

STATEMENT OF ARCHITECT-ENGINEER SERVICE  
FOR  
FY-85(86) EXPLORATORY (NONROUTINE) MONITORING

Furnish all Engineering Services, travel and subsistence necessary to perform Laboratory Analysis primarily on Wastewater and Hazardous Waste Samples collected from Camp Lejeune complex, Camp Lejeune, North Carolina.

For first quarter FY-85, services are initially estimated to be equivalent to two of each of the unit costs listed below (including two days of each advisory service), for a total of

Turn over to the Government, laboratory reports of all tests and analysis performed.

The Government shall have the option of electing to direct the Engineer to perform additional tests at the unit prices shown hereunder.

The Government shall have the further option of electing to direct the Engineer to perform one additional year of laboratory analysis at the unit price established.

<u>TYPE OF ANALYSIS</u>	<u>METHOD</u>	<u>DETECTION LIMITS</u>	<u>UNIT COST</u>
1. <u>METALS (by AA)</u>			
a. Arsenic	GF	10 PPB	
b. Barium	FL	100 PPB	
c. Cadmium	GF/FL	0.5 PPB	
d. Chromium, total	FL	10 PPB	
e. Chromium, hexavalent Wet Chemistry		10 PPB	
f. Copper	FL	50 PPB	
g. Iron	FL	50 PPB	
h. Lead	GF/FL	5 PPB	
i. Manganese	FL	10 PPB	
j. Mercury	CV	0.2 PPB	
k. Nickel	FL	40 PPB	
l. Selenium	GF	2 PPB	

FL-Flame AA  
GF=Graphite Furnace AA  
CV=Cold Vapor AA  
ICP-Inductive by Coupled Plasma



UNITED STATES GOVERNMENT

OFFICE OF THE SECRETARY OF DEFENSE

MEMORANDUM FOR THE SECRETARY OF DEFENSE

DATE: 10/15/50

FROM: [Name]

SUBJECT: [Subject]

1. [Text]

2. [Text]

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<u>TYPE OF ANALYSIS</u>	<u>METHOD</u>	<u>DETECTION LIMITS</u>	<u>UNIT COST</u>
m. Silver	FL	10 PPB	
n. Sodium	FL	2 PPB	
o. Zinc	FL	10 PPB	
2. <u>SOLIDS</u>			
a. Dissolved		10 PPM	
b. Total		10 PPM	
3. <u>ORGANICS</u>			
a. TOC (Total Organic Carbon)		1 PPM	
b. TOH (Total Organic Halogen)		5 PPB	
4. <u>NITROGEN</u>			
a. Nitrate		50 PPB	
5. <u>WET CHEMISTRY</u>			
a. Chlorides		1 PPM	
b. Fluorides, Distillation		0.5 PPM	
c. Phenols		6 PPB	
d. Sulphate		1 PPM	
6. <u>METERS</u>			
a. BTU			
b. Color		1 Unit	
7. <u>GC/MASS SPEC related to RCRA</u>			
a. Characteristics of Hazardous Waste - re: Federal Register, May 19, 1980 - Identification and Listing of Hazardous Waste			
(1) Ignitibility		NA	
(2) Corrosivity w/ø strip		NA	
" w/strip		NA	
(3) Reactivity		NA	
(4) E. P. Toxicity Test -			
(a) METALS - (Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, and Silver)			



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<u>TYPE OF ANALYSIS</u>	<u>METHOD</u>	<u>DETECTION LIMITS</u>	<u>UNIT COST</u>
	<u>1.</u> Initial Analysis of sample to determine metal content	DL as previously listed	
	<u>2.</u> Extraction of sample and metal content of leachate	DL as previously listed	
(b)	<u>ORGANICS</u> - (Endrin, Lindane, Methoxychlor, Toxaphene, 2-4D, 2-4-5 TP, Silvex)		
	<u>1.</u> Initial analysis of sample to determine organics	DL as previously listed	
	<u>2.</u> Extractions of original sample and determination of organics in leachate (without metal analysis)	DL as previously listed	
(c)	<u>METALS AND ORGANICS</u>		
	<u>1.</u> <u>1.</u> E. P. Test Metals & Organics (leachate only, no analysis on original sample)	N/A	
	<u>2.</u> Complete E. P. Test - Metals and Organics analysis of original sample and leachate	N/A	
8.	<u>OTHERS</u> GC		
a.	PCB (GC) 1-2 samples	1 PPM	
b.	PCB (GC) 3-5 samples	1 PPM	
c.	PCB (GC) 6-10 samples	1 PPM	
d.	PCB (GC) Greater than 10 samples	1 PPM	
e.	THMs (4): w/duplicate	10 PPM	
	w/o duplicate	10 PPM	

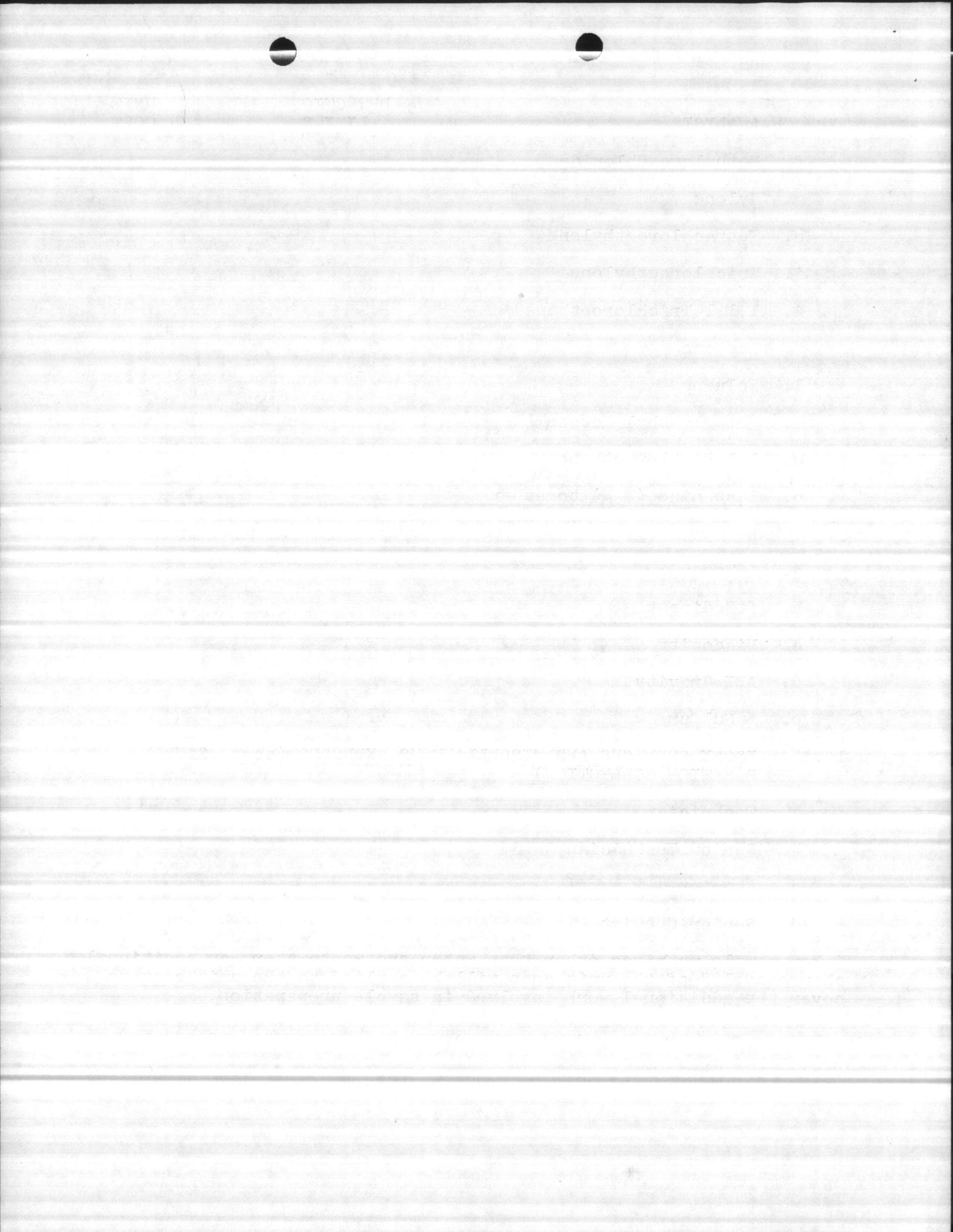
N/A=Not applicable



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<u>TYPE OF ANALYSIS</u>	<u>DETECTION LIMITS</u>	<u>UNIT COST</u>
f. Methylene Chloride		
g. Xylene		
h. Tetrachloroethylene		
i. Trichloroethylene		
j. 1,1,1-Trichloroethane		
k. Acetone		
l. Toluene		
m. Methyl Ethyl Ketone		
n. 1,1-Dichloroethane		
o. Last nine (F-N) together		
9. <u>OTHER</u>		
a. % Water		
b. % Sediment		
c. Viscosity		
d. API Gravity		
e. % Sulfur		
10. <u>ADVISORY SERVICES AND MISCELLANEOUS EXPENSES (e.g., SAMPLE PREPARATION COLLECTION)</u>		
a. Technician		
b. Senior Technician		
c. Chemist		
d. Senior Chemist		

For sample matrixes other than water and wastewater, an additional charge of 10% of the unit cost will be applied to the unit cost to cover the additional work involved in sample preparation.



11. DISCOUNTS\*/SURCHARGES:

a. DISCOUNTS FOR BULK ANALYSES

Discount in Unit Cost based on bulk number of samples received per day\*

<u>Analysis Type</u>	<u>3-5</u>	<u>6-10</u>	<u>11-19</u>	<u>Greater than or equal to 20 Samples</u>
Metals and Organic Analyses	10%	14%	17%	20%
Physical and Inorganic Analyses (other than metals)	2%	4%	5%	8%
Microbiological	2%	4%	5%	8%

\* No discounts are provided for analyses that are subcontracted.

b. ADDITIONAL CHARGES FOR RAPID TURNAROUND ANALYSES

Percent increase in unit cost for turnaround times shorter than specified as normal

For Parameters with normal turnaround of 30 days

50% for 15 calendar day turnaround  
100% for 7 calendar day turnaround  
200% for 2 calendar day turnaround

For Parameters with normal turnaround of 21 days

50% for 14 calendar day turnaround  
100% for 7 calendar day turnaround  
200% for 3 calendar day turnaround

12. PICKUPS

- a. Picking up samples at NAVSTA, Norfolk, Virginia, Buildings N-23/26
- b. Additional charges for larger shipments or perishable samples shipment (as required by test) per parcel (e.g., ice chest)
- c. Sample pickups at other sites, if required



GENERAL PROVISIONS: The Laboratory shall:

1. Provide services at the negotiated unit prices.
  2. (a) Use analytical methods (including Quality Control) approved by the United States Environmental Protection Agency and the State of North Carolina.  
  
(b) Be open for inspection.
  3. (a) Pick up samples the next workday at the specified place/time and ship in accordance with DOT/USDA requirements (if/when applicable).  
  
(b) When directed, transfer the samples to an iced cooler provided by the Laboratory for transport.  
  
(c) Leave labels and clean bottles of the type required by the analytical tests.
  4. Begin the analysis within 24 hours of when the sample is picked up Monday through Thursday (i.e., sample shipment time not to exceed 24 hours) and within 72 hours for samples picked up on Fridays (requirements excludes Holidays).
  5. Within up to 21 to 30 calendar days\* after sample pickup, mail all the test results together (original plus two copies), identified by all the information on the label, to:  
  
Commanding General  
Marine Corps Base  
Camp Lejeune, NC 28542  
  
ATTN: Dir, NREAD
- \*Up to 30 calendar days for metals and GC and/or MS (excluding PCBs) and up to 21 calendar days for all others.
6. Results will be reported by lots. No two lots will be reported on the same sample sheet. Sample lots will be identified by Camp Lejeune.
  7. In billing, provide (a) a worksheet showing by sample number/pickup dates/cost of the work performed; (b) a summary of recent Quality Control Events (first 1984 invoice to provide summary of QC methods,) and (c), a list of all samples on-hand for longer than 30 days.
  8. Use lowest unit cost unless otherwise directed.
  9. Hold samples for one month after results mailed.
  10. Only perform work authorized by Elizabeth Betz, Supervisory Chemist, Natural Resources and Environmental Affairs Division.
  11. Submit no more than one invoice per month.



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12. In November 1984, submit for LANTNAVFACENGCOM Code 114 approval, a Hazardous Waste (HW) sampling Safety Plan\* (and chain of custody procedures).

NOTE: The Government reserves the right to have more/fewer pickups/analyses performed at the unit prices.

The services herein shall be performed with 5ND LANTNAVFACENGCOM 4/4330/89A (5-79), "Guide for Architect-Engineer Firms" and submittals shall be in accordance with directives and procedures contained therein.

\* The safety plan shall meet OSHA requirements and address the following:

a. Identification and evaluation of the hazards and risks associated with each site being studied.

b. Identification of key personnel and alternates involved in site safety/response operations.

c. Determination of levels of personnel protection to be worn for various site operations.

d. Establishment of work zones (exclusion area, contamination area, and support area).

e. Establishment of decontamination protocol and procedures.

f. Determination of the number of personnel required to enter the contamination zones during the initial entries and subsequent operations.

g. Establishment of emergency procedures, such as: escape routes, signals for withdrawing work parties from site, emergency communications, wind indicators, etc., including Navy notification.

h. Identification and arrangements with nearest medical facilities for emergency medical care for both routine-type injuries and toxicological problems.

i. Establishment of continual air and personnel monitoring protocols.

j. Establishment of procedures for obtaining and handling potentially contaminated samples.

k. On-site monitoring by the EIC or his designee (i.e., activity environmental coordinator or safety representative) of operations for compliance with safety requirements.

l. Coordination of field investigation at the facility with the EFD, NAVENENVSA, and facility safety personnel.

m. Acquisition of safety permits (specified by the facility safety authorities) and necessary safety equipment.



n. Safety responsibilities of all contractor personnel involved in the study.

o. Safety indoctrination and training of all contractor and sub-contractor personnel along with facility personnel assigned to assist contractor personnel.

