

N60200.AR.002051
NAS CECIL FIELD, FL
5090.3a

PHASE 3 SAMPLING AND ANALYSIS WORK PLAN FOR POTENTIAL SOURCE OF
CONTAMINATION 49 SKEET RANGE NAS CECIL FIELD FL

8/23/1999

TETRA TECH NUS INC

**Phase III Sampling and Analysis Work Plan
PSC 49, Skeet Range
Naval Air Station Cecil Field
Jacksonville, Florida**

August 23, 1999

Phase III sampling and analysis of the surface soils is proposed for PSC 49 as identified in Figure A. Sampling and analysis will be conducted to further delineate the horizontal and vertical excavation limits at the site. A total of 10 surface soil samples will be collected during this sampling event from the approximate locations identified on Figure A and summarized in Table 1.

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 using plastic, disposable trowels. Because disposable trowels will be used, decontamination of sampling equipment will not be necessary. Once a soil sample has been collected, the location of the sample will be marked with a wooden stake or pin flag labeled with the sample identification. A registered surveyor will record the sample location coordinates. 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.

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 and the turf replaced or repaired.

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:

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

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

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

The laboratory contracted to do this work is as follows:

ACCUTEST SOUTHEAST
4405 Vineland Road, Suite C-15
Orlando, Florida 32881
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 no 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 samples/matrix	1 soil
Lab MS/MSD	1/20 samples/matrix	1 soil ⁽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.

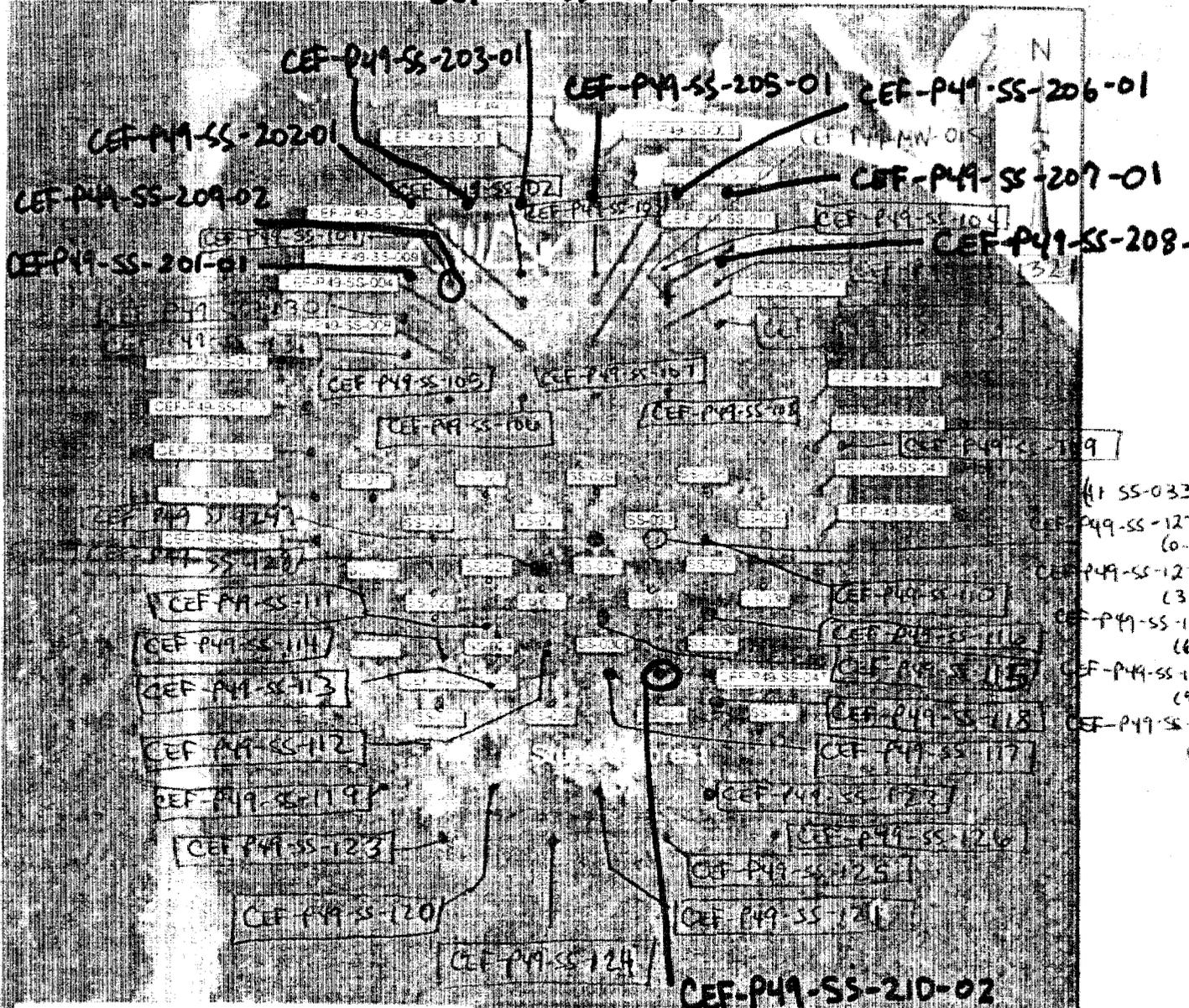
Table 1
Phase III Sampling and Analysis Work Plan
PSC 49, Skeet Range

Sample ID CEF-P49-	Location	Analysis	
		PAHs	Arsenic
SS-201-01	50 feet west of CEF-P49-SS-101-01 location (0 to 1 foot)	X	
SS-202-01 to SS-207-01	Midway between edge of shooting area and fence to the north, on 15 foot centers (0 to 1 foot)	X	
SS-208-01	25 feet east of CEF-P49-SS-042-01 (0 to 1 foot)	X	
SS-209-02	At CEF-P49-SS-101-01 location (1 to 2 feet)	X	
SS-210-02	At CEF-P49-SS-047-01 location (1 to 2 feet)		X

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CEF-P49-95-204-01



Notes

- 2) clay pigeons
 1) Locate edge of pellets visually
 and collect one line of samples at that
 edge (one line of samples = 50 centimeters
 North & south of Phase I samples)
- 3) Locate edge of lead pellets visually
 and collect one line of samples
 within the pellets and one line
 outside of the pellets on
 approximately 50 centimeters

LEGEND

- Proposed Surface Soil Sample Locations (to 1 ft)
- Proposed Surface Soil Sample Locations (to 2 ft)
- Proposed Groundwater Monitoring Area (to 1 ft)
- Proposed Groundwater Monitoring Area (to 2 ft)

PHASE II
PSC49

