

N60200.AR.002037  
NAS CECIL FIELD, FL  
5090.3a

PHASE 2 SOIL SAMPLING AND ANALYSIS WORK PLAN FOR POTENTIAL SOURCE OF  
CONTAMINATION 44 DITCH FROM DEFENSE REUSE AND MARKETING OFFICE TO  
WASTE WATER TREATMENT PLANT NAS CECIL FIELD FL

8/10/1999

TETRA TECH NUS INC

**Phase II Soil Sampling and Analysis Work Plan  
PSC 44, Ditch From DRMO to WWTP  
Naval Air Station Cecil Field  
Jacksonville, Florida**

**August 10, 1999**

Phase II sampling and analysis of surface and subsurface soils is proposed for PSC 44, Ditch From DRMO to WWTP as shown in Figure A. Sampling and analysis is being conducted to further delineate the excavation boundaries for polychlorinated biphenyl (PCB) contamination identified during previous sampling.

A total of 15 soil samples will be collected, including 13 surface soil samples from the 0- to 1-foot and 1- to 2-foot intervals and two subsurface soil samples from the 2- to 3-foot and 3- to 4-foot intervals during Phase II activities. These samples will be collected from locations identified on Figure A and described in Table 1 and analyzed for PCBs.

Phase II sampling of PSC 44 surface water and sediment, if required, will be conducted under a separate work plan.

The sampling activities and procedures described in this Work Plan will be performed in accordance with the U.S. EPA Region 4 Environmental Investigation Standard Operating Procedures and Quality Assurance Manual (EISOPQAM) and the Base-Wide Generic Work Plan for Naval Air Station (NAS) Cecil Field. Specifically, the Base-Wide Generic Work Plan includes procedures for management of investigation-derived wastes in Volume I and standard operating procedures in the Project Operations Plan in Volume II.

The surface soil samples will be collected as grab samples at a depth of 0 to 1 foot below land surface (bls) using plastic, disposable trowels. The 1- to 2-foot surface soil samples at depth may be collected as grab samples using a shovel to remove the first one foot of soil and a disposable trowel to collect the sample. Subsurface soil samples will be collected using a hand auger with decontamination in accordance with the Base-Wide Generic Work Plan and the EISOPQAM.

The sample locations shall be located in the field by a registered surveyor and marked with a wooden stake or pin flag labeled with the sample identification. The sampling crew will work with the survey crew to establish the best procedures to limit the time the wooden stakes or pin flags are in the area and make any field adjustments to the sampling locations which are necessary due to observed field conditions.

Personal protection equipment and other waste trash (e.g., disposable trowels) will not be considered hazardous and will be disposed of in a municipal landfill. Such trash will be collected in a plastic bag and disposed of in a suitable trash receptacle. Removed soil in excess of sampling volume requirements will be placed back in the ground.

Sample handling requirements, the bottleware required, preservation, and holding time requirements for the analysis proposed for this sampling event are as identified in the following table:

<b>Analysis</b>	<b>Analytical Method</b>	<b>Bottleware</b>	<b>Preservation</b>	<b>Holding Time<sup>1</sup></b>
PCBs	SW-846 8082	8-oz. glass jar	Cool to 4° C	14 days to extraction; 40 days to analysis

<sup>1</sup> Holding times are measures from the date/time of sample collection

Analytical results will be provided on a 14-day turn around time.

The laboratory contracted to do this work is as follows:

ACCUTEST SOUTHEAST  
4405 Vineland Rd., Suite C-15  
Orlando, Florida 32811  
Attention: Susan Baudios  
(407) 425-6700  
Fax: (407) 425-0707

As agreed by the BCT, the collection of rinsate and trip blanks has been eliminated at NAS Cecil Field. In accordance with these changes, the following table summarizes the frequency and type of field Quality Assurance/ Quality Control (QA/QC) samples to be collected for this confirmatory sampling program.

Type of samples	Frequency	Samples to be collected
Field Duplicate	1/10 samples/matrix	2
Lab MS/MSD	1/20 samples	1 <sup>(1)</sup>

(1) MS/MSD samples are a laboratory QA/QC requirement. Separate samples are not required, only additional volume (2X),

As agreed upon by the BCT, formal data validation has been eliminated from the installation restoration program at NAS Cecil Field. However, Tetra Tech NUS personnel will review the analytical data packages generated by the analytical laboratory to eliminate false positive and false negative results.

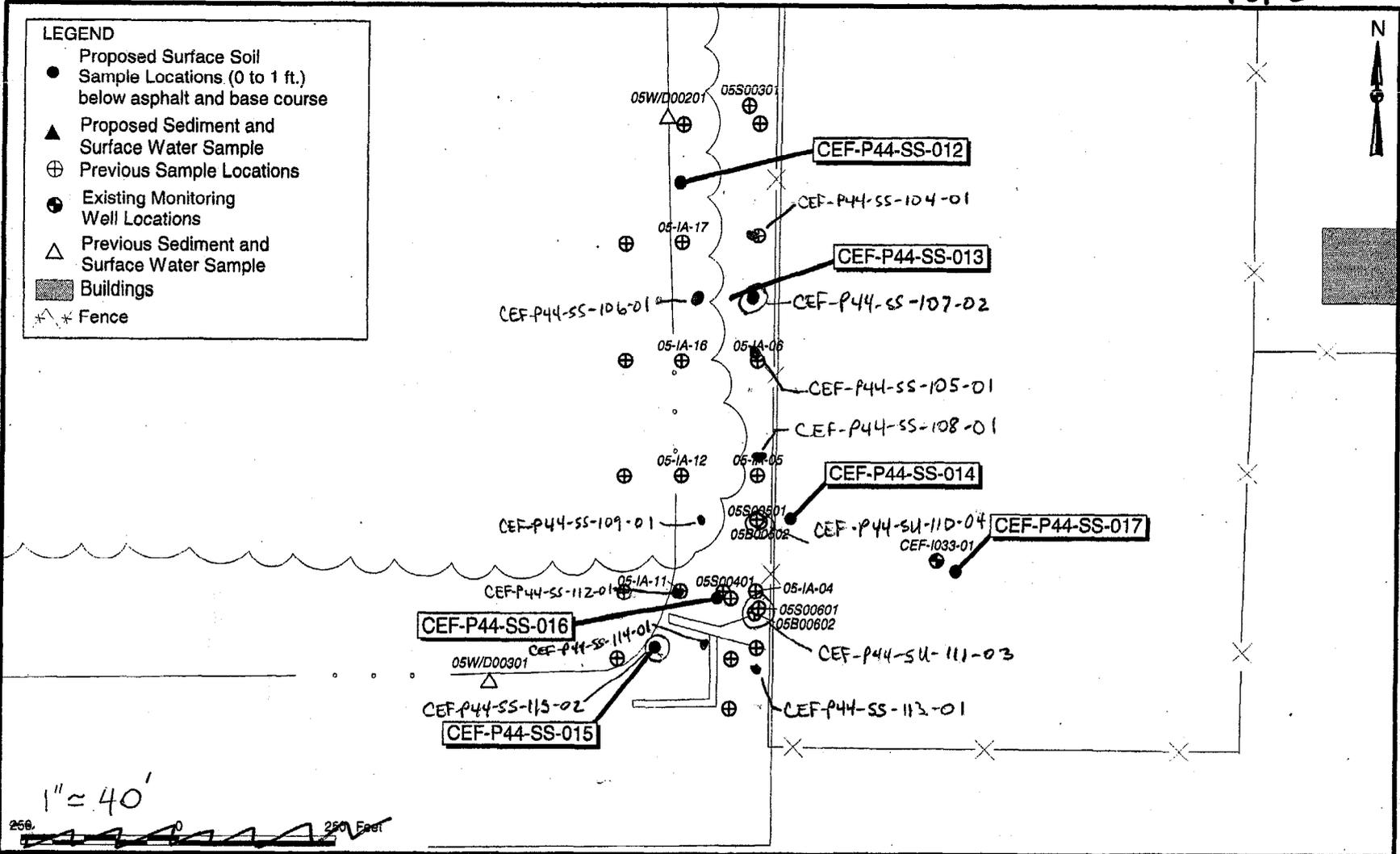
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**Table 1**

**Phase II Soil Sampling and Analysis Work Plan  
PSC 44, Ditch from DRMO to WWTP**

Sample ID	Location	Sample Depth				Analysis
		0 - 1 ft.	1 - 2 ft.	2-3 ft.	3-4 ft.	PCBs
CEF-P44-SS-101-01	15 feet due south of CEF-P44-SS-010	X				X
SS-102-01	15 feet due west of CEF-P44-SS-010 (to the east and outside of observable ditch)	X				X
SS-103-02	At CEF-P44-SS-010 location		X			X
SS-104-01	15 feet due north of CEF-P44-SS-013	X				X
SS-105-01	15 feet due south of CEF-P44-SS-013	X				X
SS-106-01	15 feet due west of CEF-P44-SS-013	X				X
SS-107-02	At CEF-P44-SS-013 location		X			X
SS-108-01	15 feet due north of 05S00501 location	X				X
SS-109-01	15 feet due west of 05S0501 location	X				X
SU-110-04	At 05S00501 location				X	X
SU-111-03	At 05S00601 location			X		X
SS-112-01	15 feet due west of 05S00401 location	X				X
SS-113-01	15 feet due south of 05S00601 location	X				X
SS-114-01	Approximately 15 feet due west of CEF-P44-SS-015, north of culvert and west of v-shaped structure	X				X
SS-115-02	At CEF-P44-SS-015 location		X			X

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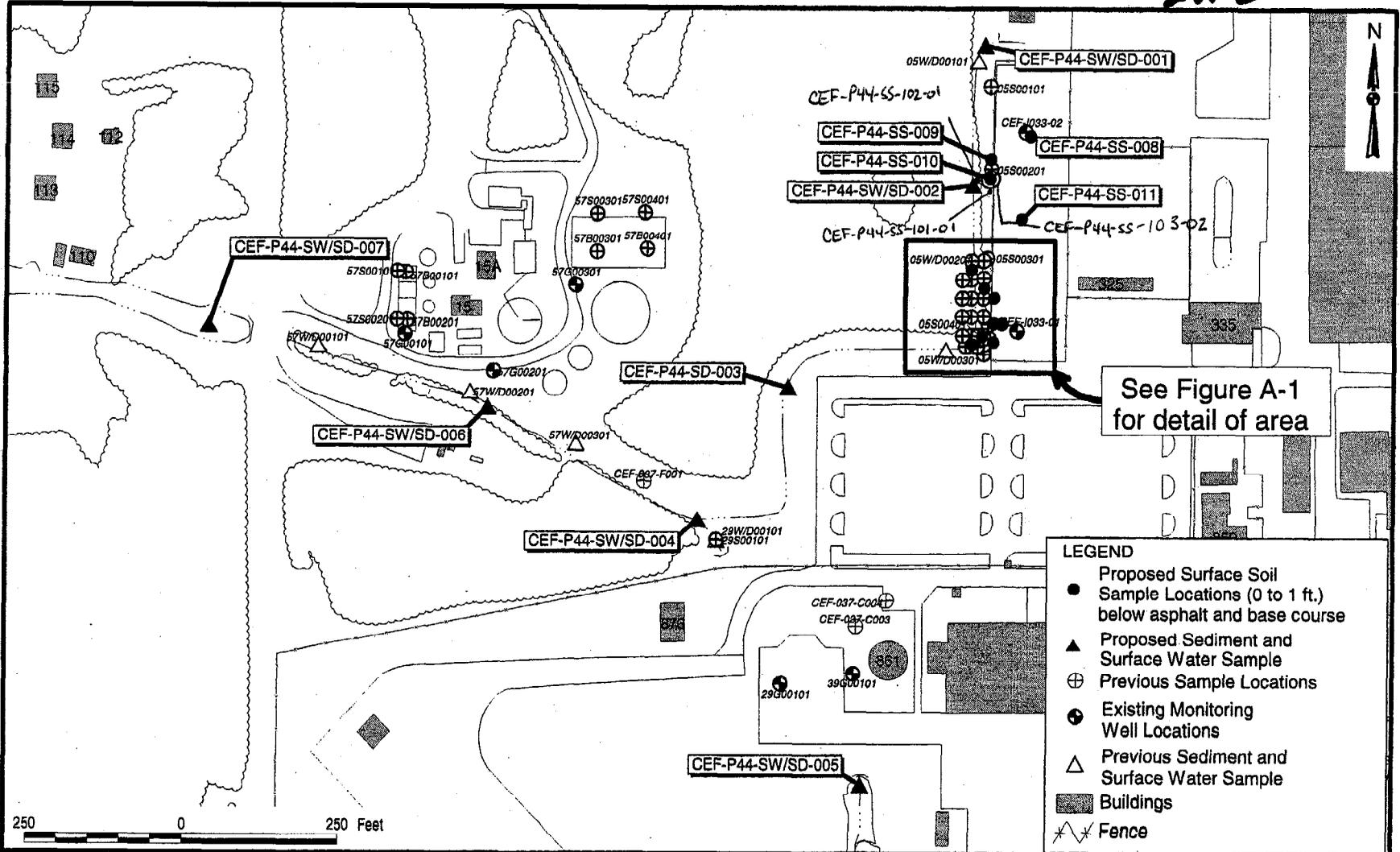
DRAWN BY YLI	DATE 04/08/99
CHECKED BY	DATE
COST/SCHEDULE-AREA	
SCALE AS NOTED	



**PHASE II**  
 PROPOSED SAMPLE LOCATIONS  
 PSC 44, DITCH FROM DRMO TO WWTP  
 NAVAL AIR STATION CECIL FIELD  
 JACKSONVILLE, FLORIDA

CONTRACT NUMBER 0039	
APPROVED BY	DATE
APPROVED BY	DATE
DRAWING NO. FIGURE A-1	REV 0

8/10/99  
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- LEGEND**
- Proposed Surface Soil Sample Locations (0 to 1 ft.) below asphalt and base course
  - ▲ Proposed Sediment and Surface Water Sample
  - ⊕ Previous Sample Locations
  - ⊙ Existing Monitoring Well Locations
  - △ Previous Sediment and Surface Water Sample
  - ▒ Buildings
  - ⌘ Fence

250 0 250 Feet

DRAWN BY YLI	DATE 04/06/99
CHECKED BY	DATE
COST/SCHEDULE-AREA	
SCALE AS NOTED	



**PHASE II**  
 PROPOSED SAMPLE LOCATIONS  
 PSC 44, DITCH FROM DRMO TO WWTP  
 NAVAL AIR STATION CECIL FIELD  
 JACKSONVILLE, FLORIDA

CONTRACT NUMBER 0039	
APPROVED BY	DATE
APPROVED BY	DATE
DRAWING NO. FIGURE A	REV 0