.969 U	1.08 U	1.05 U
1,1,2,2-TETRACHLOROETHANE	1.02 U	0.969 U	1.08 U	1.05 U
1,1,2-TRICHLOROETHANE	1.02 U	0.969 U	1.08 U	1.05 U
1,1-DICHLOROETHANE	1.02 U	0.969 U	1.08 U	1.05 U
1,1-DICHLOROETHENE	1.02 U	0.969 U	1.08 U	1.05 U
1,2,3-TRICHLOROPROPANE	1.02 U	0.969 U	1.08 U	1.05 U
1,2-DIBROMO-3-CHLOROPROPANE	1.02 U	0.969 U	1.08 U	1.05 U
1,2-DIBROMOETHANE	1.02 U	0.969 U	1.08 U	1.05 U
1,2-DICHLOROETHANE	1.02 U	0.969 U	1.08 U	1.05 U
1,2-DICHLOROPROPANE	1.02 U	0.969 U	1.08 U	1.05 U
2-BUTANONE	1.02 U	0.969 U	1.08 U	1.05 U
2-HEXANONE	1.02 U	0.969 U	1.08 U	1.05 J
3-CHLOROPROPENE	1.02 U	0.969 U	1.08 U	1.05 U
4-METHYL-2-PENTANONE	1.02 U	0.969 U	1.08 U	1.05 U
ACETONE	1.02 UR	0.969 UR	1.08 UR	3 J
ACROLEIN	1.02 UR	0.969 UR	1.08 UR	1.05 UR
ACRYLONITRILE	1.02 U	0.969 U	1.08 U	1.05 U
BENZENE	1.02 U	0.969 U	1.08 U	1.05 U
BROMODICHLOROMETHANE	1.02 U	0.969 U	1.08 U	1.05 U
BROMOFORM	1.02 U	0.969 U	1.08 U	1.05 U
BROMOMETHANE	1.02 U	0.969 U	1.08 U	1.05 U
CARBON DISULFIDE	1.02 U	0.969 U	1.08 U	1.05 U
CARBON TETRACHLORIDE	1.02 U	0.969 U	1.08 U	1.05 U
CHLOROBENZENE	1.02 U	0.969 U	1.08 U	1.05 U
CHLORODIBROMOMETHANE	1.02 U	0.969 U	1.08 U	1.05 U
CHLOROETHANE	1.02 U	0.969 U	1.08 U	1.05 U
CHLOROFORM	1.02 U	0.969 U	1.08 U	1.05 U
CHLOROMETHANE	1.02 U	0.969 U	1.08 U	1.05 U
CHLOROPRENE	1.02 U	0.969 U	1.08 U	1.05 U
CIS-1,2-DICHLOROETHENE	1.02 U	0.969 U	1.08 U	1.05 U
CIS-1,3-DICHLOROPROPENE	1.02 U	0.969 U	1.08 U	1.05 U
DIBROMOMETHANE	1.02 U	0.969 U	1.08 U	1.05 U
DICHLORODIFLUOROMETHANE	1.02 UJ	0.969 U	1.08 U	1.05 U
ETHYL METHACRYLATE	1.02 U	0.969 U	1.08 U	1.05 U
ETHYLBENZENE	1.02 U	0.969 U	1.08 U	1.05 U
METHACRYLONITRILE	1.02 U	0.969 U	1.08 U	1.05 U
METHYL IODIDE	1.02 U	0.969 U	1.08 U	1.05 U
METHYL METHACRYLATE	1.02 U	0.969 U	1.08 U	1.05 U
METHYL TERT-BUTYL ETHER	1.02 U	0.969 U	1.08 U	1.05 U

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - FORMER FIRE TRAINING AREA
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03
AOC	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING
LOCATION	09SB054	09SB055	09SB056	09SB057
SAMPLE NUMBER	09SS540002	09SS550002	09SS560002	09SS570002
SOIL CLASSIFICATION	3	3	3	3
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	9/28/2005	9/30/2005	9/30/2005	9/30/2005
METHYLENE CHLORIDE	1.02 UJ	0.969 UJ	1.08 UJ	1.05 UJ
STYRENE	1.02 U	0.969 U	1.08 U	1.05 U
TETRACHLOROETHENE	1.02 U	0.969 U	1.08 U	1.05 U
TOLUENE	1.02 U	0.969 U	1.08 U	1.05 U
TOTAL XYLENES	1.02 U	0.969 U	1.08 U	1.05 U
TRANS-1,2-DICHLOROETHENE	1.02 U	0.969 U	1.08 U	1.05 U
TRANS-1,3-DICHLOROPROPENE	1.02 U	0.969 U	1.08 U	1.05 U
TRANS-1,4-DICHLORO-2-BUTENE	1.02 U	0.969 U	1.08 U	1.05 U
TRICHLOROETHENE	1.02 U	0.969 U	1.08 U	1.05 U
TRICHLOROFLUOROMETHANE	1.02 U	0.969 U	1.08 U	1.05 U
VINYL ACETATE	1.02 U	0.969 U	1.08 U	1.05 U
VINYL CHLORIDE	1.02 U	0.969 U	1.08 U	1.05 U
Pesticides/PCBs (ug/kg)				
4,4'-DDD	1.62 U	1.65 UJ	1.63 UJ	1.67 UJ
4,4'-DDE	10	1.65 UJ	3.6 J	1.67 UJ
4,4'-DDT	6.2	1.65 U	12	1.67 U
ALDRIN	0.781 U	0.794 UJ	0.786 UJ	0.806 UJ
ALPHA-BHC	0.781 UJ	0.794 UJ	0.786 UJ	0.806 UJ
ALPHA-CHLORDANE	0.781 U	0.794 U	0.786 U	0.806 U
AROCLOR-1016	10.8 U	11 U	10.9 U	11.2 U
AROCLOR-1221	10.8 U	11 U	10.9 U	11.2 U
AROCLOR-1232	10.8 U	11 U	10.9 U	11.2 U
AROCLOR-1242	10.8 U	11 U	10.9 U	11.2 U
AROCLOR-1248	10.8 U	11 U	10.9 U	11.2 U
AROCLOR-1254	10.8 U	11 U	10.9 U	11.2 U
AROCLOR-1260	10.8 U	11 U	10.9 U	11.2 U
BETA-BHC	0.781 U	0.794 U	0.786 U	0.806 U
DELTA-BHC	0.781 UJ	0.794 UJ	0.786 UJ	0.806 UJ
DIELDRIN	1.62 U	1.65 U	1.63 U	1.67 U
ENDOSULFAN I	0.781 U	0.794 U	0.786 U	0.806 U
ENDOSULFAN II	1.62 U	1.65 U	1.63 U	1.67 U
ENDOSULFAN SULFATE	1.62 U	1.65 UJ	1.63 UJ	1.67 UJ
ENDRIN	1.62 U	1.65 U	1.63 U	1.67 U
ENDRIN ALDEHYDE	1.62 U	1.65 U	1.63 U	1.67 U
ENDRIN KETONE	1.62 U	1.65 UJ	1.63 UJ	1.67 UJ
GAMMA-BHC (LINDANE)	0.781 UJ	0.794 UJ	0.786 UJ	0.806 UJ
GAMMA-CHLORDANE	0.781 U	0.794 U	0.786 U	0.806 U
HEPTACHLOR	0.781 U	0.794 UJ	0.786 UJ	0.806 UJ
HEPTACHLOR EPOXIDE	0.781 U	0.794 U	0.786 U	0.806 U
METHOXYCHLOR	7.81 U	7.94 U	7.86 U	8.06 U
TOTAL AROCLOR	0 U	0 U	0 U	0 U

SUMMARY OF ANALYTICAL RESULTS
SURFACE SOIL
SWMU 9 - FORMER FIRE TRAINING AREA
NSWC CRANE
CRANE, INDIANA

SAMPLING ROUND	03	03	03	03
AOC	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING	FIRE TRAINING
LOCATION	09SB054	09SB055	09SB056	09SB057
SAMPLE NUMBER	09SS540002	09SS550002	09SS560002	09SS570002
SOIL CLASSIFICATION	3	3	3	3
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH RANGE (feet)	0 - 2	0 - 2	0 - 2	0 - 2
SAMPLE DATE	9/28/2005	9/30/2005	9/30/2005	9/30/2005
TOXAPHENE	102 U	104 U	103 U	105 U
Dioxins (ug/kg)				
1,2,3,4,6,7,8,9-OCDD	8.8	15	7.7	6.6
1,2,3,4,6,7,8,9-OCDF	0.11 U	0.06 U	0.11 U	0.081 U
1,2,3,4,6,7,8-HPCDD	0.15 U	0.15 U	0.27 U	0.11 U
1,2,3,4,6,7,8-HPCDF	0.057 U	0.02 U	0.045 U	0.04 U
1,2,3,4,7,8,9-HPCDF	0.046 U	0.026 U	0.044 U	0.046 U
1,2,3,4,7,8-HXCDD	0.056 U	0.023 U	0.058 U	0.052 U
1,2,3,4,7,8-HXCDF	0.03 U	0.012 U	0.038 U	0.028 U
1,2,3,6,7,8-HXCDD	0.063 U	0.029 U	0.062 U	0.053 U
1,2,3,6,7,8-HXCDF	0.026 U	0.011 U	0.035 U	0.026 U
1,2,3,7,8,9-HXCDD	0.053 U	0.018 U	0.054 U	0.049 U
1,2,3,7,8,9-HXCDF	0.043 U	0.016 U	0.057 U	0.027 U
1,2,3,7,8-PECDD	0.058 U	0.03 U	0.063 U	0.069 U
1,2,3,7,8-PECDF	0.063 U	0.01 U	0.048 U	0.031 U
2,3,4,6,7,8-HXCDF	0.036 U	0.011 U	0.052 U	0.022 U
2,3,4,7,8-PECDF	0.038 U	0.015 U	0.043 U	0.035 U
2,3,7,8-TCDD	0.042 U	0.019 U	0.049 U	0.03 U
2,3,7,8-TCDF	0.03 U	0.011 U	0.031 U	0.025 U
Petroleum Hydrocarbons (mg/kg)				
DIESEL RANGE ORGANICS	3 U	3.05 U	6.4	3.1 U
GASOLINE RANGE ORGANICS	3 U	3.05 U	3.02 U	3.1 U
OIL & GREASE - HEM	240 U	244 U	242 U	248 U
OIL RANGE ORGANICS (C24-C40)	12 U	12.2 U	12.1 U	12.4 U