

WASTE OIL ANALYSIS

1987

# Memorandum

11370

MAIN

DATE: 3 Aug 87  
FROM: Director, Utilities Branch  
TO: Director, Operations Branch

*George*

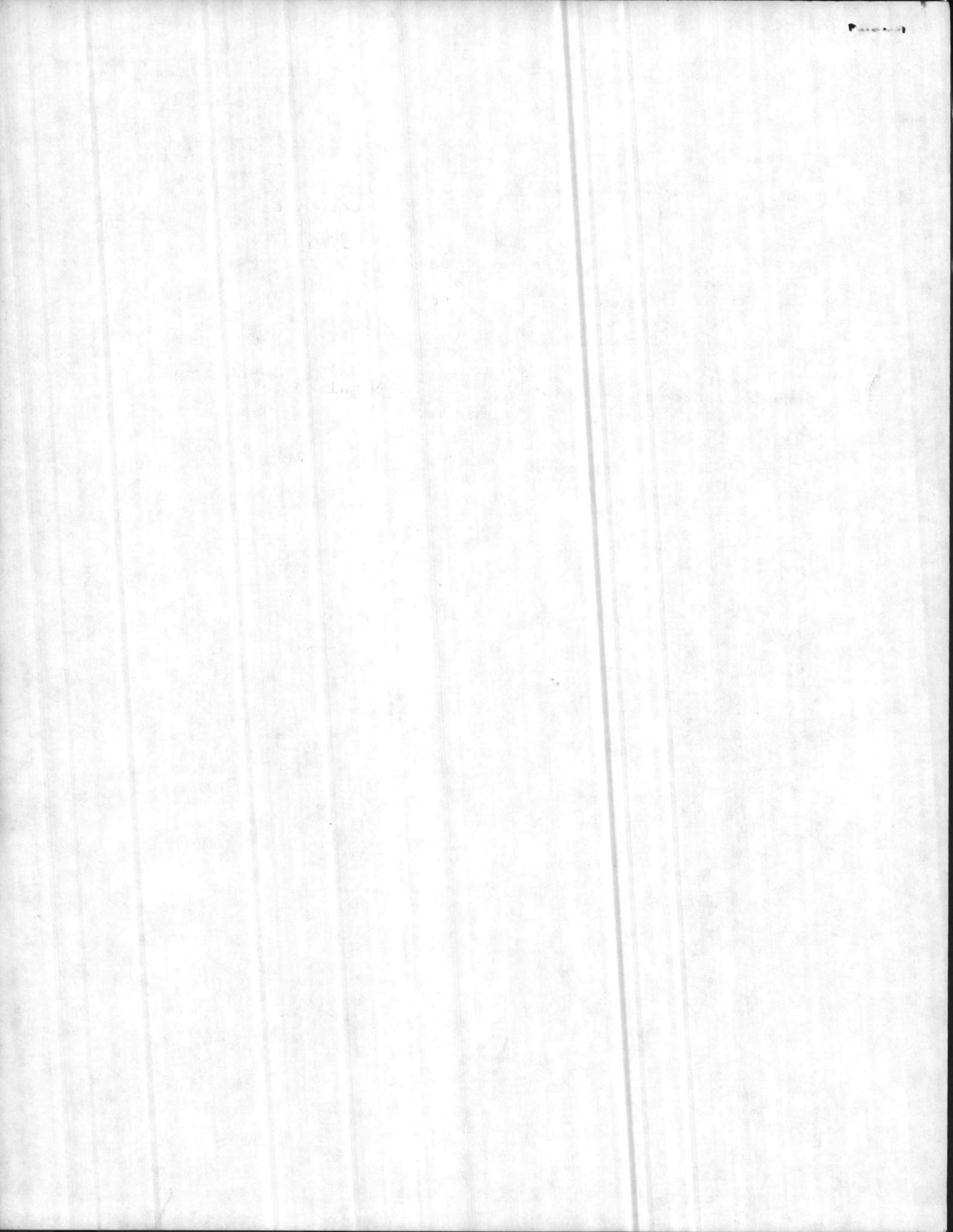
SUBJ: REMOVAL OF WASTE OIL AT STEAM PLANTS

Encl: (1) Location of Waste Oil Tanks  
(2) Analysis of Waste Oil  
(3) Ticket Nos. for Pumping Out Waste Oil

1. Enclosures (1), (2), and (3) are provided for amending the contract to remove the waste oil at the steam plants. The listed tanks have been labeled, analyzed, and tickets written for removal.

2. For additional information, point of contact is Kenneth Shepard, extension 2297.

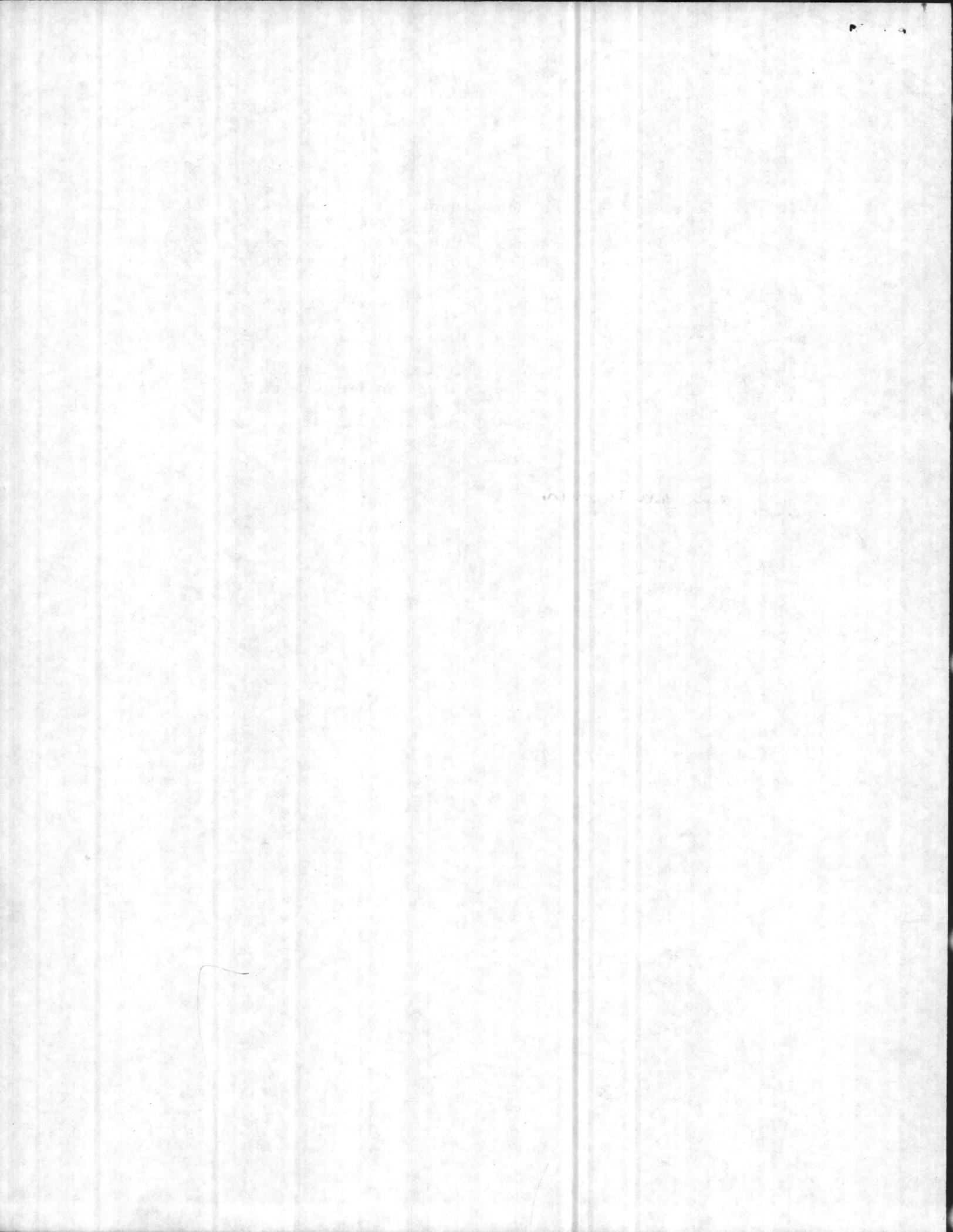
*C. H. Baker*  
C. H. BAKER



LOCATION OF WASTE OIL TANKS

1.	Bldg 1700	3 ea	(Yellow 55 gallon drums)	165 gals
		1 ea	(Aboveground 500 gallon tank)	375 gals
* 2.	Bldg M-625 ✓	1 ea	(Below ground 500 gallon tank)	450 gals
3.	Bldg G-650	1 ea	(Aboveground 500 gallon tank)	375 gals
		1 ea	(Below ground 500 gallon tank)	150 gals
4.	Bldg AS-4151	1 ea	(Aboveground 500 gallon tank)	300 gals
5.	Bldg RR-15	1 ea	(Below ground 500 gallon tank)	500 gals
6.	Bldg BB-9	1 ea	(Aboveground 500 gallon tank)	225 gals
		1 ea	(Below ground 500 gallon tank)	75 gals

\* Hazardous waste fuel



11 June 1987

Director, Natural Resources and Environmental Affairs Division,  
Marine Corps Base, Camp Lejeune  
Base Maintenance Officer, Marine Corps Base, Camp Lejeune  
(Attn: Utilities Director)

STEAM GENERATION'S WASTE OIL TANKS

incl: (1) JTC Environmental Consultants, Inc., Report No. 539, Table 6  
(2) Table of Waste Oil Tank/Drums Locations

1. On 7 January 1987, the waste oil tanks and drums at the various steam generation plants aboard Camp Lejeune were sampled by NREAD to determine if the oil could be treated as used oil.
2. Enclosure (1) shows the Total Organic Halogens (TOX) values for the waste oil tanks at the various steam plants. Enclosure (2) correlates the tank locations with the sample numbers used in enclosure (1). All but sample number 87-23 (Tank at Bldg M-625), had TOX values below 1000 ppm. Therefore, all but the aboveground tank at Bldg M-625 and the drum labeled 87-20 at Bldg 1700 should be treated as used oil. The oil in the aboveground tank at Bldg M-625 should be pumped into barrels and turned in to DRMO as a hazardous waste fuel oil. The analysis of sample #87-20 (Black drum at Bldg 1700) is incomplete at this time so disposal recommendations can not be provided at this time.

JULIAN I. WOOTEN

Copy to:  
DRMO

*Hay. Waste Fuel*



Partial Results

REPORT # 539

LABORATORY ANALYSIS ON

NAVAL SAMPLES

(A/E CONTRACT N62470-84-B-6932)

JTC REPORT # 87-132

PREPARED FOR:

DEPARTMENT OF THE NAVY

ATLANTIC DIVISION

NAVAL FACILITIES ENGINEERING COMMAND

NORFOLK, VA 23511

PREPARED BY:

JTC ENVIRONMENTAL CONSULTANTS, INC.

4 RESEARCH PLACE, SUITE L-10

ROCKVILLE, MARYLAND 20850

APRIL 22, 1987

*Ann E Rosecrance*

Ann E. Rosecrance  
Laboratory Director



Location: Camp Lejeune Date of Receipt: 2-26-87 Turnaround: routine  
 Date: 4-22-87 Case No. 539 to Naval Facilities Engineering Command, Norfolk, Virginia  
 JTC Data Report No. 87-132 Table 6

NAVY SAMPLE ID	JTC SAMPLE ID	ANALYSIS PARAMETER						
		TOX ppm	Flashpoint <sup>±</sup> °C					
87-19	12-4454	400	25					
87-21	12-4455	700	20					
87-22	12-4456	200	55					
87-23	12-4457	2100	25					
87-24	12-4458	500	25					
87-25	12-4459	400	20					
87-26	12-4460	100	40					
87-27	12-4461	100	not observed flame at 55°					
87-28	12-4462	500	not observed flame at 80°					
87-29	12-4463	<100	25					

± level of confidence ± 5°C

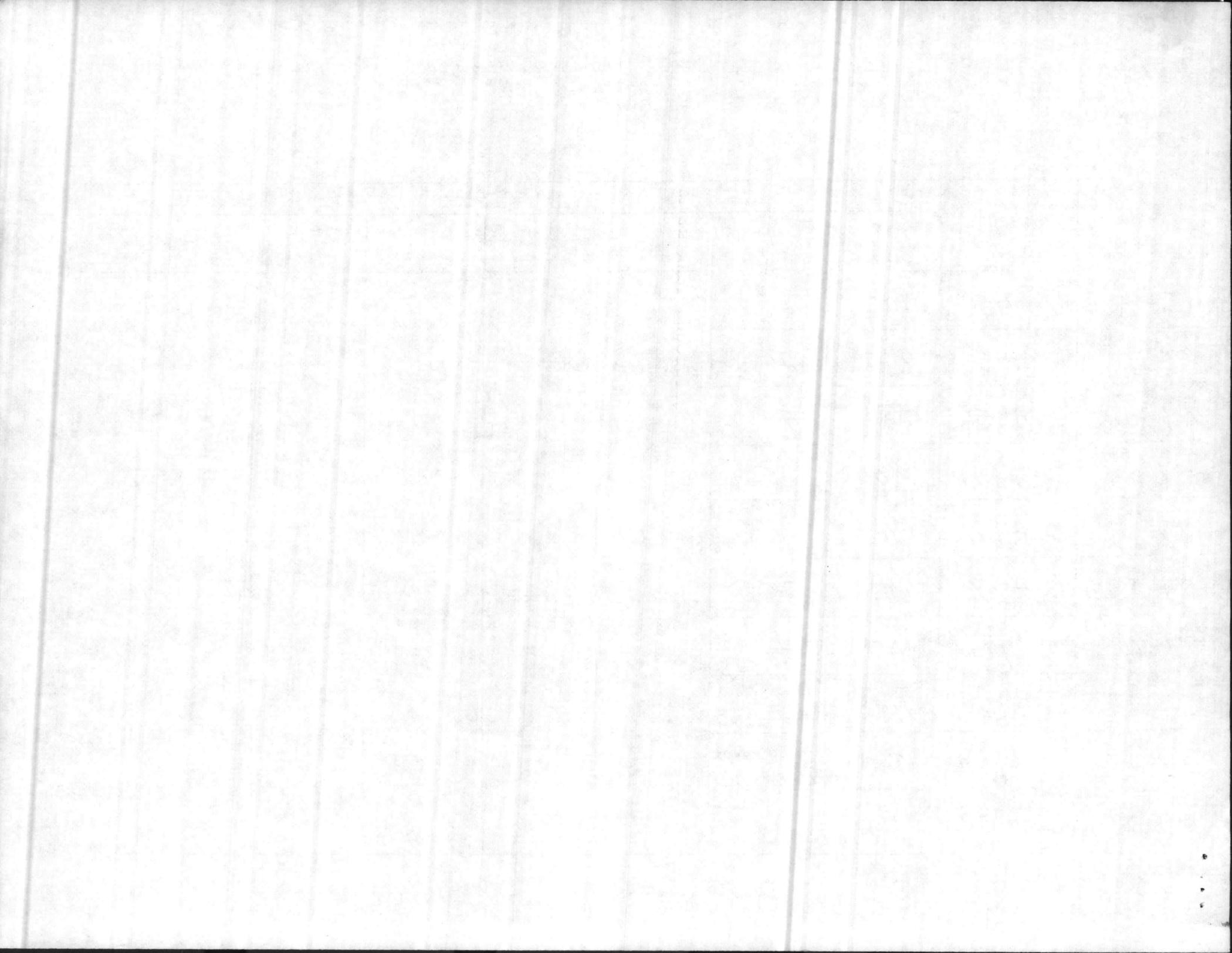
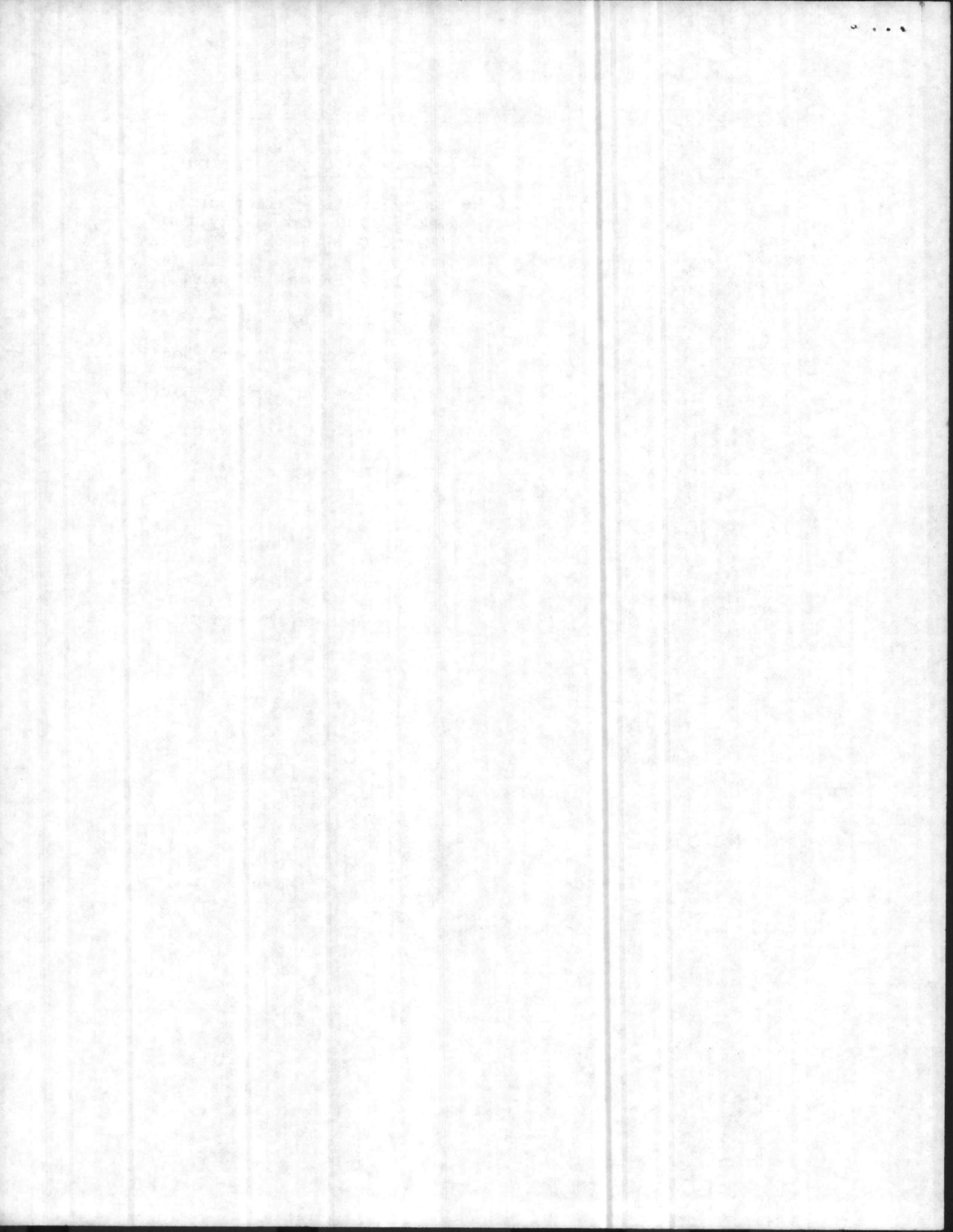


TABLE OF WASTE OIL TANK/DRUMS @ STEAM GENERATION

<u>SAMPLE NUMBER</u>	<u>LOCATION &amp; DESCRIPTION</u>
87-19	3 Yellow 55-gallon drums @ Bldg 1700 (Originally from BOQ Waste Oil Tank)
* 87-20	1 Black 55-gallon drum @ Bldg 1700
87-21	Tank at Bldg 1700
87-22	Underground Tank at Bldg M-625
87-23	Above-ground Tank at Bldg M-625
87-24	Underground Tank at Camp Geiger
87-25	Above-ground Tank at Camp Geiger
87-26	Above-ground Tank at Air Station
87-27	Underground Tank at RR-15
87-28	Underground Tank at Courthouse Bay
87-29	Above-ground Tank at Courthouse Bay

\* Hazardous waste fuel



TICKET NUMBERS FOR SHOP 72  
TO PUMP WASTE OIL AT STEAM PLANTS

1.	Bldg 1700	Ticket No.	353803
2.	Bldg M-625	" "	353809
3.	Bldg G-650	" "	353812
4.	Bldg AS-4151	" "	353817
5.	Bldg RR-15	" "	353822
6.	Bldg BB-9	" "	353824





UNITED STATES MARINE CORPS  
NATURAL RESOURCES AND ENVIRONMENTAL AFFAIRS DIVISION  
MARINE CORPS BASE  
CAMP LEJEUNE, NORTH CAROLINA 28542-5001

*George*

IN REPLY REFER TO:  
6240/2  
NREAD  
4 Jun 87

From: Director, Natural Resources and Environmental Affairs  
Division, Marine Corps Base, Camp Lejeune  
To: Base Maintenance Officer, Marine Corps Base, Camp Lejeune  
Subj: WASTE OIL STORAGE TANK AT BUILDING 45; ANALYSIS OF  
Ref: (a) Dir M & R memo 6240 MAIN dtd 9 Jan 87  
(b) BO 6240.5A  
Encl: (1) JTC Environmental Consultants, Inc., Report #559  
(2) JTC Environmental Consultants, Inc., Report #559  
addendum Table #1

1. As requested in reference (a), four samples were taken by NREAD of the large waste oil storage tank located next to Building 45. The samples were numbered 87-31 through 87-34. Sample #87-31 was taken from the bottom layers of oil in the tank. Sample #87-34 was taken just below the surface of the oil in the tank. Samples #87-32 and #87-33 were taken from middle layers of oil in the tank.

2. Based on data contained in enclosures (1) and (2), the contents of the tank are regulated as a hazardous waste fuel by regulations outlined in reference (b). The majority of the subject waste oil appears to be suitable for burning for recovery of energy based on information provided by Oldover Corporation, Aquadale, North Carolina. Oldover is currently highly regarded by the State Hazardous Waste regulatory establishment as a mechanism for disposal of this type of waste. Based on information provided by Mr. Paul Hubbell, CMC (Code LFL), DRMO's cost of disposal will be reimbursed by higher headquarters. Cost in excess of \$250,000 is likely.

3. It is recommended that the subject oil be turned in to DRMO for disposal, and that DRMO be requested to remove the entire contents of the subject tank. It is likely that the bottom layer will require separate disposition due to Chromium and water content.

4. The tank should also be evaluated/tested for suitability for storage of waste oil prior to reuse. Point of contact is Danny Sharpe, extension 5003.

D. D. SHARPE  
Acting

Copy to:  
→ DRMO  
AC/S, FAC

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UNITED STATES GOVERNMENT  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

PLATS  
PLAT NO. 1000  
SECTION 1000  
TOWNSHIP 1000  
RANGE 1000

SECTION 1000  
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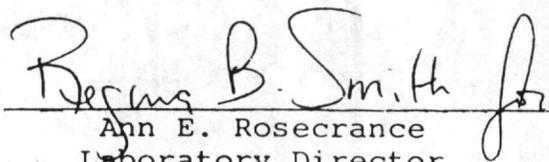
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Partial Report  
CASE # 559  
LABORATORY ANALYSIS ON  
NAVAL SAMPLES  
(A/E CONTRACT N62470-84-B-6932)  
° JTC REPORT # 87-126

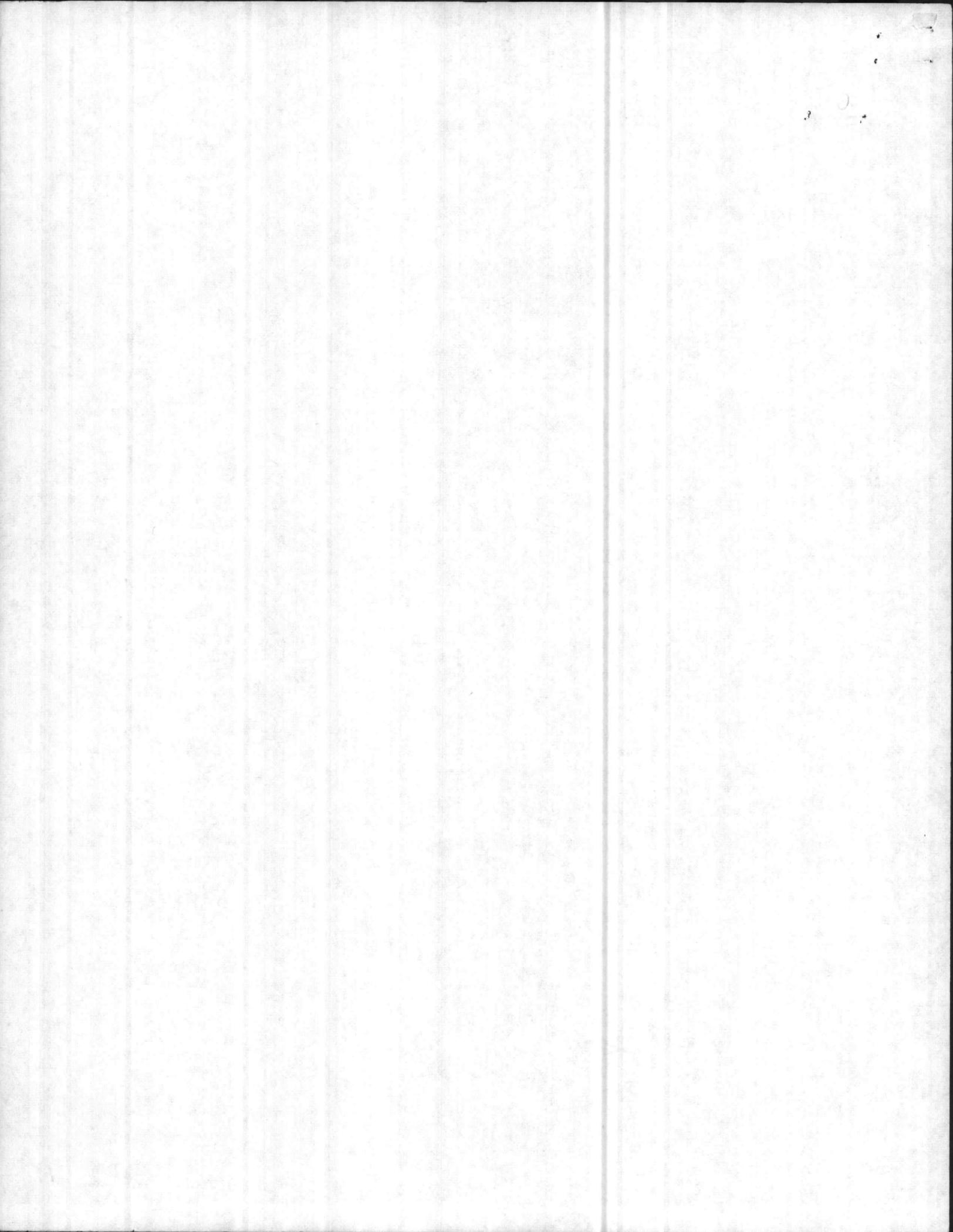
PREPARED FOR:  
DEPARTMENT OF THE NAVY  
ATLANTIC DIVISION  
NAVAL FACILITIES ENGINEERING COMMAND  
NORFOLK, VA 23511

PREPARED BY:  
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4 RESEARCH PLACE, SUITE L-10  
ROCKVILLE, MARYLAND 20850

APRIL 17, 1987

  
Ann E. Rosecrance  
Laboratory Director

ENCLOSURE III

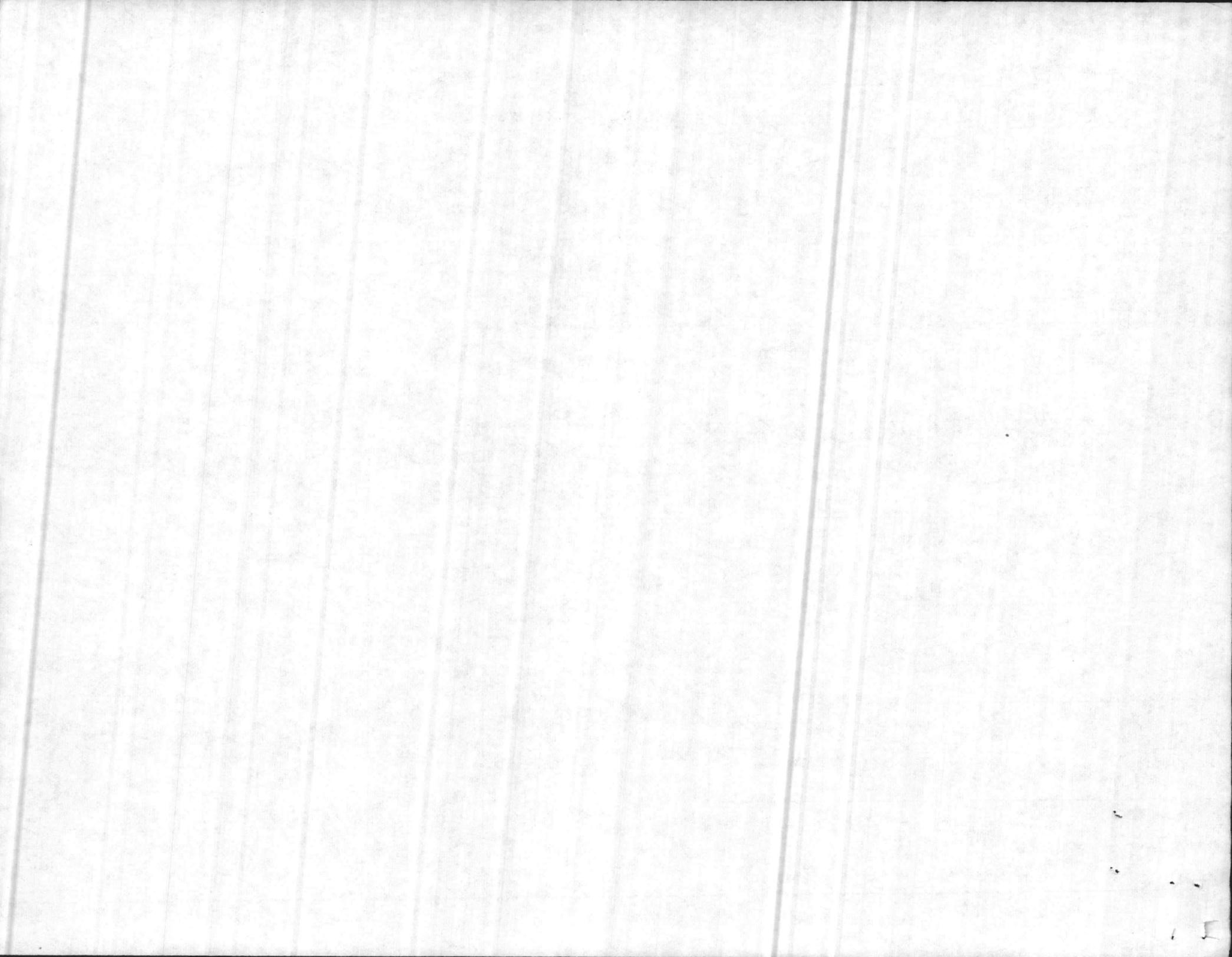


JTC Environmental Consultants, Inc.

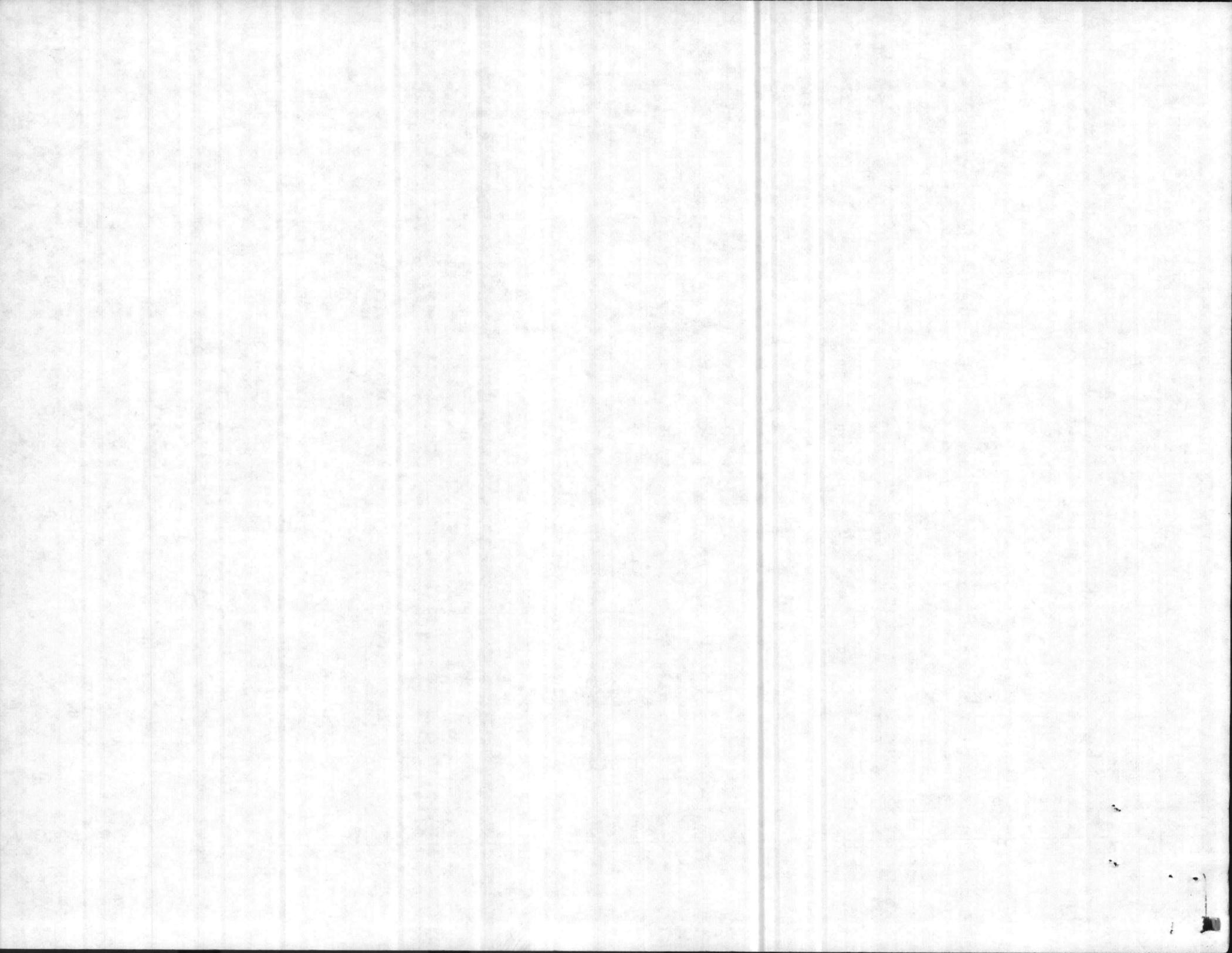
Location: Camp Lejeune Date of Receipt: 3-18-87 Turnaround: routine  
 Date: 4-17-87 Report No. 559 to Naval Facilities Engineering Command, Norfolk, Virginia  
 JTC Data Report No. 87-126 Table 1

NAVY SAMPLE ID	JTC SAMPLE ID	ANALYSIS PARAMETER					
		Flashpoint °C	TOX	Corrosivity pH	PCB ug/g		
87-30 oil layer	12-4514	55	0.07%	**	<5		
87-30 water layer	12-4514	+	572 ug/L	7.32	+		
87-31	12-4515	57	0.25%				
87-32	12-4516	50	0.25%				
87-33	12-4517	50	0.24%				
87-34	12-4518	57	0.17%				

\*\* unable to do analysis due to oil matrix







REPORT # 559 Addendum  
LABORATORY ANALYSIS ON  
NAVAL SAMPLES  
(A/E CONTRACT N62470-84-B-6932)  
JTC REPORT # 87-126

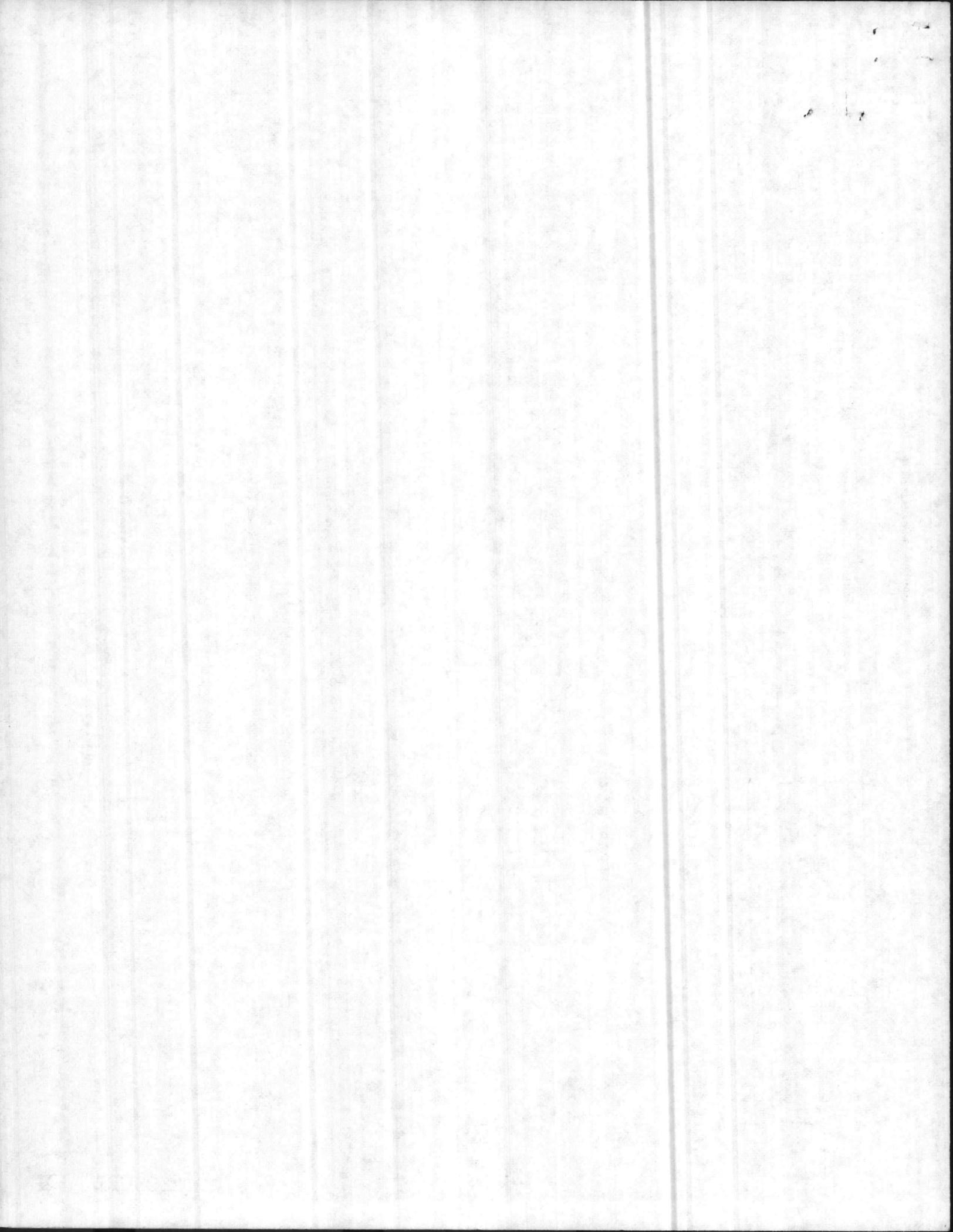
PREPARED FOR:  
DEPARTMENT OF THE NAVY  
ATLANTIC DIVISION  
NAVAL FACILITIES ENGINEERING COMMAND  
NORFOLK, VA 23511

PREPARED BY:  
JTC ENVIRONMENTAL CONSULTANTS, INC.  
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ROCKVILLE, MARYLAND 20850

APRIL 29, 1987

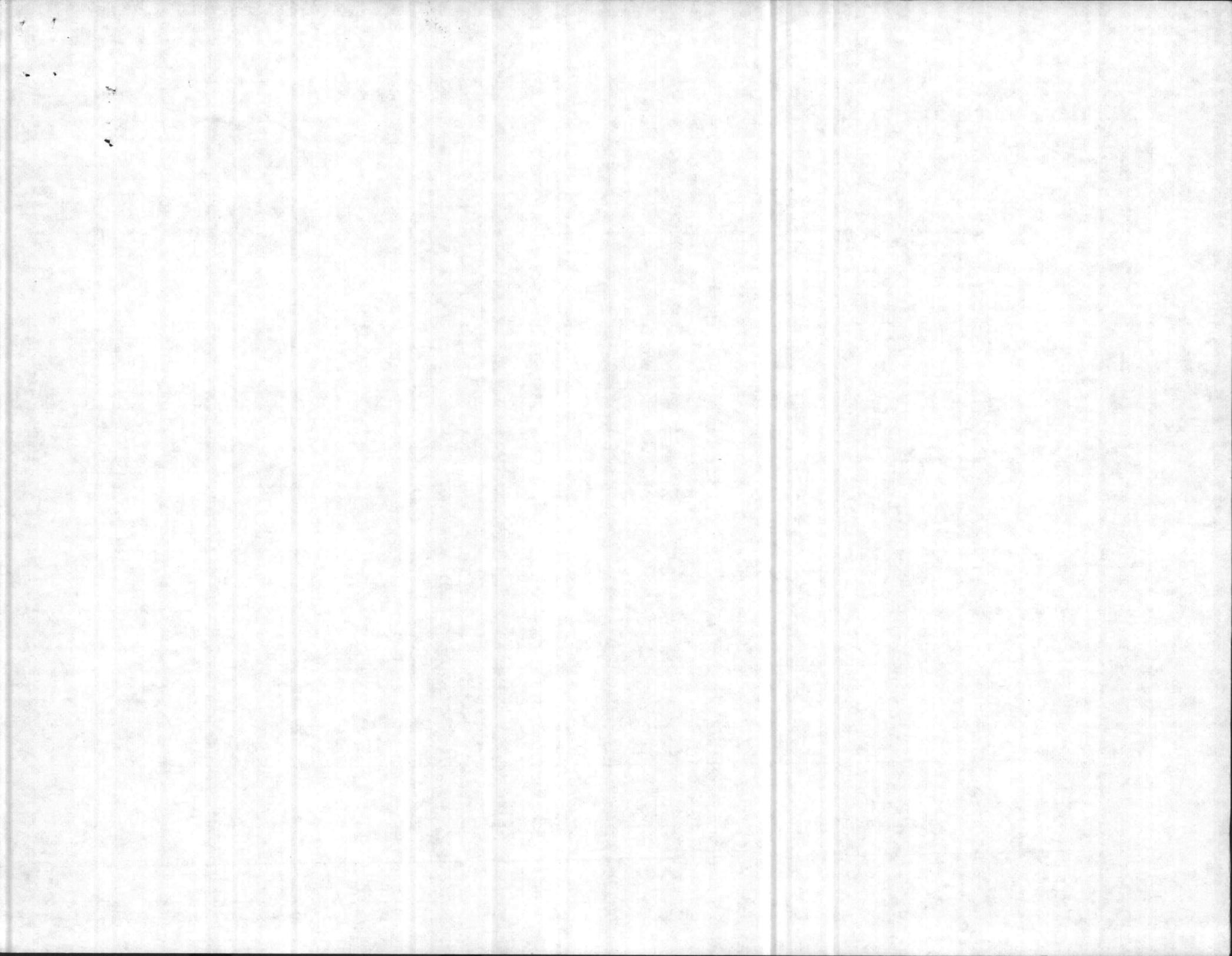
*Regina B Smith for*  
Ann E. Rosecrance  
Laboratory Director

ENCLOSURE *RI*



Location: Camp Lejeune Date of Receipt: 3-18-87 Turnaround: routine  
 Date: 4-29-87 Report No. 559 to Naval Facilities Engineering Command, Norfolk, Virginia  
 JTC Data Report No. 87-126 Table 1

NAVY SAMPLE ID	JTC SAMPLE ID	ANALYSIS PARAMETER							
		As ug/L	Ba ug/L	Cd ug/L	Cr ug/L	Pb ug/L	Hg mg/kg	Se ug/L	Ag ug/L
87-30 oil layer	12-4514	<2700	3530	<1500	710	19,500	<0.1	<860	<8920
87-30 water layer	12-4514	<500	180	<25	150	<250	<2.0 ug/L	<570	<50
87-31	12-4515	<2700	—	<1500	21,000	63,800	—	—	—
87-32	12-4516	<2700	—	<1500	1850	62,100	—	—	—
87-33	12-4517	<2700	—	<1500	1690	60,200	—	—	—
87-34	12-4518	<2700	—	<1500	1350	67,500	—	—	—



Location: Camp Lejeune Date of Receipt: 3-18-87 Turnaround: routine  
 Date: 4-29-87 Report No. 559 Add to Naval Facilities Engineering Command, Norfolk, Virginia  
 JTC Data Report No. 87-126 Table 2

NAVY SAMPLE ID	JTC SAMPLE ID	ANALYSIS PARAMETER					
		Reactivity					
		Cyanide	Sulfide				
87-30 oil layer	12-4514	<0.5 mg/kg	NA				
87-30 water layer	12-4514	<10 ug/L	850 ug/L				

NA = not available, result will be reported in separate addendum

-4 JUN 1987 15 07

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