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NAS CECIL FIELD, FL
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PHASE 11 SAMPLING AND ANALYSIS WORK PLAN FOR SITE 15 BLUE 10 ORDNANCE
DISPOSAL AREA NAS CECIL FIELD FL
7/29/2003
TETRA TECH NUS INC

**Phase XI Sampling and Analysis Work Plan
Site 15, Blue 10 Ordnance Disposal Area
Naval Air Station Cecil Field
Jacksonville, Florida**

July 29, 2003

The objective of this sampling is to further delineate the vertically extent of TRPH in soil and to collect water level measurements in seven monitoring wells recently sampled. The water level measurements were not collected during groundwater sampling event due to heavy rain conditions. The proposed soil sampling location is based on prior sampling events conducted by ABB and TtNUS that include over 500 samples. During this investigation, 1 soil sample will be collected from the 2 to 3 foot below ground surface (bgs) interval. The approximate location of the soil sample and monitoring wells are identified on Figure A and described in Table 1.

The sampling activities, quality assurance/quality control (QA/QC) procedures, and data validation requirements for field activities described in this work plan are in general agreement with the U.S. EPA Region IV Environmental Investigation Standard Operating Procedures (SOPs) and Quality Assurance Manual (EISOPQAM), FDEP SOPs FS3000, Remedial Investigation report for Sites 36 and 37, and current Tetra Tech NUS, Inc. (TtNUS) SOPs. Florida Administrative Code (FAC) Quality Assurance Rule (FAC 62-160) was updated in April of 2002 and incorporates new SOPs developed and adopted by the FDEP for the collection and analysis of environmental media. Accordingly, the soil and groundwater activities that will be conducted in this work plan will abide by SOPs FS3000 (for soil) and FS2200 (for groundwater), both of which reference additional applicable SOPs as necessary.

The subsurface soil sample (2 to 3 foot bgs) will be collected as a grab sample using a plastic, disposable trowel. The proposed soil sample locations shall be surveyed by a registered land surveyor prior to sampling and marked with a wooden stake or pin flag labeled with the sample identification as listed in Table 1.

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.

Requirements for sample handling, bottleware, preservation, and holding time for the analyses proposed for this sampling event are as identified in the following table:

Analysis	Analytical Method	Bottleware	Preservation	Holding Time(1)
TRPH	Florida PRO	8-oz. glass jar	Cool to 4° C	14 days to analysis

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

TRPH = Total recoverable petroleum hydrocarbons.

PRO = Petroleum Range Organic method.

Analytical results will be reported 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: Linda Williams
(407) 425-6700
Fax: (407) 425-0707

**Phase XI Sampling and Analysis Work Plan
 Site 15, Blue 10 Ordnance Disposal Area
 Naval Air Station Cecil Field
 Jacksonville, Florida**

July 29, 2003

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 soil
Lab MS/MSD	1/20 samples/matrix	1 soil ⁽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.

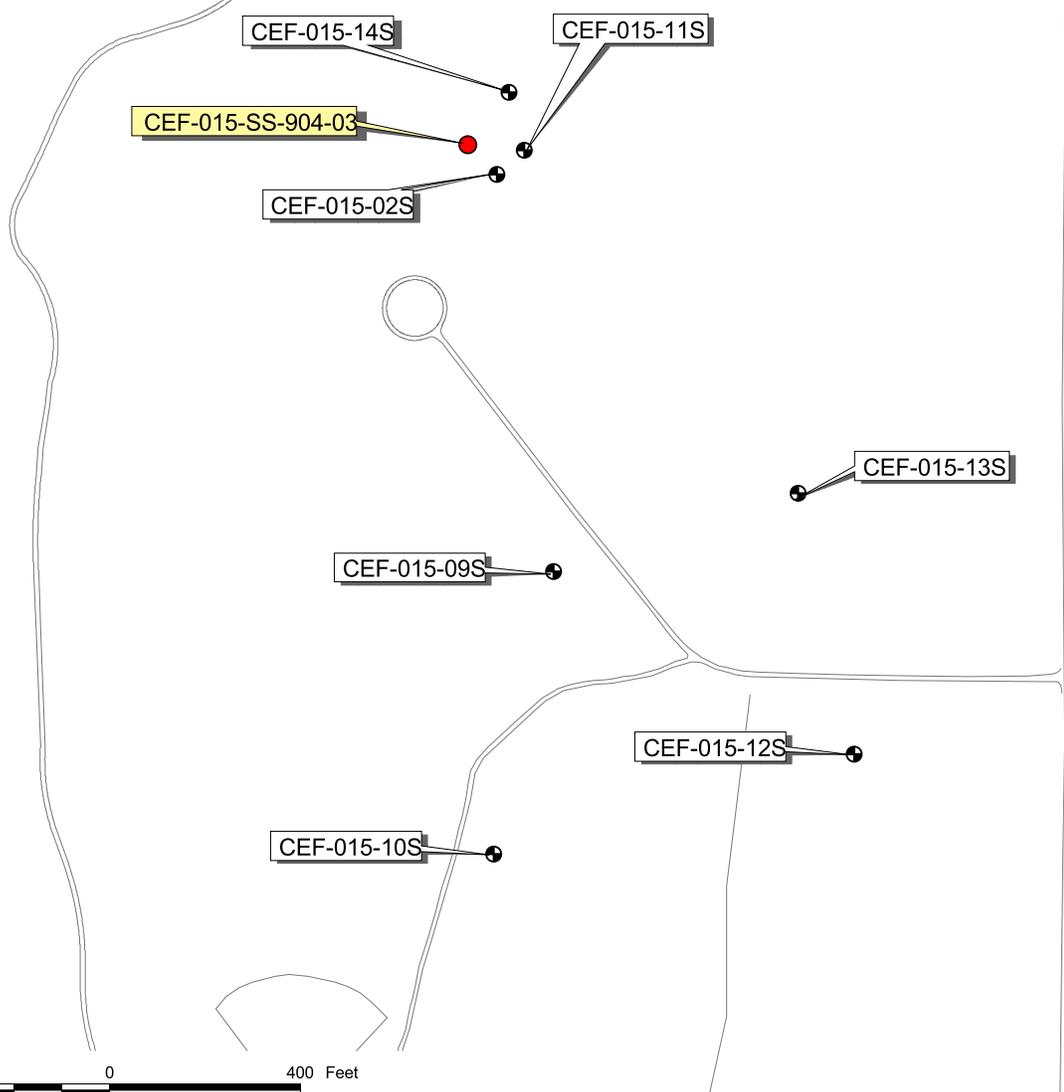
Table 1

**Phase XI Sampling and Analysis Work Plan
 Site 15, Blue 10 Ordnance Disposal Area**

Sample ID	Location	Sample Interval (bgs)	Analysis
CEF-015-SS-904-03	Below previous sample location CEF-015-827-02	2'-3'	TRPH

Legend

- Proposed Soil Sample Location
- ⊕ Monitoring Well Location
(Collect water level measurements only)



DRAWN BY MJJ	DATE 28Jul03		<p style="text-align: center;">PROPOSED PHASE XI SAMPLE LOCATIONS OU 5, SITE 15 NAVAL AIR STATION CECIL FIELD JACKSONVILLE, FLORIDA</p>		CONTRACT NUMBER 7653	
CHECKED BY	DATE				APPROVED BY	DATE
COST/SCHEDULE-AREA					APPROVED BY	DATE
SCALE AS NOTED					DRAWING NO. FIGURE A	REV 0