

N60200.AR.002008
NAS CECIL FIELD, FL
5090.3a

PHASE 3 SAMPLING AND ANALYSIS WORK PLAN FOR POTENTIAL SOURCE OF
CONTAMINATION 6 LAKE FRETWELL RUBBLE DISPOSAL AREA NAS CECIL FIELD FL
7/14/1999
TETRA TECH NUS INC

**Phase III Sampling and Analysis Work Plan
PSC 6, Lake Fretwell Rubble Disposal Area
Naval Air Station Cecil Field
Jacksonville Florida**

July 14, 1999

Phase III sampling and analysis of surface soils is proposed for PSC 6 (the Lake Fretwell Rubble Disposal Area) as shown in Figure A. The objective of Phase III sampling activities at PSC 6 is to further delineate arsenic and polycyclic aromatic hydrocarbon (PAH) detections that exceed the Florida Department of Environmental Protection (FDEP) soil screening criteria.

Phase III sampling and analysis will be conducted in two separate areas of contamination: (1) surrounding sample CEF-P06-SS-103-01 to delineate arsenic contamination; and (2) surrounding samples CEF-P06-SS-107, CEF-P06-SS-108, and CEF-P06-SS-109 to delineate PAH contamination. A total of 10 samples will be collected as summarized in Table 1.

Sampling activities 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 with plastic, disposable trowels. Because disposable trowels will be used, decontamination of surface soil/sediment sampling equipment will not be necessary. Removed soil in excess of sampling volume requirements will be placed back in the ground and the turf will be repaired or replaced.

The proposed sample locations will be located in the field by a registered land surveyor and will be 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. If the sample location requires movement based on field observations or conditions, the location where the sample was actually collected will be surveyed and reported.

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

The sample handling, bottleware, preservation, and holding time requirements for each analytical parameter are summarized as follows.

Analysis	Analytical Method	Bottleware	Preservation	Holding Time⁽¹⁾
PAHs	SW-846 8310	8-oz. glass jar	Cool to 4°C	14 days to extraction; 40 days to analysis
Arsenic	SW-846 6010B	8-oz. glass jar	Cool to 4°C	180 days to extraction

1 Holding times are measured from the date/time of sample collection.

Analytical results will be provided on a **3-day turn around basis**.

The laboratory contracted to do this work is:

ACCUTEST SOUTHEAST
4405 Vineland Road, Suite C-15
Orlando, Florida 32811
Attention: Susan Gaudios
(407) 425-5700
Fax: (407) 425-0707

As agreed upon by the BCT, the collection of rinsate and trip blanks has been eliminated at NAS Cecil Field. In addition, field blanks will not be collected during this sampling program because there will be minimal decontamination of sampling equipment. 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 sampling program.

Type of Samples	Frequency	Samples to be Collected
Field Duplicate	1/10 sample/matrix	1
Lab MS/MSD	1/20 samples	1 ⁽¹⁾

1 MS/MSD is a Laboratory QA/QC requirement, separate sample not required, only additional volume

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

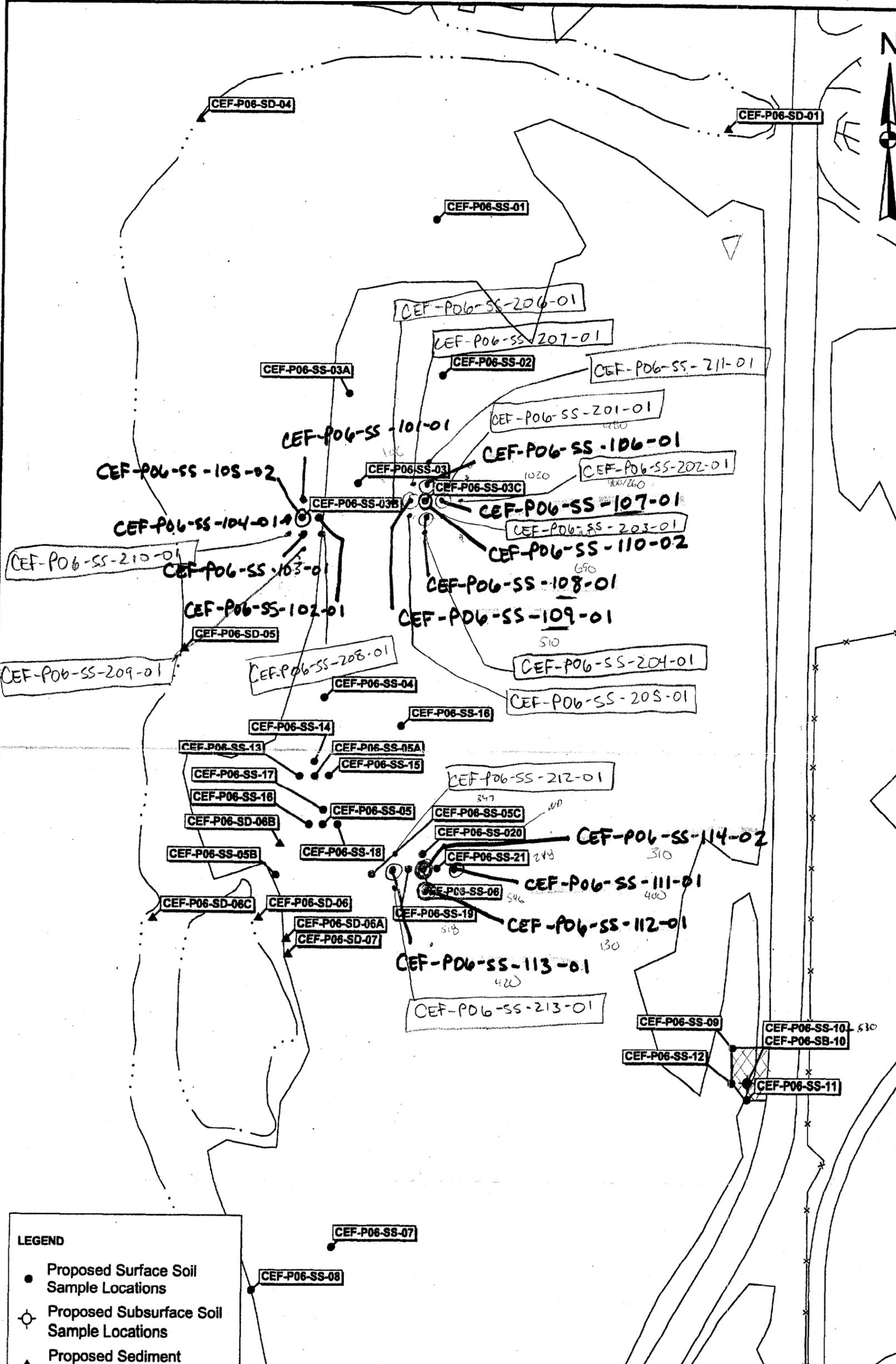
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Table 1

Phase III Sampling and Analysis Work Plan
PSC 6, Lake Fretwell Rubble Disposal Area

Sample ID	Sample Location	Sample Depth	Analytical Parameter	
			PAHs	Arsenic
CEF-P06-SS-201-01	15 feet north of CEF-P06-SS-107-01	0 to 1 foot	X	
CEF-P06-SS-202-01	15 feet east of CEF-P06-SS-107-01	0 to 1 foot	X	
CEF-P06-SS-203-01	15 feet south of CEF-P06-SS-107-01	0 to 1 foot	X	
CEF-P06-SS-204-01	15 feet south of CEF-P06-SS-108-01	0 to 1 foot	X	
CEF-P06-SS-205-01	15 feet south of CEF-P06-SS-109-01	0 to 1 foot	X	
CEF-P06-SS-206-01	15 feet west of CEF-P06-SS-109-01	0 to 1 foot	X	
CEF-P06-SS-207-01	15 feet north of CEF-P06-SS-109-01	0 to 1 foot	X	
CEF-P06-SS-208-01	15 feet east of CEF-P06-SS-103-01	0 to 1 foot		X
CEF-P06-SS-209-01	15 feet south of CEF-P06-SS-103-01	0 to 1 foot		X
CEF-P06-SS-210-01	15 feet west of CEF-P06-SS-103-01	0 to 1 foot		X
CEF-P06-SS-211-01	15 feet north of CEF-P06-SS-106-01	0 to 1 foot	X	
CEF-P06-SS-212-01	15 feet north of CEF-P06-SS-113-01	0 to 1 foot	X	
CEF-P06-SS-213-01	15 feet south of CEF-P06-SS-113-01	0 to 1 foot	X	

14-Jul-99



LEGEND

- Proposed Surface Soil Sample Locations
- ⊙ Proposed Subsurface Soil Sample Locations
- ▲ Proposed Sediment Sample Locations

DRAWN BY YLI	DATE 07/04/99
CHECKED BY RD	DATE 1/13/99
COST/SCHEDULE-AREA	
SCALE AS NOTED	



Phase III
 PROPOSED SAMPLE LOCATIONS
 PSC 6, LAKE FRETWELL RUBBLE DISPOSAL AREA
 NAVAL AIR STATION CECIL FIELD
 JACKSONVILLE, FLORIDA

100 0 100 Feet	
CONTRACT NUMBER 0039	
APPROVED BY	DATE
APPROVED BY	DATE
DRAWING NO. Figure A	REV 0

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