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NAS CECIL FIELD, FL
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SITE ASSESSMENT SAMPLING AND ANALYSIS PLAN FOR GREY SITE BUILDING 1846 OIL-WATER SEPARATOR 1846-OW NAS CECIL FIELD FL

9/23/1999

TETRA TECH NUS INC

SITE ASSESSMENT
SAMPLING AND ANALYSIS PLAN
for
GRAY SITE: BUILDING 1846,
OIL-WATER SEPARATOR 1846-OW
09/23/99

The Confirmatory Sampling Report (CSR) for Building 1846, Tank 1846-OW (HLA, Sept. 1998, Rev 0.0) identified that the two USTs, 1846-1 and 1846-2, were removed in April 19997, however the oil-water separator (OWS) associated with 1846-2 was left in place. An investigation of the Building 1846 OWS is proposed to determine if any contamination exists in the soil and/or groundwater in the area of the OWS. A site map of Building 1846 is provided in Figure A.

The CSR did not recommend a Site Assessment, however because the OWS is being requested to remain in service and not removed, this Site Assessment of the OWS is warranted. The data collected during this investigation will be used to prepare a Site Assessment Report (SAR).

The soil investigation shall consist of installation of four soil borings at the four corners of the existing OWS, as shown in Figure B. Soil samples will be collected in one foot intervals to the water table in each of the borings. Each interval will be screened for hydrocarbon vapors with a photoionization detector (PID) following the procedures for headspace analysis as required by Chapter 62-770.200, FAC. The soil sample with the highest PID reading from all four borings will be submitted to the fixed base laboratory for kerosene analytical group (KAG) and waste oil group analysis. In the case where no elevated PID readings are obtained, the soil sample collected from the southeast corner immediately above the water table will be submitted.

The soil boring in the downgradient corner (CEF-1846-104) will be advanced below the water table and converted into a shallow monitoring well as shown in Figure C. One groundwater sample will be collected from the newly installed monitoring well (CEF-1846-3S), and one sample will be collected from the existing downgradient monitoring well, CEF-1846-2S. The samples will be analyzed for KAG/waste oil constituents.

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 groundwater monitoring well will be installed in accordance with the EISPOQAM and the Base-Wide Generic Work Plan for NAS Cecil Field. The monitoring well will be screened from approximately 5 to 15 feet bgs with 10-foot long 0.010-inch slotted screen. Well construction materials will consist of certified-clean 2-inch inside diameter, flush-threaded, polyvinyl chloride (PVC) screen and riser. A registered land surveyor will survey the completed monitoring well.

Personnel protection equipment and other waste trash 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. Drill cuttings, purge water, and decon water will be containerized for proper disposal. Upon completion of field efforts, the area will be repaired to its original or better condition.

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]
SOIL				
KAG VOA (benzene, ethyl benzene, toluene, total xylenes, and MTBE)	SW-846 8021 B	3 to 4 5g EnCore Samplers	Cool to 4°C Lab to preserve upon receipt	48 hrs to preservation; 14 days to analysis
KAG PAHs	SW-846 8310	8 oz clear wide mouth glass	Cool to 4°C	14 days to extraction; 40 days to analysis
8 RCRA Metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver)	SW-846 6060B/7000A series	8 oz clear wide mouth glass	Cool to 4°C	180 days to analysis, except mercury which is 28 days
TRPH	FL-PRO	4 oz clear wide mouth glass	Cool to 4°C	14 days to analysis
GROUNDWATER				
KAG VOA-VOH Including MTBE	SW-846 8021 B	3 - 40 ml volatile vials	Cool to 4°C HCl to pH<2	14 days to analysis
KAG PAHs	SW-846 8310	1L amber glass	Cool to 4 C	7 days to extraction; 40 days to analysis
8 RCRA Metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver)	SW-846 6010 B / 7000 series	250 ml HDPE	HNO_3 to pH<2	180 days to analysis, except mercury which is 28 days
TRPH	FL-PRO	40 ml HDPE	Cool to 4°C	14 days to analysis
EDB	EPA 504.1	3 – 40 ml volatile vials	Cool to 4°C	14 days to analysis

(1) Holding times are measured from the date/time of sample collection.
MTBE: methyl tert-butyl ether
TRPH: total recoverable petroleum hydrocarbons

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

The laboratory contracted to do this work is as follows:

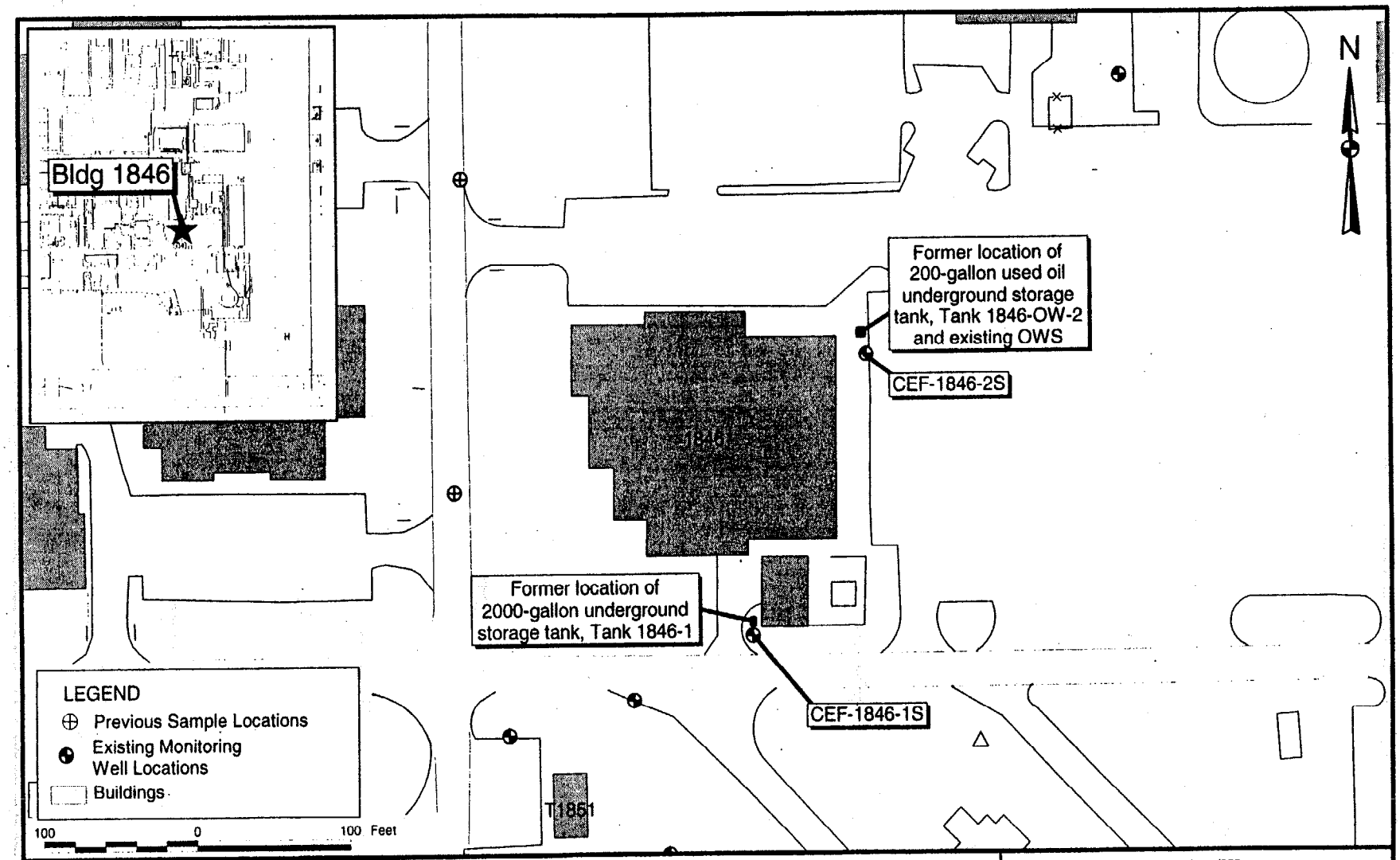
ACCUTEST SOUTHEAST
4405 Vineland Road, Suite C-15
Orlando, Florida 32881
Attention: Susan Gaudios
(407) 425-5700
Fax: (407) 425-0707

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 soil / 1 groundwater
Lab MS/MSD	1/20 samples/matrix	1 soil / 1 groundwater[1]

[1] A separate sample is 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.



DRAWN BY	DATE
MJJ	09Sept99
CHECKED BY	DATE
RS	—
COST/SCHEDULE-AREA	
SCALE	AS NOTED

VICINITY MAP

BUILDING 1846, OIL WATER SEPARATOR

NAVAL AIR STATION CECIL FIELD

JACKSONVILLE, FLORIDA

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

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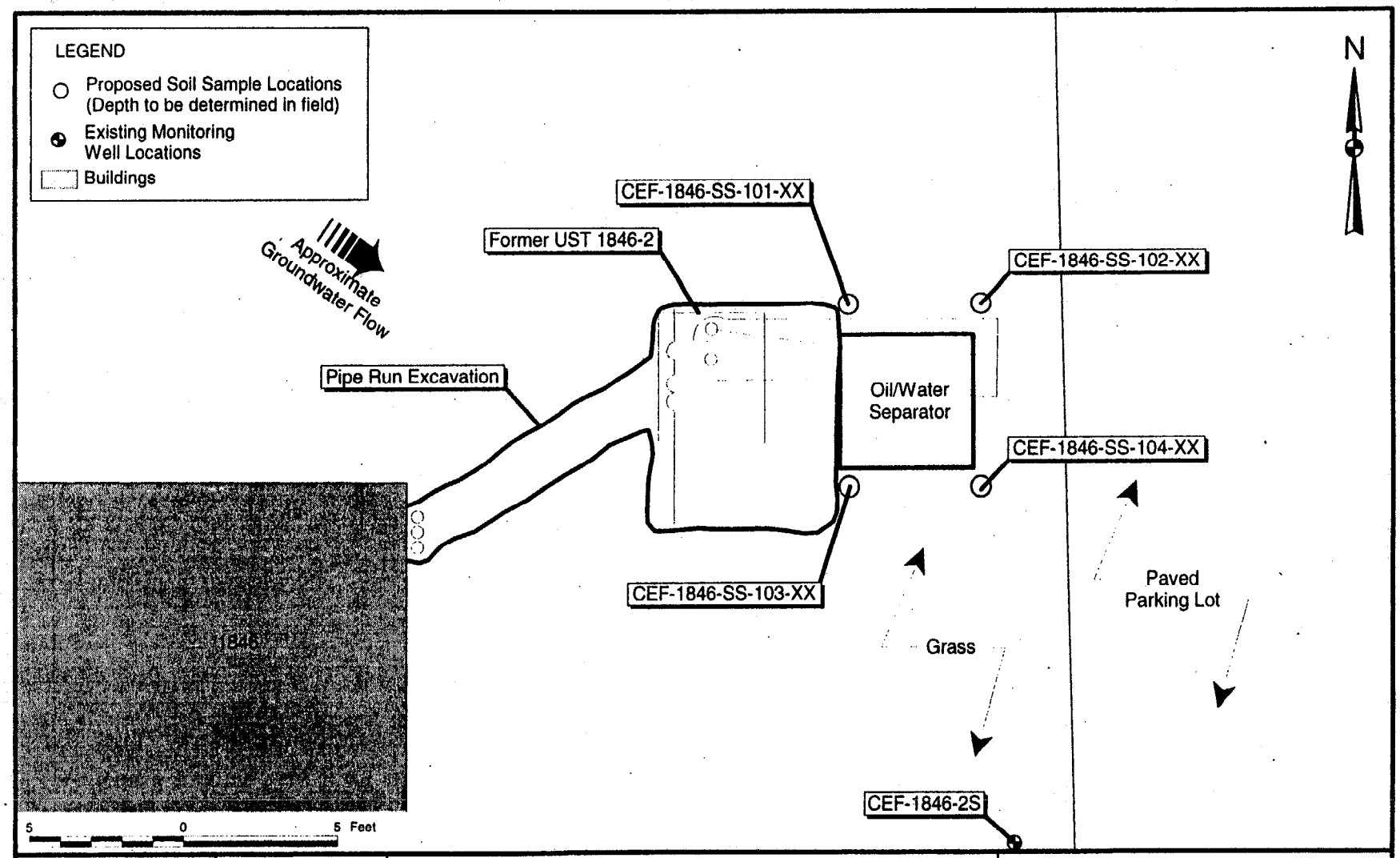

DRAWN BY: MJJ	DATE: 09Sept99	PROPOSED SAMPLING PLAN BUILDING 1846, OIL WATER SEPARATOR NAVAL AIR STATION CECIL FIELD JACKSONVILLE, FLORIDA	CONTRACT NUMBER: 0039
CHECKED BY: RS	DATE: —		APPROVED BY: — DATE: —
COST/SCHEDULE-AREA			APPROVED BY: — DATE: —
SCALE: AS NOTED			DRAWING NO.: FIGURE B REV: 0

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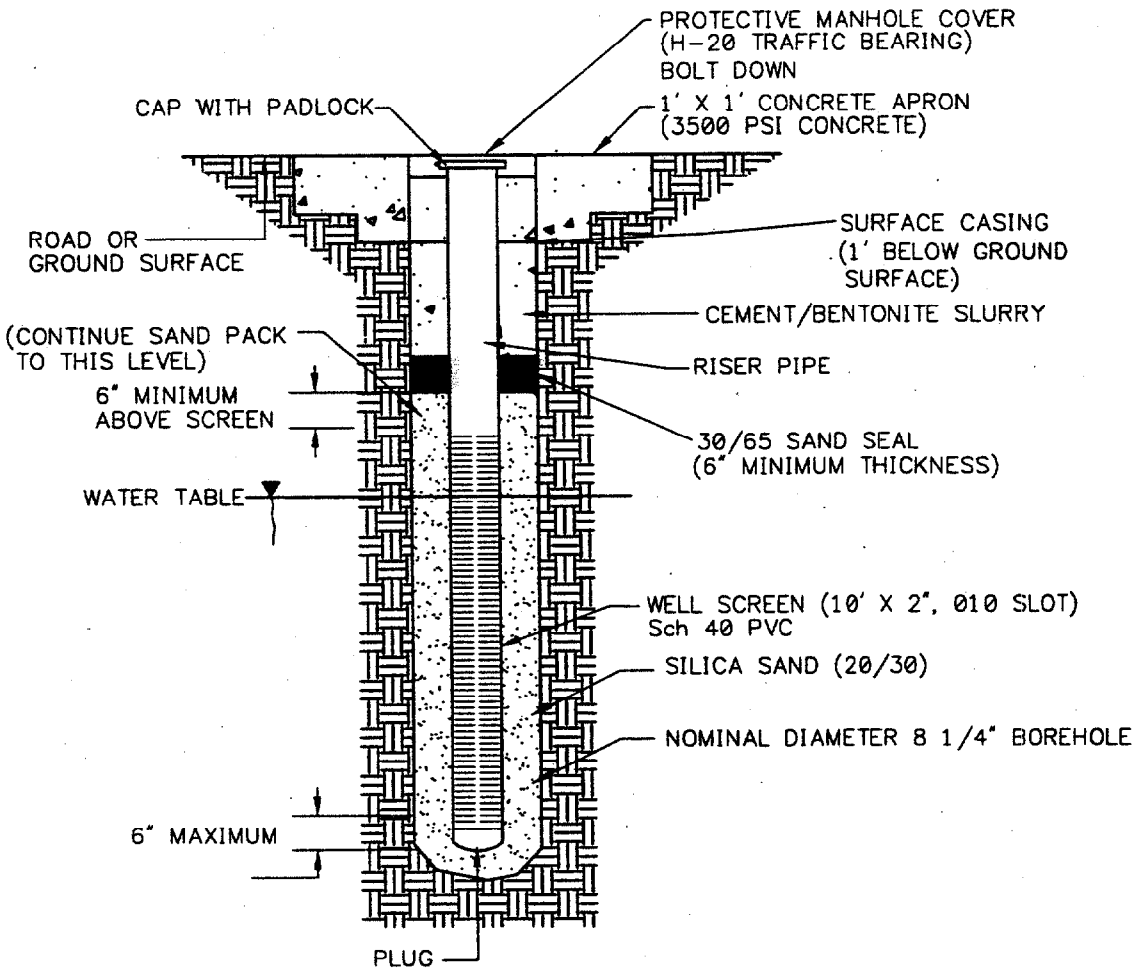

TYPICAL FLUSHMOUNT CONSTRUCTION
SHALLOW MONITORING WELL
N.T.S.

DRAWN BY HJP DATE 9/13/99		TYPICAL WELL CONSTRUCTION DETAIL NAVAL AIR STATION CECIL FIELD JACKSONVILLE, FLORIDA	CONTRACT NO. 0013
CHECKED BY DATE			APPROVED BY DATE
COST/SCHED-AREA			APPROVED BY DATE
SCALE NOT TO SCALE			DRAWING NO. FIGURE C / REV. 0

FORM CADD NO. SDIV_AV.DWG - REV 0 - 1/20/98