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NAS CECIL FIELD, FL
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PHASE 4 SAMPLING AND ANALYSIS WORK PLAN FOR BUILDING 610 NAS CECIL FIELD FL

3/9/2001

TETRA TECH NUS INC

Phase IV Sampling and Analysis Work Plan
Building 610
Naval Air Station Cecil Field
Jacksonville, Florida

March 9, 2001

Phase IV sampling and analysis of surface soils is proposed for the Building 610 area, as shown in Figure A. Previous soil sample results indicated exceedances of volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAHs), total recoverable petroleum hydrocarbons (TRPH), barium, and selenium. A total of 10 samples will be collected as shown on Figure A and analyzed as shown on 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.

Surface soil samples will be collected as grab samples using plastic, disposable trowels. The proposed soil sample locations shall be marked with a wooden stake or pin flag labeled with the sample identification. The locations where the samples are collected will be recorded by a registered land surveyor. The sampling crew will work with the survey crew to establish the best procedures to limit the time between collecting the sample and conducting the survey.

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 from the surface soil sampling in excess of sampling volume requirements will be placed back on the ground and the turf replaced or repaired.

Sampling 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]
VOCs	SW-846 5035/8260B	Encore samplers	Cool to 4° C Preservation by laboratory	48 hours to preservation; 14 days to analysis
PAHs	SW-846 8310	8-oz. glass jar	Cool to 4°C	14 days to extraction; 40 days to analysis
TRPH	Florida PRO	8-oz. glass jar	Cool to 4°C	14 days to analysis
Barium, selenium	SW-846 6010B	8-oz. glass jar	Cool to 4°C	180 days to analysis

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

Analytical results will be reported on a *3-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: Linda Williams
(407) 425-6700
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.

But because of the limited number of samples and analyses, no duplicates will be collected in this phase.

Type of Samples	Frequency	Samples to be Collected
Field Duplicate	1/10 sample/matrix	0
Lab MS/MSD	1/20 samples/matrix	1(1)

(1) MS/MSD is a laboratory QA/QC requirement, separate samples 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, 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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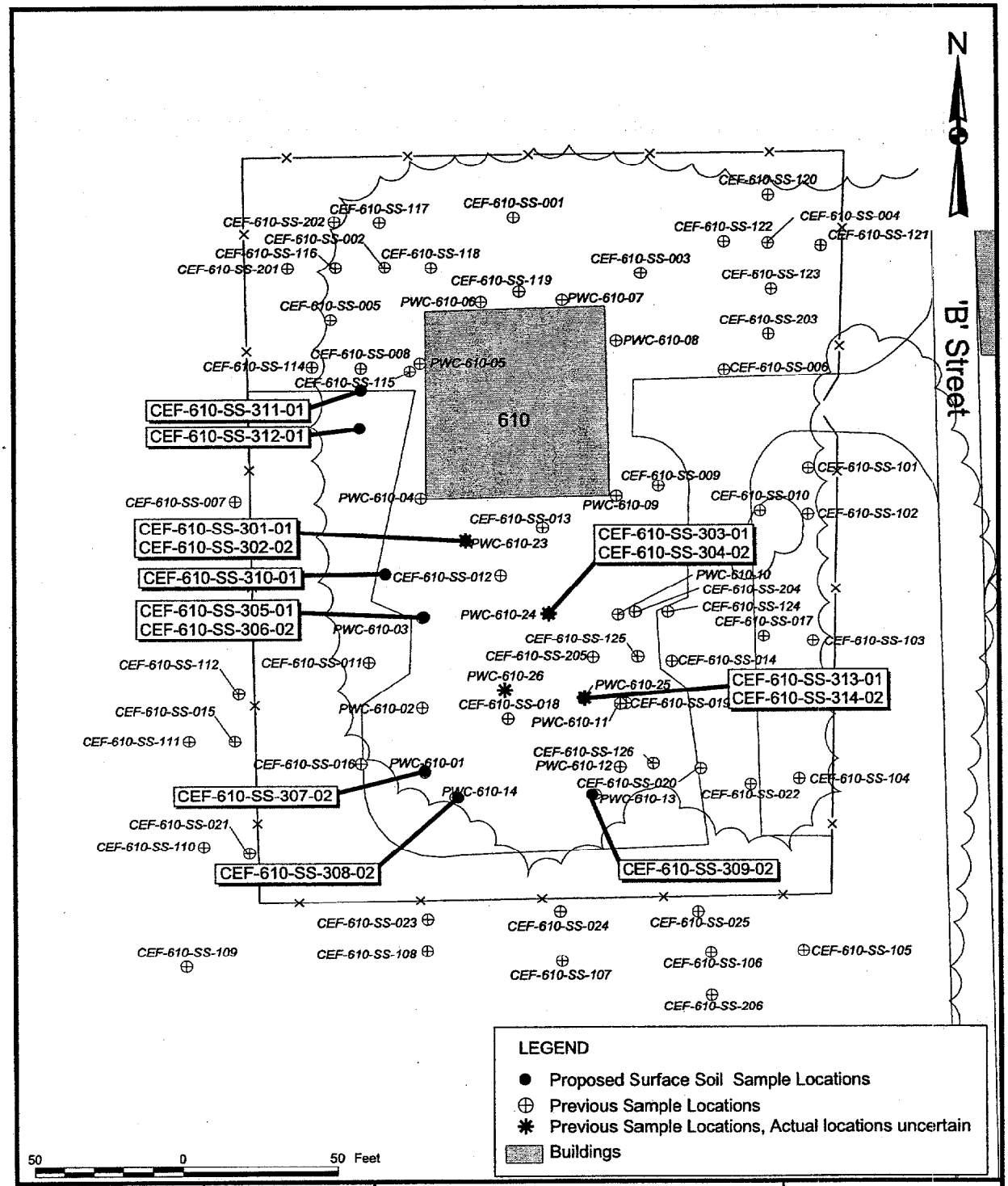
Table 1

Sampling and Analysis Summary
Building 610 – Phase VI

Sample ID CEF-610-	Location	VOCs	PAHs	TRPH	Ba	Se
SS-301-01	14 feet south and 13 feet east of SW corner of Building 610 (0 - 1 ' bgs) (estimated location of PWC-610-23)	X				
SS-302-02	14 feet south and 13 feet east of SW corner of Building 610 (1 - 2 ' bgs) (Same location as CEF-610-SS-301) (estimated location of PWC-610-23)	X				
SS-303-01	40 feet south and 20 feet west of SE corner of Building 610 (0 - 1 ' bgs) (estimated location of PWC-610-24)	X				
SS-304-02	40 feet south and 20 feet west of SE corner of Building 610 (1 - 2 ' bgs) (Same location as CEF-610-SS-303) (estimated location of PWC-610-24)	X				
SS-305-01	40 feet south and 1 foot west of SW corner of Building 610 (0 - 1 ' bgs) (location of PWC-610-3)				X	X
SS-306-02	40 feet south and 1 foot west of SW corner of Building 610 (1 - 2 ' bgs) (Same location as CEF-610-SS-305) (location of PWC-610-3)				X	X
SS-307-02	92 feet south and 1 foot west of SW corner of Building 610 (1 - 2 ' bgs) (location of PWC-610-1)				X	
SS-308-02	101 feet south and 10 feet east of SW corner of Building 610 (1 - 2 ' bgs) (location of PWC-610-14)			X		
SS-309-02	101 feet south and 8 feet west of SE corner of Building 610 (1 - 2 ' bgs) (location of PWC-610-13)			X		
SS-310-01	30 feet north of CEF-610-SS-011. Adjust in towards the east so that the location is not under the pavement. (0 - 1 ' bgs)				X	X
SS-311-01	Due south of CEF-610-SS-008, at edge of pavement (0 - 1' bgs)		X			
SS-312-01	20 feet due south of CEF-610-SS-008, under pavement (0 - 1'). Be sure sample is free of asphalt particles.		X			
SS-313-01	80 feet south and 12 feet west of SE corner of Building 610 (0 - 1 ' bgs) (estimated location of PWC-610-25)	X				
SS-314-02	80 feet south and 12 feet west of SE corner of Building 610 (1 - 2 ' bgs) (Same location as CEF-610-SS-313) (estimated location of PWC-610-25)	X				



DRAWN BY: MJJ	DATE: 22Nov99	PROPOSED SAMPLE LOCATIONS PHASE IV PWC, BUILDING 610 NAVAL AIR STATION CECIL FIELD JACKSONVILLE, FLORIDA	CONTRACT NUMBER: 0039
CHECKED BY	DATE		APPROVED BY / DATE
COST/SCHEDULE-AREA			APPROVED BY / DATE
SCALE: AS NOTED			DRAWING NO.: FIGURE — REV: 0

P:\GIS\CECIL\bldg610.apr 08Mar01 MJJ Layout PWC Bldg 610 Proposed Sample Locations