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PRE-DEMOLITION INVESTIGATION NAVAL AVIATION DEPOT CHEVALIER FIELD NAS
PENSACOLA FL
6/1/1994
ECOLOGY AND ENVIRONMENT, INC.

PRE-DEMOLITION INVESTIGATION
NADEP/CHEVALIER FIELD
NAVAL AIR STATION PENSACOLA
PENSACOLA, FLORIDA

CONTRACT N62467-93-D-0663

June 1994

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TABLE OF CONTENTS

<u>Section</u>		<u>Page</u>
1	INTRODUCTION	1-1
2	INVESTIGATION METHODOLOGY	2-1
	2.1 PRE-FIELDWORK INSPECTION AND SCOPING MEETING	2-1
	2.2 CONCRETE CORE SAMPLING	2-1
	2.3 SHALLOW CONCRETE CORE/CHIP SAMPLING	2-2
	2.4 WIPE SAMPLING	2-3
	2.5 MISCELLANEOUS SAMPLES	2-3
	2.6 FIELD QUALITY CONTROL SAMPLES	2-4
	2.7 DECONTAMINATION PROCEDURES	2-4
	2.8 INVESTIGATION-DERIVED WASTE MANAGEMENT ...	2-4
3	RESULTS	3-1
	3.1 BUILDING 627	3-1
	3.2 BUILDING 630	3-2
	3.3 BUILDING 631	3-3
	3.4 BUILDING 3220	3-4
	3.5 BUILDING 606	3-5
	3.6 BUILDING 2662	3-6
	3.7 BUILDING 3450	3-7
	3.8 BUILDING 607	3-8
	3.9 BUILDING 3460	3-9
	3.10 BUILDING 3588	3-9
	3.11 BUILDING 3557	3-11

Table of Contents (Cont.)

<u>Section</u>		<u>Page</u>
	3.12 BUILDING 3380	3-13
	3.13 FIELD QC	3-13
4	CONCLUSIONS	4-1
5	REFERENCES	5-1
<u>Appendix</u>		<u>Page</u>
A	CHEVALIER FIELD ANALYTICAL DATA—APRIL 1994	A-1

LIST OF TABLES

<u>Table</u>		<u>Page</u>
2-1	Sample Summary—NADEP/Chevalier Field, NAS Pensacola	2-5
2-2	Sample Analytical Summary—NADEP/Chevalier Field, NAS Pensacola	2-8
3-1	Summary of Analytical Results, Building No. 627—NADEP/Chevalier Field Pre-Demolition Investigation, NAS Pensacola	3-15
3-2	Summary of Analytical Results, Building No. 630—NADEP/Chevalier Field Pre-Demolition Investigation, NAS Pensacola	3-17
3-3	Summary of Analytical Results, Building No. 631—NADEP/Chevalier Field Pre-Demolition Investigation, NAS Pensacola	3-18
3-4	Summary of Analytical Results, Building No. 3220—NADEP/Chevalier Field Pre-Demolition Investigation, NAS Pensacola	3-20
3-5	Summary of Analytical Results, Building No. 606—NADEP/Chevalier Field Pre-Demolition Investigation, NAS Pensacola	3-22
3-6	Summary of Analytical Results, Building No. 2662—NADEP/Chevalier Field Pre-Demolition Investigation, NAS Pensacola	3-25
3-7	Summary of Analytical Results, Building No. 3450—NADEP/Chevalier Field Pre-Demolition Investigation, NAS Pensacola	3-27
3-8	Summary of Analytical Results, Building No. 607—NADEP/Chevalier Field Pre-Demolition Investigation, NAS Pensacola	3-33
3-9	Summary of Analytical Results, Building No. 3460—NADEP/Chevalier Field Pre-Demolition Investigation, NAS Pensacola	3-34
3-10	Summary of Analytical Results, Building No. 3588—NADEP/Chevalier Field Pre-Demolition Investigation, NAS Pensacola	3-35
3-11	Summary of Analytical Results, Building No. 3557—NADEP/Chevalier Field Pre-Demolition Investigation, NAS Pensacola	3-40
3-12	Summary of Analytical Results, Building No. 3380—NADEP/Chevalier Field Pre-Demolition Investigation, NAS Pensacola	3-44

List of Tables (Cont.)

<u>Table</u>		<u>Page</u>
3-13	Summary of Field QC Sample Analytical Results—NADEP/Chevalier Field Pre-Demolition Investigation, NAS Pensacola	3-45

LIST OF ILLUSTRATIONS

<u>Figure</u>		<u>Page</u>
1-1	Location Map—NADEP/Chevalier Field, NAS Pensacola	1-3
1-2	Building Location Map—NADEP/Chevalier Field, NAS Pensacola	1-5
2-1	Sample Location Map, Buildings 3380, 2662, and 627—NADEP/Chevalier Field, NAS Pensacola	2-11
2-2	Sample Location Map, Building 630—NADEP/Chevalier Field, NAS Pensacola	2-12
2-3	Sample Location Map, Building 631—NADEP/Chevalier Field, NAS Pensacola	2-13
2-4	Sample Location Map, Building 3220—NADEP/Chevalier Field, NAS Pensacola	2-14
2-5	Sample Location Map, Building 606—NADEP/Chevalier Field, NAS Pensacola	2-15
2-6	Sample Location Map, Building 3450—NADEP/Chevalier Field, NAS Pensacola	2-16
2-7	Sample Location Map, Building 607—NADEP/Chevalier Field, NAS Pensacola	2-17
2-8	Sample Location Map, Building 3460—NADEP/Chevalier Field, NAS Pensacola	2-18
2-9	Sample Location Map, Building 3588—NADEP/Chevalier Field, NAS Pensacola	2-19
2-10	Sample Location Map, Building 3557—NADEP/Chevalier Field, NAS Pensacola	2-20

I. INTRODUCTION

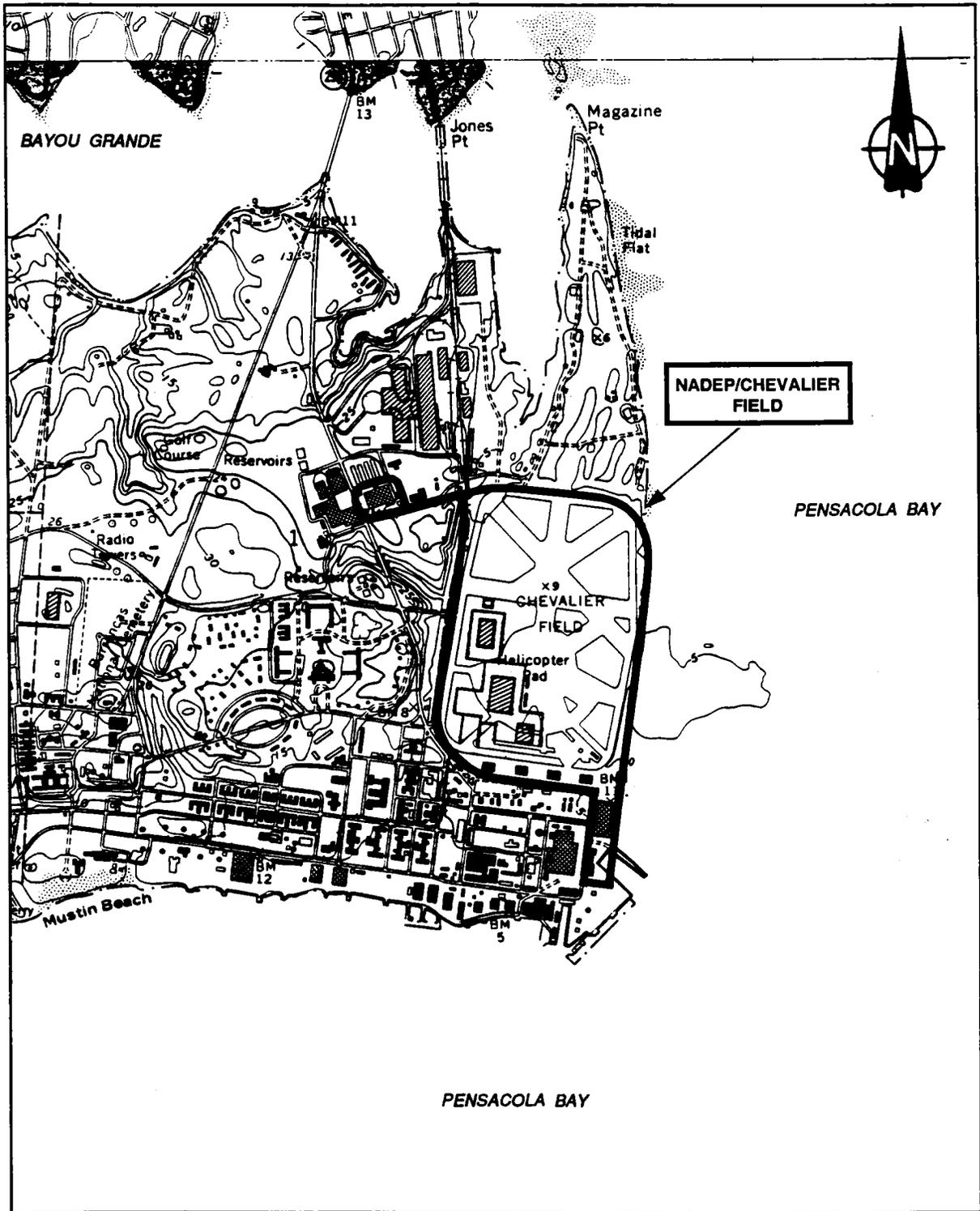
This report, prepared by Ecology and Environment, Inc. (E & E), for Southern Division (SouthDiv), U.S. Navy, Naval Engineering Command, under Contract No. N62467-93-D-0663, presents the findings of the pre-demolition investigation activities conducted at the Naval Aviation Depot (NADEP) buildings located in and around Chevalier Field, Naval Air Station (NAS) Pensacola, Escambia County, Florida.

The information presented in this report is based on information provided by the Navy and on data gathered during the fieldwork conducted by E & E in April 1994. NADEP personnel provided specific information regarding the current and previous activities and processes that were performed in the subject buildings and identified and documented specific areas in the buildings where potentially hazardous materials were used or stored. The sample locations were selected based on this information.

The pre-demolition investigation activities were conducted in accordance with E & E's 1992 General Health and Safety Plan (E & E 1992b) and Generic Quality Assurance Project Plan (GQAPP; E & E 1992a), which were previously prepared for and approved by SouthDiv. A Site-Specific Health and Safety Plan and a Sampling and Analysis Plan were also generated for this investigation.

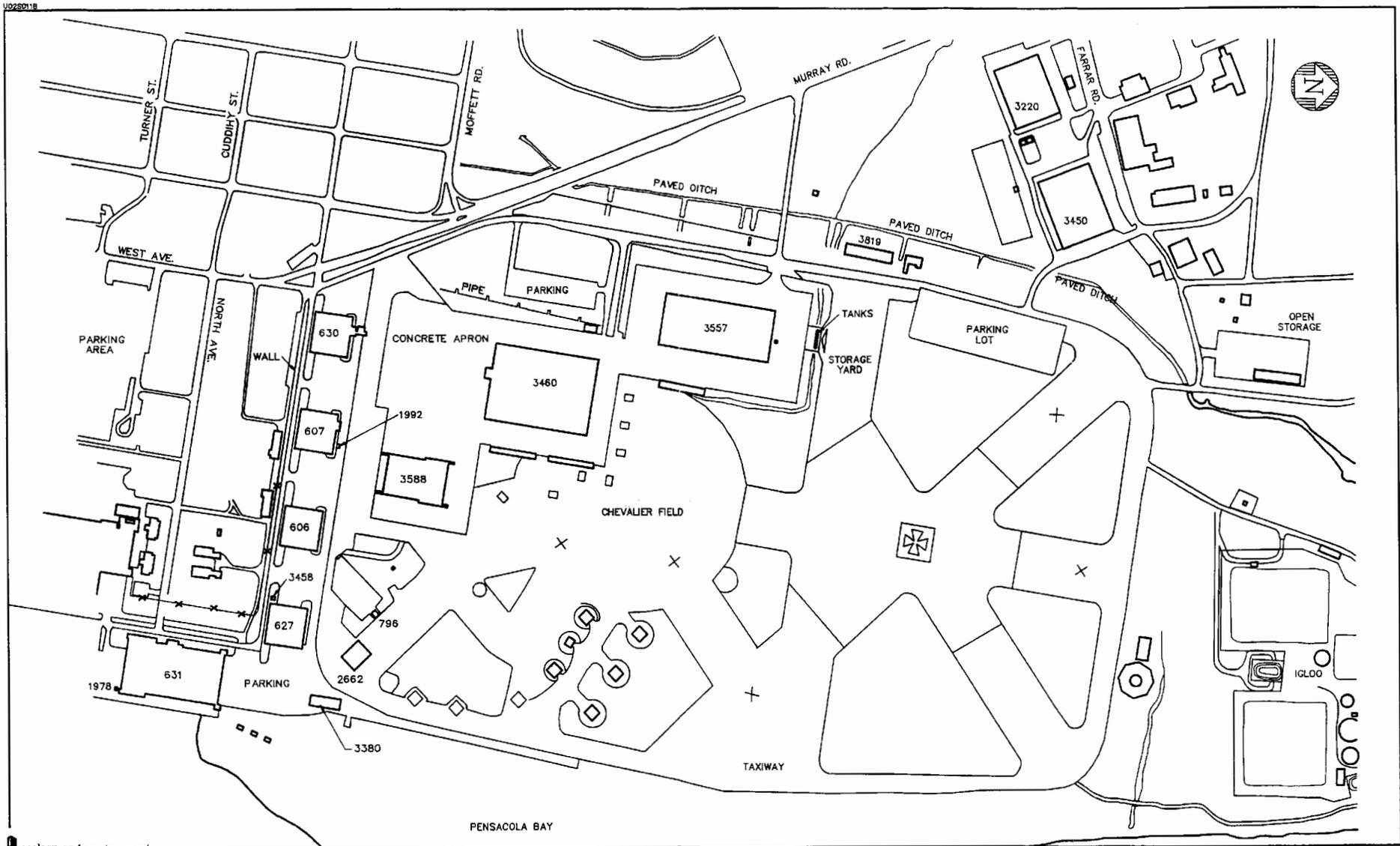
The NADEP/Chevalier Field buildings of interest, which are used for the refurbishing and testing of military helicopters, are generally located along the east central border of NAS Pensacola (see figures 1-1 and 1-2). This NADEP facility is currently scheduled for closure under the Base Realignment and Closure Act of 1993. Following closure of the NADEP facility, SouthDiv, Chief Naval Education Training (CNET), plans to construct a technical training complex at the former Chevalier Field location. As a result of this transition, 22 of the currently active NADEP buildings are scheduled for either demolition or major remodeling to accommodate the training complex.

The purpose of this pre-demolition investigation is to determine if debris generated during the demolition of these facilities would require decontamination or disposal as hazardous waste.



SOURCE: U.S.G.S. 7.5 Minute Series (Topographic) Quadrangle: Fort Barrancas, Fl. 1970 and West Pensacola, Fl. 1970, Photorevised 1987.

Figure 1-1
LOCATION MAP — NADEP/CHEVALIER FIELD - NAS PENSACOLA



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Figure 1-2 BUILDING LOCATION MAP
NADEP/CHEVALIER FIELD
NAS PENSACOLA

2. INVESTIGATION METHODOLOGY

2.1 PRE-FIELDWORK INSPECTION AND SCOPING MEETING

On February 24, 1994, a pre-fieldwork scoping meeting was conducted at NAS Pensacola. The meeting was attended by personnel representing SouthDiv, NAS Environmental Division, CNET, NADEP, Public Works Center, Greiner Inc. (Greiner), and E & E. During this meeting, environmental issues related to the planned demolition and remodeling of the NADEP buildings located in and around Chevalier Field were discussed and prospective areas of concern were identified.

From February 25 to March 1, 1994, project personnel from SouthDiv, CNET, NADEP, NAS Environmental Division, Greiner, and E & E performed a pre-fieldwork inspection of the subject buildings. During the inspection, the NADEP representative, who was familiar with past and present activities and processes in the NADEP buildings, identified areas that may be of concern, and the team determined the sample types and locations for this investigation which are illustrated on figures 2-1 through 2-10. In most cases, the sample locations selected are biased to provide a "worst case" scenario of the building debris. Table 2-1 presents the locations, types, analytical parameters, and sample numbers for all samples collected.

2.2 CONCRETE CORE SAMPLING

To meet the objectives of this investigation, 29 concrete core samples were collected in and around the subject buildings (see figures 2-1 through 2-3, 2-5, and 2-7 through 2-10) at locations selected by the team during the inspection. Of the 29 concrete core sample locations, the 23 apron sample locations were selected to provide both biased and random sample coverage. The other six locations were inside buildings where materials with

hazardous constituents were routinely used. These indoor sample locations were selected to provide a "worst case" representation of actual conditions.

At each sample location, a concrete core sample was collected for laboratory analysis using a drill with either a 2- or 3-inch diameter diamond core barrel. Samples collected from areas where a potential explosion hazard exists were collected using an intrinsically safe pneumatic drill. Following collection, in accordance with Section 7.3 of the GQAPP, the concrete core samples were wrapped in aluminum foil, placed in sealable plastic bags, and labeled for shipment to E & E's Analytical Services Center (ASC) in Buffalo, New York. The core barrel was decontaminated prior to use and between borings in accordance with Section 6.10 of the GQAPP.

The concrete core samples were analyzed using United States Environmental Protection Agency (EPA) Third Edition SW-846 methods. A summary of the analytical parameters of interest is provided in Table 2-2.

2.3 SHALLOW CONCRETE CORE/CHIP SAMPLING

Twenty-four concrete shallow core/chip samples were collected from April 5 through April 8, 1994, at locations selected by the team during the inspection (see Table 2-1 and figures 2-1 through 2-7, 2-9, and 2-10). The purpose of the shallow core samples was to determine the analytes present in the initial 2 inches of concrete. At selected locations, concrete core and shallow core samples were collected in pairs to help define the vertical distribution of analytes in the concrete. This information could be used to determine treatment and decontamination alternatives. At each location, a shallow core sample (approximately 2 inches deep) was collected for laboratory analysis.

The samples were generally collected using a 2-inch-diameter core barrel advanced to a depth of 2 inches. An intrinsically safe pneumatic saw was used to collect samples in areas where the potential for an explosion hazard existed. The saw was used to cut a grid approximately 1.5 inches deep into the concrete, and a chisel was used to remove the chip sample. The shallow core/chip samples were wrapped in aluminum foil, placed in a plastic bag, sealed, and labeled for shipment to E & E's ASC in accordance with Section 7.3 of the GQAPP. The shallow core/chip samples were analyzed for the parameters listed in Table 2-2 using the methods described in Section 2.2. The sampling equipment was decontaminated prior to use and between sample locations using the methods specified in Section 6.10 of the GQAPP.

2.4 WIPE SAMPLING

To identify and characterize surficial contamination inside the NADEP buildings, an E & E sampling team collected wipe samples from 17 preselected locations (see Table 2-1 and figures 2-1, 2-5, 2-6, 2-9, and 2-10). At each sample location, a separate wipe was performed for each group of parameters (e.g., metals, cyanide, volatiles, and semivolatiles). Wipe templates made of Teflon were used to ensure a uniform sample collection area. The samples were collected by wiping a 100 square centimeter area with a sterile gauze pad that had been saturated with the appropriate solvent for the parameter group. This solvent was a pesticide-grade reagent in which the contaminant of concern is most soluble (e.g., nitric acid for metals; sodium hydroxide for cyanide; methanol for volatiles; and hexane for semivolatiles). The pad was stroked firmly over the sample surface area (first vertically, then horizontally) to ensure complete coverage of the area, then transferred to the sample container. This procedure was repeated in an adjacent sample location for each of the four samples at each location. The members of the sampling team used a new pair of surgical gloves for each of the four wipes at each sample location. Wipe sampling was performed in accordance with the EPA Office of Solid Waste and Emergency Response directive which specifies wipe sampling procedures (EPA 1991). Between sample locations, the Teflon templates were decontaminated using the procedures described in Section 6.10 of the GQAPP. The wipe samples were analyzed by E & E's ASC for the parameters listed in Table 2-2. The samples were labeled and custody maintained in accordance with Section 7 of the GQAPP.

2.5 MISCELLANEOUS SAMPLES

In addition to the sampling described in the previous sections, a sample of soiled ceiling tile and a scrape sample of paint debris were also collected. The ceiling tile sample was collected from the central cleaning room in Building 3557 by physically breaking the tile into pieces small enough to fit into the sample container (see Figure 2-10). The scrape sample was collected from the grate overlying the paint sump in Building 3588 (see Figure 2-9). A stainless steel knife was used to remove the debris from the grate and place it in the sample container. This knife was decontaminated before and after use in accordance with Section 6.10 of the GQAPP. These samples were placed in sample containers and labeled for shipment to E & E's ASC. The ceiling tile and scrape samples were also analyzed by E & E's ASC for the parameters listed in Table 2-2.

2.6 FIELD QUALITY CONTROL SAMPLES

Field quality control (QC) samples were collected for all media sampled with the exception of the ceiling tile and scrape samples. Duplicate samples were collected using the same procedures and equipment as the original samples, then co-located with the original samples. Duplicate samples were collected at a frequency of one duplicate for each 10 samples of a particular medium. Equipment rinsate samples were collected during the core and shallow core sampling activities by rinsing the decontaminated core barrel assembly with deionized water and collecting this liquid for analysis. The rinsate samples were collected at a rate of one sample per medium (concrete) per sampling day. Trip blanks should have been prepared daily; however, because of field error, trip blanks were only prepared for two of the four days when volatile samples were shipped.

In addition, field blanks were collected for the wipe samples. The field blank samples were prepared in the same manner and at the same time as the actual samples; however, the gauze pads were not exposed to any surface. The field blanks were collected at a frequency of one blank per day. The field QC sample protocol is provided in Section 11.1 of the GQAPP, and the actual field QC samples are presented in Table 2-2.

2.7 DECONTAMINATION PROCEDURES

All equipment used during the field activities was decontaminated in accordance with Section 6.10 of the GQAPP.

2.8 INVESTIGATION-DERIVED WASTE MANAGEMENT

Potentially contaminated personal protective clothing, disposable materials, waste generated during decontamination activities, and any other investigation-derived materials were either decontaminated or neutralized, then double bagged and disposed of as general refuse.

Table 2-1

**SAMPLE SUMMARY
NADEP/CHEVALIER FIELD
NAS PENSACOLA**

Building No.	Sample Type and Quantity			Analytical Parameters	Description of Location (Sample Number)	
	Core	Shallow Core/ Chip ^a	Wipe			Other
627		1			A	Former paint area (SC04).
			1		A	Former paint exhaust vents (WS04).
630		1			A	Former paint area (SC01).
631		3			A	Paint area (SC11), wash area (SC06), and wing tank test area (SC07).
3220		4			A	Active paint area (SC19), former paint area (SC18), acid bath room (SC20), and winding area (SC08).
606		1			A	Former mixing room floor (SC03).
			2		A	Plastic Material Blasting area (WS11-floor, WS05-ceiling).
2662	1	1			A, B	Near drain, NE corner (CC27, SC10).
3450		6			A	First floor paint room (SC14, SC15); cement storage room (SC13); cleaning room (SC22); former paint area (SC21); and former parts cleaning area (SC23).
			7		A	Penetrant testing room (WS07-wall, WS08-floor, WS09-floor); cable shop (WS16-floor); bearing shop (WS15-floor); buffing room (WS10-floor); and final cleaning room (WS14-floor).
607		1			A, B	Lead acid battery storage area (SC02).
3460	No sampling - no hazardous materials used.					
18	No sampling - administrative building.					

Key at end of table.

Table 2-1

**SAMPLE SUMMARY
NADEP/CHEVALIER FIELD
NAS PENSACOLA**

Building No.	Sample Type and Quantity				Analytical Parameters	Description of Location (Sample Number)
	Core	Shallow Core/ Chip ^a	Wipe	Other		
52	No sampling - administrative building.					
3588	2	2			A, B	Bay sump (CC29, SC17) and central sump (CC28, SC16).
		1			A, B	Mixing room floor (SC12).
			1		A	Exhaust stack (WS06).
				1 ^b	A	Scrape of sump grate (SCS01).
3557	1	1			A, B	Solvent bay sump (CC24, SC24).
	1	1			A, B	Containment area under solvent bath (CC25, SC05).
			1		A	Solvent bay sump vent system (WS20).
			2		A	Cleaning room wall (WS12) and solvent bay wall (WS13).
			3		A	Cleaning room: ceiling (WS02), ductwork (WS01), and power room roof (WS03).
				1 ^c	A	Ceiling tile sample (CT01).
781	No sampling - storage only.					
796	No sampling - storage only.					
3616	No sampling - storage only.					
3617	No sampling - storage only.					
3632	No sampling - storage only.					

Key at end of table.

Table 2-1

**SAMPLE SUMMARY
NADEP/CHEVALIER FIELD
NAS PENSACOLA**

Building No.	Sample Type and Quantity				Analytical Parameters	Description of Location (Sample Number)
	Core	Shallow Core/ Chip ^a	Wipe	Other		
3685	No sampling - storage only.					
3380	1	1			A, B	Outside--contained storage area (CC26, SC09).
3677	No sampling - storage only.					
3691	No sampling - RCRA closure by PWC.					
Concrete Apron	23				B, C	Various locations (CC01 through CC23).

^aShallow core/chip sample to be collected from approximately 0 to 2 inches into the material.

^bScrape sample.

^cCeiling tile sample.

Key:

A = Includes priority pollutant metals (Be, Cd, Cr, Cu, Ni, Ag, Zn, Sb [EPA Method 6010]; Hg [EPA Method 7470]; Pb [EPA Method 7421]; As [EPA Method 7060]; Se [EPA Method 7740]; Tl [EPA Method 7841]; Cyanide [EPA Method 9010]); Volatile Organic Compounds (VOCs; EPA Method 8240); and Base/Neutral and Acid Extractable Organics (BNAs; EPA Method 8270).

B = Toxicity characteristic leaching procedure and analysis for Resource Conservation and Recovery Act (RCRA) metals, VOCs, and BNAs.

C = F-Listed Waste (F001, F002, F004, F005) suite.

EPA = United States Environmental Protection Agency.

NADEP = Naval Aviation Depot.

PWC = Public Works Center.

Source: Ecology and Environment, Inc., 1994.

Table 2-2
SAMPLE ANALYTICAL SUMMARY
NADEP/CHEVALIER FIELD, NAS PENSACOLA

				Field QC Samples				
Matrix	Analytical Parameters	EPA Analytical Method Numbers	Number of Samples	Duplicate	Rinsate	Trip Blank	Field Blank	Total Number Samples
Concrete Core	PP Metals & Total Cyanide	6010/7000/9010	6	1	4	0	0	11
	Volatiles	8240	6	1	4	2	0	13
	Semivolatiles	8270	6	1	4	0	0	11
	TCLP Extraction	1311	29	3	0	0	0	32
	Metals	6010/7470	29	3	0	0	0	32
	Volatiles	8240	29	3	0	0	0	32
	Semivolatiles	8270	29	3	0	0	0	32
	F-Listed Waste Suite	8240/8270	23	3	0	0	0	26
Shallow Core/ Concrete Chip	PP Metals & Total Cyanide	6010/7000/9010	25	3	0	0	0	28
	Volatiles	8240	25	3	0	0	0	28
	Semivolatiles	8270	25	3	0	0	0	28
	TCLP Extraction	1311	9	1	0	0	0	10
	Metals	6010/7470	9	1	0	0	0	10
	Volatiles	8240	9	1	0	0	0	10
	Semivolatiles	8270	9	1	0	0	0	10
Wipe	PP Metals & Total Cyanide	6010/7000/9010	16	2	0	0	3	21
	Volatiles	8240	16	2	0	0	3	21
	Semivolatiles	8270	16	2	0	0	3	21
Ceiling Tile/Scrape	PP Metals & Total Cyanide	6010/7000/9010	2	0	0	0	0	2
	Volatiles	8240	2	0	0	0	0	2
	Semivolatiles	8270	2	0	0	0	0	2

Key at end of table.

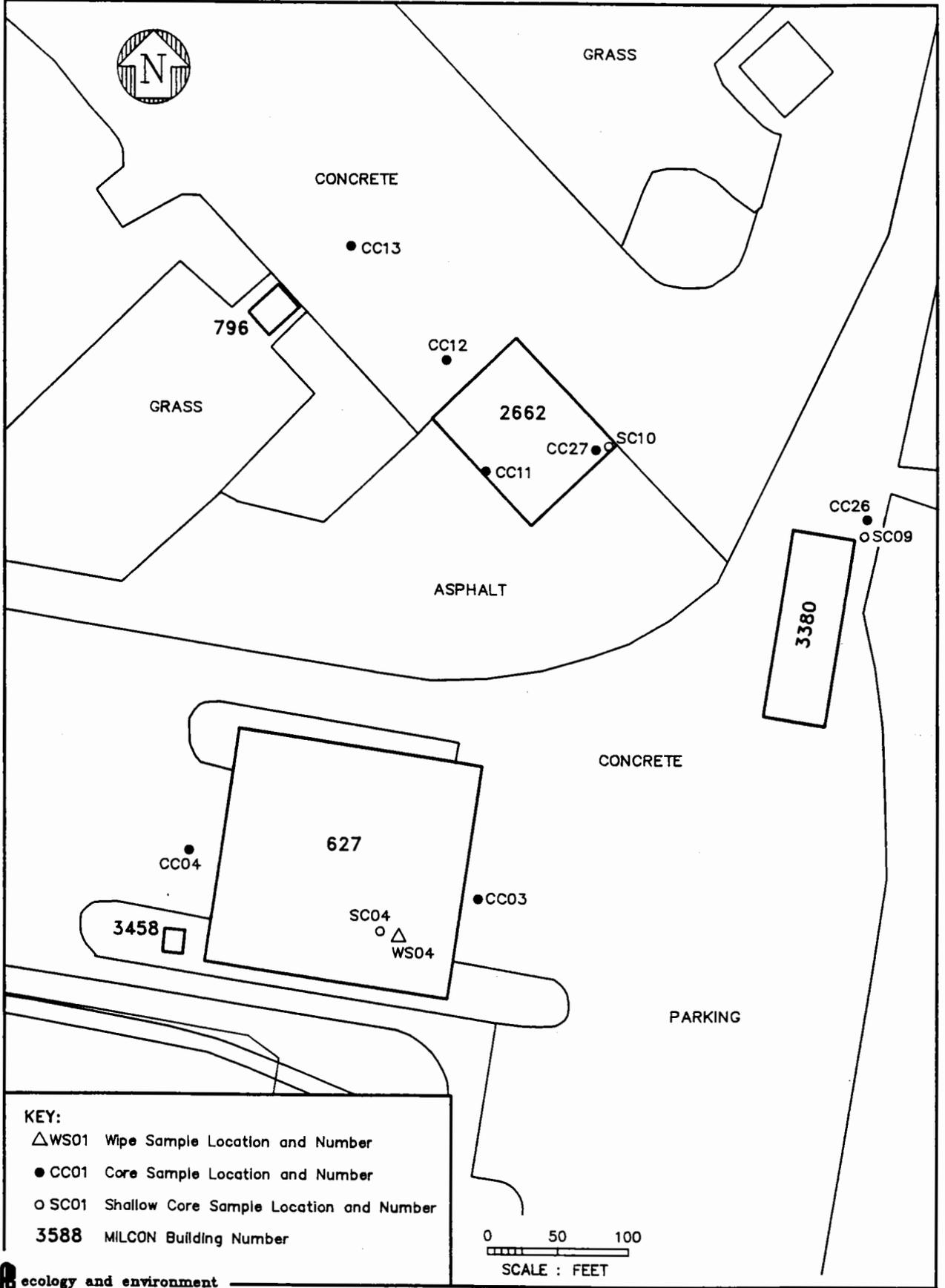
Table 2-2

**SAMPLE ANALYTICAL SUMMARY
NADEP/CHEVALIER FIELD, NAS PENSACOLA**

Key:

- EPA = United States Environmental Protection Agency.
- NADEP = Naval Aviation Depot.
- PP = Priority Pollutant (Be, Cd, Cr, Cu, Ni, Ag, Zn, Sb, Hg, Pb, As, Se, Tl).
- QC = Quality control.
- TCLP = Toxicity characteristic leaching procedure.

Source: Ecology and Environment, Inc., 1994.



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Figure 2-1
 SAMPLE LOCATION MAP
 BUILDINGS 3380, 2662, AND 627
 NADEP/CHEVALIER FIELD, NAS PENSACOLA

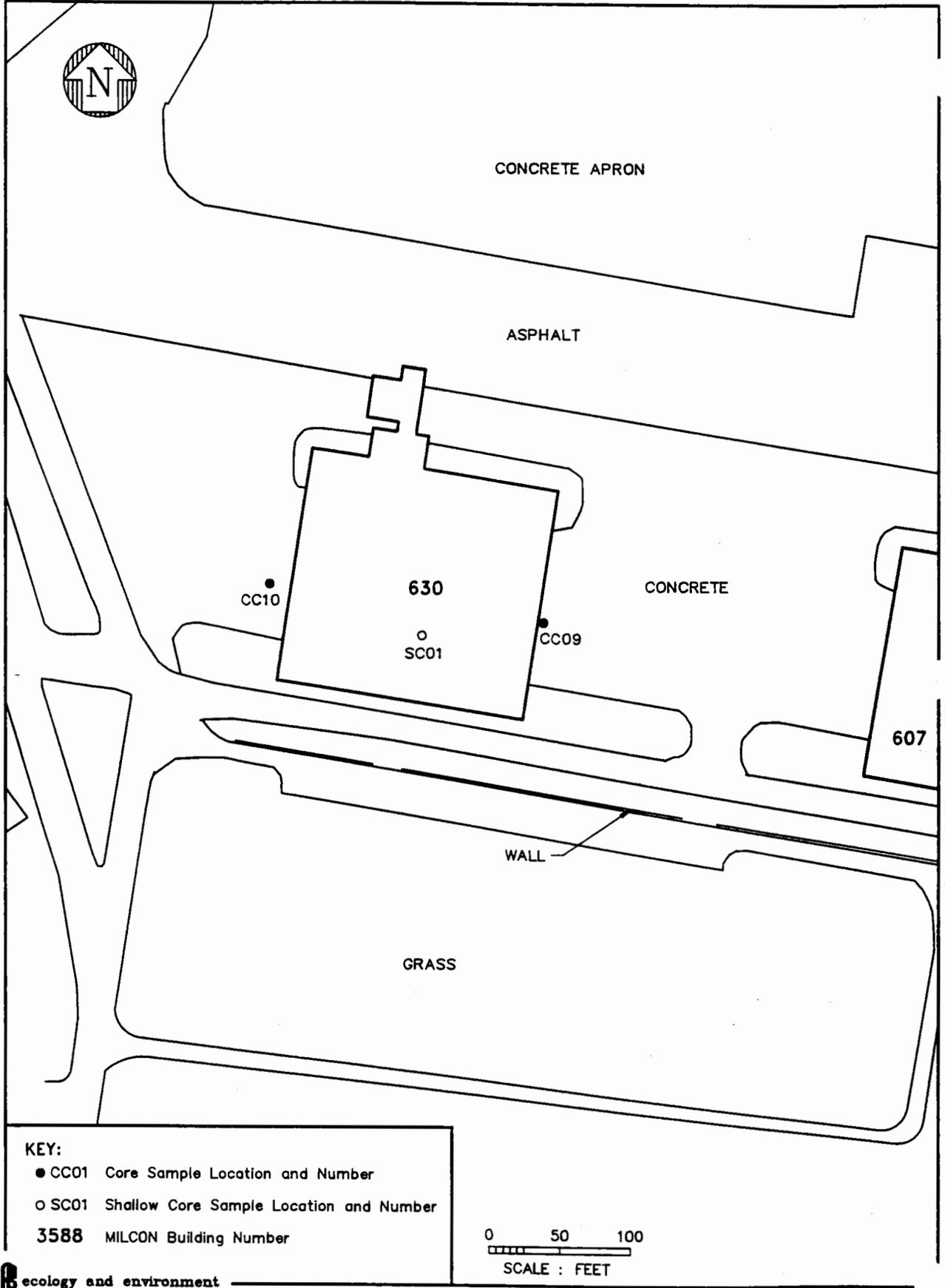


Figure 2-2
 SAMPLE LOCATION MAP
 BUILDING 630
 NADEP/CHEVALIER FIELD, NAS PENSACOLA

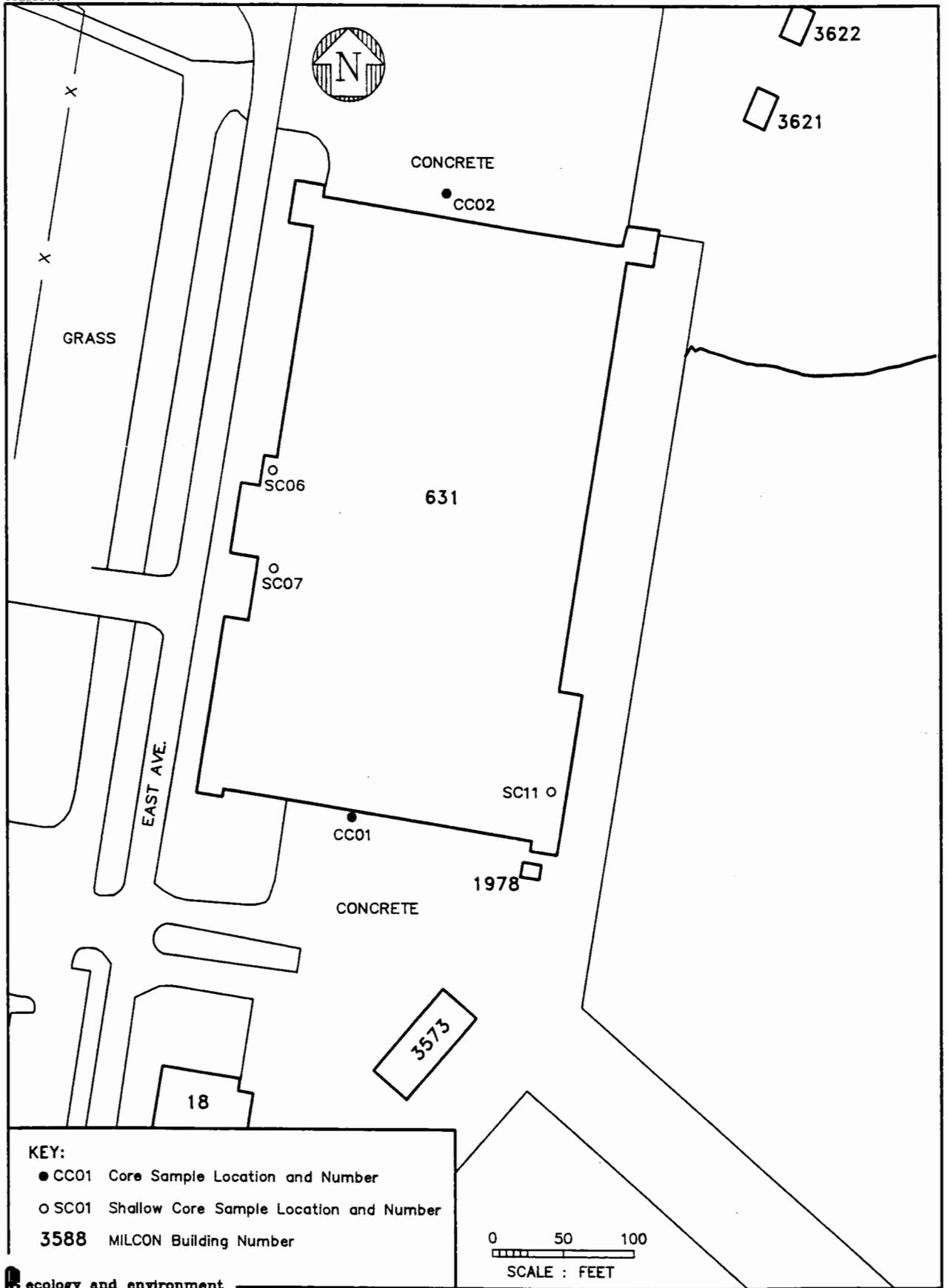


Figure 2-3
 SAMPLE LOCATION MAP
 BUILDING 631
 NADEP/CHEVALIER FIELD, NAS PENSACOLA

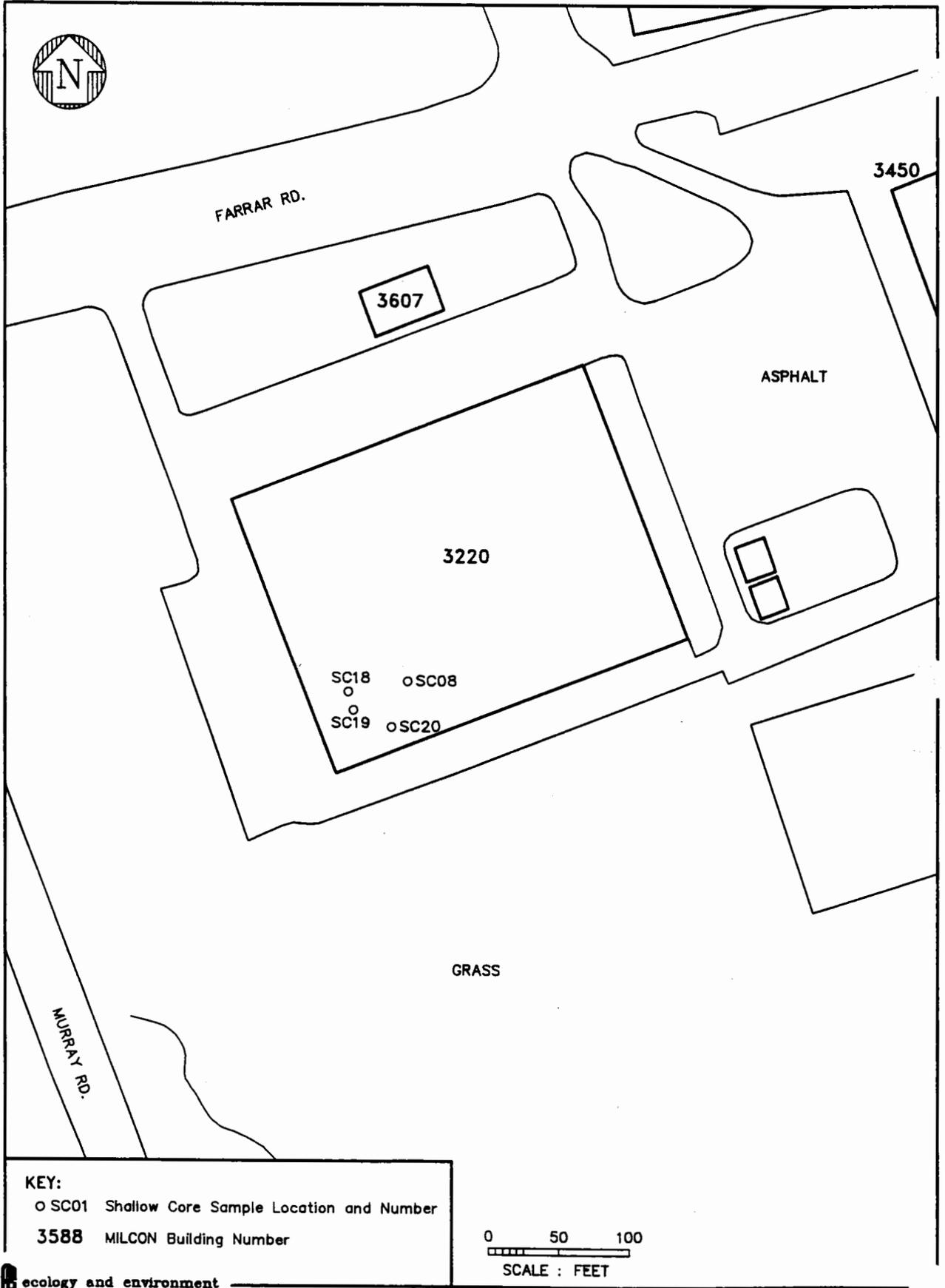


Figure 2-4
 SAMPLE LOCATION MAP
 BUILDING 3220
 NADEP/CHEVALIER FIELD, NAS PENSACOLA

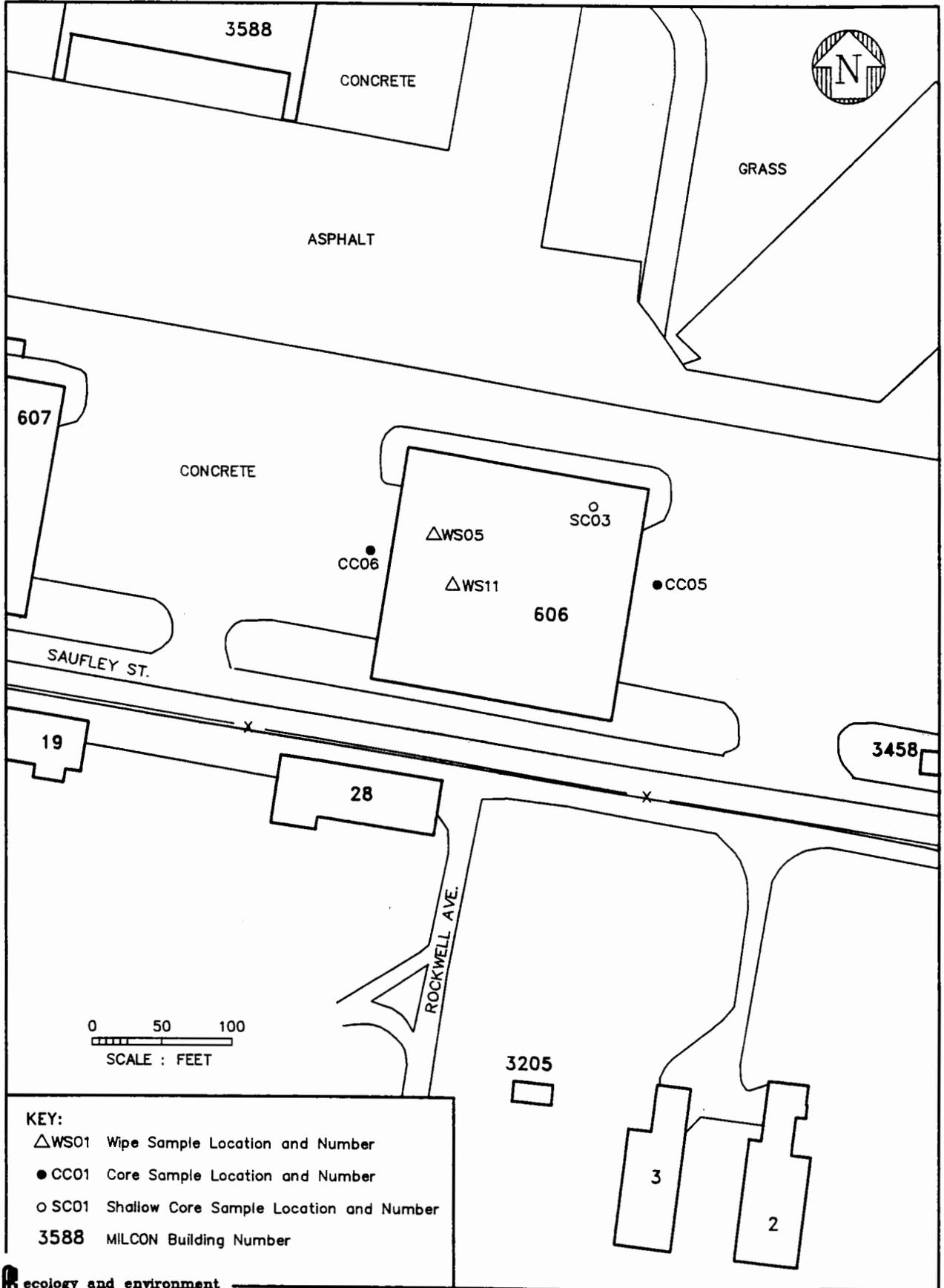


Figure 2-5
 SAMPLE LOCATION MAP
 BUILDING 606
 NADEP/CHEVALIER FIELD, NAS PENSACOLA

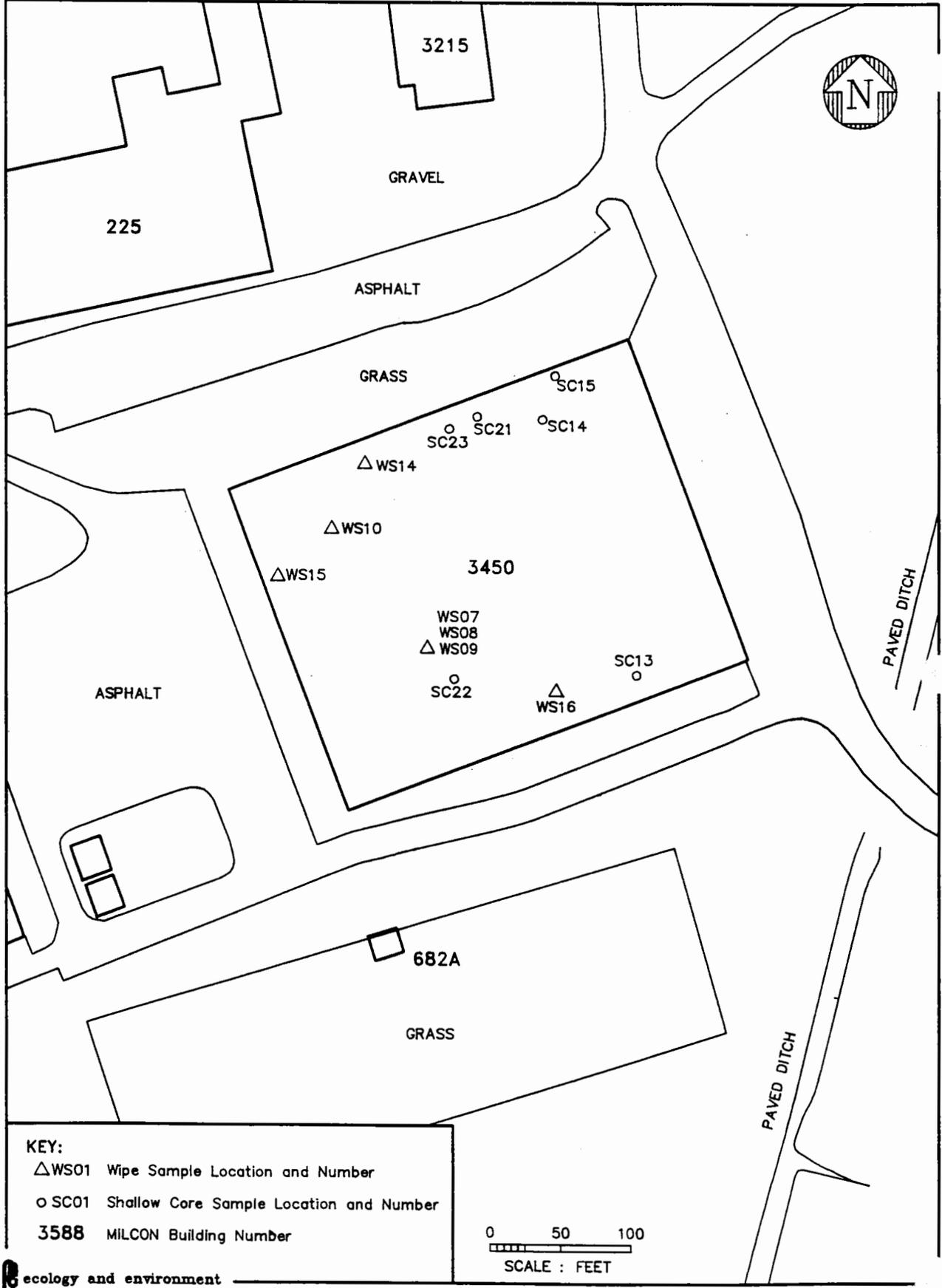
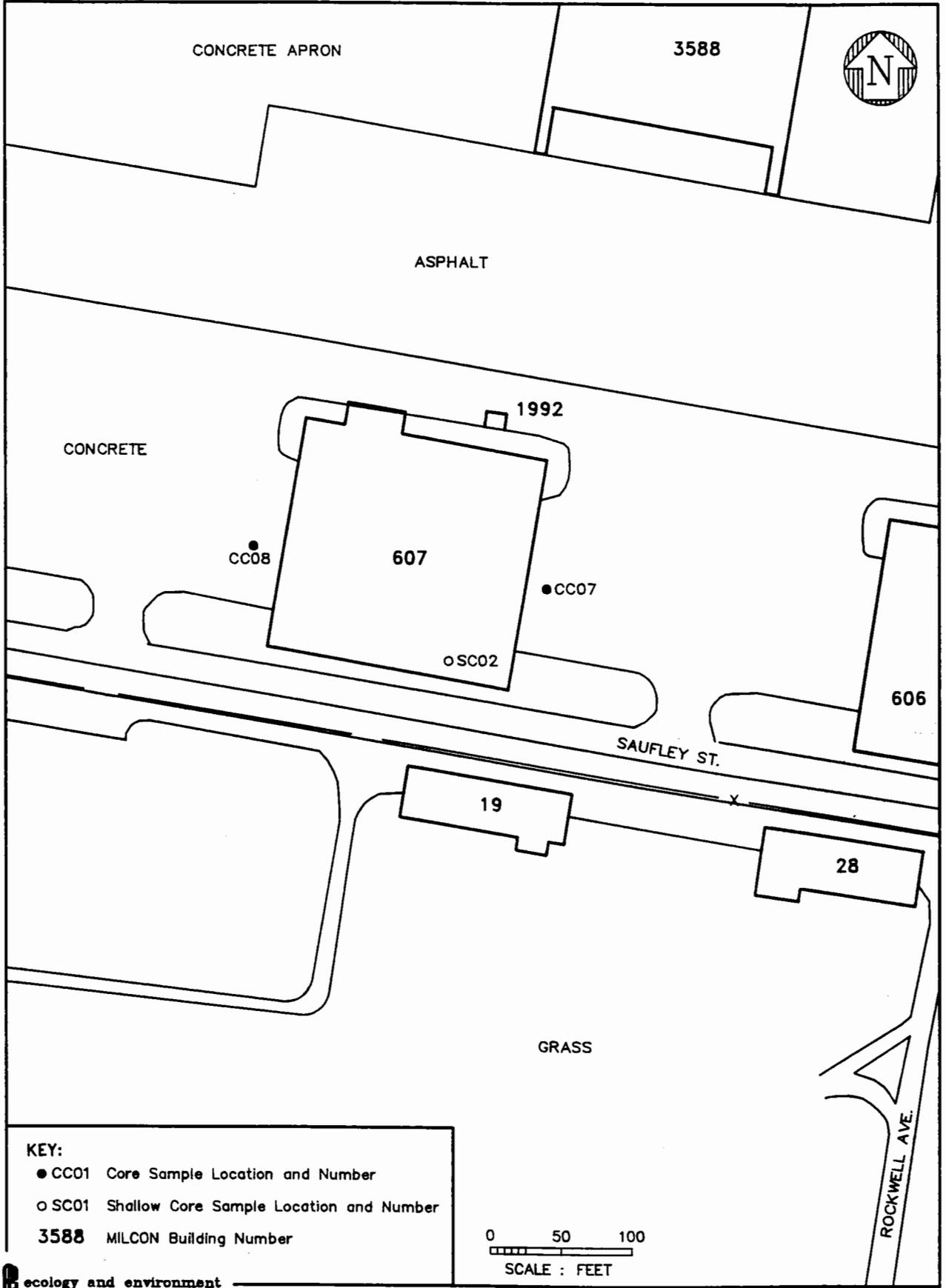
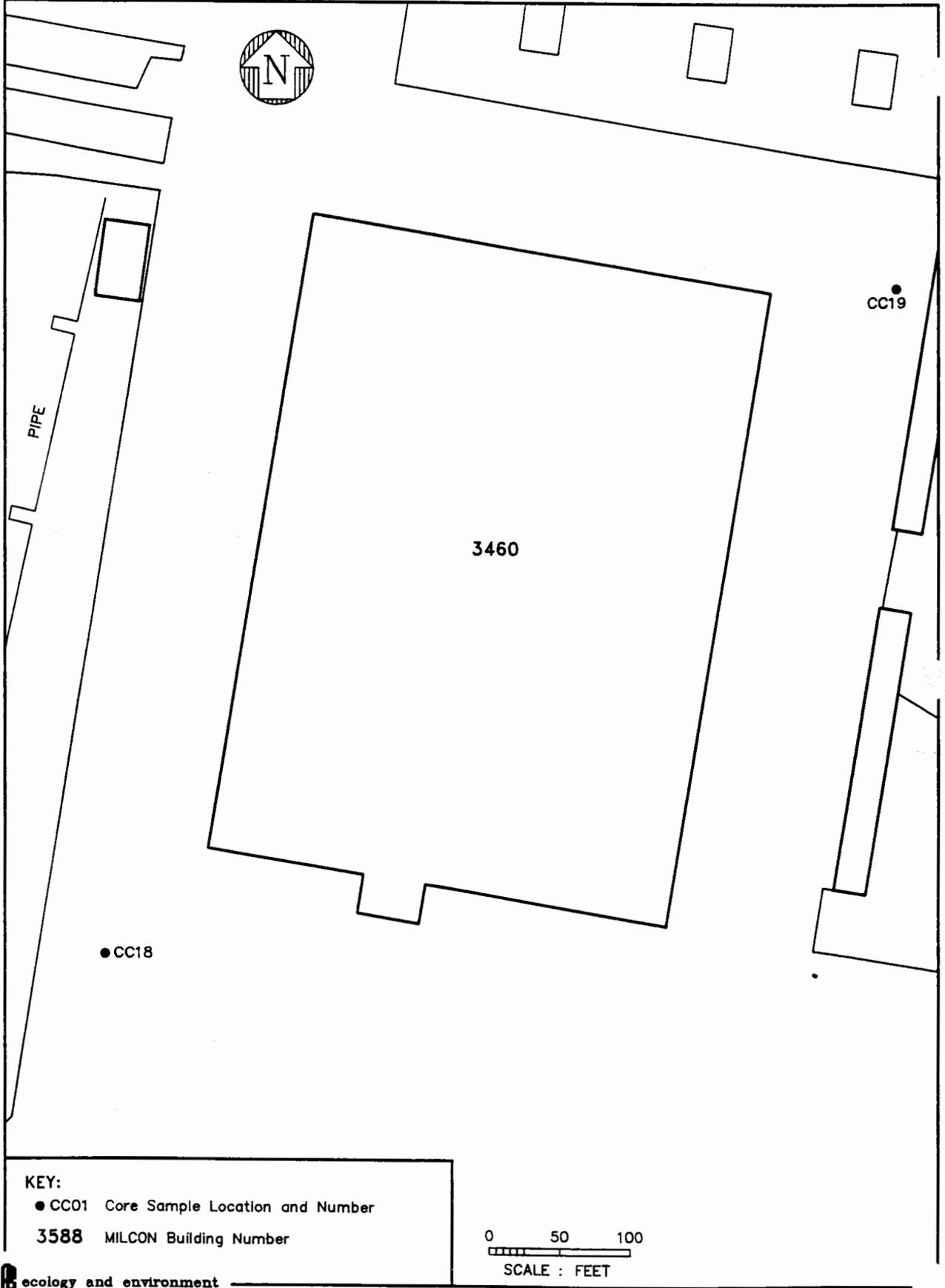


Figure 2-6
 SAMPLE LOCATION MAP
 BUILDING 3450
 NADEP/CHEVALIER FIELD, NAS PENSACOLA



KEY:
 ● CC01 Core Sample Location and Number
 ○ SC01 Shallow Core Sample Location and Number
 3588 MILCON Building Number

Figure 2-7
 SAMPLE LOCATION MAP
 BUILDING 607
 NADEP/CHEVALIER FIELD, NAS PENSACOLA



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Figure 2-8
 SAMPLE LOCATION MAP
 BUILDING 3460
 NADEP/CHEVALIER FIELD, NAS PENSACOLA
 2-18

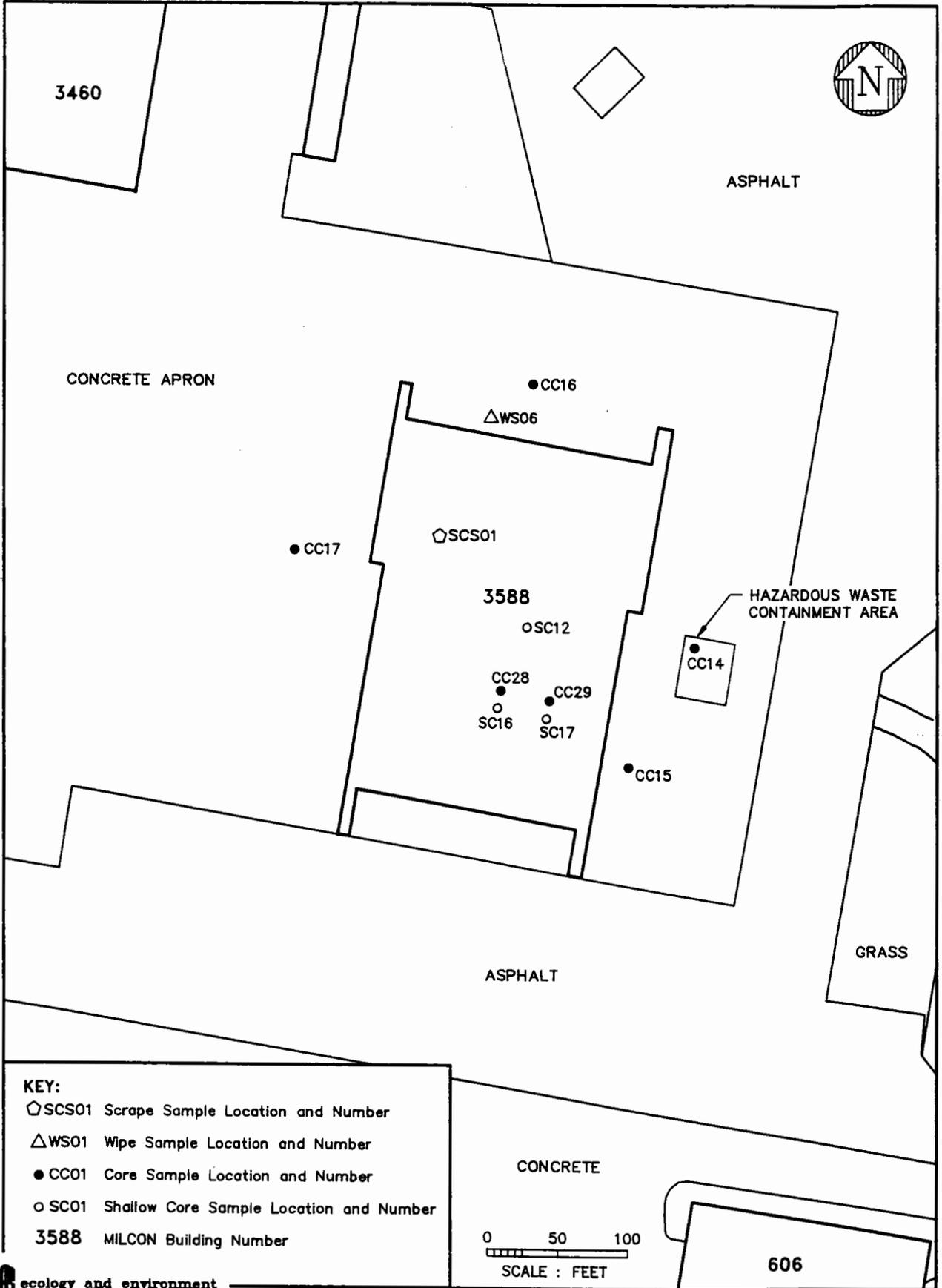
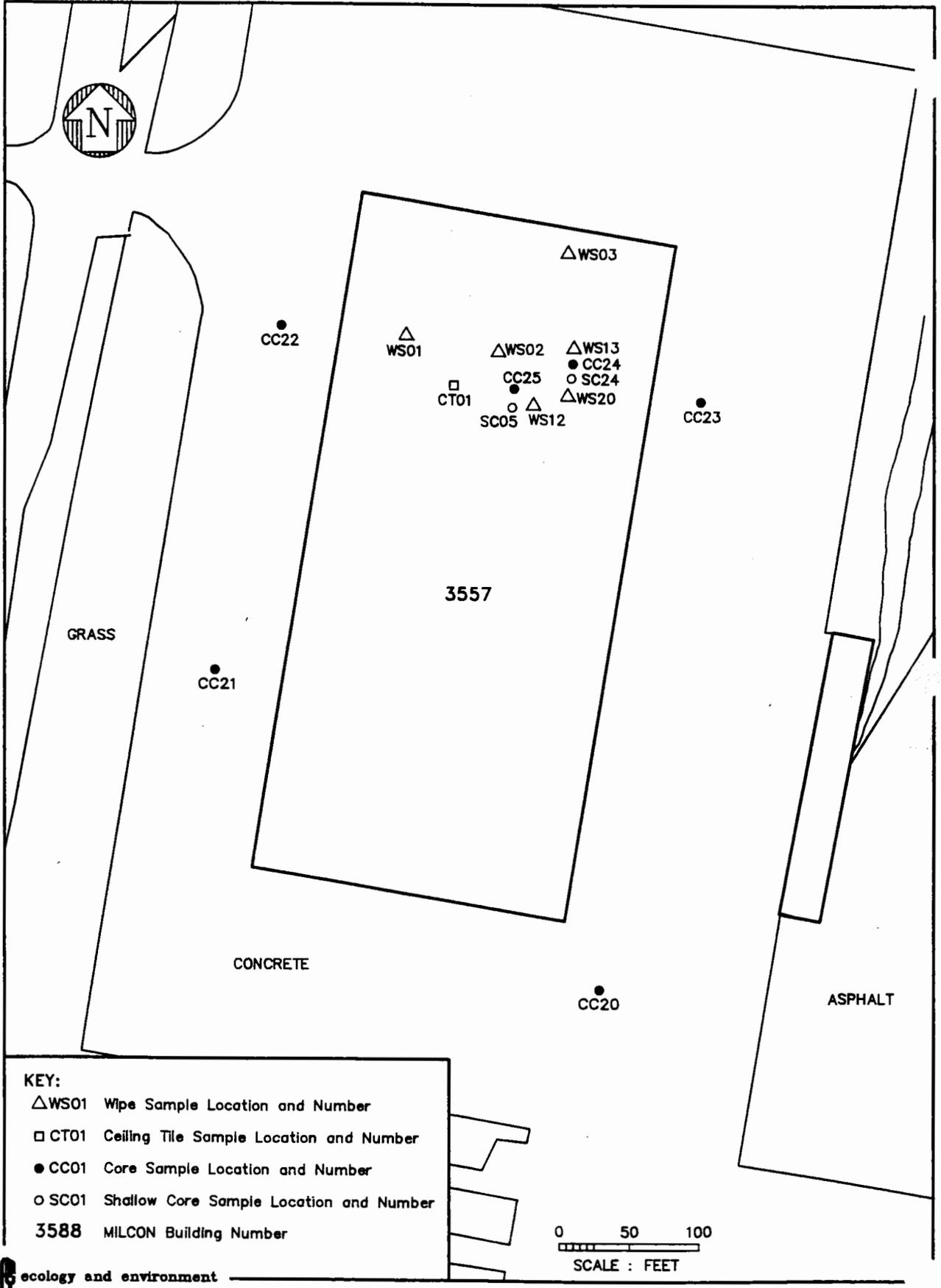


Figure 2-9
 SAMPLE LOCATION MAP
 BUILDING 3588
 NADEP/CHEVALIER FIELD, NAS PENSACOLA



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Figure 2-10
 SAMPLE LOCATION MAP
 BUILDING 3557
 NADEP/CHEVALIER FIELD, NAS PENSACOLA

3. RESULTS

This section contains the analytical results of the concrete core, shallow core/chip, wipe, and miscellaneous samples which can be used to determine whether the debris at the NADEP/Chevalier Field site will be considered hazardous (as defined in the August 18, 1993, Federal Register). Tables 2-1 and 2-2 present the analyses performed on these samples.

3.1 BUILDING 627

Building 627 is a former aircraft hangar currently used for storage and office space. Four samples were collected in and around this hangar: two concrete core samples (CC03 and CC04) were collected from the apron just outside the hangar doors; a shallow core sample (SC04) was collected from the raised concrete base of a former paint booth; and a wipe sample (WS04) was collected from an exhaust vent which once served the paint booth (see Figure 2-1). Samples CC03 and CC04 were analyzed for the F-listed waste suite. A portion of samples CC03 and CC04 was extracted using the toxicity characteristic leaching procedure (TCLP) method, and the extract was then analyzed for metals, volatile organic compounds (VOCs), and semivolatile compounds. Samples SC04 and WS05 were analyzed for priority pollutant metals, total cyanide, VOCs, and semivolatile compounds. Table 3-1 presents a summary of the analytes detected in the Building 627 samples.

Relatively low concentrations of methylene chloride and acetone were detected in both concrete apron samples. Although neither of these compounds was detected in the associated laboratory method blanks, the laboratory considers these compounds to be common laboratory artifacts and not attributable to the building materials. The methylene chloride detected in these samples was most likely introduced during sample preparation. No parameters were detected during the TCLP analysis.

SC01 was analyzed for priority pollutant metals, total cyanide, VOCs, and semivolatile compounds. Table 3-2 presents a summary of the analytes detected in the Building 630 samples.

Relatively low concentrations of methylene chloride, acetone, and chlorobenzene were detected in samples CC09 and CC10. Although methylene chloride and acetone were not detected in the associated methods blanks, the laboratory considers these compounds to be common laboratory artifacts and not related to the operations conducted in the building. The methylene chloride detected in these samples was most likely introduced during sample preparation. No parameters were detected during the TCLP analysis.

Inorganic analytes and VOCs and semivolatile compounds were detected in sample SC01. The suite of inorganic analytes detected and their low concentrations are representative of the concrete matrix.

Methylene chloride and acetone were present in the associated laboratory method blanks and therefore can be considered laboratory artifacts. The presence of chlorobenzene (an F-listed waste suite parameter) may be related to building operations. Four semivolatile compounds (butyl benzyl phthalate, bis(2-ethylhexyl) phthalate, phenol, and di-n-octylphthalate) were detected in the shallow core sample; however, the source of these compounds is unknown.

3.3 BUILDING 631

Building 631 is a former aircraft hangar. Current activities in the building include fabrication, painting, and testing of aircraft parts. Five samples were collected in and around this building: two concrete core samples (CC01 and CC02) were collected from the apron just outside the hangar doors, and three shallow core samples were collected from the wash area (SC06), wing tank test area (SC07), and paint room floor (SC11; see Figure 2-3). Samples CC01 and CC02 were analyzed for the F-listed waste suite and TCLP parameters. Samples SC06, SC07, and SC11 were analyzed for priority pollutant metals, total cyanide, VOCs, and semivolatile compounds. Table 3-3 presents a summary of the analytes detected in the Building 631 samples.

Low concentrations of acetone and methylene chloride were detected in both concrete core samples. Because methylene chloride and acetone were also present at similar concentrations in the laboratory method blank associated with sample CC01, the laboratory considers the detection of these compounds to be the result of laboratory contamination and therefore

not attributable to the building materials. No analytes were detected during the TCLP analysis.

Inorganic analytes and VOCs and semivolatile compounds were detected in the shallow core samples. The inorganic analyte concentrations were generally low, and with the exception of chromium in sample SC11, representative of the concrete matrix. The presence of chromium in sample SC11 can most likely be attributed to the use of paint in this area.

Seven VOCs (methylene chloride, acetone, ethylbenzene, xylene, 4-methyl-2-pentanone, n-butyl alcohol, and isobutanol) were detected in the shallow core samples. Because methylene chloride and acetone were detected in all three samples and in the associated laboratory method blanks, they can be considered laboratory artifacts. Ethylbenzene, xylene, 4-methyl-2-pentanone, n-butyl alcohol, and isobutanol were detected in the paint room sample (SC11).

Six semivolatile compounds were also detected in the shallow core samples; however, all concentrations were below detection limits with the exception of bis(2-ethylhexyl) phthalate. The presence of this compound is probably the result of sample handling.

3.4 BUILDING 3220

Current activities in Building 3220 include the refurbishment and testing of aircraft electronic components. Four shallow core samples were collected from areas inside this building: samples SC19 and SC18 were collected from active and former paint booth areas, respectively; sample SC08 was collected from the electrical motor winding room floor; and sample SC20 was collected from the acid bath cleaning room floor (see Figure 2-4). All four samples were analyzed for priority pollutant metals, total cyanide, VOCs, and semivolatile compounds. Table 3-4 presents a summary of the parameters detected in the Building 3220 samples.

Inorganic analytes and VOCs and semivolatile compounds were detected in all four samples. The concentrations of inorganic analytes were very low and representative of the concrete matrix.

Five VOCs (methylene chloride, acetone, 2-butanone, 4-methyl-2-pentanone, and xylene) were detected. Methylene chloride and acetone were also detected in the associated laboratory method blanks and therefore can be considered laboratory artifacts. Of the other three compounds, only two (2-butanone and 4-methyl-2-pentanone) were present above

detection limits. Both of these compounds are generally used as paint/lacquer thinners and strippers.

Five semivolatile compounds (butyl benzyl phthalate, bis(2-ethylhexyl) phthalate, phenanthrene, di-n-butyl phthalate, and di-n-octyl phthalate) were also detected in the Building 3220 samples. However, only butyl benzyl phthalate and bis(2-ethylhexyl)phthalate were present at concentrations exceeding detection limits. These compounds were both detected in samples SC08 and SC20; the source of these compounds is unknown. Butyl benzyl phthalate is a resin plasticizer that may have been used in the building. The presence of bis(2-ethylhexyl) phthalate is most likely due to sample handling.

3.5 BUILDING 606

Building 606 is a former aircraft hangar and is currently used for office space, fabrication of training simulators, and plastic material blasting of aircraft. Five samples were collected in and around this hangar: two concrete core samples (CC05 and CC06) were collected from the apron just outside the hangar doors; a shallow core sample (SC03) was collected from the floor of the former paint mixing room; and two wipe samples (WS05 and WS11) were collected from the plastic material blasting area (see Figure 2-5). Sample WS05 was collected from the ceiling trusses and sample WS11 was collected from the floor. Samples CC05 and CC06 were analyzed for the F-listed waste suite and TCLP parameters. Samples SC03, WS05, and WS11 were analyzed for priority pollutant metals, total cyanide, VOCs, and semivolatile compounds. Table 3-5 presents a summary of the analytes detected in the Building 606 samples.

Relatively low concentrations of methylene chloride and acetone were detected in both concrete apron samples. These compounds may have been used in processes conducted in the building. Although neither of these compounds was detected in the associated method blanks, the laboratory considers them to be common laboratory artifacts and therefore not attributable to building materials. The methylene chloride detected in these samples was most likely introduced during sample preparation. No parameters were detected during the TCLP analysis.

The shallow core sample exhibited concentrations of inorganic analytes and VOCs and semivolatile compounds. The suite of inorganic analytes detected and their low concentrations are representative of the concrete matrix.

Of the four VOCs detected, methylene chloride and acetone were also present in the associated method blanks and can therefore be considered laboratory artifacts. The only other compound present above the detection limit was 4-methyl-2-pentanone.

The wipe samples exhibited generally low concentrations of inorganic analytes and VOCs and semivolatile compounds. Wipe sample WS05 exhibited elevated levels of chromium and zinc, and wipe sample WS11 exhibited concentrations of inorganics.

VOCs were detected only in sample WS05. Of these compounds, only carbon disulfide and 2-butanone were present above detection limits. Both of these compounds may be the result of operations conducted in this area of the building. The low concentrations of semivolatile compounds detected can most likely be attributed to the gloves worn while collecting the wipe samples.

3.6 BUILDING 2662

Building 2662 functions as an aircraft washing area. A total of five samples were collected in and around Building 2662: three concrete core samples (CC11, CC12, and CC13) were collected from the apron, and one concrete core sample (CC27) and one shallow core sample (SC10) were collected from the area of the former floor drain (see Figure 2-1). Samples CC11, CC12, and CC13 were analyzed for the F-listed waste suite and TCLP parameters. Samples CC27 and SC10 were analyzed for priority pollutant metals, total cyanide, VOCs, semivolatile compounds, and TCLP parameters. Table 3-6 presents a summary of analytes detected in the Building 2662 samples.

Relatively low concentrations of methylene chloride, acetone, and xylene were detected in the apron samples, and only methylene chloride and acetone were present above detection limits. Both of these compounds were also present in the associated method blanks and can therefore be considered laboratory artifacts. No analytes were detected in the TCLP analysis of these samples.

The other two samples, CC27 and SC10, exhibited concentrations of inorganic analytes and VOCs and semivolatile compounds. With the exception of the chromium and zinc concentrations, all metal concentrations were representative of the concrete matrix. The elevated chromium and zinc concentrations can most likely be attributed to paint waste. No inorganic analytes were detected in the TCLP analysis.

Four VOCs were detected in samples CC27 and SC10. Methylene chloride and acetone were present in both samples and in the associated laboratory method blanks;

therefore, they may be laboratory artifacts. However, because the concentrations of acetone in the samples were significantly higher than those found in the method blanks, the presence of this compound can most likely be attributed to activities in the building. In addition, 2-butanone and n-butyl alcohol were detected in both samples, and 2-methyl phenol was detected in the TCLP analysis of sample CC27. However, the concentrations detected were well below the Resource Conservation and Recovery Act (RCRA) regulatory levels.

3.7 BUILDING 3450

The activities currently conducted in Building 3450 include the fabrication of fuel cells and wiring harnesses, and the refurbishment and testing of mechanical and electronic aircraft components. Six shallow core and seven wipe samples were collected in Building 3450 (see Figure 2-6). The shallow core samples were collected from the first floor paint room (SC14 and SC15), cement storage room (SC13), cleaning room (SC22), former paint area (SC21), and former parts cleaning area (SC23). The wipe samples were collected from the penetrant testing room (WS07, WS08, and WS09), cable shop (WS16), bearing shop (WS15), buffing room (WS10), and final cleaning room (WS14). Both sets of samples were analyzed for priority pollutant metals, total cyanide, VOCs, and semivolatile compounds. Table 3-7 presents a summary of the analytes detected in the Building 3450 shallow core and wipe samples.

Relatively low concentrations of inorganic analytes and VOCs were detected in the shallow core samples. In general, the inorganic results are representative of the concrete matrix. However, exceptions to this are the elevated concentrations of lead and chromium detected in samples SC14 and SC15, respectively, which can most likely be attributed to the waste paint on the floor in these areas. Copper was detected at elevated concentrations in sample SC22; the reason for this, however, is unknown.

Ten VOCs were detected in the shallow core samples, two of which (methylene chloride and acetone) were present in the laboratory method blanks and should be considered laboratory artifacts. Trichloroethene was present below the detection limit. 1,1,1-Trichloroethane and 4-methyl-2-pentanone were detected in sample SC23, which was collected in the parts cleaning area and is probably a spill residue. Xylene was detected in sample SC22, which was collected in the cleaning room and is also a probable spill residue. 2-Butanone was detected in samples collected from the paint room and is most likely a spill residue. The source of the alcohols and the 1,1,2-trichloro-1,2,2-trifluoromethane is unknown.

Elevated concentrations of eight semivolatile compounds were also detected in the shallow core samples. The source of these semivolatile compounds is unknown; however, the bis(2-ethylhexyl)phthalate is probably attributable to sample handling.

The wipe samples exhibited generally low concentrations of inorganic analytes and VOCs and semivolatile compounds. Elevated concentrations of zinc were detected in all samples except WS07. Wipe sample WS10 exhibited a significant concentration of silver. With the exception of the silver detected in sample WS10, WS15 exhibited the highest overall metals concentrations.

Low concentrations of seven VOCs were detected in the wipe samples collected in Building 3450. However, most compounds were either detected in the laboratory method blanks or below the detection limit. Five semivolatile compounds were detected in the wipe samples. With the exception of the moderate concentrations of butyl benzyl phthalate and bis(2-ethylhexyl) phthalate, all semivolatile concentrations can most likely be attributed to the gloves worn while collecting the samples. Bis(2-ethylhexyl) phthalate is a common laboratory contaminant. The source of the butyl benzyl phthalate is unknown.

3.8 BUILDING 607

Building 607 currently functions as an active helicopter hangar. Three samples were collected in and around this building: two concrete core samples (CC07 and CC08) were collected from the apron just outside the hangar doors, and a shallow core sample (SC02) was collected from the lead acid battery storage area (see Figure 2-7). Samples CC07 and CC08 were analyzed for the F-listed waste suite. A portion of samples CC07, CC08, and SC02 were extracted using the TCLP method. The extract was then analyzed for metals, VOCs, and semivolatile compounds. Sample SC02 was also analyzed for priority pollutant metals, total cyanide, VOCs, and semivolatile compounds. Table 3-8 presents a summary of the analytes detected in the Building 607 samples.

Low concentrations of methylene chloride and acetone were detected in the apron samples. These two compounds were also detected in the associated laboratory method blanks and therefore should be considered laboratory artifacts. No parameters were detected in the TCLP analysis.

Concentrations of inorganic analytes and VOCs and semivolatile compounds were detected in the shallow core sample. The relatively low concentrations of inorganic analytes detected are representative of the concrete matrix. The methylene chloride and acetone

detected were also present in the associated method blanks and can be considered laboratory artifacts.

Two semivolatile compounds (phenol and di-n-octyl phthalate) were present above detection limits. The source of these compounds is unknown.

3.9 BUILDING 3460

Building 3460 is an active hangar where helicopters are reassembled. Two concrete core samples (CC18 and CC19) were collected from the apron surrounding this building (see Figure 2-8) and analyzed for the F-listed waste suite and TCLP parameters. Table 3-9 presents a summary of the analytes detected in the Building 3460 samples.

Very low concentrations of methylene chloride and acetone were detected in the two samples. These compounds were also detected in the associated laboratory method blanks and therefore should be considered laboratory artifacts. No analytes were detected during the TCLP analysis.

3.10 BUILDING 3588

Building 3588 is an active aircraft painting hangar. Six concrete core, three shallow core, one wipe, and one scrape sample were collected in and around Building 3588 (see Figure 2-9). Three concrete core samples (CC15, CC16, and CC17) were collected from the concrete apron around Building 3588; one concrete core sample (CC14) was collected from the hazardous waste containment area; and two concrete core samples (CC28 and CC29) were collected from the central sump floor and paint bay number 3 sump floor, respectively. Two shallow core samples (SC16 and SC17) were co-located with CC28 and CC29, and one shallow core sample (SC12) was collected from the paint mixing room floor. Samples CC28 and SC16 were collected from the base of the central sump which is located in the northwest portion of the ventilation corridor in paint bay number 3. Samples CC29 and SC17 were collected from the angled portion of the floor in paint bay number 3. One wipe sample (WS06) was collected from the paint bay number 5 exhaust stack, and one paint debris scrape sample (SCS01) was collected from the floor grate in paint bay number 5. Samples CC14 through CC17 were analyzed for the F-listed waste suite and TCLP parameters. Samples CC28, CC29, SC12, SC16, and SC17 were analyzed for priority pollutant metals, total cyanide, VOCs, semivolatile compounds, and TCLP parameters. Samples SCS01 and WS06 were analyzed for priority pollutant metals, total cyanide, VOCs, and semivolatile com-

pounds. Table 3-10 presents a summary of the analytes detected in the Building 3588 samples.

Low concentrations of methylene chloride and acetone were detected in core samples CC14, CC15, CC16, and CC17. These compounds were also detected in the associated laboratory method blanks and therefore should be considered laboratory artifacts. No analytes were detected in the TCLP analysis of the core samples.

Concrete core samples CC28 and CC29 and co-located shallow core samples SC16 and SC17 exhibited concentrations of inorganic analytes and VOCs and semivolatile compounds. The inorganic analytes detected and their concentrations are indicative of the concrete matrix. A comparison of the VOCs and semivolatile compounds in the co-located paired samples collected from the central sump (CC28 and SC16) shows that both contain very similar constituents. However, the bis(2-ethylhexyl) phthalate in the shallow core samples is considerably higher than that detected in the core samples. The paint bay sump paired samples (CC29 and SC17) reveal a similar ratio of concentrations with greater diversity occurring in the shallow core sample. The methylene chloride and acetone detected in all of these samples should be considered laboratory artifacts. Toluene, ethylbenzene, xylene, and 2-butanone are most likely residues from painting operations. No analytes were detected above the regulatory levels in the TCLP results.

Shallow core sample SC12 exhibited concentrations of inorganic analytes and VOCs and semivolatile compounds. The inorganic analytes detected and their concentrations are indicative of the concrete matrix.

Two of the four VOCs detected in sample SC12 (methylene chloride and acetone) were also detected in the laboratory method blanks; therefore, they may be laboratory artifacts. However, because the concentration of acetone in sample SC12 is considerably higher than that found in the method blank, a portion is most likely attributable to activities in the paint mixing room. 4-Methyl-2-pentanone, cyclohexanone, n-butyl alcohol, and isobutanol were also detected in sample SC12. The semivolatile compound bis(2-ethylhexyl) phthalate was also present below the detection limit. No analytes were detected above the regulatory levels in the TCLP results.

Wipe sample WS06 exhibited elevated lead, cadmium, chromium, and zinc concentrations. All other analytes detected in the wipe sample were present below detection limits.

Scrape sample SCS01 exhibited extremely high concentrations of the paint constituents lead, chromium, and zinc; all other inorganic detections were also elevated.

VOCs detected in SCS01 include methylene chloride, toluene, ethylbenzene, and xylene. Methylene chloride was also detected in the laboratory method blank; toluene was present below the detection limit. Ethylbenzene and xylene are probably from paint residue. In addition, an extremely high concentration of bis(2-ethylhexyl) phthalate was detected in this sample; however, the source of this compound is unknown.

3.11 BUILDING 3557

Building 3557 is an active aircraft and aircraft component stripping and cleaning hangar. Six concrete core, two shallow core, six wipe, and one ceiling tile sample were collected in and around Building 3557 (see Figure 2-10). Four of the core samples (CC20, CC21, CC22, and CC23) were collected from the apron; one core sample (CC24) and one shallow core sample (SC24) were collected from the sloped part of the floor of solvent bay number 4 along the north edge; and one core sample (CC25) and one shallow core sample (SC05) were collected from the floor inside the containment area in the central cleaning room. Three wipe samples were collected from the outside of duct work (WS01), ceiling trusses (WS02), and the power room roof (WS03). The exhaust stack located at the north end of Building 3557 was not sampled because NADEP is responsible for removal of the stack as described in the memorandum of understanding between NADEP and NAS Pensacola. The work plan specified that a shallow core sample be collected from the vent in solvent bay number 4. However, a wipe sample (WS20) was collected from the inside of the vent instead, because the vent system is constructed of sheet metal rather than concrete. Wipe samples were also collected from the painted concrete block walls in the central cleaning room, from approximately the center of the east wall (WS12) and from the solvent bay number 4 wall (WS13). In addition, a ceiling tile sample (CT01) was collected from the suspended ceiling in the central cleaning room. Samples CC20 through CC23 were analyzed for the F-listed waste suite and TCLP parameters. Samples CC24, CC25, SC24, and SC05 were analyzed for priority pollutant metals, total cyanide, VOCs, semivolatile compounds, and TCLP parameters. Samples WS01 through WS03, WS12, WS13, WS20, and CT01 were analyzed for priority pollutant metals, total cyanide, VOCs, and semivolatile compounds. Table 3-11 presents a summary of the analytes detected in the Building 3557 samples.

Low concentrations of methylene chloride and acetone were detected in apron core samples CC20, CC21, CC22, and CC23, and were also present in the laboratory method

blanks; therefore, they should be considered laboratory artifacts. No analytes were detected in the TCLP results of these core samples.

Core sample CC24 and shallow core sample SC24 were located in the same area of the floor in solvent bay number 4. The laboratory sample custodian inadvertently composited these samples; consequently, the results are presented as one sample in Table 3-11. Elevated concentrations of chromium and zinc, which are most likely constituents of paint debris, were detected in this sample. All other metals were detected at concentrations representative of the concrete matrix. Chromium was detected in the TCLP analysis at a concentration below the RCRA regulatory level.

Low concentrations of methylene chloride and acetone were detected in sample SC24/CC24. Because these compounds were also detected in the laboratory method blanks, they should be considered laboratory artifacts. A significant concentration of phenol was also present in sample SC24/CC24.

The other paired samples (CC25 and SC05) exhibited concentrations of inorganic analytes and VOCs and semivolatile compounds. The suite of inorganic analytes and the low concentrations detected are representative of the concrete matrix. A comparison of the VOCs and semivolatile compounds detected in this pair reveals very similar constituents, although the compounds detected in the shallow core sample are generally significantly higher than those detected in the core sample.

Wipe samples WS01, WS02, and WS03 were collected from various locations in the central cleaning room. With the exception of WS02, the samples showed elevated concentrations of lead, cadmium, chromium, copper, zinc, and cyanide. Copper and cyanide were not detected in WS02. All detections of VOCs and semivolatile compounds were below the detection limits. Wipe samples WS12 and WS13, collected from the cleaning room and solvent bay number 4 walls, respectively, exhibited only ambient concentrations of inorganic analytes. No VOCs or semivolatile compounds were present above detection limits. Wipe sample WS20, collected from the vent in solvent bay number 4, exhibited elevated concentrations of chromium, zinc, and cyanide. This suite of analytes is similar to that detected in sample SC24/CC24. VOCs and semivolatile compounds 2-butanone and benzyl alcohol were present at low concentrations. All other compounds present are below detection limits and/or present in the laboratory method blank.

The metals detected in ceiling tile sample CT01 were generally low; however, elevated levels of chromium, nickel, and zinc were present. No VOCs were detected in the

sample, but a significant concentration of benzyl alcohol was reported. In addition, a smaller but still elevated concentration of bis(2-ethylhexyl) phthalate was reported, the source of which may be the ceiling tile. The source of the benzyl alcohol is unknown.

3.12 BUILDING 3380

Building 3380 currently functions as the NADEP hazardous materials storage building. Formerly the building and the contained outside area were used for general storage. One concrete core (CC26) and one shallow core (SC09) sample were collected from inside the contained storage area outside of Building 3380 (see Figure 2-1). Both of these samples were analyzed for priority pollutant metals, total cyanide, VOCs, and semivolatile compounds. The samples also underwent TCLP analysis for metals, VOCs, and semivolatile compounds. Table 3-12 presents a summary of the analytes detected in the Building 3380 samples.

Both samples exhibited low concentrations of inorganic analytes and VOCs. The suite of inorganic analytes detected and their concentrations are representative of the concrete matrix. The source of the n-butyl alcohol is unknown. The methylene chloride and acetone detected were also present in the laboratory method blanks; therefore, they can be considered laboratory artifacts.

3.13 FIELD QC

The results of the field QC and original samples are presented in Table 3-13. The duplicate samples were collected for each medium sampled as presented in Table 2-2. In general, the duplicate core sample results were in agreement with the original sample results, with the exception of the acetone detected in CC06D. The duplicate shallow core results were similar to the original sample results with the exception of the acetone detected in samples SC09D and SC10D. In addition, the concentration of bis(2-ethylhexyl) phthalate detected in SC10D was less than that found in the original sample. It is possible that these discrepancies are the result of laboratory contamination. The results of the duplicate wipe samples were also generally in agreement with the original samples, with the exception of the higher concentration of zinc detected in WS05D. Because the two samples were co-located, this difference could be the result of a nonhomogeneous distribution of the zinc on the sample surface.

The wipe sample field blanks exhibited low concentrations of cadmium, zinc, mercury, cyanide, acetone, and 2-butanone. The source of these analytes is unknown.

The concrete core/shallow core rinsate samples exhibited detections of chromium and zinc. The source of these analytes could be the water used for the rinsate blank. Rinsate samples were collected each day the equipment was used.

No detections were reported in the trip blank samples.

Table 3-1								
SUMMARY OF ANALYTICAL RESULTS								
BUILDING NO. 627								
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION								
NAS PENSACOLA								
Parameters	Sample Type/Sample No.							
	Concrete Core/Shallow Core					Wipe Sample		
	Units	Detection Limit	CC03 (Apron)	CC04 (Apron)	SC04 ^a (Former Paint Area)	Units	Detection Limit	WS04 (Former Paint Exhaust Vent)
Inorganics								
Arsenic	mg/kg	0.5	NA	NA	0.98	ug/100cm ²	20	ND
Lead	mg/kg	0.5	NA	NA	2.7	ug/100cm ²	10	450
Cadmium	mg/kg	0.5	NA	NA	ND	ug/100cm ²	1.0	3.1
Chromium (Total)	mg/kg	1.0	NA	NA	34	ug/100cm ²	2.0	720
Copper	mg/kg	2.0	NA	NA	2.4	ug/100cm ²	4.0	7.4
Nickel	mg/kg	2.0	NA	NA	2.4	ug/100cm ²	4.0	ND
Zinc	mg/kg	1.0	NA	NA	11	ug/100cm ²	2.0	4,600
Cyanide	mg/kg	<0.5	NA	NA	2.5	ug/100cm ²	<0.5	ND
Volatiles								
Methylene Chloride	ug/kg	<5.0	NA	NA	3.7(J,B)	ug/100cm ²	<2.5	3.0(B)
Acetone	ug/kg	<10	NA	NA	41(B)	ug/100cm ²	<5.0	ND
2-Butanone	ug/kg	<10	NA	NA	ND	ug/100cm ²	<5.0	4.0(J)
Semivolatiles								
Dimethyl Phthalate	ug/kg	<330	NA	NA	ND	ug/100cm ²	<10	1.4(J)
Butyl Benzyl Phthalate	ug/kg	<330	NA	NA	62(J)	ug/100cm ²	<10	20
Bis(2-ethylhexyl) Phthalate	ug/kg	<330	NA	NA	140(J)	ug/100cm ²	<10	10(B)
Phenol	ug/kg	<330	NA	NA	840	ug/100cm ²	<10	ND
Di-n-Octyl Phthalate	ug/kg	<330	NA	NA	4,400	ug/100cm ²	<10	ND

Key at end of table.

Table 3-1								
SUMMARY OF ANALYTICAL RESULTS								
BUILDING NO. 627								
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION								
NAS PENSACOLA								
Parameters	Sample Type/Sample No.							
	Concrete Core/Shallow Core					Wipe Sample		
	Units	Detection Limit	CC03 (Apron)	CC04 (Apron)	SC04 ^a (Former Paint Area)	Units	Detection Limit	WS04 (Former Paint Exhaust Vent)
F-Listed Suite								
Methylene Chloride	ug/kg	<5.0	10	9.7	NA	ug/100cm ²	NA	NA
Acetone	ug/kg	<10	17	21	NA	ug/100cm ²	NA	NA

Note: Detection limits given are applicable to all samples unless otherwise noted.

^aSample diluted twice; detection limit elevated for all semivolatle compounds in this sample.

Key:

mg/kg =Milligrams per kilogram.

ug/kg =Micrograms per kilogram.

ug/100cm² =Micrograms per 100 square centimeter sample area.

ND =Parameter not detected.

NA =Not analyzed for this parameter.

J =Estimated value; compound present below stated detection limit.

B =Also present in the laboratory method blank.

Source: Ecology and Environment, Inc., 1994.

Table 3-2					
SUMMARY OF ANALYTICAL RESULTS					
BUILDING NO. 630					
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION					
NAS PENSACOLA					
Parameters	Sample Type/Sample No.				
	Concrete Core/Shallow Core				
	Units	Detection Limits	CC09 (Apron)	CC10 (Apron)	SC01 ^a (Former Paint Area)
Inorganics					
Arsenic	mg/kg	0.5	NA	NA	0.74
Lead	mg/kg	0.5	NA	NA	7.6
Chromium (Total)	mg/kg	1.0	NA	NA	1.5
Zinc	mg/kg	1.0	NA	NA	4.8
Volatiles					
Methylene Chloride	ug/kg	<5.0	NA	NA	7.6(B)
Acetone	ug/kg	<10	NA	NA	18(B)
Semivolatiles					
Butyl Benzyl Phthalate	ug/kg	<330	NA	NA	71(J) (1,650)
Bis(2-ethylhexyl) Phthalate	ug/kg	<330	NA	NA	730(J) (1,650)
Phenol	ug/kg	<330	NA	NA	7,900
Di-n-Octyl Phthalate	ug/kg	<330	NA	NA	66(J) (1,650)
F-Listed Suite					
Methylene Chloride	ug/kg	<5	12	11	NA
Acetone	ug/kg	<10	24	26	
Chlorobenzene	ug/kg	<5.0	1.6(J)	ND	NA

Note: Detection limits given are applicable for all samples unless otherwise noted.

^aSample diluted 5 times; detection limits are elevated for all semivolatile compounds in this sample.

Key:

- B = Also present in laboratory method blank.
- J = Estimated value; compound present below stated detection limit.
- mg/kg = Milligrams per kilogram.
- ug/kg = Micrograms per kilogram.
- NA = Not analyzed for this parameter.
- ND = Parameter not detected.

Source: Ecology and Environment, Inc., 1994.

Table 3-3							
SUMMARY OF ANALYTICAL RESULTS							
BUILDING NO. 631							
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION							
NAS PENSACOLA							
Parameters	Sample Type/Sample No.						
	Concrete Core/Shallow Core						
	Units	Detection Limits	CC01 (Apron)	CC02 (Apron)	SC06 (Wash Area)	SC07 (Wing Tank Test Area)	SC11 (Active Paint Area)
Inorganics							
Arsenic	mg/kg	0.5	NA	NA	0.93	1.2	2.2
Lead	mg/kg	0.5	NA	NA	20	1.6	5.0
Cadmium	mg/kg	0.5	NA	NA	8.3	ND	3.5
Chromium (Total)	mg/kg	1.0	NA	NA	19	5.2	230
Copper	mg/kg	2.0	NA	NA	7.7	12	29
Nickel	mg/kg	2.0	NA	NA	4.6	5.7	10
Silver	mg/kg	1.0	NA	NA	ND	ND	2.3
Zinc	mg/kg	1.0	NA	NA	41	22	30
Cyanide	mg/kg	<0.5	NA	NA	0.61	ND	0.69
Volatiles							
Methylene Chloride	ug/kg	<5	NA	NA	6.4(B)	6.2(B)	25(B)
Acetone	ug/kg	<10	NA	NA	21(B)	9.5(J,B)	440(B)
Ethylbenzene	ug/kg	<5	NA	NA	ND	ND	13(J)
N-Butyl Alcohol	ug/kg	<5	NA	NA	53	ND	1,500
Isobutanol	ug/kg	<5	NA	NA	ND	ND	900
Total Xylenes	ug/kg	<5	NA	NA	ND	ND	140
4-Methyl-2-Pentanone	ug/kg	<10	NA	NA	ND	ND	620
Semivolatiles							
Butyl Benzyl Phthalate	ug/kg	<330	NA	NA	ND	140(J)	240(J)
Bis(2-ethylhexyl) Phthalate	ug/kg	<330	NA	NA	35(J)	280(J)	820
Phenol	ug/kg	<330	NA	NA	120(J)	ND	ND

Key at end of table.

Table 3-3							
SUMMARY OF ANALYTICAL RESULTS							
BUILDING NO. 631							
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION							
NAS PENSACOLA							
Parameters	Sample Type/Sample No.						
	Concrete Core/Shallow Core						
	Units	Detection Limits	CC01 (Apron)	CC02 (Apron)	SC06 (Wash Area)	SC07 (Wing Tank Test Area)	SC11 (Active Paint Area)
Naphthalene	ug/kg	<330	NA	NA	ND	ND	42(J)
Di-n-Butyl Phthalate	ug/kg	<330	NA	NA	ND	ND	44(J)
Di-n-Octyl Phthalate	ug/kg	<330	NA	NA	ND	ND	72(J)
F-Listed Suite							
Methylene Chloride	ug/kg	<5.0	6.2(B)	13	NA	NA	NA
Acetone	ug/kg	<10	18(B)	31	NA	NA	NA

Note: Detection limits given are applicable to all samples unless otherwise noted.

Key:

mg/kg = Milligrams per kilogram.

ug/kg = Micrograms per kilogram.

NA = Not analyzed for this parameter.

ND = Parameter not detected.

J = Estimated value; compound present below stated detection limit.

B = Also present in the laboratory method blank.

Source: Ecology and Environment, Inc., 1994.

Table 3-4						
SUMMARY OF ANALYTICAL RESULTS						
BUILDING NO. 3220						
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION						
NAS PENSACOLA						
Parameters	Sample Type/Sample No.					
	Shallow Core					
	Units	Detection Limits	SC08 (Winding Area)	SC18 (Former Paint Area)	SC19 (Active Paint Area)	SC20 (Acid Bath Room)
Inorganics						
Arsenic	mg/kg	0.5	1.1	0.96	ND	0.62
Lead	mg/kg	0.5	1.2	1.0	ND	1.7
Cadmium	mg/kg	0.5	ND	ND	ND	1.4
Chromium (Total)	mg/kg	1.0	14	12	8.9	16
Copper	mg/kg	2.0	8.3	2.2	2.3	8.1
Nickel	mg/kg	2.0	3.4	3.9	2.8	3.5
Silver	mg/kg	1.0	6.6	ND	ND	ND
Zinc	mg/kg	1.0	13	9.3	14	13
Volatiles						
Methylene Chloride	ug/kg	< 5.0	11(B)	8.9(B)	11(B)	8.3(B)
Acetone	ug/kg	< 10	16(B)	11(B)	25(B)	23(B)
Total Xylenes	ug/kg	< 5	ND	ND	1.8(J)	ND
2-Butanone	ug/kg	< 10	ND	ND	91	ND
4-Methyl-2-Pentanone	ug/kg	< 10	12	ND	44	ND
Semivolatiles						
Butyl Benzyl Phthalate	ug/kg	< 330	2,500	ND	41(J)	400
Bis(2-ethylhexyl) Phthalate	ug/kg	< 330	1,000	38(J)	200(J)	870
Phenanthrene	ug/kg	< 330	140(J)	ND	55(J)	ND
Di-n-Butyl Phthalate	ug/kg	< 330	41(J)	ND	ND	ND

Key at end of table.

Table 3-4						
SUMMARY OF ANALYTICAL RESULTS						
BUILDING NO. 3220						
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION						
NAS PENSACOLA						
Parameters	Sample Type/Sample No.					
	Shallow Core					
	Units	Detection Limits	SC08 (Winding Area)	SC18 (Former Paint Area)	SC19 (Active Paint Area)	SC20 (Acid Bath Room)
Di-n-Octyl Phthalate	ug/kg	< 330	ND	ND	ND	120(J)
N-Butyl Alcohol	ug/kg	50	210	ND	ND	ND

Note: Detection limits given are applicable for all sample unless otherwise noted.

Key:

mg/kg = Milligrams per kilogram.

ug/kg = Micrograms per kilogram.

ND = Parameter not detected.

J = Estimated value; compound present below stated detection limit.

B = Also detected in laboratory method blank.

Source: Ecology and Environment, Inc., 1994.

Table 3-5
SUMMARY OF ANALYTICAL RESULTS
BUILDING NO. 606
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION
NAS PENSACOLA

Parameters	Sample Type/Sample No.								
	Concrete Core/Shallow Core					Wipe Samples			
	Units	Detection Limits	CC05 (Apron)	CC06 (Apron)	SC03 (Former Paint Mixing Area)	Units	Detection Limit	WS05 (Plastic Material Blasting Area)	WS11 (Plastic Material Blasting Area)
Inorganics									
Arsenic	mg/kg	0.5	NA	NA	1.2	ug/100cm ²	20	ND	ND
Lead	mg/kg	0.5	NA	NA	1.9	ug/100cm ²	10	240	ND
Cadmium	mg/kg	0.5	NA	NA	ND	ug/100cm ²	1.0	23	ND
Chromium (Total)	mg/kg	1.0	NA	NA	4.2	ug/100cm ²	2.0	760	4.0
Copper	mg/kg	2.0	NA	NA	ND	ug/100cm ²	4.0	9.3	ND
Silver	mg/kg	1.0	NA	NA	ND	ug/100cm ²	2.0	15	ND
Zinc	mg/kg	1.0	NA	NA	8.1	ug/100cm ²	2.0	570	85
Cyanide	mg/kg	<0.5	NA	NA	ND	ug/100cm ²	<0.5	5.1	0.7
Volatiles									
Methylene Chloride	ug/kg	<5.0	NA	NA	2.9(J,B)	ug/100cm ²	<2.5	1.5(J)	ND
Acetone	ug/kg	<10	NA	NA	120(B)	ug/100cm ²	<2.5	ND	ND

Key at end of table.

Table 3-5
SUMMARY OF ANALYTICAL RESULTS
BUILDING NO. 606
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION
NAS PENSACOLA

Parameters	Sample Type/Sample No.								
	Concrete Core/Shallow Core					Wipe Samples			
	Units	Detection Limits	CC05 (Apron)	CC06 (Apron)	SC03 (Former Paint Mixing Area)	Units	Detection Limit	WS05 (Plastic Material Blasting Area)	WS11 (Plastic Material Blasting Area)
Carbon Disulfide	ug/kg	<2.5	NA	NA	ND	ug/100cm ²	<2.5	5.6	ND
Trichloroethene	ug/kg	<2.5	NA	NA	ND	ug/100cm ²	<2.5	1.2(J)	ND
2-Butanone	ug/kg	<10	NA	NA	8.3(J)	ug/100cm ²	<2.5	8.0	ND
4-Methyl-2-Pentanone	ug/kg	<10	NA	NA	71	ug/100cm ²	<5.0	ND	ND
Semivolatiles									
Butyl Benzyl Phthalate	ug/kg	<330	NA	NA	160(J)	ug/100cm ²	<10	4.2(J)	ND
Bis(2-ethylhexyl) Phthalate	ug/kg	<330	NA	NA	230(J)	ug/100cm ²	<10	32(B)	3.8(J,B)
Phenol	ug/kg	<330	NA	NA	42(J)	ug/100cm ²	<10	ND	ND
Benzoic Acid	mg/kg	<1600	NA	NA	ND	ug/100cm ²	<50	2.0(J)	1.5(J)

Key at end of table.

Table 3-5

**SUMMARY OF ANALYTICAL RESULTS
BUILDING NO. 606
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION
NAS PENSACOLA**

Parameters	Sample Type/Sample No.								
	Concrete Core/Shallow Core					Wipe Samples			
	Units	Detection Limits	CC05 (Apron)	CC06 (Apron)	SC03 (Former Paint Mixing Area)	Units	Detection Limit	WS05 (Plastic Material Blasting Area)	WS11 (Plastic Material Blasting Area)
F-Listed Suite									
Methylene Chloride	ug/kg	<5.0	9.8	9.3	NA	NA	NA	NA	NA
Acetone	ug/kg	<10	29	21	NA	NA	NA	NA	NA

Note: Detection limits given are applicable to all samples unless otherwise noted.

Key:

- mg/kg = Milligrams per kilogram.
- ug/kg = Micrograms per kilogram.
- ug/cm² = Micrograms per 100 square centimeter sample area.
- NA = Not analyzed for this parameter.
- ND = Parameter not detected.
- J = Estimated value; compound present below stated detection limit.
- B = Also present in laboratory method blank.

Source: Ecology and Environment, Inc., 1994.

Table 3-6							
SUMMARY OF ANALYTICAL RESULTS							
BUILDING NO. 2662							
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION							
NAS PENSACOLA							
Parameters	Sample Type/Sample No.						
	Concrete Core/Shallow Core						
	Units	Detection Limits	CC11 (Apron)	CC12 (Apron)	CC13 (Apron)	CC27 (Near Drain, NE Corner)	SC10 (Near Drain, NE Corner)
Inorganics							
Arsenic	mg/kg	0.5	NA	NA	NA	0.84	0.78
Lead	mg/kg	0.5	NA	NA	NA	18	43
Cadmium	mg/kg	0.5	NA	NA	NA	5.6	19
Chromium (Total)	mg/kg	1.0	NA	NA	NA	230	610
Copper	mg/kg	2.0	NA	NA	NA	7.5	11
Nickel	mg/kg	2.0	NA	NA	NA	3.6	4.2
Silver	mg/kg	1.0	NA	NA	NA	ND	2.5
Zinc	mg/kg	1.0	NA	NA	NA	72	190
Cyanide	mg/kg	<0.5	NA	NA	NA	16	32
Volatiles							
Methylene Chloride	ug/kg	<5.0	NA	NA	NA	35(B)	5.4(B)
Acetone	ug/kg	<10	NA	NA	NA	200(B,X)	440(X,B)
N-Butyl Alcohol	ug/kg	50	NA	NA	NA	940	360(C)
2-Butanone	ug/kg	<10	NA	NA	NA	17	60
Semivolatiles							
Bis(2-ethylhexyl) Phthalate	ug/kg	<330	NA	NA	NA	84(J)	530
Phenol	ug/kg	<330	NA	NA	NA	83(J)	48(J)

Key at end of table.

Table 3-6							
SUMMARY OF ANALYTICAL RESULTS							
BUILDING NO. 2662							
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION							
NAS PENSACOLA							
Parameters	Sample Type/Sample No.						
	Concrete Core/Shallow Core						
	Units	Detection Limits	CC11 (Apron)	CC12 (Apron)	CC13 (Apron)	CC27 (Near Drain, NE Corner)	SC10 (Near Drain, NE Corner)
TCLP Volatiles							
2-Methyl Phenol	mg/L	0.10	ND	ND	ND	0.015(J)	ND
F-Listed Suite							
Methylene Chloride	ug/kg	< 5.0	16(B)	26(B)	7.8(B)	NA	NA
Acetone	ug/kg	< 10.	58(B)	55(B)	38(B)	NA	NA
Xylene (Total)	ug/kg	< 5.0	1.6(J)	2.3(J)	ND	NA	NA

Note: Detection limits given are applicable for all samples unless otherwise noted.

Key:

- mg/kg = Milligrams per kilogram.
- mg/L = Milligrams per liter.
- ug/kg = Micrograms per kilogram.
- NA = Not analyzed for this parameter.
- ND = Parameter not detected.
- J = Estimated value; compound present below stated detection limit.
- B = Also present in the laboratory method blank.
- X = Exceeds calibration limit.
- TCLP = Toxicity characteristic leaching procedure.

Source: Ecology and Environment, Inc., 1994.

Table 3-7
SUMMARY OF ANALYTICAL RESULTS
BUILDING NO. 3450
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION
NAS PENSACOLA

Parameters	Sample Type/Sample No.							
	Shallow Core							
	Units	Detection Limits	SC13 (Cement Storage Room)	SC14 ^a (Paint Room-1st Floor)	SC15 ^a (Paint Room-1st Floor)	SC21 ^b (Former Paint Area)	SC22 ^c (Cleaning Room)	SC23 (Former Parts Cleaning Area)
Inorganics								
Arsenic	mg/kg	0.5	0.81	0.85	0.69	0.7	0.81	ND
Lead	mg/kg	0.5	2.0	220	9.1	0.74	4.8	2.0
Cadmium	mg/kg	0.5	ND	ND	ND	1.0	18	ND
Chromium (Total)	mg/kg	1.0	9.8	32	150	28	41	6.8
Copper	mg/kg	2.0	120	4.1	4.0	2.7	380	2.2
Nickel	mg/kg	2.0	2.4	16	12	2.8	3.8	3.0
Silver	mg/kg	1.0	16	ND	ND	ND	9.4	ND
Zinc	mg/kg	1.0	32	28	48	27	46	32
Cyanide	mg/kg	<0.5	ND	0.57	ND	5.8	ND	ND
Volatiles								
Methylene Chloride	ug/kg	<5	23(B)	18(B)	25(B)	8.3(B)	11(B)	9.3(B)
Acetone	ug/kg	<10	37(B)	130(B)	93(B)	ND	29(B)	12(B)
1,1,1-Trichloroethane	ug/kg	<5	ND	ND	ND	ND	ND	7.9

Key at end of table.

Table 3-7
SUMMARY OF ANALYTICAL RESULTS
BUILDING NO. 3450
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION
NAS PENSACOLA

Parameters	Sample Type/Sample No.							
	Shallow Core							
	Units	Detection Limits	SC13 (Cement Storage Room)	SC14 ^a (Paint Room-1st Floor)	SC15 ^a (Paint Room-1st Floor)	SC21 ^b (Former Paint Area)	SC22 ^c (Cleaning Room)	SC23 (Former Parts Cleaning Area)
Total Xylenes	ug/kg	<5	ND	2.0(J)	ND	ND	11	ND
Trichloroethene	ug/kg	<5.0	ND	ND	ND	ND	2.8(J)	ND
2-Butanone	ug/kg	<10	ND	26	17	ND	ND	4.3(J)
1,1,2-Trichloro-1,2,2-Trifluoromethane	ug/kg	5.0	ND	17	ND	ND	ND	ND
N-Butyl Alcohol	ug/kg	50	1,500	800	440	ND	ND	ND
Isobutanol	ug/kg	50	ND	180	ND	ND	ND	ND
4-Methyl-2-Pentanone	ug/kg	<10	ND	21	11	ND	ND	19
Semivolatiles								
2-Methyl Naphthalene	ug/kg	<330	ND	ND(660)	ND(660)	ND(1,650)	6,200	74(J)
Butyl Benzyl Phthalate	ug/kg	<330	950	930	250(J)	3,700	ND(3,300)	400
Bis(2-ethylhexyl) Phthalate	ug/kg	<330	740	63(J)	3,400	6,700	380(J)	2,100
Phenol	ug/kg	<330	ND	ND(660)	82(J)	ND(1,650)	ND(3,300)	ND

3-28

Key at end of table.

Table 3-7								
SUMMARY OF ANALYTICAL RESULTS								
BUILDING NO. 3450								
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION								
NAS PENSACOLA								
Parameters	Sample Type/Sample No.							
	Shallow Core							
	Units	Detection Limits	SC13 (Cement Storage Room)	SC14 ^a (Paint Room-1st Floor)	SC15 ^a (Paint Room-1st Floor)	SC21 ^b (Former Paint Area)	SC22 ^c (Cleaning Room)	SC23 (Former Parts Cleaning Area)
Naphthalene	ug/kg	< 330	ND	ND(660)	ND(660)	ND(1,650)	4,300	45(J)
Benzyl Alcohol	ug/kg	< 330	140(J)	ND(660)	ND(660)	ND(1,650)	ND(3,300)	ND
Di-n-Butyl Phthalate	ug/kg	< 330	100(J)	ND(660)	250(J)	110(J)	ND(3,300)	ND
Di-n-Octyl Phthalate	ug/kg	< 330	ND	63(J)	ND(660)	670(J)	ND(3,300)	270(J)

3-29

Key at end of table.

Table 3-7
SUMMARY OF ANALYTICAL RESULTS
BUILDING NO. 3450
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION
NAS PENSACOLA

Parameters	Sample Type/Sample No.								
	Wipe Samples								
	Units	Detection Limits	WS07 (Penetrant Testing Room Wall)	WS08 (Penetrant Testing Room Floor)	WS09 (Penetrant Testing Room Floor)	WS10 (Buffing Room Floor)	WS14 (Final Cleaning Room Floor)	WS15 (Bearing Shop Floor)	WS16 (Cable Shop Floor)
Inorganics									
Lead	ug/100cm ²	10	ND	ND	44	19	12	96	26
Antimony	ug/100cm ²	12	ND	ND	ND	ND	ND	ND	24
Cadmium	ug/100cm ²	1.0	2.2	7.1	55	12	4.6	140	12
Chromium (Total)	ug/100cm ²	2.0	3.3	13	89	61	26	170	57
Copper	ug/100cm ²	4.0	ND	9.5	63	66	12	160	31
Nickel	ug/100cm ²	4.0	ND	ND	16	79	12	81	ND
Silver	ug/100cm ²	2.0	ND	ND	ND	620	3.5	30	3.0
Zinc	ug/100cm ²	2.0	24	90	270	140	230	3,100	100
Mercury	ug/100cm ²	0.2	ND	ND	0.25	ND	ND	0.6	ND
Cyanide	ug/100cm ²	<0.5	ND	ND	1.5	3.0	ND	ND	1.4

at end of table.

Table 3-7
SUMMARY OF ANALYTICAL RESULTS
BUILDING NO. 3450
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION
NAS PENSACOLA

Parameters	Sample Type/Sample No.								
	Wipe Samples								
	Units	Detection Limits	WS07 (Penetrant Testing Room Wall)	WS08 (Penetrant Testing Room Floor)	WS09 (Penetrant Testing Room Floor)	WS10 (Buffing Room Floor)	WS14 (Final Cleaning Room Floor)	WS15 (Bearing Shop Floor)	WS16 (Cable Shop Floor)
Volatiles									
Methylene Chloride	ug/100cm ²	<2.5	1.7(J,B)	ND	ND	1.1(J)	2.2(J,B)	ND	2.2(J,B)
Acetone	ug/100cm ²	<2.5	ND	ND	ND	ND	1.8(J)	2.7(J)	ND
Chloroform	ug/100cm ²	<2.5	1.2(J)	ND	ND	ND	ND	ND	ND
Carbon Disulfide	ug/100cm ²	<2.5	ND	ND	6.0(J)	ND	ND	ND	ND
1,1,1-Trichloroethane	ug/100cm ²	<2.5	ND	ND	ND	ND	13	ND	ND
Trichloroethene	ug/100cm ²	<2.5	ND	1.0(J)	1.2(J)	ND	1.0(J)	1.1(J)	1.2(J)
2-Butanone	ug/100cm ²	<5.0	9.0	ND	ND	15	9.7	9.6	8.8
Semivolatiles									
Butyl Benzyl Phthalate	ug/100cm ²	<10	ND	360	85	170	6.0(J)	210	390
Bis(2-ethylhexyl) Phthalate	ug/100cm ²	<10	16(B)	400(B)	310(B)	79(B)	8.0(J,B)	130(B)	270(B)

Key at end of table.

Table 3-7
SUMMARY OF ANALYTICAL RESULTS
BUILDING NO. 3450
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION
NAS PENSACOLA

Parameters	Sample Type/Sample No.								
	Wipe Samples								
	Units	Detection Limits	WS07 (Penetrant Testing Room Wall)	WS08 (Penetrant Testing Room Floor)	WS09 (Penetrant Testing Room Floor)	WS10 (Buffing Room Floor)	WS14 (Final Cleaning Room Floor)	WS15 (Bearing Shop Floor)	WS16 (Cable Shop Floor)
Benzoic Acid	ug/100cm ²	< 50	1.4(J)	ND	ND	ND	ND	ND	ND
Di-n-Butyl Phthalate	ug/100cm ²	< 10	ND	5.0(J,B)	ND	2.3(J,B)	ND	2.0(J)	1.2(J)
Di-n-Octyl Phthalate	ug/100cm ²	< 10	2.0(J)	76	15	ND	ND	ND	ND

Note: Detection limits given are applicable to all samples unless otherwise noted

^aSample diluted twice; detection limits are elevated for all semivolatile compounds in this sample.

^bSample diluted 5 times; detection limits are elevated for all semivolatile compounds in this sample.

^cSample diluted 10 times; detection limits are elevated for all semivolatile compounds in this sample.

Key:

mg/kg = Milligrams per kilogram.

ug/kg = Micrograms per kilogram.

ug/100cm² = Micrograms per 100 square centimeter sample area.

ND = Parameter not detected.

J = Estimated value; present below stated detection limits.

B = Also present in the laboratory method blank.

Source: Ecology and Environment, Inc., 1994.

Table 3-8					
SUMMARY OF ANALYTICAL RESULTS					
BUILDING NO. 607					
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION					
NAS PENSACOLA					
Parameters	Sample Type/Sample No.				
	Concrete Core/Shallow Core				
	Units	Detection Limits	CC07 (Apron)	CC08 (Apron)	SC02 (Lead Acid Battery Storage Area)
Inorganics					
Arsenic	mg/kg	0.5	NA	NA	1.0
Lead	mg/kg	0.5	NA	NA	2.6
Chromium (Total)	mg/kg	1.0	NA	NA	10
Nickel	mg/kg	2.0	NA	NA	2.7
Zinc	mg/kg	1.0	NA	NA	17
Cyanide	mg/kg	<0.5	NA	NA	3.4
Volatiles					
Methylene Chloride	ug/kg	<5.0	NA	NA	2.5(J,B)
Acetone	ug/kg	<10	NA	NA	35(B)
Semivolatiles					
Bis(2-ethylhexyl) Phthalate	ug/kg	<330	NA	NA	130(J)
Phenol	ug/kg	<330	NA	NA	1,400
Di-n-Octyl Phthalate	ug/kg	<330	NA	NA	350
F-Listed Suite					
Methylene Chloride	ug/kg	<5.0	6.0(B)	6.7(B)	NA
Acetone	ug/kg	<10	16(B)	18(B)	NA

Note: Detection limits given are applicable to all samples unless otherwise noted.

Key:

mg/kg = Milligrams per kilogram.

ug/kg = Micrograms per kilogram.

NA = Not analyzed for this parameter.

ND = Parameter not detected.

J = Estimated value; compound present below stated detection limit.

B = Also present in laboratory method blank.

Source: Ecology and Environment, Inc., 1994.

Table 3-9				
SUMMARY OF ANALYTICAL RESULTS				
BUILDING NO. 3460				
NADEP/CHEVALIER FIELD PRE-DEMOLITION				
INVESTIGATION				
NAS PENSACOLA				
Parameters	Sample Type/Sample No.			
	Concrete Core			
	Units	Detection Limits	CC18 (Apron)	CC19 (Apron)
F-Listed Suite				
Methylene Chloride	ug/kg	<5.0	6.0(B)	5.0(B)
Acetone	ug/kg	<10.0	11(B)	6.9(J,B)

Note: Detection limits given are applicable for all samples unless otherwise noted.

Key:

ug/kg = Micrograms per kilogram.

B = Also present in laboratory method blank.

J = Estimated value; present below stated detection limit.

Source: Ecology and Environment, Inc., 1994.

Table 3-10						
SUMMARY OF ANALYTICAL RESULTS						
BUILDING NO. 3588						
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION						
NAS PENSACOLA						
Parameters	Sample Type/Sample No.					
	Concrete Core					
	Units	Detection Limits	CC14 (Haz. Waste Area)	CC15 (Apron)	CC16 (Apron)	CC17 (Apron)
Inorganics						
Arsenic	mg/kg	0.5	NA	NA	NA	NA
Lead	mg/kg	0.5	NA	NA	NA	NA
Chromium (Total)	mg/kg	1.0	NA	NA	NA	NA
Copper	mg/kg	2.0	NA	NA	NA	NA
Nickel	mg/kg	2.0	NA	NA	NA	NA
Silver	mg/kg	1.0	NA	NA	NA	NA
Zinc	mg/kg	1.0	NA	NA	NA	NA
Mercury	mg/kg	0.1	NA	NA	NA	NA
Volatiles						
Methylene Chloride	ug/kg	<5	NA	NA	NA	NA
Acetone	ug/kg	<10	NA	NA	NA	NA
Total Xylenes	ug/kg	<5	NA	NA	NA	NA
2-Butanone	ug/kg	<10	NA	NA	NA	NA
4-Methyl-2-Pentanone	ug/kg	<10	NA	NA	NA	NA
Semivolatiles						
Bis(2-Ethylhexyl) Phthalate	ug/kg	<330	NA	NA	NA	NA
F-Listed Suite						
Methylene Chloride	ug/kg	<5	7.1(B)	6.6(B)	6.4(B)	6.3(B)
Acetone	ug/kg	<10	40(B)	22(B)	23(B)	21(B)

Key at end of table.

Table 3-10					
SUMMARY OF ANALYTICAL RESULTS					
BUILDING NO. 3588					
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION					
NAS PENSACOLA					
Parameters	Sample Type/Sample No.				
	Concrete Core				
	Units	Detection Limits	CC28 (Central Sump Floor)	CC29 (Bay No. 3 Sump Floor)	SC12 (Paint Mixing Room Floor)
Inorganics					
Arsenic	mg/kg	0.5	0.83	ND	0.63
Lead	mg/kg	0.5	3.4	2.3	6.2
Chromium (Total)	mg/kg	1.0	12	23	36
Copper	mg/kg	2.0	20	38	18
Nickel	mg/kg	2.0	ND	ND	32
Silver	mg/kg	1.0	16	5.5	ND
Zinc	mg/kg	1.0	22	21	16
Mercury	mg/kg	0.1	ND	0.020	ND
Volatiles					
Methylene Chloride	ug/kg	<5	7.1(B)	11(B)	29(B)
Acetone	ug/kg	<10	ND	62(B)	220(B)
Total Xylenes	ug/kg	<5	ND	ND	16(J)
2-Butanone	ug/kg	<10	ND	86	ND
4-Methyl-2-Pentanone	ug/kg	<10	ND	12	100
Semivolatiles					
Bis(2-ethylhexyl) Phthalate	ug/kg	<330	57(J)	320(J)	88(J)
N-Butyl Alcohol	ug/kg	<330	ND	ND	2,200
Cyclohexanone	ug/kg	<330	ND	ND	110
Isobutanol	ug/kg	<330	ND	ND	330
TCLP Metals					
Chromium	mg/L	0.5	ND	ND	1.0
F-Listed Suite	ug/kg	<5.0	NA	NA	NA
Methylene chloride	ug/kg	<10	NA	NA	NA

Key at end of table.

Table 3-10				
SUMMARY OF ANALYTICAL RESULTS				
BUILDING NO. 3588				
NADEP/CHEVALIER FIELD PRE-DEMOLITION				
INVESTIGATION				
NAS PENSACOLA				
Parameters	Sample Type/Sample No.			
	Shallow Core			
	Units	Detection Limits	SC16 (Central Sump Floor)	SC17^a (Bay No. 3 Sump Floor)
Inorganics				
Arsenic	mg/kg	0.5	0.83	ND
Lead	mg/kg	0.5	5.0	0.68
Cadmium	mg/kg	0.5	ND	1.2
Chromium (Total)	mg/kg	1.0	17	8.0
Copper	mg/kg	2.0	6.5	3.8
Nickel	mg/kg	2.0	ND	ND
Zinc	mg/kg	1.0	37	32
Volatiles				
Methylene Chloride	ug/kg	<5.0	9.0(B)	44(B)
Acetone	ug/kg	<10	45(B)	ND
Toluene	ug/kg	<5.0	ND	38
Ethylbenzene	ug/kg	<5.0	ND	8.0
Total Xylenes	ug/kg	<5.0	ND	72
Trichloroethene	ug/kg	<5.0	ND	ND
4-Methyl-2-Pentanone	ug/kg	<10	ND	180
Semivolatiles				
Bis(2-ethylhexyl) Phthalate	ug/kg	<330	220(J)	21,000
Benzoic Acid	ug/kg	<1,600	ND	ND(16,000)
Methylene Chloride	ug/kg	<10	ND	ND

Key at end of table.

Table 3-10						
SUMMARY OF ANALYTICAL RESULTS						
BUILDING NO. 3588						
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION						
NAS PENSACOLA						
Parameters	Sample Type/Sample No.					
	Wipe Sample			Scrap Sample		
	Units	Detection Limits	WS06 (Exhaust Stack)	Units	Detection Limit	SCS01 ^b (Floor Grate)
Inorganics						
Arsenic	ug/100 cm ²	20	ND	mg/kg	0.5	ND
Lead	ug/100 cm ²	10	34	mg/kg	0.5	1,800
Cadmium	ug/100 cm ²	1.0	1.1	mg/kg	0.5	52
Chromium (Total)	ug/100 cm ²	2.0	50	mg/kg	1.0	13,000
Copper	ug/100 cm ²	4.0	ND	mg/kg	2.0	130
Nickel	ug/100 cm ²	4.0	ND	mg/kg	2.0	78
Zinc	ug/100 cm ²	2.0	1,600	mg/kg	1.0	360
Cyanide	ug/100 cm ²	<0.5	ND	mg/kg	1.0	1.4
Volatiles						
Methylene Chloride	ug/100 cm ²	<2.5	2.3(J,B)	ug/kg	<620	290(J,B)
Acetone	ug/100 cm ²	<2.5	ND	ug/kg	<620	ND
Toluene	ug/100 cm ²	<2.5	ND	ug/kg	<620	150(J)
Ethylbenzene	ug/100 cm ²	<2.5	ND	ug/kg	<620	780
Total Xylenes	ug/100 cm ²	<2.5	ND	ug/kg	<620	1,400
Trichloroethene	ug/100 cm ²	<2.5	1.3(J)	ug/kg	<620	ND
4-Methyl-2-Pentanone	ug/100 cm ²	<2.5	ND	ug/kg	<620	ND
Semivolatiles						
Benzoic Acid	ug/100 cm ²	<50	1.2(J)	ug/kg	<1,600	ND(330,000)
Bis(2-ethylhexyl) Phthalate	ug/100 cm ²	<10	2.2(J,B)	ug/kg	<330	7,300,000(X)

Key at end of table.

Table 3-10

**SUMMARY OF ANALYTICAL RESULTS
BUILDING NO. 3588
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION
NAS PENSACOLA**

Note: Detection limits given are applicable for all samples unless otherwise noted.

^a Sample diluted 10 times; detection limits are elevated for all semivolatile compounds in this sample.

^b Sample diluted 1,000 times; detection limits are elevated for all semivolatiles compounds in this sample.

Key:

B = Also present in laboratory method blank.

J = Estimated value; compound present below stated detection limit.

mg/kg = Milligrams per kilogram.

mg/L = Milligrams per liter.

ug/kg = Micrograms per kilogram.

ug/100 cm² = Micrograms per 100 square centimeter sample area.

NA = Not analyzed for this parameter.

ND = Parameter not detected.

Source: Ecology and Environment, Inc., 1994.

Table 3-11
SUMMARY OF ANALYTICAL RESULTS
BUILDING NO. 3557
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION
NAS PENSACOLA

Parameters	Sample Type/Sample No.								
	Concrete Core/Shallow Core								
	Units	Detection Limits	CC20 (Apron)	CC21 (Apron)	CC22 (Apron)	CC23 (Apron)	SC24/CC24 ^a (Bay No. 4 Sump Floor)	CC25 (Containment Area Under Solvent)	SC05 (Containment Area Under Solvent)
Inorganics									
Arsenic	mg/kg	0.5	NA	NA	NA	NA	0.93	0.74	0.91
Lead	mg/kg	0.5	NA	NA	NA	NA	4.9	2.4	3.0
Cadmium	mg/kg	0.5	NA	NA	NA	NA	1.9	ND	1.2
Chromium (Total)	mg/kg	1.0	NA	NA	NA	NA	120	6.4	18
Copper	mg/kg	2.0	NA	NA	NA	NA	2.6	ND	ND
Zinc	mg/kg	1.0	NA	NA	NA	NA	66	12	31
Cyanide	mg/kg	<0.5	NA	NA	NA	NA	5.9	ND	ND
Volatiles									
Methylene Chloride	ug/kg	<5.0	NA	NA	NA	NA	3.3(J,B)	3.4(J,B)	4.2(J,B)
Acetone	ug/kg	<10	NA	NA	NA	NA	90(B)	86(B)	53(B)
Total Xylenes	ug/kg	<5.0	NA	NA	NA	NA	ND	28	18
4-Methyl-2-Pentanone	ug/kg	<10	NA	NA	NA	NA	ND	78	290
Semivolatiles									
Phenol	ug/kg	<330	NA	NA	NA	NA	38,000	37(J)	ND
Naphthalene	ug/kg	<330	NA	NA	NA	NA	ND	ND	42(J)

Key at end of table.

Table 3-11
SUMMARY OF ANALYTICAL RESULTS
BUILDING NO. 3557
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION
NAS PENSACOLA

Parameters	Sample Type/Sample No.								
	Concrete Core/Shallow Core								
	Units	Detection Limits	CC20 (Apron)	CC21 (Apron)	CC22 (Apron)	CC23 (Apron)	SC24/CC24 ^a (Bay No. 4 Sump Floor)	CC25 (Containment Area Under Solvent)	SC05 (Containment Area Under Solvent)
Bis(2-ethylhexyl) Phthalate	ug/kg	< 330	NA	NA	NA	NA	1,100(J)	220(J)	2,200
Benzyl Alcohol	ug/kg	< 330	NA	NA	NA	NA	ND (8,250)	36(J)	820
Di-n-Octyl Phthalate	ug/kg	< 330	NA	NA	NA	NA	150(J)	ND	ND
TCLP Metals									
Chromium (Total)	mg/L	0.5	ND	ND	ND	ND	0.58	NA	ND
F-Listed Suite									
Methylene Chloride	ug/kg	< 5.0	6.1(B)	6.3(B)	6.9(B)	6.7(B)	NA	NA	NA
Acetone	ug/kg	< 10	12(B)	11(B)	19(B)	25(B)	NA	NA	NA

3-41

Key at end of table.

Table 3-11
SUMMARY OF ANALYTICAL RESULTS
BUILDING NO. 3557
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION
NAS PENSACOLA

Parameters	Sample Type/Sample No.										
	Wipe Samples								Ceiling Tile		
	Units	Detection Limits	WS01 (Ventilation Duct)	WS02 (Ceiling)	WS03 (Power Room Roof)	WS12 (East Wall)	WS13 (Bay No. 4 Wall)	WS20 (Bay No. 4 Sump Vent)	Units	Detection Limits	CT01 ^b (Ceiling Tile)
Inorganics											
Arsenic	ug/100cm ²	20	ND	ND	ND	ND	ND	ND	mg/kg	0.5	1.6
Lead	ug/100cm ²	10	100	18	190	ND	ND	18	mg/kg	0.5	2.6
Cadmium	ug/100cm ²	1.0	19	18	13	ND	ND	6.6	mg/kg	0.5	1.7
Chromium (Total)	ug/100cm ²	2.0	850	5.9	210	2.6	3.8	230	mg/kg	1.0	29
Copper	ug/100cm ²	4.0	180	ND	730	ND	ND	12	mg/kg	2.0	9.6
Nickel	ug/100cm ²	4.0	7.2	ND	7.6	ND	ND	6.1	mg/kg	2.0	34
Silver	ug/100cm ²	2.0	ND	ND	ND	ND	ND	3.7	mg/kg	1.0	ND
Zinc	ug/100cm ²	2.0	2,500	87	580	46	34	130	mg/kg	1.0	92
Mercury	ug/100cm ²	0.2	ND	ND	ND	ND	ND	ND	mg/kg	0.1	0.43
Cyanide	ug/100cm ²	<0.5	4.5	ND	1.1	ND	ND	60	mg/kg	<0.5	ND
Volatiles											
Methylene Chloride	ug/100cm ²	<2.5	1.2(J,B)	2.6(J,B)	1.3(J)	ND	ND	ND	ug/kg	<620	ND
Chloroethane	ug/100cm ²	5.0	ND	ND	ND	ND	ND	1.6(J,B)	ug/kg	<1,200	ND
Trichloroethene	ug/100cm ²	<2.5	ND	1.2(J)	ND	1.0(J)	1.1(J)	1.2(J)	ug/kg	<620	ND

Key at end of table.

3-42

Table 3-11
SUMMARY OF ANALYTICAL RESULTS
BUILDING NO. 3557
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION
NAS PENSACOLA

Parameters	Sample Type/Sample No.										
	Wipe Samples								Ceiling Tile		
	Units	Detection Limits	WS01 (Ventilation Duct)	WS02 (Ceiling)	WS03 (Power Room Roof)	WS12 (East Wall)	WS13 (Bay No. 4 Wall)	WS20 (Bay No. 4 Sump Vent)	Units	Detection Limits	CT01 ^b (Ceiling Tile)
2-Butanone	ug/100cm ²	< 5.0	ND	ND	4.0(J)	ND	ND	9.4	ug/kg	< 1,200	ND
Semivolatiles											
Butyl Benzyl Phthalate	ug/100cm ²	< 10	1.5(J)	ND	1.7(J)	ND	ND	2.7(J,B)	ug/kg	< 1,650	ND
Bis(2-ethylhexyl) Phthalate	ug/100cm ²	< 10	5.2(J,B)	ND	4.3(J,B)	ND	1.1(J)	9.3(J)	ug/kg	< 1,650	2,700(J)
Di-n-Butyl Phthalate	ug/100cm ²		ND	ND	ND	ND	ND	ND	ug/kg	< 330	700(J)
Benzoic Acid	ug/100cm ²	< 50	1.1(J)	2.2(J)	ND	ND	1.1(J)	ND	ug/kg	< 80,000	ND
Benzyl Alcohol	ug/100cm ²	< 10	4.3(J)	ND	5.2(J)	ND	ND	13	ug/kg	16,000	96,000

Note: Detection limits given are applicable for all samples unless otherwise noted.

^aSample diluted 25 times; detection limit elevated for all semivolatile compounds in this sample.

^bSample diluted 50 times; detection limit elevated for all semivolatile compounds in this sample.

Key:

- mg/kg = Milligrams per kilogram.
- mg/L = Milligrams per liter.
- ug/kg = Micrograms per kilogram.
- ug/cm² = Micrograms per 100 square centimeter sample area.
- NA = Not analyzed for this parameter.
- ND = Parameter not detected.
- J = Estimated value; compound present below stated detection limit.
- B = Also present in laboratory method blank.
- TCLP = Toxicity characteristic leaching procedure.

Source: Ecology and Environment, Inc., 1994.

Table 3-12				
SUMMARY OF ANALYTICAL RESULTS				
BUILDING NO. 3380				
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION				
NAS PENSACOLA				
Parameters	Sample Type/Sample No.			
	Concrete Core/Shallow Core			
	Units	Detection Limits	CC26 (Contained Storage Area)	SC09 (Contained Storage Area)
Inorganics				
Arsenic	mg/kg	0.5	1.5	1.6
Lead	mg/kg	0.5	2.9	10
Cadmium	mg/kg	.05	ND	0.62
Chromium (Total)	mg/kg	1.0	12	25
Copper	mg/kg	2.0	6.5	4.9
Nickel	mg/kg	2.0	5.1	3.5
Zinc	mg/kg	1.0	14	19
Volatiles				
Chloromethane	ug/kg	10	9.3(J)	ND
N-Butyl Alcohol	ug/kg	50	350	ND
Methylene Chloride	ug/kg	< 5.0	20(B)	4.6(J,B)
Acetone	ug/kg	< 10	51(B)	39(B)

Note: Detection limits given are applicable to all samples unless otherwise noted.

Key:

mg/kg = Milligrams per kilogram.

ug/kg = Micrograms per kilogram.

ND = Parameter not detected.

J = Estimated value; compound present below stated detection limit.

B = Also present in laboratory method blank.

Source: Ecology and Environment, Inc., 1994.

Table 3-13								
SUMMARY OF FIELD QC SAMPLE ANALYTICAL RESULTS NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION NAS PENSACOLA								
Parameters	Sample Type/Sample No.							
	Duplicate Concrete Core							
	Units	Detection Limits	CC06	CC06D	CC14	CC14D	CC23	CC23D
F-Listed Suite								
Methylene Chloride	ug/kg	<5.0	9.3	15(B)	7.1(B)	5.6(B)	6.7(B)	7.1(B)
Acetone	ug/kg	<10	21	260(B)	40(B)	55(B)	25(B)	16(B)

Key at end of table.

Table 3-13								
SUMMARY OF FIELD QC SAMPLE ANALYTICAL RESULTS								
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION								
NAS PENSACOLA								
Parameters	Sample Type/Sample No.							
	Duplicate Concrete Core/Shallow Core							
	Units	Detection Limits	CC26	CC26D	SC04 ^a	SC04D	SC09	SC09D
Inorganics								
Arsenic	mg/kg	0.5	1.5	1.4	0.98	ND	1.6	1.4
Lead	mg/kg	0.5	2.9	5.6	2.7	ND	10	2.5
Cadmium	mg/kg	0.5	ND	0.85	ND	ND	0.62	0.94
Chromium (Total)	mg/kg	1.0	12	46	34	4.9	25	12
Copper	mg/kg	2.0	6.5	6.7	2.4	ND	4.9	6.7
Nickel	mg/kg	2.0	5.1	5.0	2.4	ND	3.5	5.8
Zinc	mg/kg	1.0	14	28	11	6.0	19	18
Cyanide	mg/kg	<0.5	ND	2.5	2.5	ND	ND	ND
Volatiles								
N-Butyl Alcohol	ug/kg	<50	350	220	ND	ND	ND	ND
Methylene Chloride	ug/kg	<5.0	20	12(B)	3.7(J,B)	3.4(J,B)	4.6(J,B)	5.5(B)
Acetone	ug/kg	<10	51(B)	26(B)	41(B)	47(B)	39(B)	250(B,X)
Chloromethane	ug/kg	<10	9.3(J)	ND	ND	ND	ND	ND
Semivolatiles								
Phenol	ug/kg	<330	ND	ND	840	ND	ND	ND
Butyl Benzyl Phthalate	ug/kg	<330	ND	ND	62(J)	56(J)	ND	ND
Di-n-Octyl Phthalate	ug/kg	<330	ND	ND	4400	ND	ND	ND
Bis(2-ethylhexyl) Phthalate	ug/kg	<330	ND	ND	140(J)	41(J)	ND	67(J)

Key at end of table.

Table 3-13
SUMMARY OF FIELD QC SAMPLE ANALYTICAL RESULTS
NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION
NAS PENSACOLA

Parameters	Sample Type/Sample No.							
	Duplicate Shallow Core				Duplicate Wipe Sample			
	Units	Detection Limits	SC10	SC10D	Units	Detection Limits	WS05	WS05D
Inorganics								
Arsenic	mg/kg	0.5	0.78	1.1	ug/100cm ²	20	ND	ND
Lead	mg/kg	0.5	43	50	ug/100cm ²	10	240	290
Cadmium	mg/kg	0.5	19	16	ug/100cm ²	1.0	23	65
Chromium (Total)	mg/kg	1.0	610	450	ug/100cm ²	2.0	760	990
Copper	mg/kg	2.0	11	9.9	ug/100cm ²	4.0	9.3	13
Nickel	mg/kg	2.0	4.2	4.0	ug/100cm ²	4.0	ND	5.4
Silver	mg/kg	1.0	2.5	ND	ug/100cm ²	2.0	15	15
Zinc	mg/kg	1.0	190	180	ug/100cm ²	2.0	570	1,600
Mercury	mg/kg	0.1	ND	ND	ug/100cm ²	0.20	ND	0.25
Cyanide	mg/kg	<0.5	32	44	ug/100cm ²	<0.5	5.1	5.3
Volatiles								
Methylene Chloride	ug/kg	<5.0	5.4(B)	12	ug/100cm ²	<2.5	1.5(J)	1.4(J,B)
Acetone	ug/kg	<10	440(B,X)	120(B)	ug/100cm ²	<2.5	ND	ND
1,1,1-Trichloroethene	ug/kg	<5.0	ND	ND	ug/100cm ²	<2.5	ND	ND
N-Butyl Alcohol	ug/kg	<50	360(C)	260	ug/100cm ²	<2.5	ND	ND
Carbon Disulfide	ug/kg	<2.5	ND	ND	ug/100cm ²	<2.5	5.6	ND
Trichloroethene	ug/kg	<5.0	ND	ND	ug/100cm ²	<2.5	1.2(J)	1.0(J)
2-Butanone	ug/kg	<10	60	ND	ug/100cm ²	<2.5	8.0	4.3(J)
Semivolatiles								
Phenol	ug/kg	<330	48(J)	69(J)	ug/100cm ²	<10	ND	ND
Butyl Benzyl Phthalate	ug/kg	<330	ND	ND	ug/100cm ²	<10	4.2(J)	5.1(J)
Bis(2-ethylhexyl) Phthalate	ug/kg	<330	530	130(J)	ug/100cm ²	<10	32(B)	38(B)
Di-n-Butyl Phthalate	ug/kg	<330	ND	ND	ug/100cm ²	<10	ND	ND
Di-n-Octyl Phthalate	ug/kg	<330	ND	ND	ug/100cm ²	<10	ND	ND
Benzoic Acid	ug/kg	<1,600	ND	ND	ug/100cm ²	<50	2.0(J)	3.0(J)

Key at end of table.

Table 3-13							
SUMMARY OF FIELD QC SAMPLE ANALYTICAL RESULTS NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION NAS PENSACOLA							
Parameters	Sample Type/Sample No.						
	Duplicate Wipe Sample				Wipe Sample Field Blank		
	Units	Detection Limits	WS09	WS09D	WS17FB	WS18FB	WS19FB
Inorganics							
Lead	ug/100cm ²	10	44	17	ND	ND	ND
Cadmium	ug/100cm ²	1.0	55	37	1.7	ND	ND
Chromium (Total)	ug/100cm ²	2.0	89	33	ND	ND	ND
Copper	ug/100cm ²	4.0	63	35	ND	ND	ND
Nickel	ug/100cm ²	4.0	16	5.6	ND	ND	ND
Silver	ug/100cm ²	2.0	ND	ND	ND	ND	ND
Zinc	ug/100cm ²	2.0	270	110	14	84	14
Mercury	ug/100cm ²	0.1	0.25	0.25	ND	0.43	ND
Cyanide	ug/100cm ²	<0.5	1.5	0.95	0.60	ND	ND
Volatiles							
Chloroform	ug/100cm ²	<2.5	ND	ND	ND	ND	1.0(J)
Acetone	ug/100cm ²	<2.5	ND	ND	ND	3.2(J)	3.8(J)
Carbon Disulfide	ug/100cm ²	<2.5	6.0	ND	ND	ND	ND
Trichloroethene	ug/100cm ²	<2.5	1.2(J)	ND	1.7(J)	1.5(J)	1.4(J)
2-Butanone	ug/100cm ²	<2.5	ND	ND	ND	18	10
Semivolatiles							
Butyl Benzyl Phthalate	ug/100cm ²	<10	85	440	ND	ND	ND
Bis(2-ethylhexyl)phthalate	ug/100cm ²	<10	310(B)	840(B)	ND	ND	2.5(J,B)
Di-n-Butyl Phthalate	ug/100cm ²	<10	ND	2.7(J,B)	ND	ND	ND
Di-n-Octyl Phthalate	ug/100cm ²	<10	15	100	ND	ND	ND

Key at end of table.

Table 3-13								
SUMMARY OF FIELD QC SAMPLE ANALYTICAL RESULTS NADEP/CHEVALIER FIELD PRE-DEMOLITION INVESTIGATION NAS PENSACOLA								
Parameters	Sample Type/Sample No.							
	Core Sample Rinsate Blank						Trip Blank	
	Units	Detection Limits	CCRB01	CCRB02	CCRB03	CCRB04	CCTB01	CCTB02
Inorganics								
Chromium (Total)	ug/L	10	30	ND	ND	ND	NA	NA
Zinc	ug/L	10	14	18	14	ND	NA	NA
Volatiles	ug/L		ND	ND	ND	ND	ND	ND
Semivolatiles	ug/L		ND	ND	ND	ND	ND	ND

Note: Detection limits given are applicable to all samples unless otherwise noted.

^aSample diluted twice; detection limit elevated for all semivolatile compounds in this sample.

Key:

- mg/kg = Milligrams per kilogram.
- ug/kg = Micrograms per kilogram.
- ug/100cm² = Micrograms per 100 square centimeter sample area.
- ug/L = Micrograms per liter.
- ND = Parameter not detected.
- NA = Not analyzed for this parameter.
- J = Estimated value; compound present below stated detection limits.
- B = Also present in the laboratory method blank.
- X = Exceeds calibration limit.
- C = Parameter not included in daily standard; quantitation performed using standard of the following day.

Source: Ecology and Environment, Inc., 1994.

4. CONCLUSIONS

The results of this investigation have characterized both the surficial wastes and those present in the building materials at the NADEP/Chevalier Field site. Based on these results, it appears that several analytes were detected in the samples that could meet the definition of a listed hazardous waste. In buildings where these wastes were detected, Navy personnel must use their process and materials knowledge to determine the RCRA status of the waste. Solvents used in the NADEP buildings may carry listings of wastes from nonspecific sources (F001-F005).

Several compounds were also detected at the site that may be considered residues from spills of commercial chemical products that are listed because of toxicity (U list). If these constituents are determined to be listed hazardous wastes, the debris in which they are contained would carry the same listing by virtue of the recently promulgated "contained in" principle (40 Code of Federal Regulations (CFR) 268.2(g)).

A determination must be made as to the final disposition of the buildings and floors. The decision to reuse or remove the buildings will be the major concern in determining the regulatory status (debris vs. non-debris) of the materials present. An intact, concrete floor does not meet the regulatory definition of debris or a solid waste. As defined in 40 CFR §268.2(g), "Debris means solid material exceeding a 60 mm particle size that is intended for disposal and that is: a manufactured object; or plant or animal matter; or natural geologic material..." In addition, the floor would not meet the regulatory definition of a solid waste (§261.2) since it has not been discarded.

In areas where the buildings will be demolished and the debris removed, the concentrations of the contaminants detected on the concrete surfaces and in the cores are below established treatment standards presented in 268.43 Table CCW. Because the samples are

below land disposal restriction treatment standards, it may be possible to exclude the debris from regulation under Subtitle C.

None of the samples analyzed by the TCLP method contained any contaminant concentrations exceeding RCRA toxicity characteristic regulatory levels.

Analytical results from the wipe samples identified metals as the primary surficial contaminants. In buildings that will be reused, these metals should be removed by a thorough washing to reduce the exposure risk to future occupants of the building.

5. REFERENCES

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APPENDIX A
CHEVALIER FIELD
ANALYTICAL DATA
APRIL 1994