

## FILE FOLDER

### DESCRIPTION ON TAB:

Waste Oil

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**\*Scanned as next image**



JOINT MESSAGEFORM

SECURITY CLASSIFICATION

UNCLASSIFIED

7

PAGE 01 OF 02	DTG/RELEASER TIME			PRECEDENCE		CLASS	SPECAT	LMF	CIC	ORIG MSG IDENT
	DATE TIME	MONTH	YR	ACT	INFO	UUUU				03161500
BOOK	MESSAGE HANDLING INSTRUCTIONS ADMIN									

FROM: CG MCB 'CAMP LEJEUNE NC  
 TO: CO MCAS NEW RIVER NC  
 INFO CG SECOND MAW  
 CO MAG 26  
 CO MAG 29

UNCLAS //N06240//

SUBJ: UNAUTHORIZED DISPOSAL OF HAZARDOUS WASTE {HW} INTO WASTE OIL  
 BY MAG 26 AND MAG 29 AIRCRAFT MAINTENANCE OPERATIONS

- A. DIV OF HEALTH SERVICES HW COMPLIANCE ORDER DTD 11 AUG 87
- B. BO 6240.5A
- 1. COOPERATIVE EFFORTS BY MCB AND MCAS, NEW RIVER, ENVIRONMENTAL PERSONNEL HAVE IDENTIFIED THE SUBJ DISPOSAL AS THE DIRECT CAUSE OF CONTAMINATION OF HUNDREDS OF THOUSANDS OF GALLONS OF WASTE OIL WITH HALOGENATED SOLVENTS AND DEGREASERS. THE MOST SIGNIFICANT IS FREON FROM "PATCH TESTS" ON AIRCRAFT HYDRAULIC SYSTEMS. THE COOPERATION BY MAG 26, MAG 29 AND MCAS NEW RIVER IN ADDRESSING THE SUBJECT ISSUE ARE APPRECIATED.
- 2. THE SUBJECT ACTIVITY LED TO THIS CMD BEING CITED FOR VIOLATIONS OF STATE AND FEDERAL HW REGULATIONS AND THE ISSUANCE OF REF {A}.

DISTR: NREA|BFAC|BSJA|OICB|BCOS|CEOA|

DRAFTER TYPED NAME, TITLE, OFFICE SYMBOL, PHONE  
 D. Sharpe  
 D. SHARPE, NREA, GS-11, 5003

SPECIAL INSTRUCTIONS  
 SJA \_\_\_\_\_

RELEASEE TYPED NAME, TITLE, OFFICE SYMBOL AND PHONE  
 T. J. DALZELL, AC/S FAC 3034  
 SIGNATURE

SECURITY CLASSIFICATION  
 UNCLASSIFIED  
 DATE TIME GROUP

10

10

JOINT MESSAGEFORM

SECURITY CLASSIFICATION  
UNCLASSIFIED

PAGE 02 OF 02	DTG/RELEASER TIME			PRECEDENCE		CLASS	SPECAT	LMF	CIC	ORIG/MSG IDENT
	DATE TIME	MONTH	YR	ACT	INFO	UUUU				03161500

BOOK ADMIN MESSAGE HANDLING INSTRUCTIONS

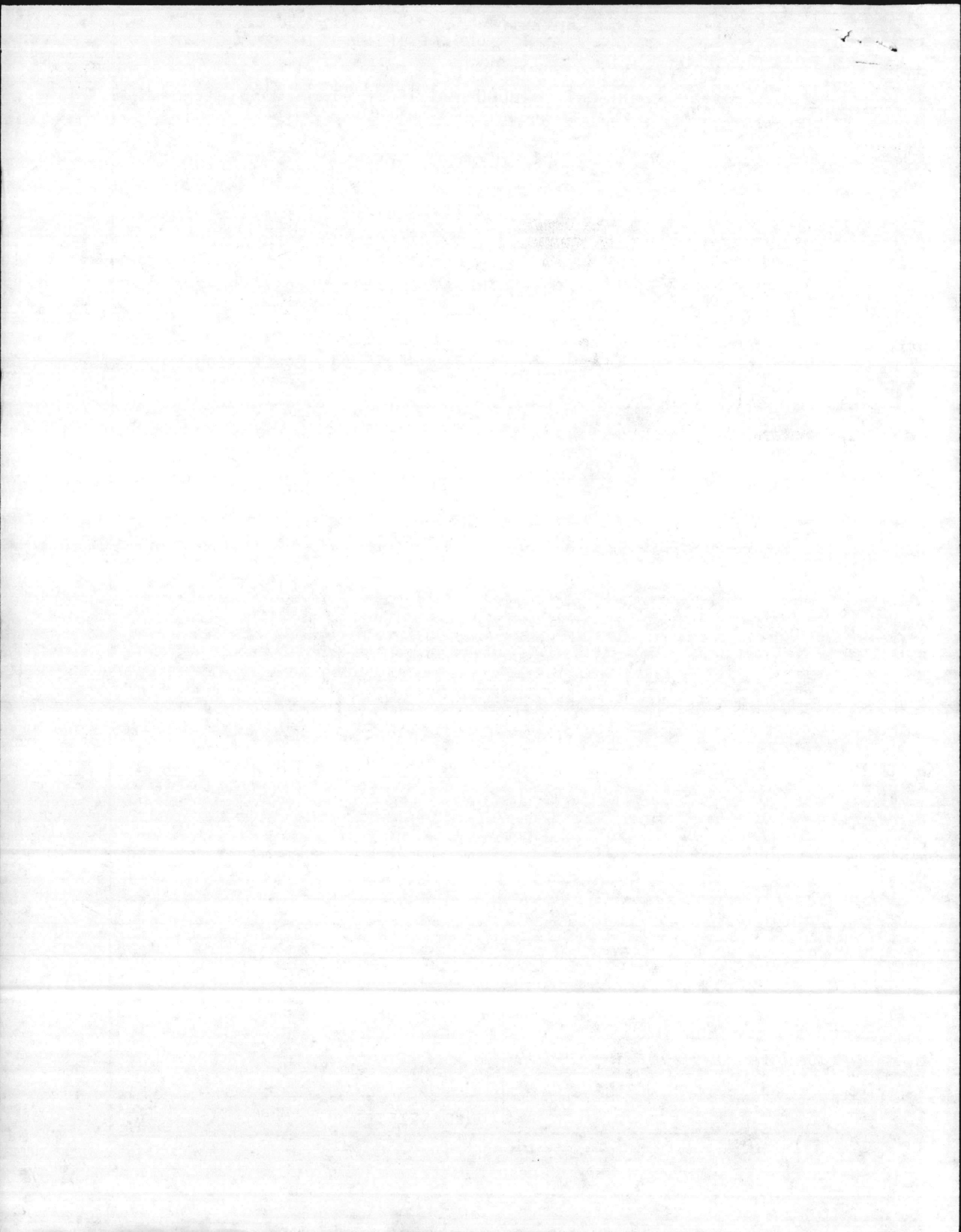
IN ORDER FOR THIS CMD TO PROPERLY RESPOND TO REGULATORY AGENCIES, ADDRESSEE IS REQUESTED TO PROVIDE A WRITTEN SUMMARY OF ACTION TAKEN AND PLANNED TO ADDRESS THE FOLLOWING:

- A. ENSURE PROPER COLLECTION, SEGREGATION AND DISPOSAL OF THE SUBJ HW PER REF {B} AND
- B. PREVENTING THE DISPOSAL OF HW INTO WASTE OIL COLLECTION CONTAINERS AND TANKS.

THIS CMD CANNOT OVER EMPHASIZE THE IMPORTANCE OF ENSURING ONGOING RESOLUTION OF THE SUBJ PROBLEM. A REPOSE IS REQUESTED NLT 20 NOV 1987. POC WITH THIS MATTER IS MR. DANNY SHARPE, NREAD, EXTENSIONS 2083 AND 2195.

DISTR:

DRAFTER TYPED NAME, TITLE, OFFICE SYMBOL, PHONE		SPECIAL INSTRUCTIONS	
RELEASER	TYPED NAME, TITLE, OFFICE SYMBOL AND PHONE	SECURITY CLASSIFICATION UNCLASSIFIED	DATE TIME GROUP
	SIGNATURE		





6240  
NREAD  
23 Dec 87

From: Director, Natural Resources and Environmental Affairs  
Division, Marine Corps Base, Camp Lejeune  
To: Assistant Chief of Staff, Facilities, Marine Corps Base,  
Camp Lejeune

Subj: WASTE OIL MANAGEMENT AND EQUIPMENT SUPPORT FOR FORESTRY/  
WILDLIFE

Encl: (1) Deputy AC/S, FAC memo of 7 Dec 87  
(2) Revised Action Brief

1. Enclosure (1) has been reviewed relative to both the Deputy, AC/S, Facilities, Action Brief and related Base Maintenance Officer, (BMO) comments. I concur with BMO comments that transfer of one billet will not support the actual needs of forestry and wildlife operations. Several man years are required for these operations and related soil conservation and wetlands protection. I recommend that heavy equipment functions remain within Base Maintenance Division.

2. Both the original action brief and related BMO comments, are much greater in scope than the AC/S, Facilities proposal. Changes involving maintenance of oil pollution abatement facilities and PCB transformer management are clearly Maintenance functions, requiring major support from almost all shops within Base Maintenance. There is some benefit from improving NREAD capabilities to respond to small spills, thereby eliminating coordination with and disruption of, Base Maintenance operations.

3. I non-concur with enclosure (1), and submit enclosure (2) for consideration.

J. I. WOOTEN

*DWS*  
*S. Eco.*

11/10/50  
11/10/50  
11/10/50

From Director, National Research and Development Administration  
Division, Marine Corps Base, Camp Lejeune  
To: Assistant Chief of Staff, Logistics, Marine Corps Base  
Camp Lejeune

4  
11/10/50

Subject: WAREHOUSE MANAGEMENT AND EQUIPMENT SUPPORT FOR LOGISTICS  
DIVISION

1. The purpose of this report is to provide a summary of the  
current status of the Warehouse Management and Equipment Support  
Program for the Logistics Division.

2. The program is currently in the planning stage and is  
being coordinated with the Logistics Division and the  
Warehouse Management Office. The program will be  
implemented in the near future. The program will  
provide for the efficient management and support of  
the Logistics Division's warehouse facilities and  
equipment.

3. The program will consist of the following major  
components: (a) The establishment of a Warehouse  
Management Office; (b) The development of a  
Warehouse Management Plan; (c) The procurement of  
warehouse facilities and equipment; and (d) The  
implementation of the program.

4. The program will be implemented in the near future  
and will provide for the efficient management and  
support of the Logistics Division's warehouse  
facilities and equipment.



HEADQUARTERS, MARINE CORPS BASE  
CAMP LEJEUNE, NORTH CAROLINA

DATE 12-7-87

Deputy  
From: Assistant Chief of Staff, Facilities  
To: Natural Resources

Subj: Waste Oil Mgmt

Denny,

Attached is AC/Staff proposal  
to transfer subj. function. Base  
Maintenance counter proposal  
is also attached. Request  
review, comments/concurrence

Regards  
[Signature]

1



# Memorandum

DATE: 04 DEC 1987

FROM: Base Maintenance Officer

TO: Assistant Chief of Staff, Facilities

6280  
MAIN

SUBJ: WASTE OIL MANAGEMENT AND EQUIPMENT SUPPORT FOR FORESTRY/  
WILDLIFE

Encl: (1) Draft Action Brief  
(2) Proposed Enclosure to Draft Action Brief

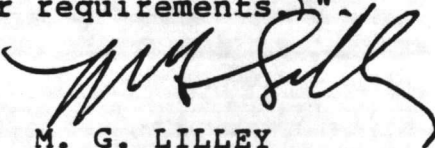
1. After discussing forestry and wildlife support with members of Base Maintenance, the following is offered:

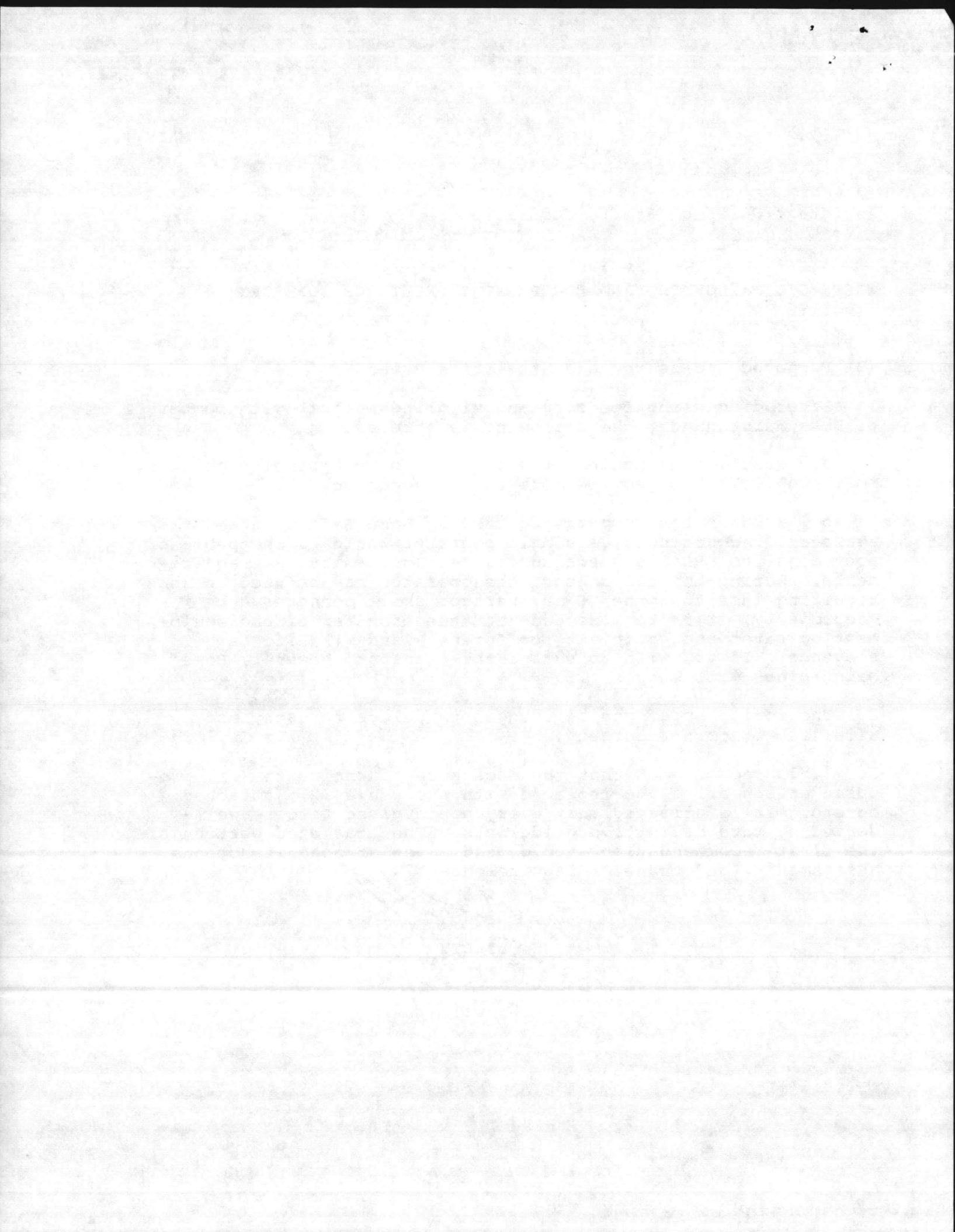
a. Rarely does equipment support involve a single operator. Most support roles require more than one person.

b. Much of the support provided by Base Maintenance is seasonal. Accordingly, a single operator would be incapable of providing for NREAD's needs during periods of intense requirements. During the off season, the operator may be used in jobs requiring less than the WG-10 operator skill connotes. Accordingly, it is recommended that the transfer of one equipment operator and equipment for forestry and wildlife be held in abeyance. If you wish to pursue the transfer, however, Base Maintenance will support it.

2. The action brief can be changed to delete forestry and wildlife with minor surgery.

3. It is recommended that the enclosure to enclosure (1), proposed action brief, be replaced with enclosure (2), attached hereto. It is believed that everyone involved will be well-served by more definitive guidelines. The bracketed portion of the first recommendation should read "(see attached functions, assignments, and transfer requirements.)"

  
M. G. LILLEY



HEADQUARTERS, MARINE CORPS BASE, CAMP LEJEUNE

ACTION BRIEF

Staff Section:

Date: NOV 20 1987

Problem: Waste oil management and equipment support for forestry/  
wildlife

Background/Discussion: Waste oil management includes collection, storage and disposition of oil; inspection of separators; monitoring oil storage tanks; testing for content; etc. The operational requirements of waste oil management (cleaning, collection, maintenance, etc.) has been assigned to Base Maintenance with staff assistance (inspections, testing, etc.) provided by Natural Resources Division. Waste oil can easily become hazardous waste when/if contaminated. The collection, storage and disposal process then becomes more complicated and entangled with state and federal regulations and laws.

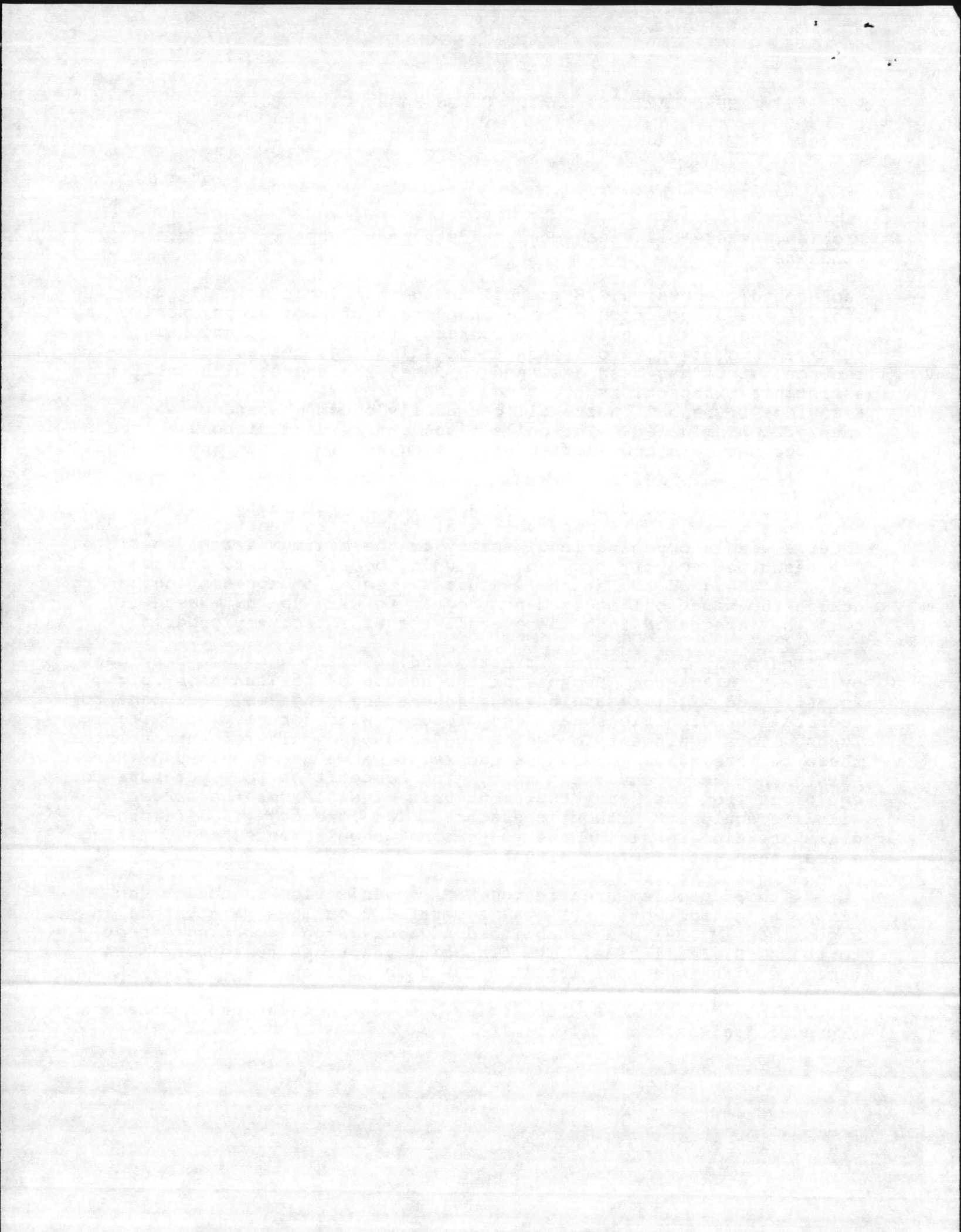
Because of the complexities associated with waste oil and hazardous waste, it is desirable that the entire function be placed under a single organizational entity to the maximum extent possible. The resource recovery program, including metals, paper, cardboard, etc., is assigned to Natural Resources. Thus, it appears logical to assign the waste oil management program to NREA so that waste oil could be integrated into the overall resource recovery program.

Equipment support for forestry and wildlife has been provided by Base Maintenance. Because of the nature of the function; e.g., forestry and wildlife are revenue generating programs, equipment to support these functions has been procured with forestry/wildlife funds. This equipment is "set aside" and used only for support of these two programs. Operators and maintenance are provided by Base Maintenance heavy equipment unit. The competition for operators for equipment from the heavy equipment unit often leaves the forestry/wildlife equipment without operators. The forestry/wildlife programs are time sensitive due to seasonal requirements, thus, making a less than satisfactory situation.

A third problem area in the NREA organization is budget and financial management. NREA was separated from Base Maintenance in approximately 1981 and established as a division reporting directly to the AC/S, Facilities. The financial resources to support NREA remained with Fund Administrator 23, Base Maintenance. Thus, the situation was (and is) that the Natural Resources Officer is responsible to the AC/S, Facilities but must obtain funding through a peer organization.

Encl.



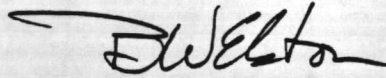




Subj: WASTE OIL MANAGEMENT AND FORESTRY/WILDLIFE HEAVY EQUIPMENT SUPPORT

Recommended Action:

1. Transfer waste oil management to Natural Resources (see attached for functions included).
2. Transfer forestry/wildlife equipment operators to Natural Resources (see attached for functions included).
3. Create a separate fund administrator for Natural Resources with total financial management responsibilities.

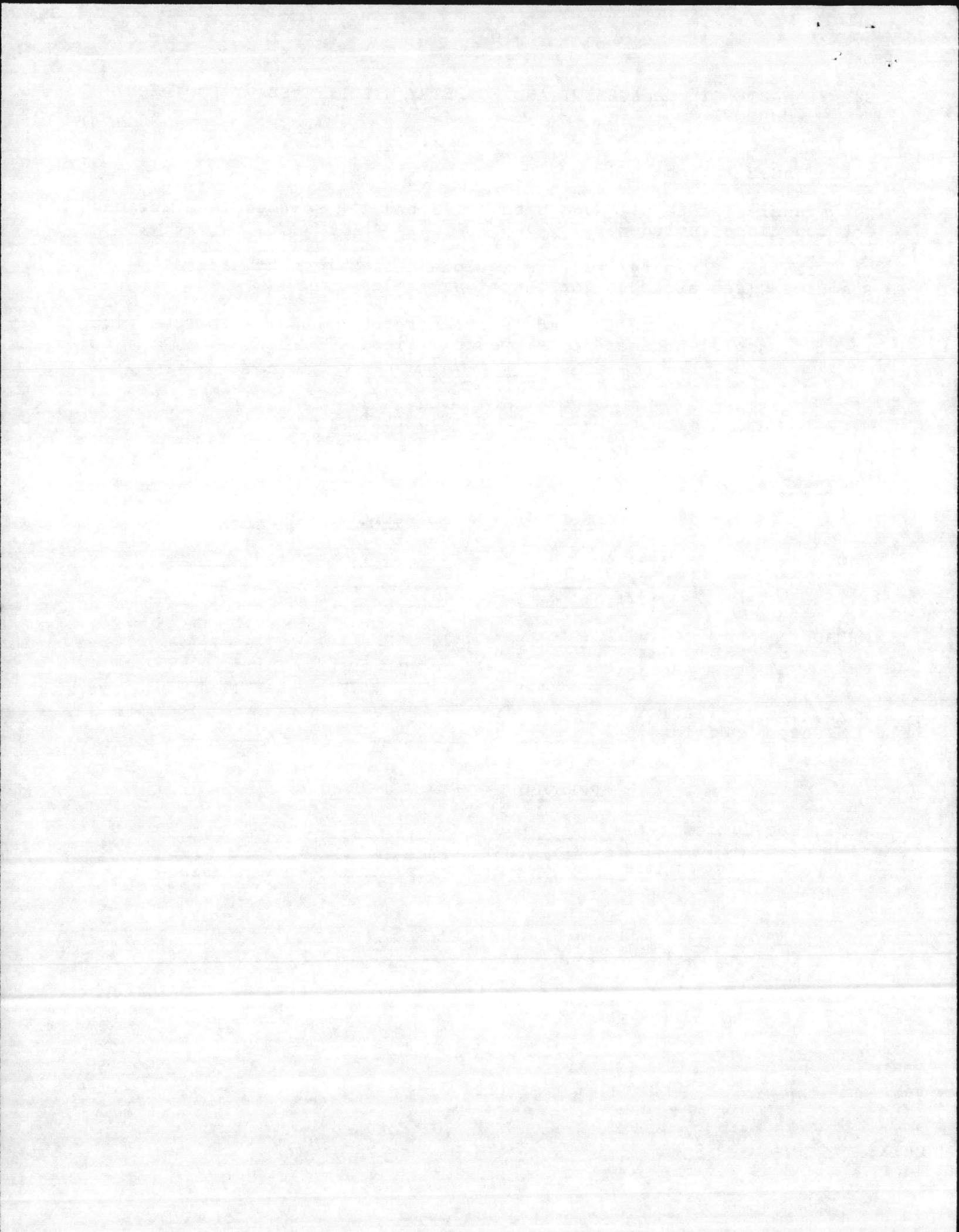


B. W. ELSTON

Deputy, Assistant Chief of Staff, Facilities

Recommendation:

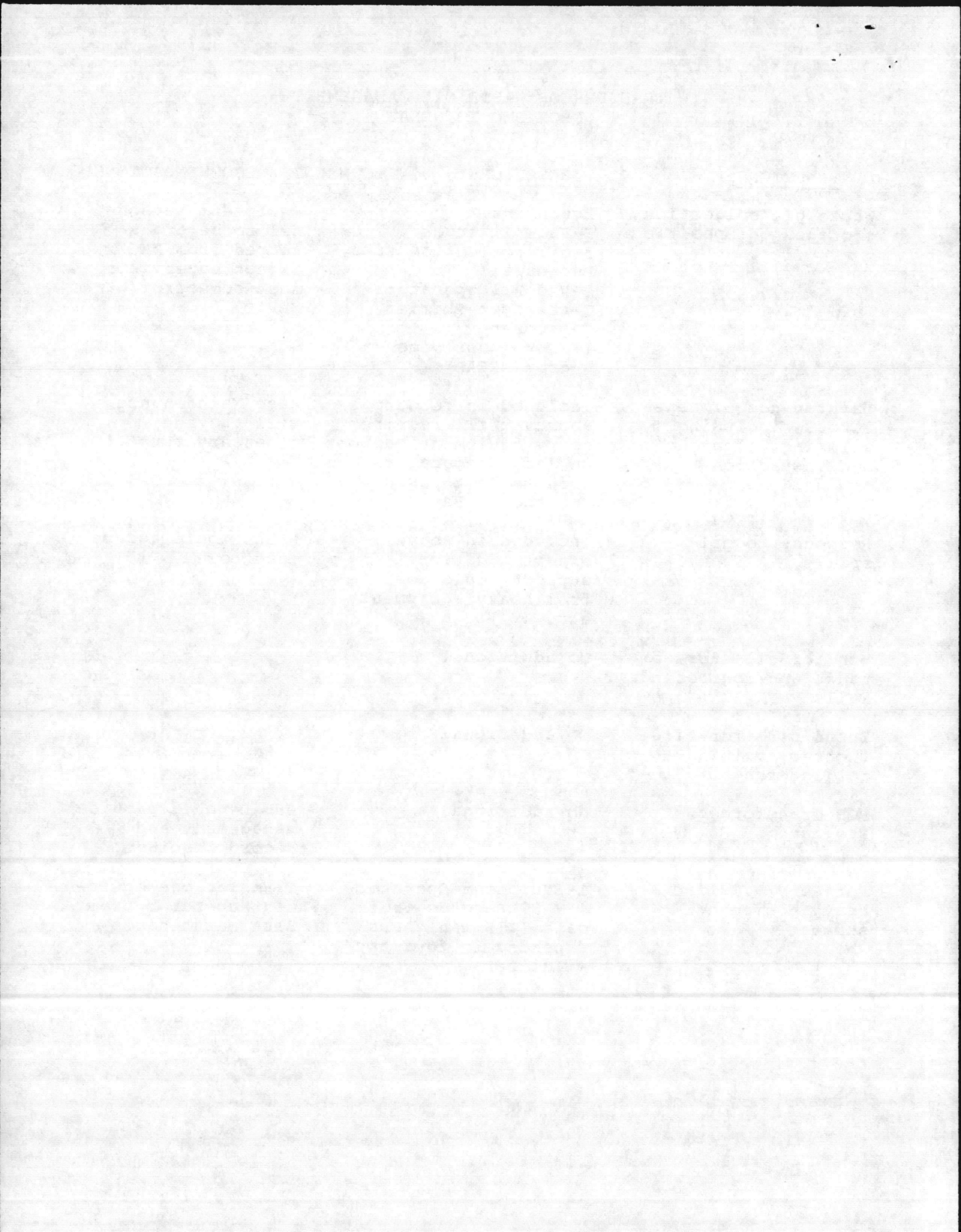
		<u>CONCUR</u>	<u>NON-CONCUR</u>	<u>DATE</u>
BMO	#1	_____	_____	_____
	#2	_____	_____	_____
	#3	_____	_____	_____
AREAD	#1	_____	_____	_____
	#2	_____	_____	_____
	#3	_____	_____	_____
AC/S, Comptroller: Recommendation	#3	_____	_____	_____
		<u>APPROVED</u>	<u>DISAPPROVED</u>	
AC/S, Facilities	#1	_____	_____	_____
	#2	_____	_____	_____
	#3	_____	_____	_____



TRANSFER OF WASTE OIL MANAGEMENT  
FROM BMO TO NREAD

<u>FUNCTIONS</u>	<u>RESOURCES</u>	<u>COMMENTS/RECOMMENDATIONS</u>
Waste oil collection, storage & disposition	Equipment: 1-Vac-All truck 3-oil collection trks Personnel: 2-Vac All operators 1-trk oper-Skimmer 1-laborer 1-Supv (must come from NREAD)	Equipment personnel to be transferred from BMO except supervisor must come from NREAD
Maintenance of separators, including skimming, cleaning and inspection	Included in resources above. Will require heavy equipment support on large separators, such as Boat Basin, Courthouse Bay	Base Maintenance will provide necessary support
Response to oil spills	Included in above except additional support would come from heavy equipment, etc.	NREAD would assume lead role
Monitor oil storage tanks and monitoring wells	No additional	
Burns pits for firefighter training -- collect run off	No additional	
PCB Transformer Program	No additional	NREAD would provide management and record keeping
Forestry/Wildlife heavy equipment support	1-Equipment Operator (FY-87 Records indicate 1.15 man years expended in forestry/wildlife)	Transfer one equipment operator from Base Maintenance







<u>FUNCTIONS</u>	<u>RESOURCES</u>	<u>COMMENTS/RECOMMENDATIONS</u>
Parking/storage of vehicles and equipment	Heavy equipment lot and parking lot between bldgs. 1102 and 1103	Utilize parking facilities at heavy equipment to continue parking low beds/dozers. Assign lot between 1102/1103 to NREA.
Space for personnel/shop area	Bldg. 1103 and 1102	Assign bldgs. 1102 and 1103 to NREA.
Budgeting/financial management	1-Budget Clerk	Transfer a billet from Base Maintenance

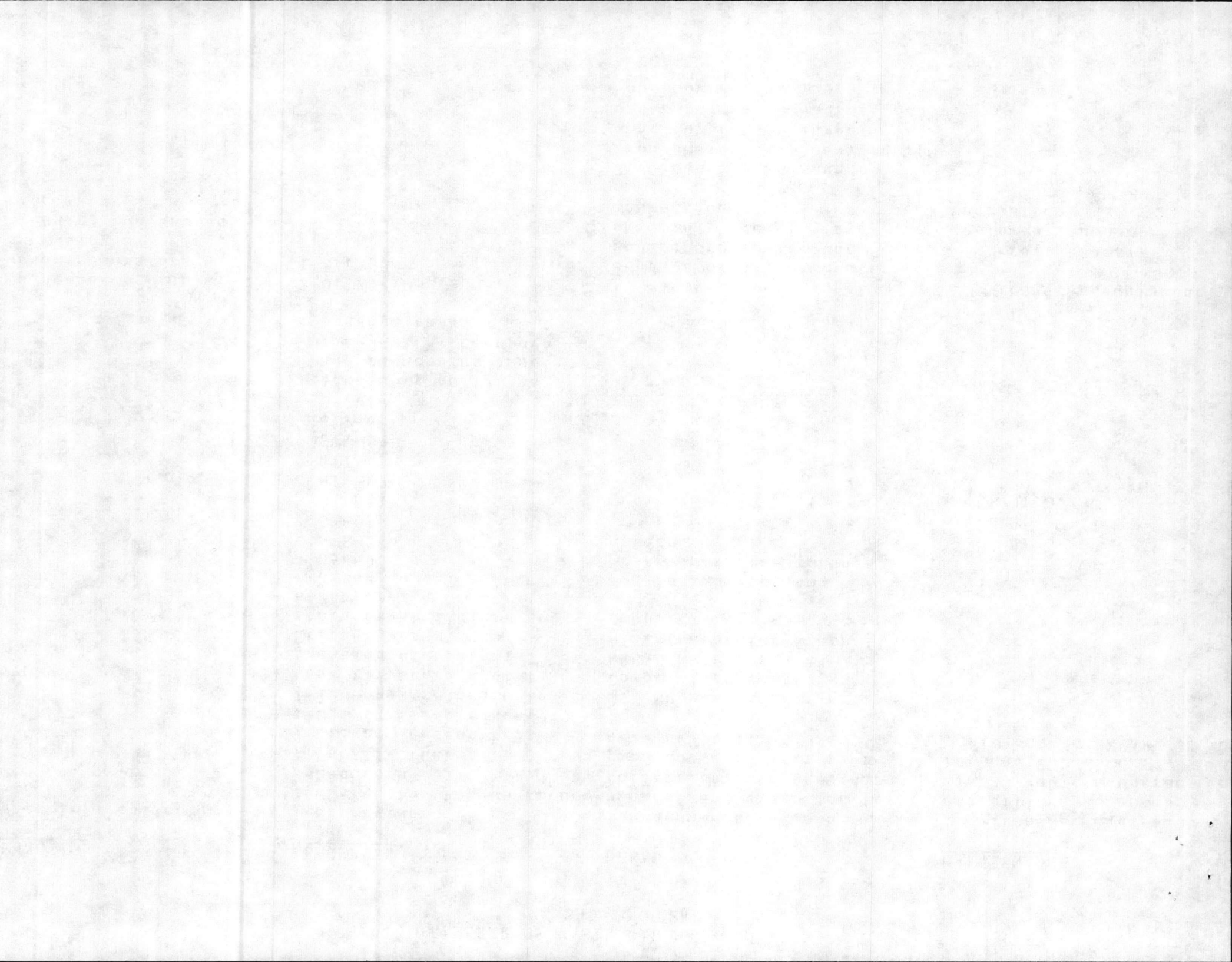


TRANSFER OF WASTE OIL MANAGEMENT  
FROM BMO TO NREAD

<u>FUNCTION</u>	<u>RESOURCES</u>	<u>NREAD</u>	<u>MAINTENANCE</u>
Waste oil collection	1-Supervisor 3-WG-7 Motor Veh Operators 2-Laborers 1-VacAll truck 2-Oil collection trucks 1-Oil skimming truck 1-1200 gal relocatable tank for storage of questionable material Storage tanks, accessory buildings and structures: S-888 S-889 S-890 S-891 STT-61 STT-62 STT-63 STT-64 STT-65 S-781 Accessory buildings and structures associated with the above storage tanks	1. Assume total management and execution for collection, storage, disposal and administration of waste oil.  2. Request AC/S, Comptroller to assign NREAD as Program Administrator for Class II property.  3. Assign Program Supervisor from inhouse assets.	1. Transfer equipment and billets to establish 3 Vehicle Operator and 2 Laborer positions to NREAD.
Maintenance of oil-water separators, including skimming, cleaning and inspection.	2-Oil skimmers 1-Air pump	1. Assume operational support of all oil-water separators to include skimming, cleaning and inspection.  2. Request assistance from BMaint for heavy equipment support on large separators such as Boat Basin, Courthouse Bay.	1. Transfer equipment.  2. Provide heavy equipment support as requested.

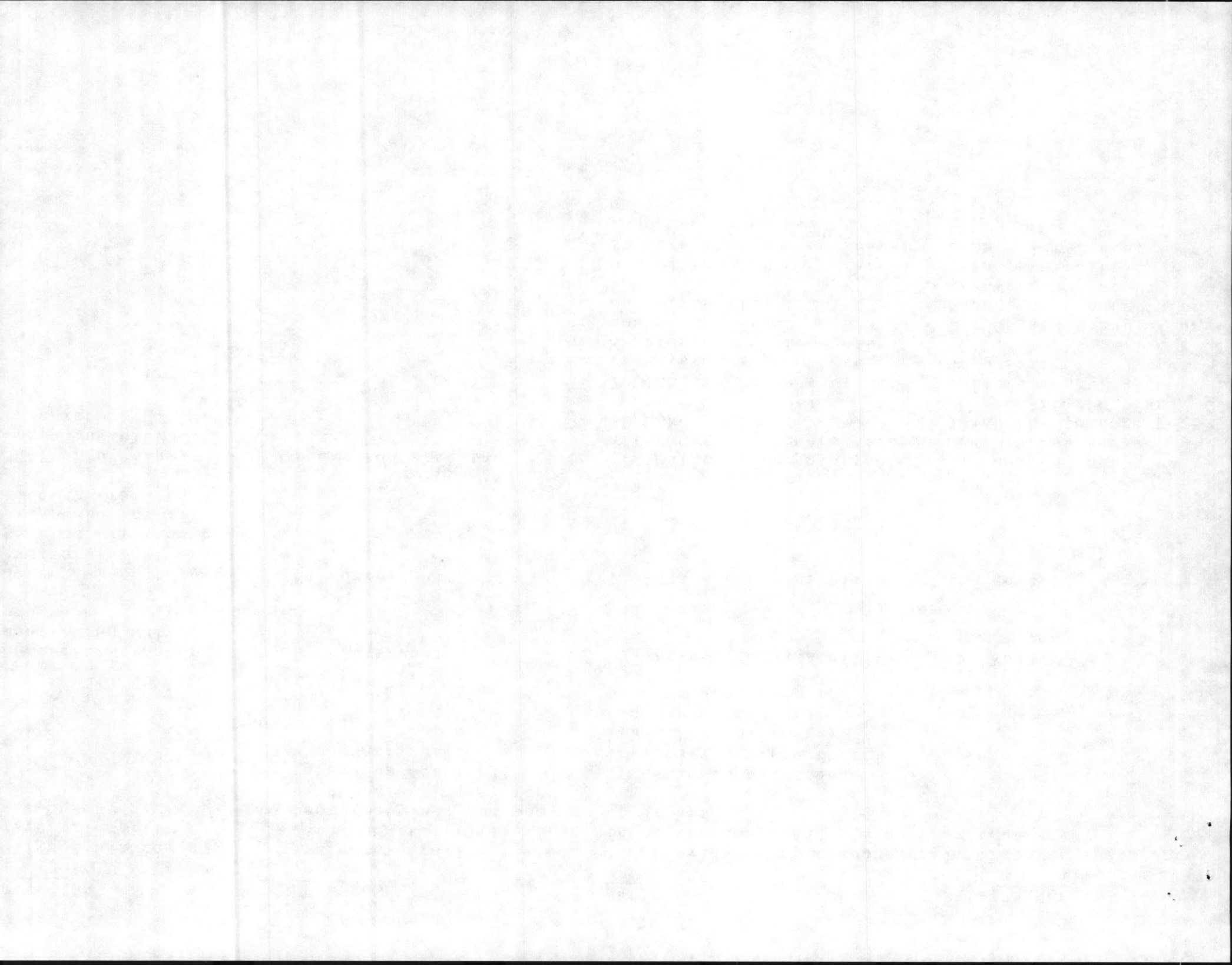
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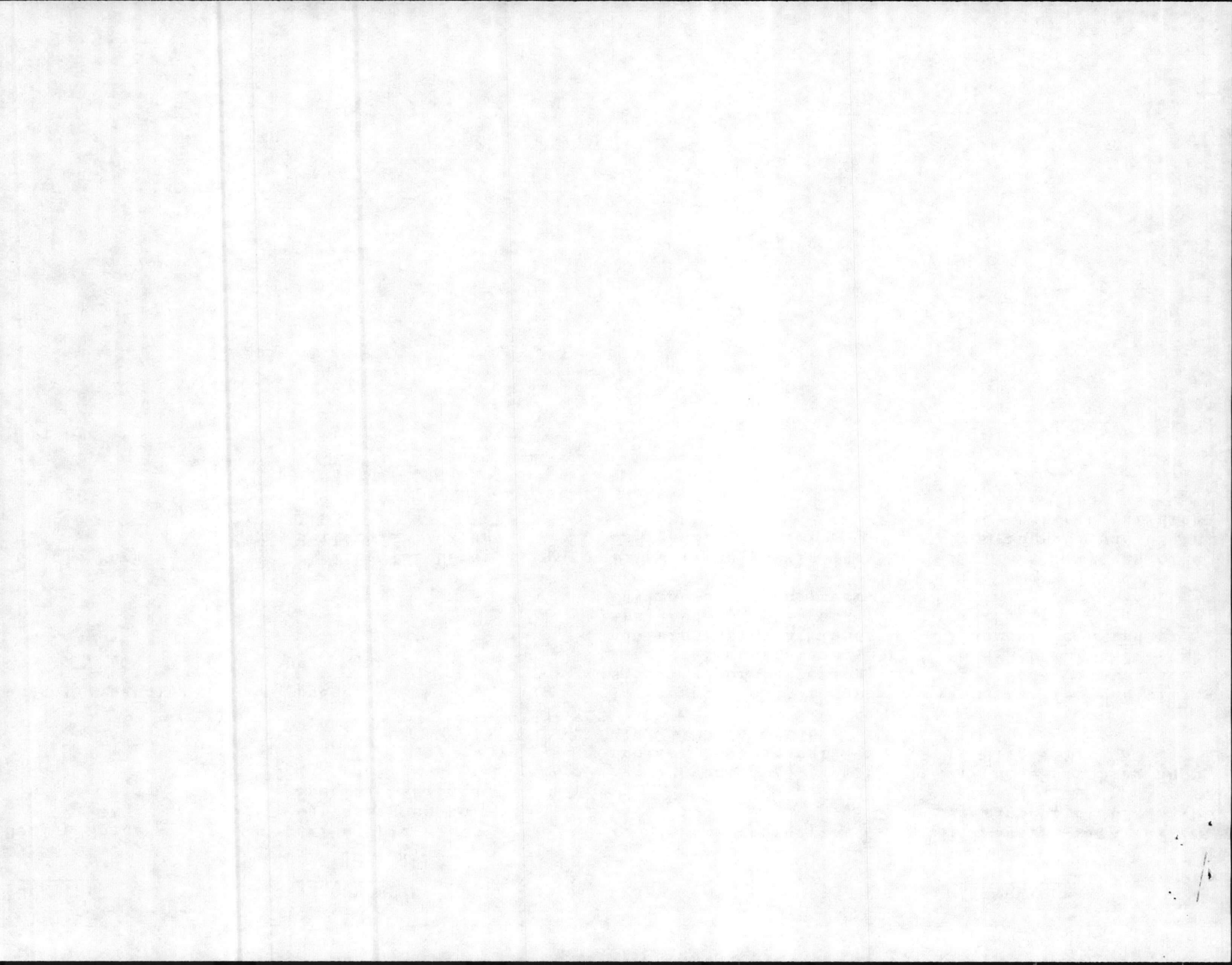


<u>FUNCTION</u>	<u>RESOURCES</u>	<u>NREAD</u>	<u>MAINTENANCE</u>
Oil and hazardous material spill response	Preloaded trailer loaded with 500 ft. of floating boom, matting, pom pom, hand tools, drums for hazardous material, absorbent, etc.	<ol style="list-style-type: none"> <li>1. Provide first response for containment and clean-up of spills.</li> <li>2. Request assistance for heavy equipment or labor for spills beyond own capability from Base Maintenance.</li> </ol>	<ol style="list-style-type: none"> <li>1. Provide assistance as requested.</li> </ol>
Administration of monitoring well program.	No additional	<ol style="list-style-type: none"> <li>1. Assume responsibility.</li> </ol>	<ol style="list-style-type: none"> <li>1. None.</li> </ol>
Servicing containment basins at Fire Protection Division burn pits used for fire fighter training	No additional	<ol style="list-style-type: none"> <li>1. Assume responsibility.</li> </ol>	<ol style="list-style-type: none"> <li>1. None.</li> </ol>
Monitoring and disposing of PBC transformers	Dedicated area in Lot 140	<ol style="list-style-type: none"> <li>1. Maintain inventory of all PBC transformers in use at CLNC.</li> <li>2. Assume custody of PBC transformers from Base Maintenance or from contractors that are taken out of service.</li> <li>3. Dispose of PBC transformers that are no longer required at CLNC.</li> </ol>	<ol style="list-style-type: none"> <li>1. Assign dedicated area in Lot 140 to NREAD for temporary storage of PBC transformers awaiting disposal.</li> <li>2. Notify NREAD of any change of "in use" PBC transformers or PBC transformers held by Base Maintenance.</li> </ol>



<u>FUNCTION</u>	<u>RESOURCES</u>	<u>NREAD</u>	<u>MAINTENANCE</u>
Office Space	All of Bldg 1103 not assigned to Special Services	<ol style="list-style-type: none"> <li>1. Assume custody of Bldg 1103.</li> <li>2. Request AC/S, Comptroller to transfer Bldg 1103 to NREAD.</li> </ol>	<ol style="list-style-type: none"> <li>1. Assist with re-assignment of Bldg 1103.</li> <li>2. Move Plumbing Shop to Bldg 1102.</li> </ol>
Budget/Financial	Budget Clerk	<ol style="list-style-type: none"> <li>1. Assume total responsibility for budgeting, financial management, and administration of funds assigned to NREAD and Environmental Engineer.</li> </ol>	<ol style="list-style-type: none"> <li>1. Transfer one billet from Base Maintenance to NREAD for the establishment of a budget clerk.</li> </ol>
Vehicle Parking	Parking lot between Buildings 1102 and 1103.	<ol style="list-style-type: none"> <li>1. Utilize parking now assigned.</li> </ol>	<ol style="list-style-type: none"> <li>1. Park only vehicles from Shop 61 and 62 in space between Building 1102 and 1103.</li> </ol>





HEADQUARTERS, MARINE CORPS BASE, CAMP LEJEUNE

Action Brief

Staff Section: Natural Resources and Environmental Affairs Division

Date: 23 December 1987

Problem: Hazardous Waste (HW) compliance issues and pollution abatement needs related to inadequate management of waste petroleum oils and lubricants (POL's).

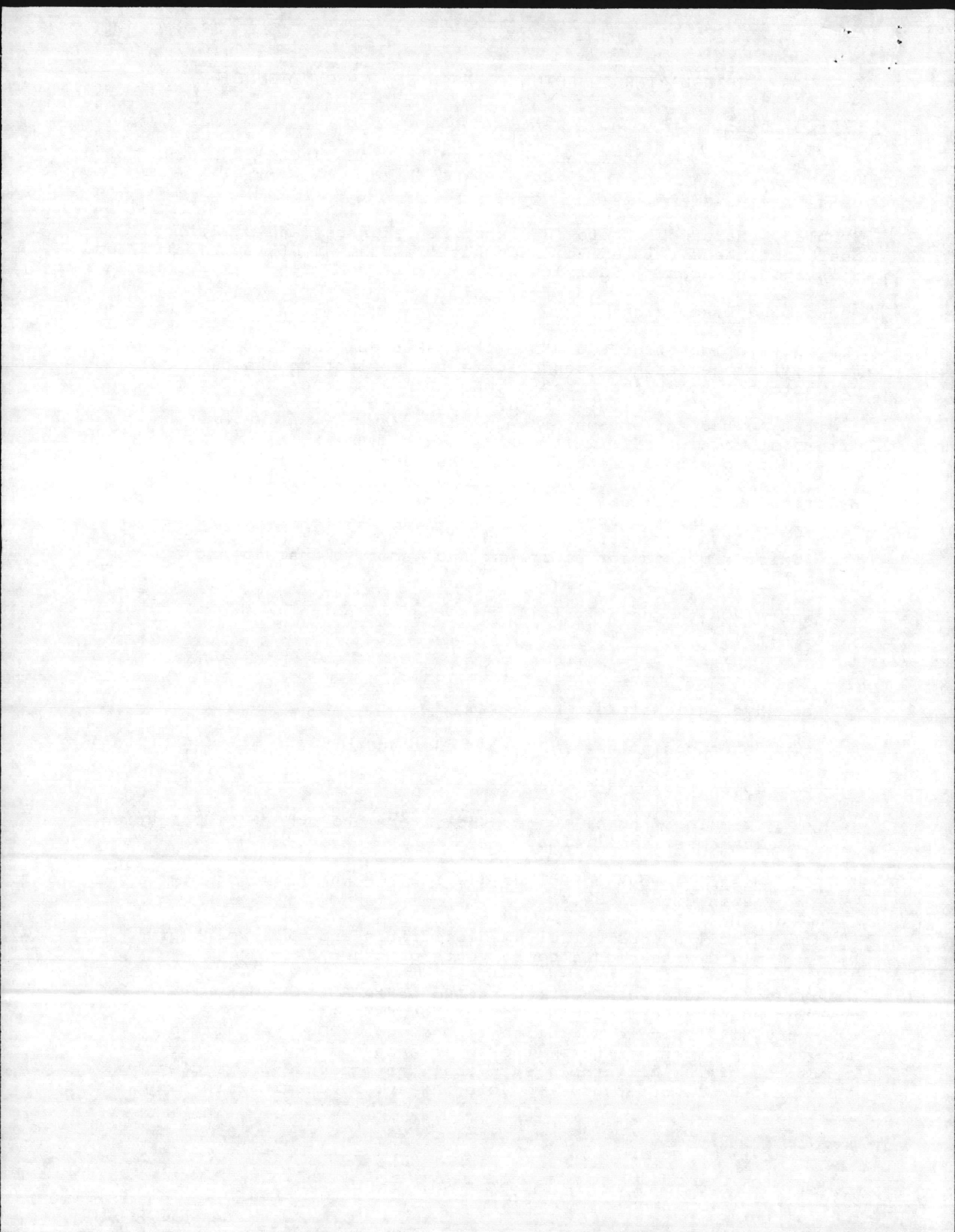
Background/Discussion:

1. This action brief addresses the Assistant Chief of Staff, Facilities' decision to consolidate the collection and disposal of waste oil under the Director, Natural Resources and Environmental Affairs Division. The initial scope of the change was limited to the collection of waste oil from generating work sites, storage of oil awaiting disposal, disposal of oil, and related inspections, reports and other administrative tasks required by state and federal environmental regulations. Base Maintenance Officer has added several issues, including the cleaning and maintenance of oil pollution abatement facilities such as oil/water separators, and initial response to the Base Fire Chief requests for equipment and labor to contain and cleanup oil spills.

2. Waste POL's generally fall into the following seven categories:

- a. Waste crankcase oil and lubricants
- b. Hydraulic fluids
- c. Water contaminated JP-5, diesel and other fuels
- d. Spill residues collected in liquid form
- e. Skimming from oil water separators and other oil pollution abatement facilities.
- f. Miscellaneous petroleum distillates which do not meet definition of HW.
- g. Miscellaneous petroleum distillates and oils which are mixed with regulated solvents or other HW.

With several hundred sites generating waste POL's, controls to prevent unauthorized dumping of regulated HW into waste POL's are very difficult to administer. Once used POL's are mixed together in drums or tanks, the appearance and physical characteristics of the mixture is such that the presence of regulated levels of HW is often undetectable, except by chemical testing.



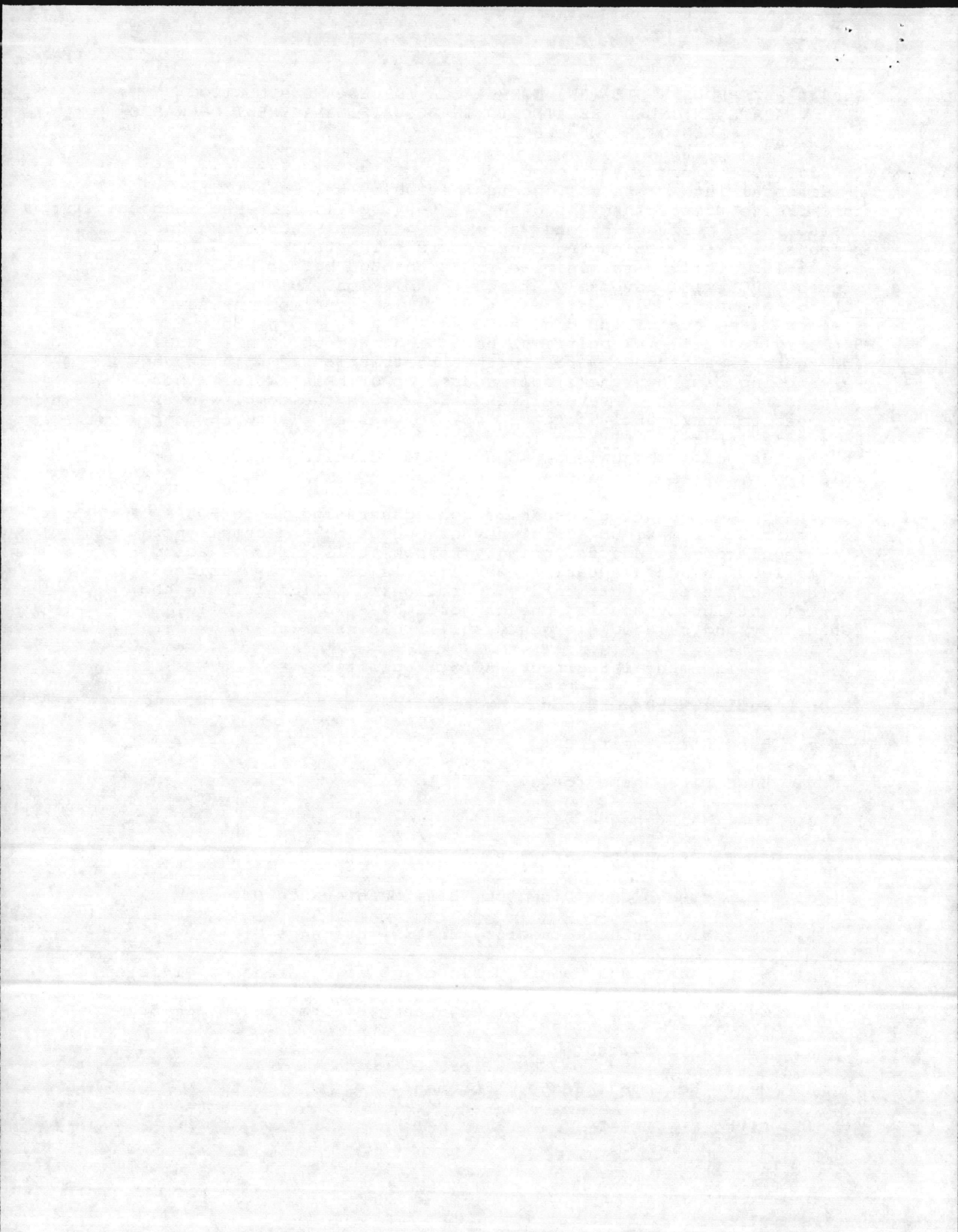


Subj: HAZARDOUS WASTE (HW) COMPLIANCE ISSUES AND POLLUTION  
ABATEMENT NEEDS RELATED TO INADEQUATE MANAGEMENT OF WASTE  
PETROLEUM OILS AND LUBRICANTS (POL'S)

In addition to regulatory problems associated with unauthorized HW disposal into waste oil, contamination by HW, water, dirt, anti-freeze, detergents and other wastes greatly increase disposal costs. With costs of HW and waste oil disposal increasing and responsibilities for paying these costs being transferred to local activities, failure to minimize costs through better management of waste POL will adversely affect the mission. Historically, POL contaminated soil residues from spills and sloppy house-keeping have been disposed of as a solid waste at the Base Sanitary landfill. Regulations have tightened up in this area and there is a trend towards further restrictions. With ground-water being Camp Lejeune's sole source of drinking water, there is concern on part of several managers within the complex over the need to stringently control types of wastes placed in Camp Lejeune's landfill. It should be noted that the landfill is, to the best of our knowledge, operated in compliance with existing rules and standards.

3. While the support of organizations generating waste POL's is required for maximum efficiency of operation and compliance with regulatory standards, primary responsibility for managing the collection and disposal of waste POL's is clearly assigned to the Facilities Department. The following officials have had significant involvement in one or more phases of waste oil management and related emergency spill response:

- a. Environmental Engineer, AC/S, Facilities
- b. Public Works Officer
- c. Base Fire Chief
- d. Base Fire Inspector(s)
- e. Base Maintenance Officer
- f. Admin Branch Director, Base Maintenance Division
- g. Utilities Branch Director, Base Maintenance Division
- h. Operation Branch Director, Base Maintenance Division
- i. Maintenance and Repair Director, Base Maintenance Division
- j. Outside Plumbing, Utilities Branch, (formally in M&R Branch)
- k. General Services
- l. Heavy Equipment General Foreman
- m. Director, NREAD



Subj: HAZARDOUS WASTE (HW) COMPLIANCE ISSUES AND POLLUTION  
ABATEMENT NEEDS RELATED TO INADEQUATE MANAGEMENT OF WASTE  
PETROLEUM OILS AND LUBRICANTS (POL'S)

Reduction of the number of supervisors within the General Services Section of M&R Branch as a result of "streamlining" associated with CA review had a negative effect on the waste oil program. The program which has steadily improved from the mid 1970's through 1983, began to deteriorate in the 1984-85 time frame. The relatively low priority placed on waste oil management combined with the large number of unfilled positions in the M&R Branch and Utilities Branch have created the current perception that an emergency exists requiring major organizational changes.

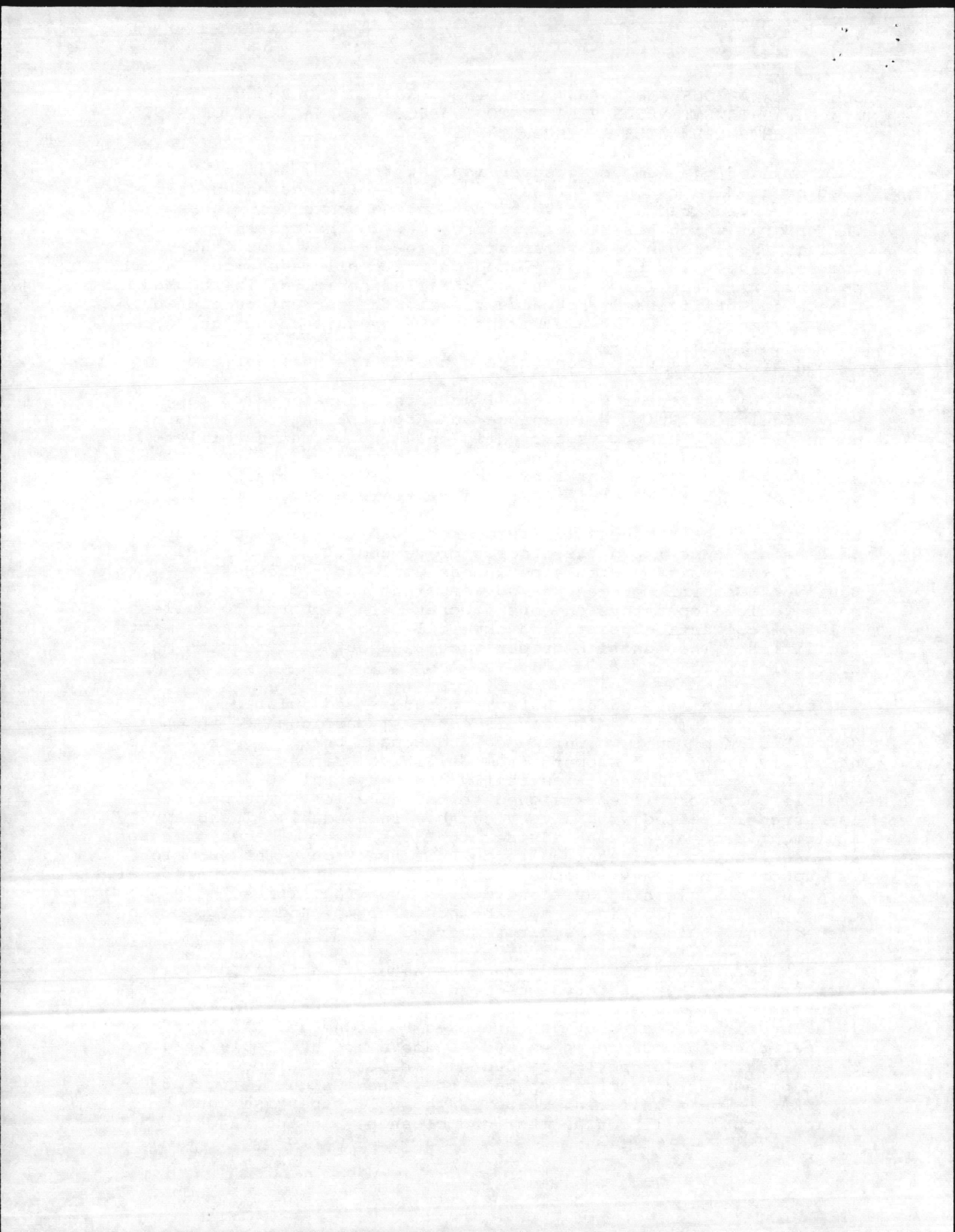
4. Major oil pollution control and abatement functions are:

a. Collection of waste oil is currently assigned to the Heavy Equipment Unit, Maintenance and Repair Branch, Base Maintenance Division. There is currently only one permanent billet assigned to the function. The position became vacant this past summer when the incumbent took another position in the Logistics Department. Base Maintenance submitted a requisition to fill the permanent billet with a temporary in early August. The requisition was subsequently returned by CPO to Base Maintenance. Base Maintenance is in the process of resubmitting the requisition to fill the position with a permanent employee. The Heavy Equipment General Foreman has advised that three billets (two motor vehicle operators and one laborer) are required to collect oil from collection points and skim oil from pollution abatement facilities. The function properly carried out will require major clerical input.

b. Maintenance of oil water separators and related pollution abatement facilities is currently assigned to the Heavy Equipment Unit, Maintenance and Repair branch, Base Maintenance Division, with support from Utilities Branch, Base Maintenance Division. There is currently one permanent WG-7 Motor Vehicle Operator billet assigned to the function. The billet is currently filled with a very capable individual. The Heavy Equipment General Foreman advises that one Motor Vehicle operator and one laborer are required to do this function. The function is supported by Heavy Equipment Operators and Utilities personnel. Work involves cleaning grit and debris from facilities, clearing of stopped up drain lines, maintenance of pumps and controls and inspections to identify repair requirements.

c. Response to oil and hazardous material spills in support of the Marine Corps On-Scene Commander (Base Fire Chief) requests for labor and equipment to contain and cleanup spills is a function affected by the proposed realignment. As long as the personnel discussed in 4a and 4b above are available (radio communications), properly trained and properly equipped, this is no major advantage regarding where they are assigned, i.e., BMO or NREAD. The significant issue is who will supervise them during actual spill containment and cleanup. In the majority



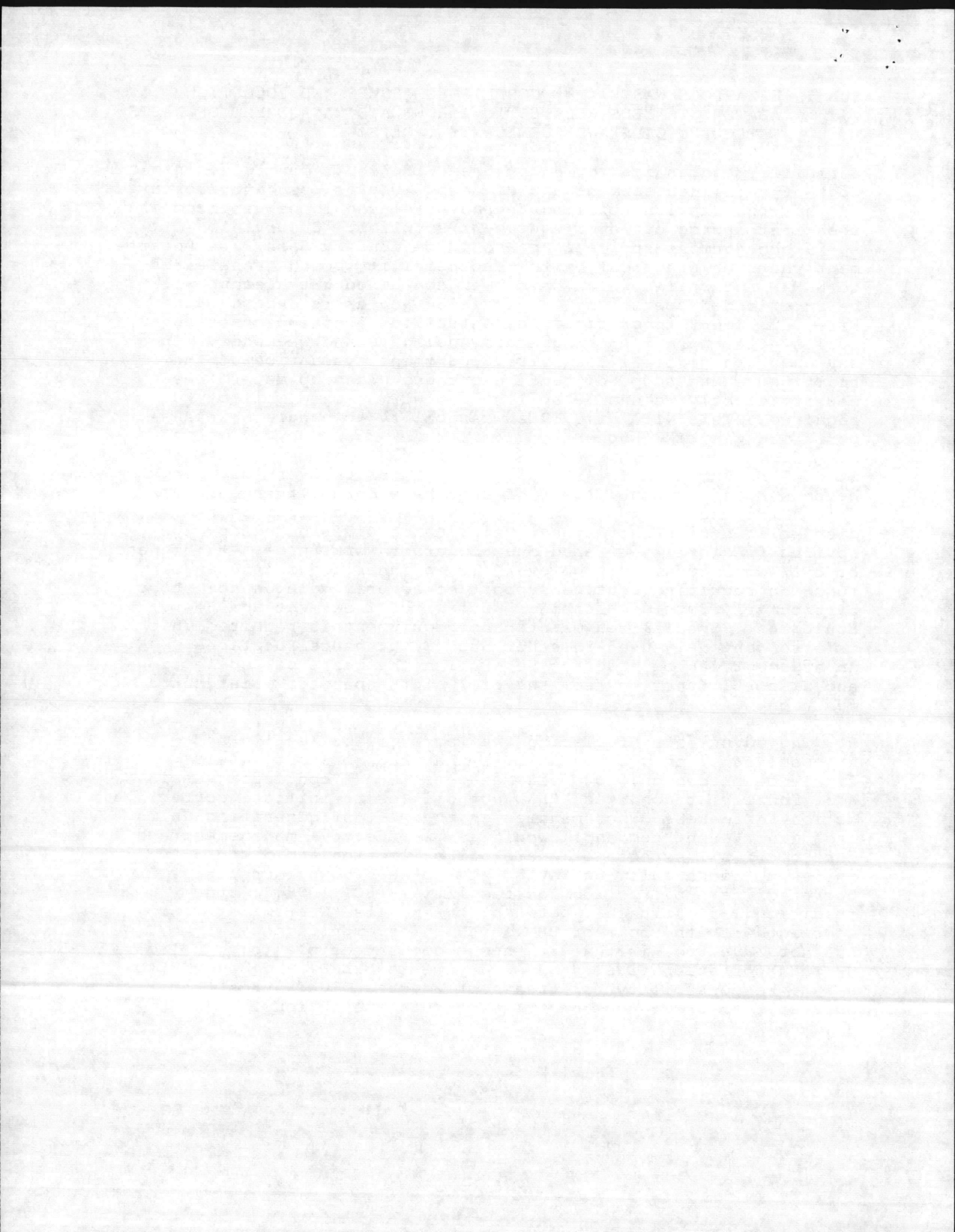


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ABATEMENT NEEDS RELATED TO INADEQUATE MANAGEMENT OF WASTE  
PETROLEUM OILS AND LUBRICANTS (POL'S)

of spills, aggressive action by Base Fire Department can minimize cost of spill containment and cleanup. Use of personnel/resources of the organization spilling the material should be utilized as the first source of labor/equipment/supplies. Supervision of spill containment and cleanup should be done by Base Fire Department wherever practical, with responsibility being transferred to NREAD for spills which have been contained but cleanup will be an extended operation. Supervision and assistance by Base Fire Department is critical in controlling overtime costs for spills after normal working hours, holidays and weekends. In any case, the initial Base Fire Department evaluation of the spill scene and scope of containment and clean-up determines how efficiently we handle spills. a two man crew will be required. This will give NREAD capability to handle HW transportation with TMO support.

5. Unless burning of waste oil locally for recovery of energy becomes a major issue/aspect of the the program, there are no driving forces toward locating the waste oil collection and disposal function in the Base Maintenance Division except the obvious flexibility offered due to larger work force. Maintenance of oil/water separators however, is an inherited maintenance function requiring routine support of several maintenance shops, particularly Outside Plumbing, Wastewater Treatment and Heavy Equipment. Specialized maintenance equipment is required which is also routinely used in other Base Maintenance functions. An argument can be made for separating the waste oil collection and disposal function from the oil/water separator maintenance function.

6. The advantages of placing the waste oil collection and disposal function within NREAD is that high priority would likely be placed on waste oil management on a continuing basis. Additionally, recognized NREAD authorities to initiate corrective action to address discrepancies on the part of generating units including tenant commands, would allow effective management and control of all aspects of waste oil collection and disposal. While BMO technically has authority to shut down improperly operated waste oil collection facilities (BO 11090.3), the traditional relationship between BMO and its "Customers" is in conflict with the role of BMO as an enforcement agency. Another advantage is that it then becomes feasible to consolidate HW transportation (i.e. from AC/S, LOG to NREAD) and have NREAD assume responsibility for transporting hazardous wastes from generator to DRMO. The benefits to this are obvious.





Subj: HAZARDOUS WASTE (HW) COMPLIANCE ISSUES AND POLLUTION  
ABATEMENT NEEDS RELATED TO INADEQUATE MANAGEMENT OF WASTE  
PETROLEUM OILS AND LUBRICANTS (POL'S)

The main disadvantage to transferring the responsibility for collection of waste oil to NREAD is the inflexibility of NREAD in dealing with vacancies, absences, and sudden peaks of workload. If the following guidelines (expectations) are accepted by all parties involved, then transfer of the waste oil collection and disposal function should be successful.

a. That the current table of organization (equivalent) of the Soil, Water and Environmental Branch, NREAD, is maintained plus the additional billets, shown in recommended action #1 below;

b. That use of overtime by the Branch will frequently be relatively high, if the Branch plays any significant role in cleaning up spills (other than present advisory capacity);

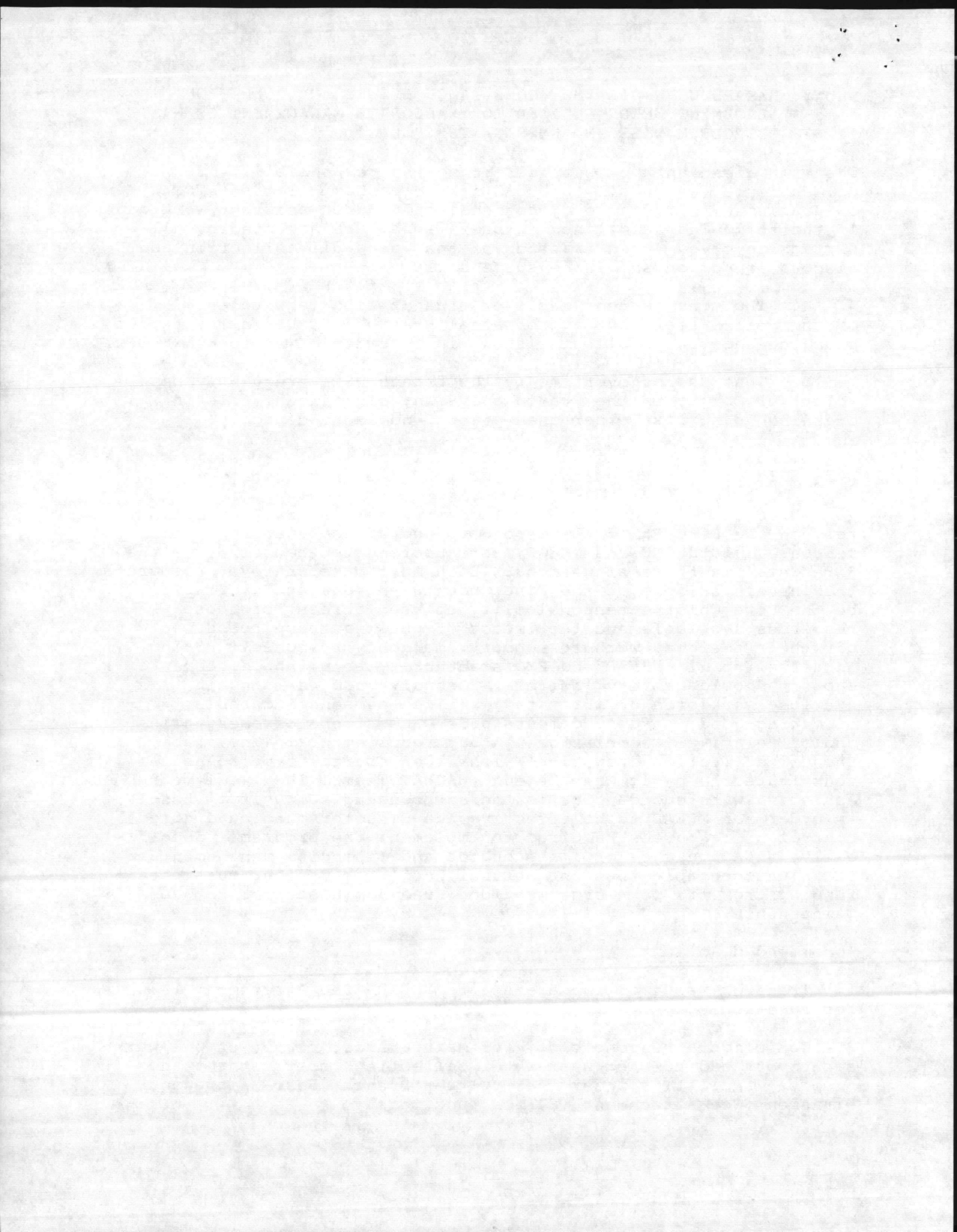
c. That the additional billets will be skilled positions and would need to be permanent, well trained personnel;

7. Three other issues are pertinent. First, AC/S, Facilities must rely on the Fire Chief to respond to and direct emergency spill response. Both BMO and NREAD must subordinate themselves to the Fire Chief in these situations. Both must make whatever resources they have available to the Fire Chief when requested. It will be the Fire Chief's responsibility to keep abreast of those resources available and the impact of pulling these resources off their assigned work to support emergency response. During an actual spill, NREAD and BMO's authority to withhold requested support should be very limited. Secondly, can we maintain a stable workforce of motivated, skilled personnel capable of making good, safe judgements under the stress of emergencies and/or relatively complex regulatory requirements? Inevitably, the oil collection crew along with Fire Department personnel will constitute the basic Camp Lejeune HAZMAT Team. They will be subject to assisting with emergencies in the surrounding community. Lastly, in order for NREAD to be effective the Director must have direct control of resources required to implement the program. Specifically, NREAD must control its budget and financial management. It is unacceptable that the Natural Resources Officer must obtain funding from its peer organization, Fund Administrator 23, Base Maintenance.

Recommended Action:

1. Transfer waste oil management to NREAD (See Attachment (A) for functions).

2. Consolidate responsibility for maintenance, repair of oil/water separators and related wastewater collection, pretreatment and disposal facilities under the Utilities Branch, Base Maintenance Division (See Attachment (B) for functions).



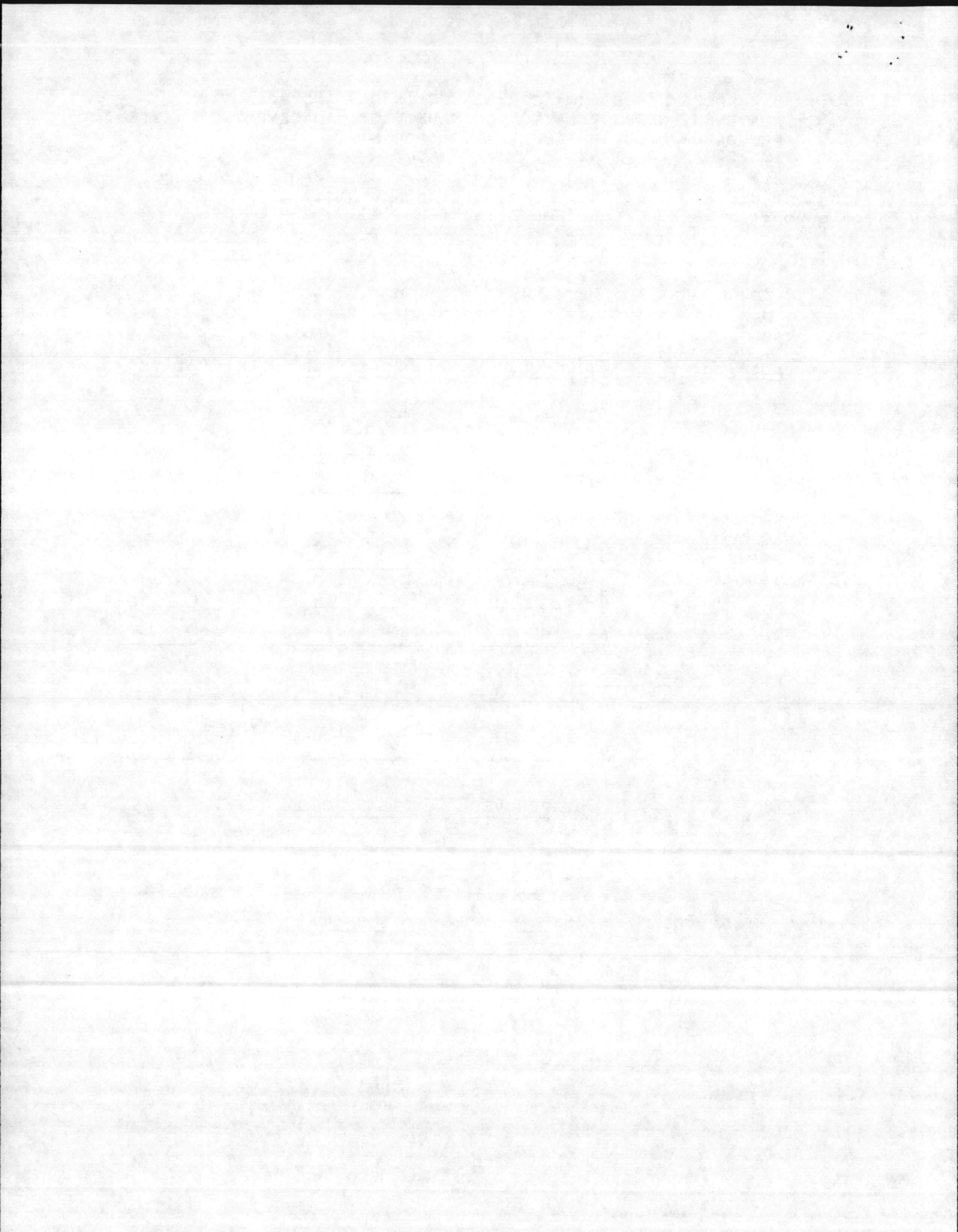
Subj: HAZARDOUS WASTE (HW) COMPLIANCE ISSUES AND POLLUTION  
 ABATEMENT NEEDS RELATED TO INADEQUATE MANAGEMENT OF WASTE  
 PETROLEUM OILS AND LUBRICANTS (POL'S)

3. Create a separate fund administrator for NREAD and transfer  
 a budget clerk billet from Base Maintenance Division to NREAD  
 to support this function (See Attachment (A)).

J. I. WOOTEN  
 Director, Natural Resources Division

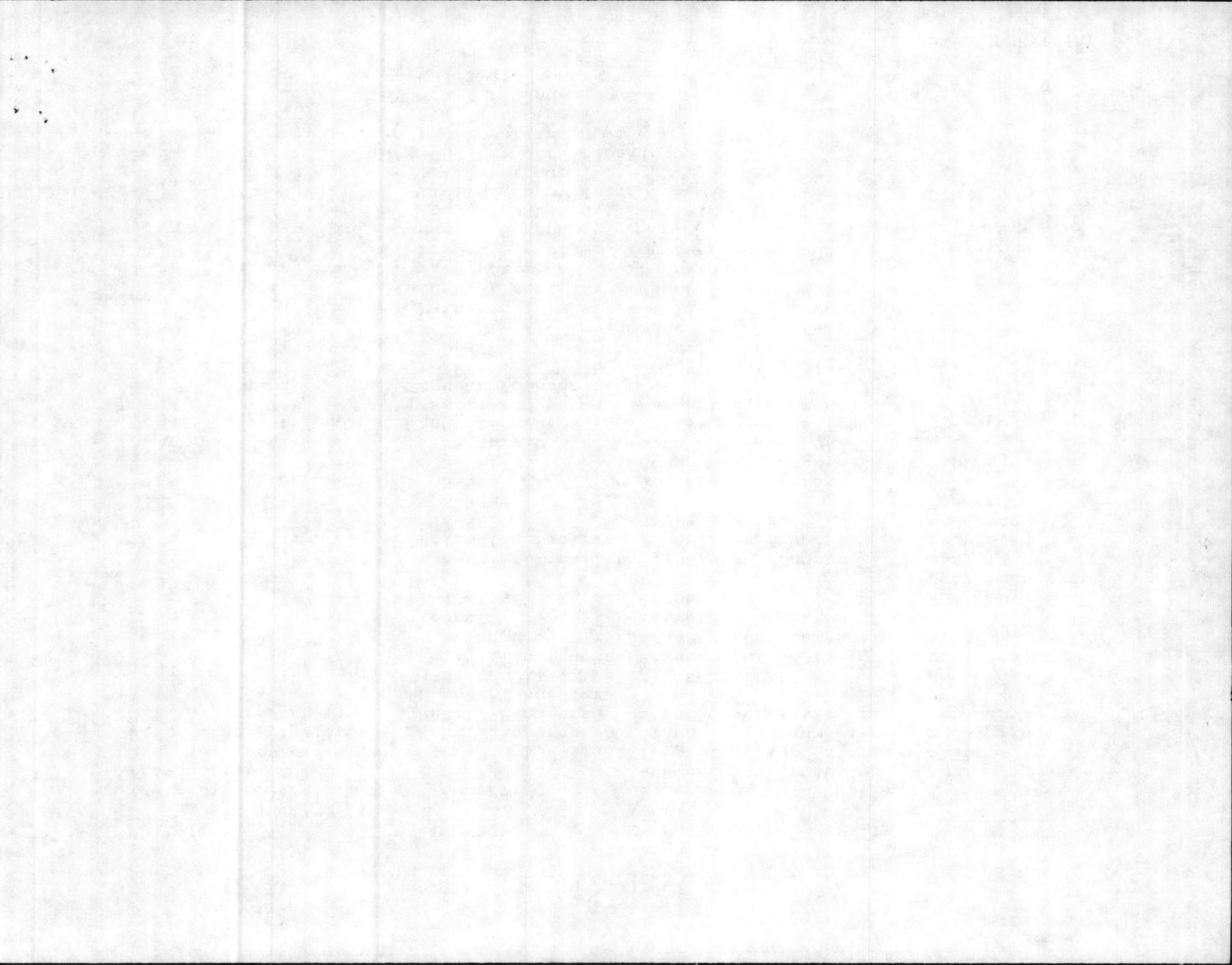
<u>Recommendation:</u>		<u>CONCUR</u>	<u>NON-CONCUR</u>	<u>DATE</u>
BMO	#1	_____	_____	_____
	#2	_____	_____	_____
	#3	_____	_____	_____
Deputy, AC/S, Facilities	#1	_____	_____	_____
	#2	_____	_____	_____
	#3	_____	_____	_____
AC/S, Comptroller:				
Recommendation	#3	_____	_____	_____
		<u>APPROVED</u>	<u>DISAPPROVED</u>	
AC/S, Facilities	#1	_____	_____	_____
	#2	_____	_____	_____
	#3	_____	_____	_____





TRANSFER OF WASTE OIL MANAGEMENT FROM BMO TO NREAD

<u>FUNCTION</u>	<u>RESOURCES</u>	<u>NREAD</u>	<u>MAINTENANCE</u>
Waste oil collection, transportation and disposal. Hazardous waste transportation oil spill response	<p>1-Supervisor                      1-Clerk                      3-WG-7 Motor Vehicle Operators/                      HAZMAT Handlers                      2-HAZMAT Handlers                      3-Waste Oil Collection trucks                      1-Stake Body truck                      1-4 wheel drive pickup                      1-Forklift/trailer                      Following tanks:                      S-888                      S-889                      S-890                      S-891                      Accessory bldgs and structures associated with the above storage tanks.</p> <p>Maintain inventory of specialized spill response equipment and supplies including but not limited to preloaded trailer loaded with 500 ft of floating boom, matting, pom pom, hand tools, drums for hazardous material, absorbent etc.</p>	<p>1. Assume total management and execution for collection, storage, disposal and administration of waste oil.</p> <p>2. Request AC/S, Comptroller to assign NREAD as Program Administrator for Class II Property.</p> <p>3. Assign Program Supervisor from in-house assets.</p> <p>4. Provide first response for containment &amp; cleanup of spills requests from Base Fire Deptment.</p> <p>5. Request assistance for heavy equipment or labor for spills beyond own capability from Base Maintenance via on-scene commander</p>	<p>1. Transfer equipment and billets to establish 3 vehicle operators, 2 HAZMAT and 1 clerk position in NREAD.</p> <p>2. Provide spill response assistance as requested by on-scene Commander (i.e. Base Fire Chief Representative)</p>





FUNCTION

RESOURCES

NREAD

MAINTENANCE

OFFICE SPACE

All of Bldg. 1103 not assigned to Special Services & the Paint Shop Area at South West End of Bldg. 1102.

1. Assume custody of Bldg. 1103 & designated portion of 1102.

2. Request AC/S, Comptroller to transfer Bldg. 1102

1. Assist with re-assignment of Bldgs. 1102 & 1103.

2. Move Plumbing Shop from Bldg. 1103.

BUDGET/FINANCIAL

Budget Clerk

1. Assume total responsibility for budgeting, financial management, and administration of funds assigned to NREAD and Environmental Engineer.

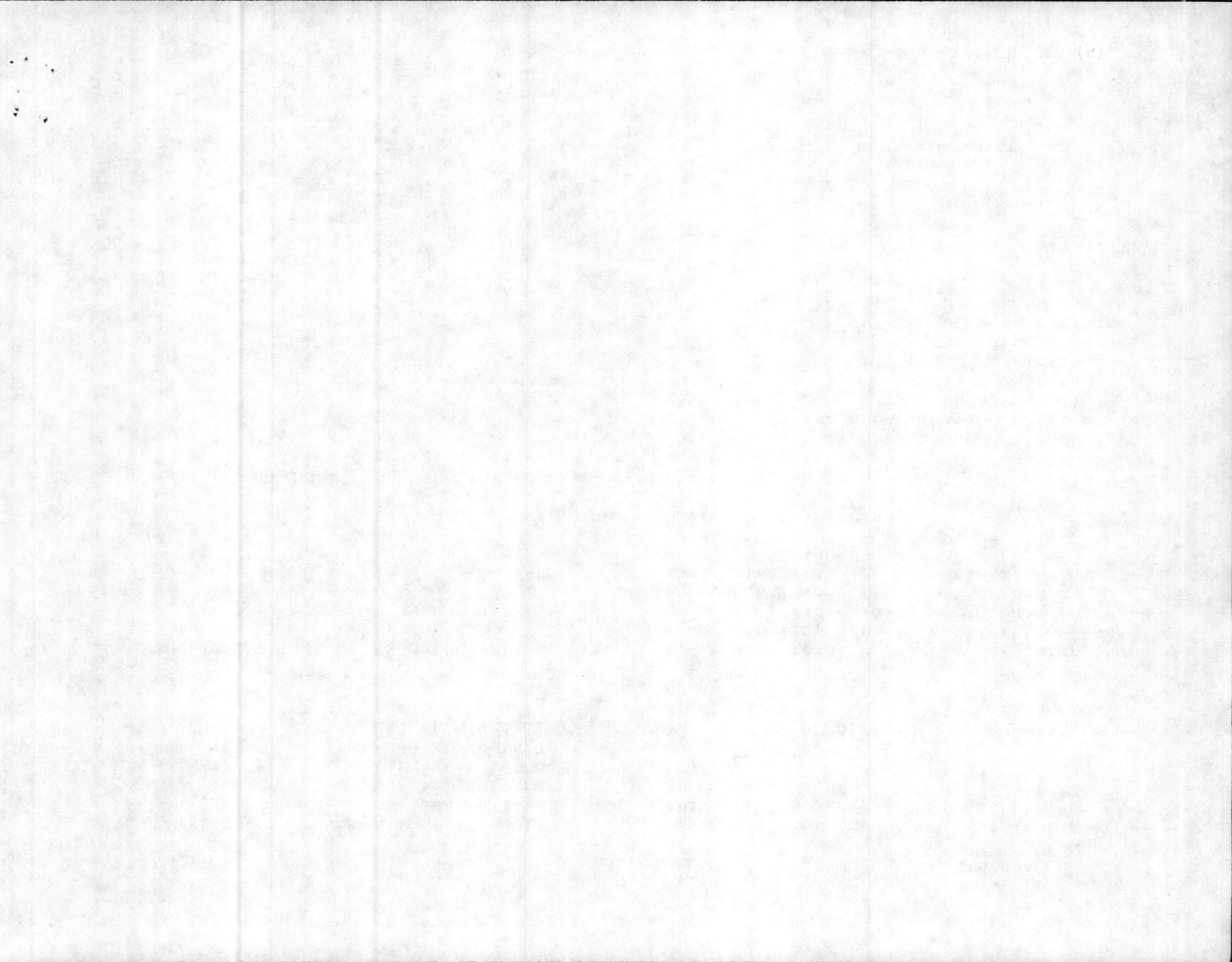
1. Transfer one billet from Base Maintenance to NREAD for the establishment of a budget Clerk.

VEHICLE PARKING

Parking lot between buildings 1102 and 1103.

1. Utilize parking space adjacent to portions of buildings 1102 & 1103 assigned to NREAD.

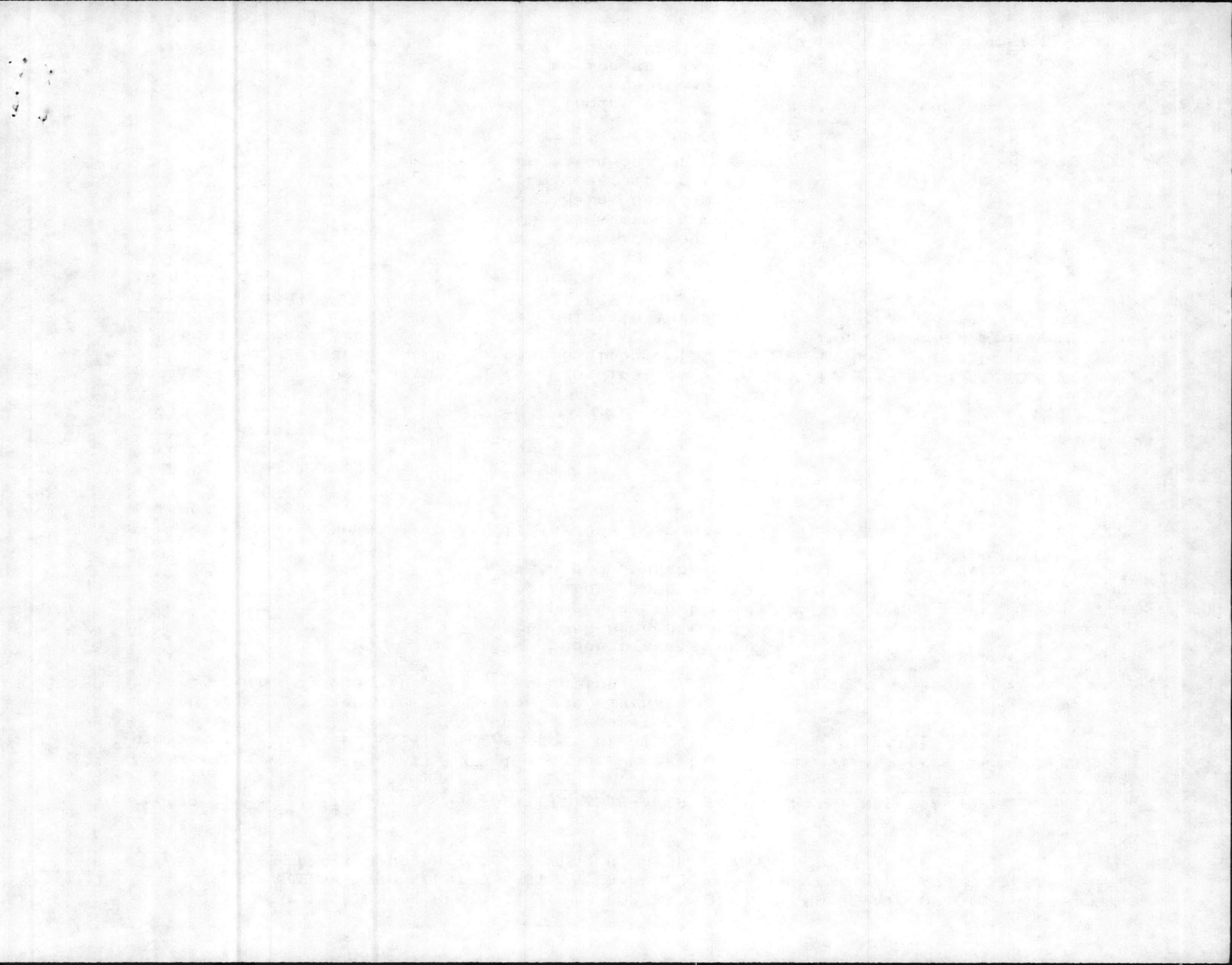
1. Park only vehicles from Shop 61 and 62 in space between buildings 1102 & 1103 adjacent to portions of building 1102 occupied by Base Maintenance.



CONSOLIDATION OF RESPONSIBILITY FOR MAINTENANCE AND REPAIR OF OIL-WATER SEPARATORS AND RELATED WASTEWATER COLLECTION, PRETREATMENT AND DISPOSAL FACILITIES UNDER UTILITIES BRANCH, BASE MAINTENANCE DIVISION

<u>FUNCTIONS</u>	<u>RESOURCES</u>	<u>UTILITIES BRANCH</u>	<u>MAINTENANCE &amp; REPAIR BRANCH</u>
Maintenance of oil-water separators, including cleaning and inspection.	1-Vac All truck 1-Motor vehicle operator 1-Laborer	<ol style="list-style-type: none"> <li>1. Assume operational support of all oil-water separators to include cleaning &amp; inspection.</li> <li>2. Request assistance from M&amp;R Branch for heavy equipment support on large separators such as Boat Basin and Courthouse Bay.</li> </ol>	<ol style="list-style-type: none"> <li>1. Transfer equipment and two billets.</li> <li>2. Provide heavy equipment support as requested.</li> </ol>
Servicing containment basins at Fire Protection Division burn pits used for fire fighter training.	No additional	<ol style="list-style-type: none"> <li>1. Assume responsibility</li> </ol>	<ol style="list-style-type: none"> <li>1. None</li> </ol>
Monitoring & disposing of PCB transformers including inspecting and maintaining records.	Dedicated area in Lot 140.	<ol style="list-style-type: none"> <li>1. Coordination with Base Environmental Staff.</li> <li>2. Maintain inventory of all PCB transformers in use at CLNC.</li> <li>3. Assume custody of PCB transformers from Base Maintenance or from contractors that are taken out of service.</li> <li>4. Dispose of PCB transformers that are no longer required at CLNC.</li> </ol>	<ol style="list-style-type: none"> <li>1. Assign dedicated area in Lot 140 to Utilities for temporary storage of PCB transformers awaiting disposal.</li> <li>2. Assist in spill response.</li> </ol>





*Edw*

*CP*



**PUBLIC WORKS DIVISION**  
BUILDING 1005, MARINE CORPS BASE  
CAMP LEJEUNE, NORTH CAROLINA 28542-5001

IN REPLY REFER TO:

87-B-9423  
PWO  
10 Nov 87

**From:** Public Works Officer, Marine Corps Base, Camp Lejeune  
**To:** Base Maintenance Officer

**Subj:** CONSTRUCTION CONTRACT 87-B-9423, IMPROVEMENT TO WASTE  
OIL STORAGE FACILITIES, BLDG 45

**Encl:** (1) Preliminary Basis of Design.

1. A contract with A. D. Energy has been awarded to design plans and specifications for the subject project.
2. As previously discussed, we have asked the A&E firm to hold on continued design effort until we fully determine our requirements and site location for the project.
3. The enclosure provides a preliminary basis of design for the project. It is requested you review the enclosure and provide direction regarding the project.
4. A meeting between all interested parties to discuss the project is highly recommended.
5. Point of contact is Mr. Thomas H. Hankins, extension 3238.

*F. E. Cone*  
F. E. CONE  
By direction

Copy to: (w/o encl)  
NREA  
FAC





6000  
PWO

DEC 15 1987

From: Commanding General, Marine Corps Base, Camp Lejeune  
To: Commander, Atlantic Division, Naval Facilities Engineering Command,  
Norfolk, VA 23511-6287 (Code 1143, Steve Olson)

Subj: HAZARDOUS WASTE/MATERIALS AND USED OIL MANAGEMENT STUDY AT MARINE CORPS  
BASE, CAMP LEJEUNE

1. The subject study is currently under review by MCB, Camp Lejeune. Consolidated comments will be provided to you in the near future to allow completion of the final report.
2. In the interim, several action items regarding waste oil management require immediate attention. It is requested that arrangements be made with the current A&E, Ensafe, to provide the following:
  - a. Site visit to Camp Lejeune to obtain revised MCB policy decisions and review MCB comments for waste oil management. Based on this visit, modify used oil management plan to reflect current MCB policies and federal/state regulations.
  - b. Provide alternative management strategies, cost estimates, and facilities documentation for the collection, handling and disposal of:
    - (1) Skimmings from oil/water separators and similar facilities.
    - (2) Grit and other solids/semisolids from cleaning of oil/water separators and similar facilities.
    - (3) Residues occurring from cleanup of oil spills and leaks including:
      - (a) Absorbents (granular and matting)
      - (b) Contaminated Soil
      - (c) Oil/Water Mixtures
  - c. Evaluate existing condition of used oil storage facilities associated with:
    - (1) Holcomb Boulevard Storage Facility (S-399 - S-391)
    - (2) Building 45 Storage Tank
    - (3) Tarawa Terrace Storage Facility (STP-61 - STP-65)
    - (4) MCAS, New River Storage Facility (AS-419 - AS-421)

411  
Bump ID?

DEC 1 8 1987

[The following text is extremely faint and illegible due to low contrast and noise. It appears to be a series of lines of text, possibly a list or a document body.]



Subj: HAZARDOUS WASTE/MATERIALS AND USED OIL MANAGEMENT STUDY AT MARINE CORPS  
BASE, CAMP LEJEUNE

Recommend or provide the following:

(5) Suitability for continued use to include modification requirements and cost estimates.

(6) Suitability/feasibility of relocation of serviceable tanks.

(7) Requirements for cleaning of waste oil tanks which previously held oil containing regulated quantities of organic halogens.

(8) Provide a plan with cost estimates and documentation for demolition of facilities not suitable for or required for continued use in managing waste oil.

d. Evaluate alternatives and provide recommendations for siting of proposed waste oil facilities. Include the following:

(1) Select site for the two waste oil storage areas (MCB and MCAS) from proposed sites.

(2) Provide project site plan for each selected location, including layout of tanks, unloading docks, existing utilities, etc.

(3) Update project documentation and cost estimates for the two selected sites to allow submittal under the MCON program.

e. MCB currently has an approved minor construction project beginning design. The project intent is to alleviate current waste oil separation and storage problems. Request Ensafe provide recommendations for design to insure effectiveness of facilities and compatibility with future MCON projects.

f. Provide a phased plan for handling waste oil. The plan should address the following:

Phase I - Procedures for handling waste oil with the currently available facilities (tanks, pump trucks). Address segregation, storage, disposal, etc.

Phase II - Procedures for handling waste oil upon completion of the R-2 project noted above. Address coordination of new facility with current facilities regarding segregation, storage, disposal, etc.

Phase III - Procedures for handling waste oil upon completion of total waste oil handling facilities at MCB and MCAS.

3. Although portions of the above are within the original study scope of work, it is recognized that several items include additional work for which Ensafe should be compensated. Appropriate funding will be provided upon request.



THE UNIVERSITY OF CHICAGO

DEPARTMENT OF CHEMISTRY

LABORATORY OF ORGANIC CHEMISTRY

REPORT OF RESEARCH

BY

DR. ROBERT M. BROWN

AND

DR. J. H. GOLD

CHICAGO, ILLINOIS

1954

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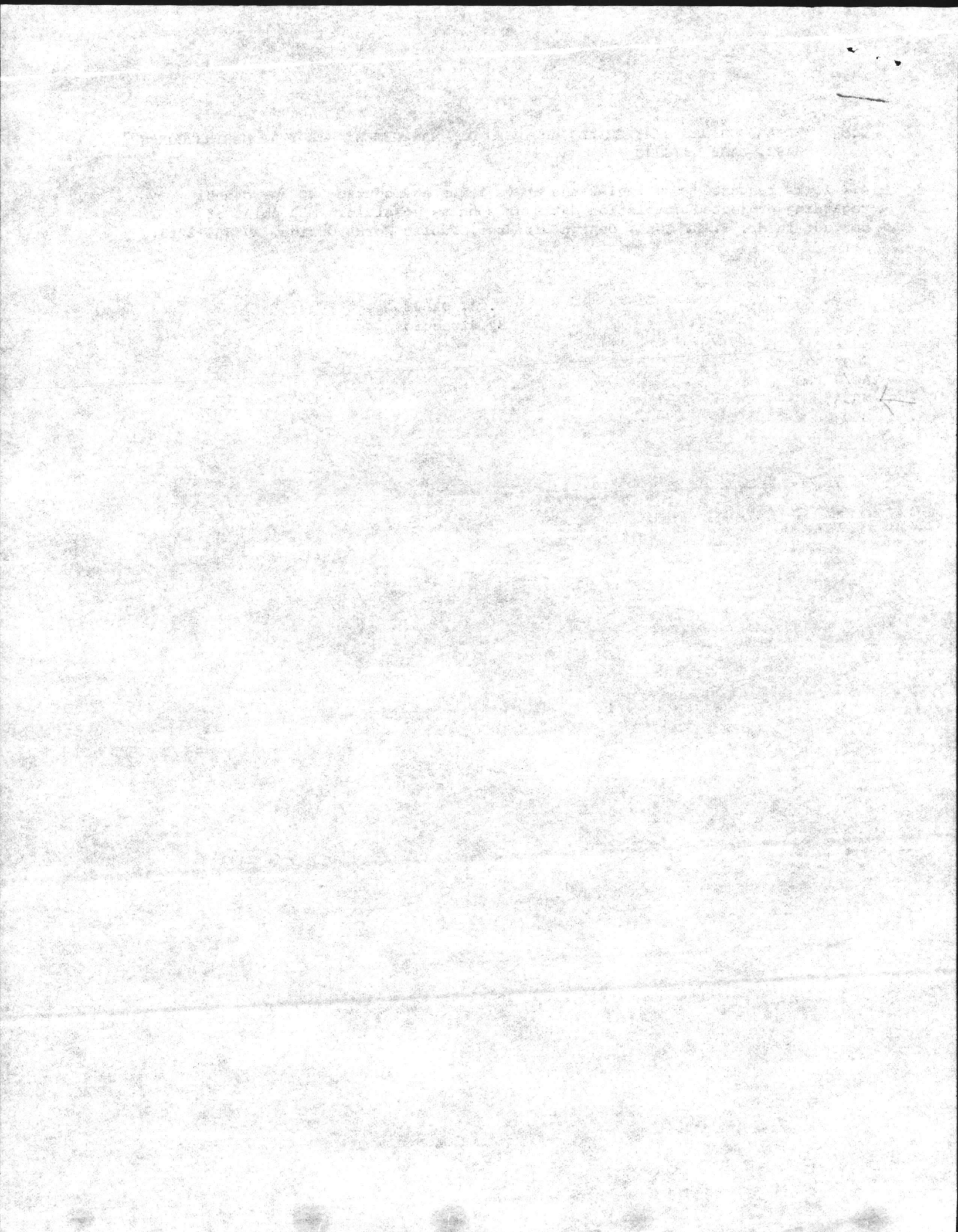
Subj: HAZARDOUS WASTE/MATERIALS AND USED OIL MANAGEMENT STUDY AT MARINE CORPS  
BASE, CAMP LEJEUNE

4. It is requested you review the above items and contact MCB personnel regarding projected completion dates as soon as possible. MCB point of contact is Mr. F. E. Cone, Design Director, Public Works Office, AV 434-2213.

T. J. DALZELL  
By direction

Copy to:  
AC/3 FAC  
→ NREA  
BMO







NREAD

6240  
NREAD  
NOV 24 1987

Mr. Jerry Rhodes  
Assistant Head  
Solid & Hazardous Waste  
Management Branch  
Division of Health Services  
Post Office Box 2091  
Raleigh, North Carolina 27602-2091

Dear Mr. Rhodes:

The purpose of this letter is to address issues related to the Marine Corps Base, Camp Lejeune, waste oil management program. On September 4, 1987, I met with Mr. Gary Babb and Mr. Mack Henderson of your office. During the meeting, a determination was made that the contents of seven waste oil tanks identified in enclosure (1) would be managed as a hazardous waste. This determination was based on analytical data provided by this command. It was further determined that the date the analytical data was received by Marine Corps Base from the contract laboratory would be the accumulation start date, i.e., September 1, 1987.

✓  
DDJ  
S. E. Co. (1987)

Having reached agreement on the above, all parties in the September 4, 1987 meeting agreed to the following plan of action:

1. Marine Corps Base would expedite removal of the contents of the seven waste oil tanks within 90 calendar days;
2. If Marine Corps Base was unable to remove the oil within 90 calendar days, a request to your office would be made for a thirty day extension;
3. Marine Corps Base would take action to identify and eliminate sources of the unauthorized disposal of halogenated solvents into local waste oil collection system.

Be advised that this command understands the importance of proper waste oil recycling and management in achieving national and state goals to minimize the volume and toxicity of hazardous wastes generation. To date, three of the seven waste oil tanks have been emptied. Approximately 219,000 gallons of waste oil have been shipped to an off site treatment, storage and disposal facility at a cost of approximately \$589,000. I have been informed by the government contracting officer representative, that removal of the approximately 76,000 gallons in the remaining four tanks will begin in a few days.

Writer/Typist Shaye Kski  
Date Typed 23 Nov 87  
Word Processor Number 50





6240  
NREAD

In that removal of this oil will likely not be completed before the end of November, I am requesting that the thirty - day extension discussed above be granted by your office. This matter was discussed with Mr. Gary Babb on November 18, 1987. At that time Mr. Babb was advised of several other tanks which were in the process of being filled were sampled subsequent to September 4, 1987. The three tanks shown in enclosure (2) were found to contain halogens in excess of the 1000 parts per million standard. Although we made the hazardous waste determination in mid October, we are attempting to properly dispose of the 56,000 gallons in these tanks within the same time frame as the contents of the original seven tanks.

The assistance of your staff in resolving problems with our waste oil management program is greatly appreciated. Point of contact with this matter is Mr. Danny Sharpe, at telephone (919) 451-5003.

Sincerely,

T. J. DALZELL  
Colonel, U. S. Marine Corps  
Assistant Chief of Staff, Facilities  
By direction of the Commanding General

Enclosures

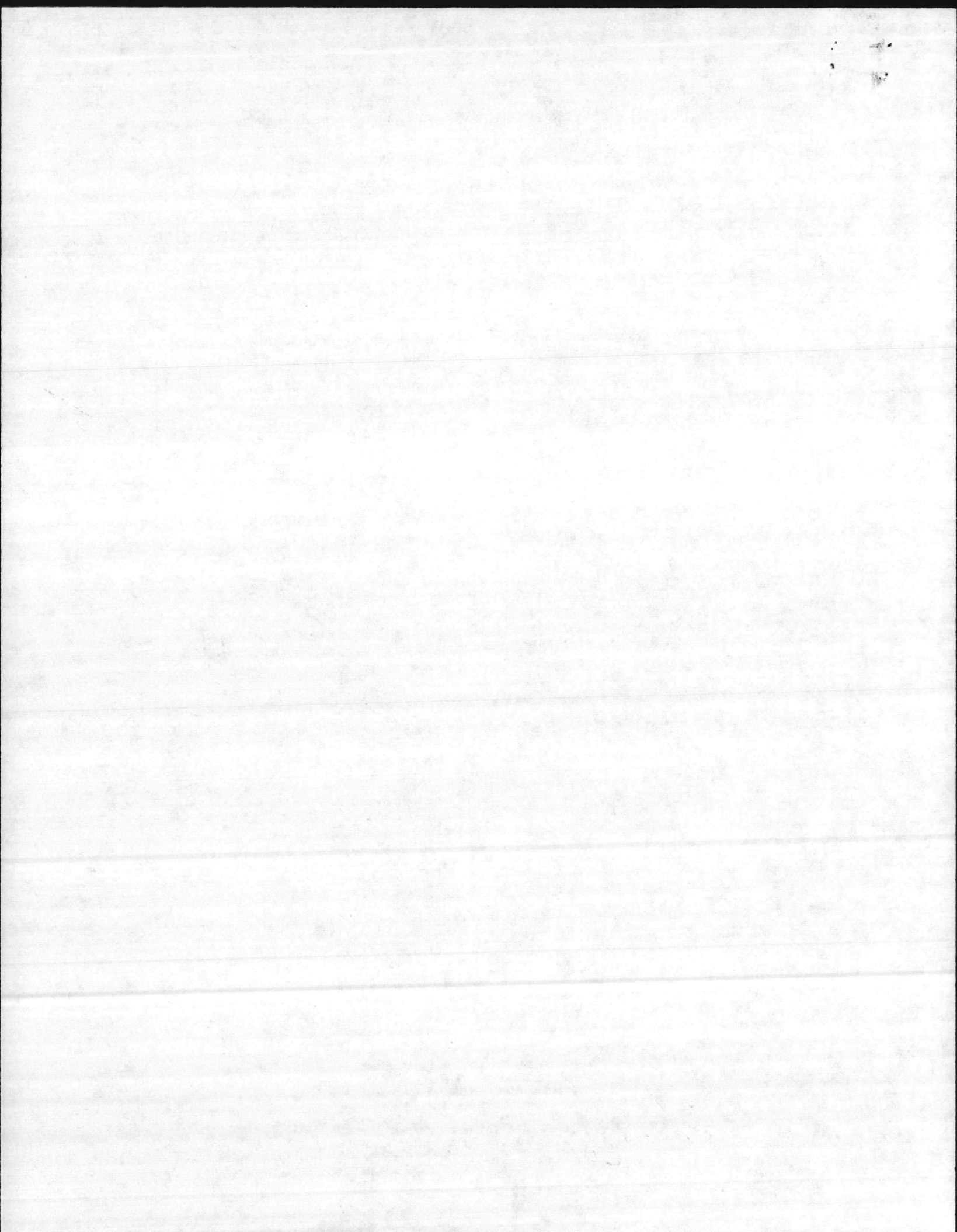




LOCATION OF WASTE OIL TANKS  
CONTAINING HALOGENATED SOLVENTS DISCUSSED  
WITH DIVISION OF HEALTH SERVICES ON SEPTEMBRE 4, 1987

<u>STRUCTURE NUMBER</u>	<u>SHEET NUMBER</u>	<u>APPROXIMATE VOLUME OF CONTENTS PRIOR TO STARTING DISPOSAL</u>
S-781	2 of 5	185,500 (See note 1)
S-889	3 of 5	14,300
S-891	3 of 5	23,000
STT-61	4 of 5	18,800 (See note 1)
STT-62	4 of 5	19,900 (See note 1)
AS-420	5 of 5	18,700
AS-421	5 of 5	13,800

NOTE 1: These tanks have been emptied and are waiting cleaning prior to reuse for waste oil storage.



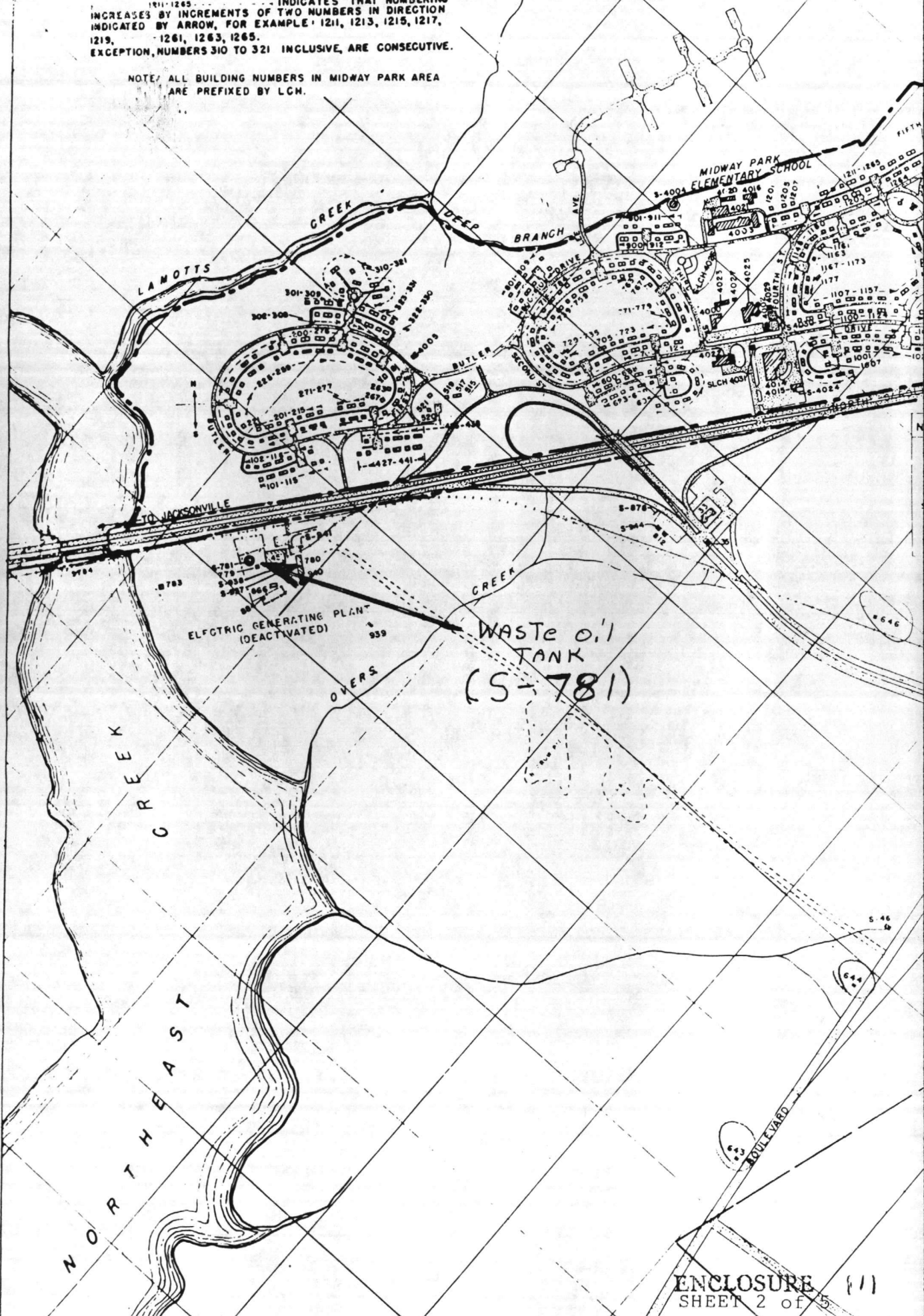


REC BLDG  
SOFTBALL FIELD  
STORAGE CUV ORG/OTH  
PLAZA

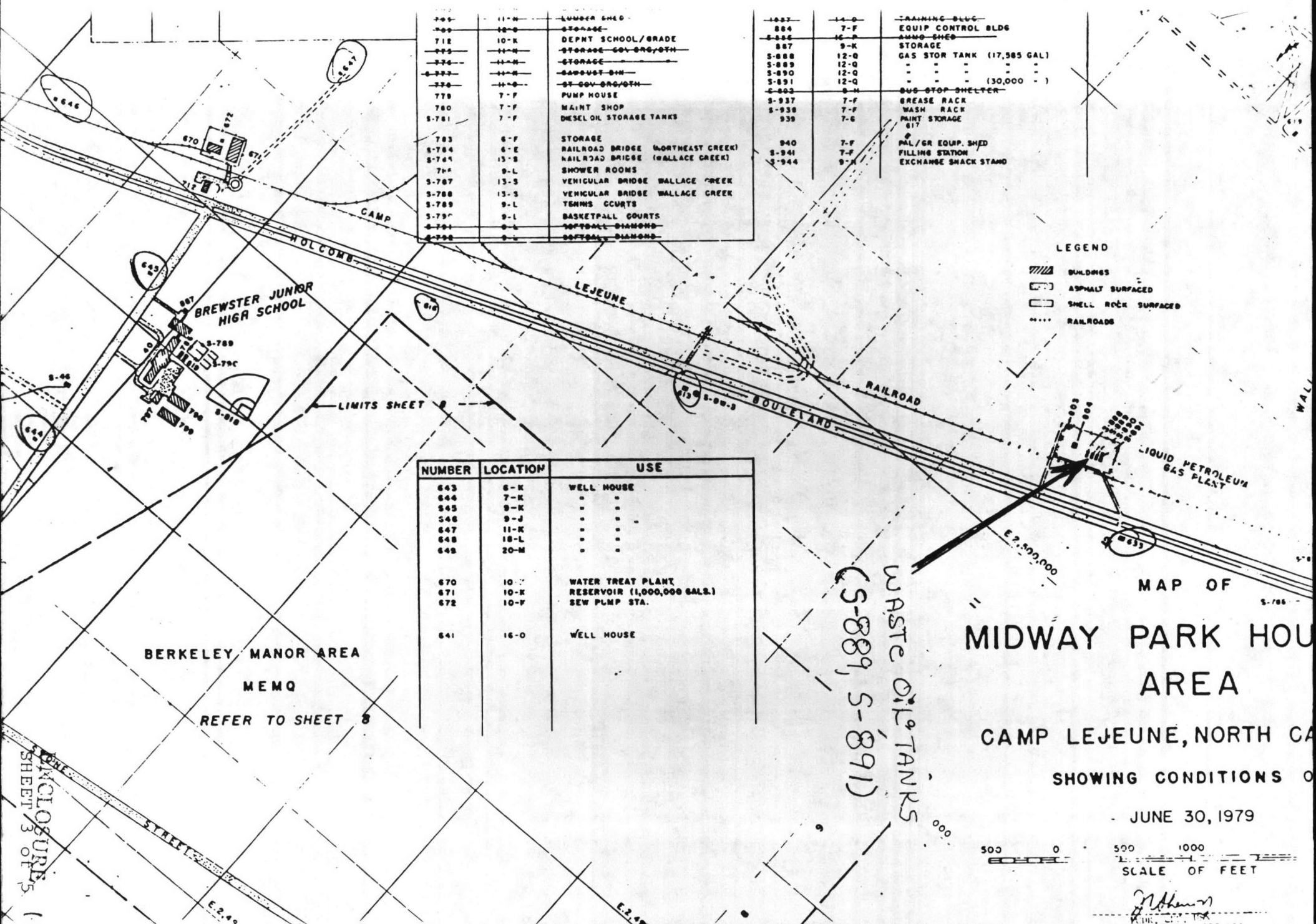
**SINGLE AND DOUBLE DWELLINGS  
LEGEND FOR BUILDING NUMBERS**

INDICATES THAT NUMBERING INCREASES BY INCREMENTS OF TWO NUMBERS IN DIRECTION INDICATED BY ARROW, FOR EXAMPLE: 1211, 1213, 1215, 1217, 1219, 1261, 1263, 1265.  
EXCEPTION, NUMBERS 310 TO 321 INCLUSIVE, ARE CONSECUTIVE.

NOTE: ALL BUILDING NUMBERS IN MIDWAY PARK AREA ARE PREFIXED BY LCM.







705	11-N	LUMBER SHED
706	12-O	STORAGE
712	10-K	DEPT SCHOOL/GRADE
723	11-N	STORAGE GOV BRG/OTH
724	11-N	STORAGE
727	11-N	SABOUST BIN
728	11-O	ST GOV BRG/OTH
778	7-F	PUMP HOUSE
780	7-F	MAINT SHOP
5-781	7-F	DIESEL OIL STORAGE TANKS
783	6-F	STORAGE
5-784	6-E	RAILROAD BRIDGE (NORTHEAST CREEK)
5-744	15-B	RAILROAD BRIDGE (WALLACE CREEK)
784	9-L	SHOWER ROOMS
5-787	13-S	VEHICULAR BRIDGE WALLACE CREEK
5-788	13-S	VEHICULAR BRIDGE WALLACE CREEK
5-789	9-L	TENNIS COURTS
5-790	9-L	BASKETBALL COURTS
5-791	9-L	SOFTBALL DIAMOND
5-792	9-L	SOFTBALL DIAMOND

1227	14-O	TRAINING BLDG	
884	7-F	EQUIP CONTROL BLDG	
5-886	16-F	AMMO SHED	
887	9-K	STORAGE	
5-888	12-Q	GAS STOR TANK (17,985 GAL)	
5-889	12-Q	" " " " " "	
5-890	12-Q	" " " " " "	
5-891	12-Q	" " " " " (30,000 " " )	
5-932	8-N	BUS STOP SHELTER	
5-937	7-F	BREASE RACK	
5-938	7-F	WASH RACK	
939	7-G	PAINT STORAGE	
		817	
940	7-F	PAL/GR EQUIP. SHED	
5-941	7-F	FILLING STATION	
5-944	9-N	EXCHANGE SHACK STAND	

LEGEND

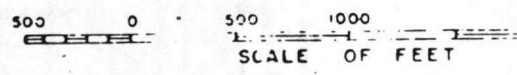
- BUILDINGS
- ASPHALT SURFACED
- SHELL ROCK SURFACED
- RAILROADS

NUMBER	LOCATION	USE
643	6-K	WELL HOUSE
644	7-K	" "
645	9-K	" "
646	9-J	" "
647	11-K	" "
648	18-L	" "
649	20-M	" "
670	10-Y	WATER TREAT PLANT
671	10-K	RESERVOIR (1,000,000 GALS.)
672	10-Y	SEW PLMP STA.
641	16-O	WELL HOUSE

BERKELEY MANOR AREA  
MEMO  
REFER TO SHEET 8

MAP OF  
MIDWAY PARK HOUSE  
AREA  
CAMP LEJEUNE, NORTH CAROLINA  
SHOWING CONDITIONS OF

JUNE 30, 1979

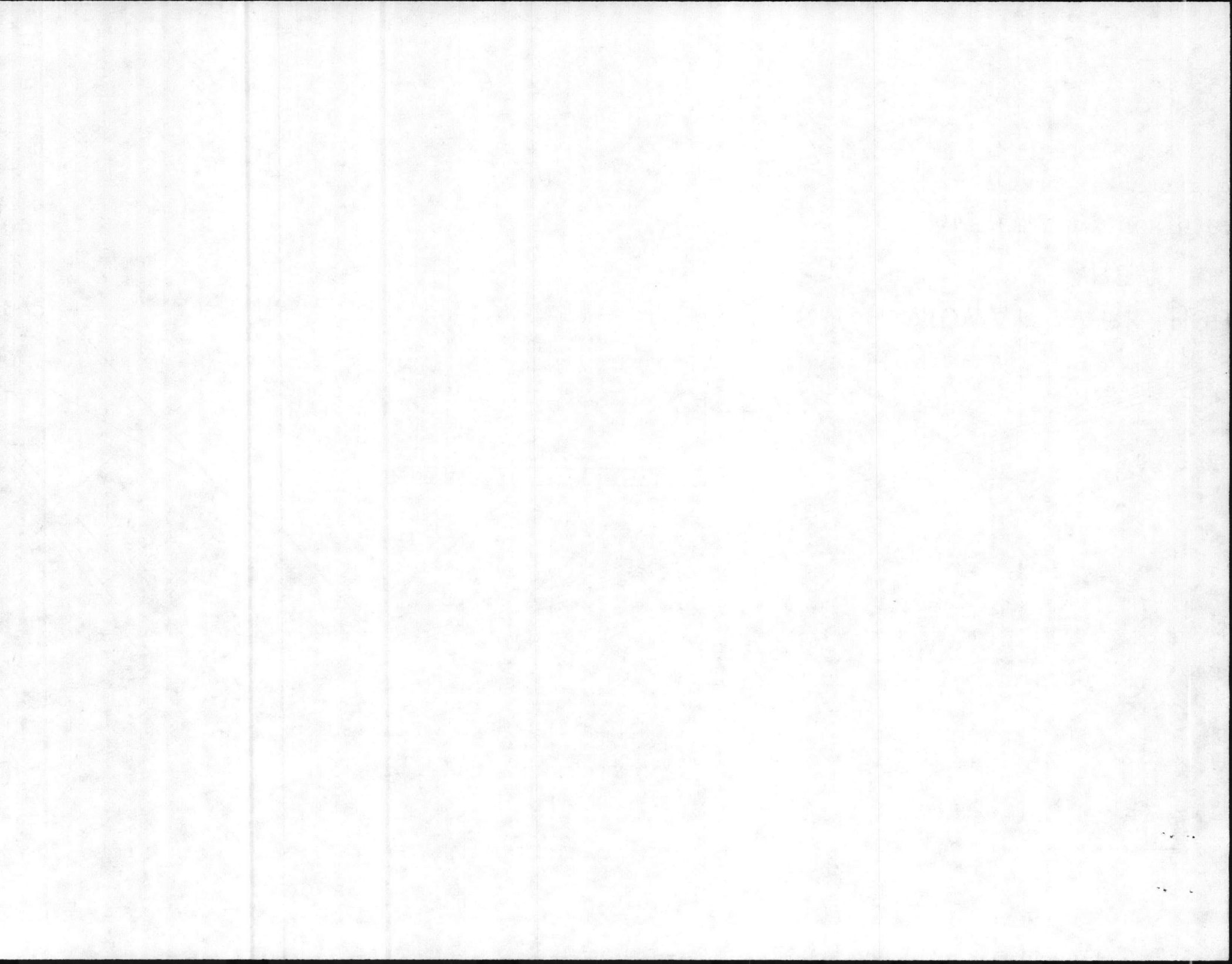


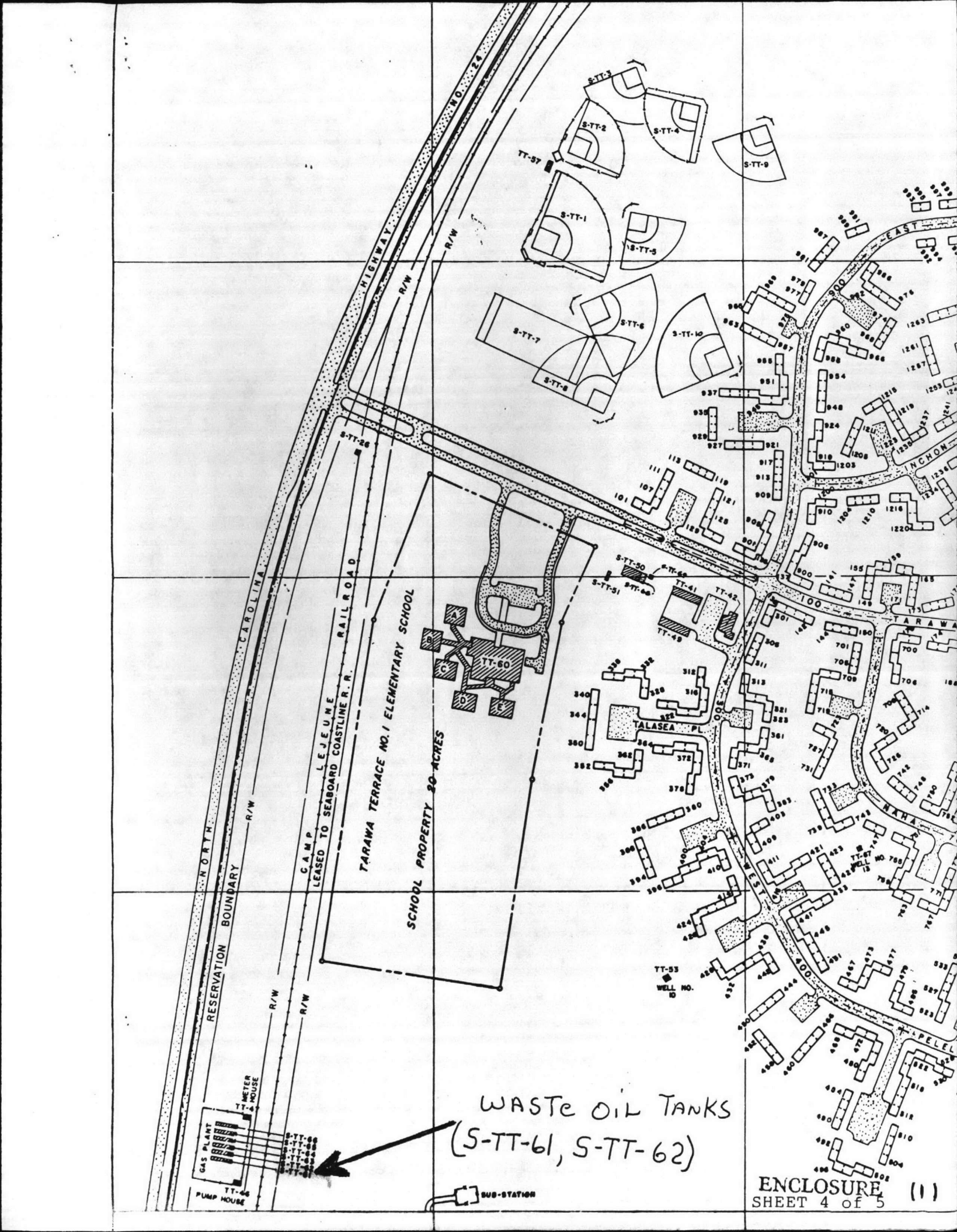
*[Signature]*  
ENGINEER

WASTE OIL TANKS  
(5-889, 5-891)

ENCLOSURE  
SHEET 3 OF 5 (11)



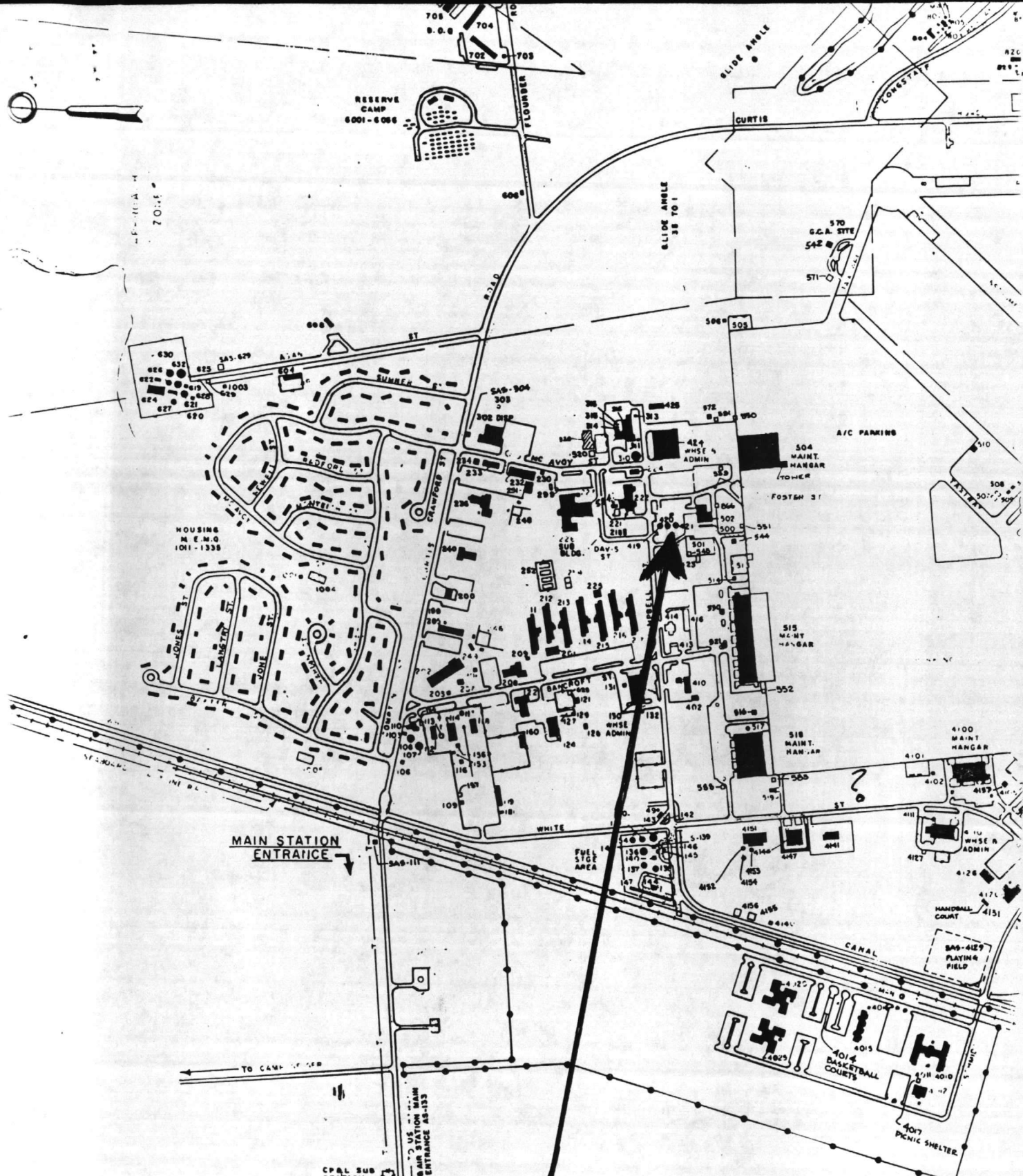




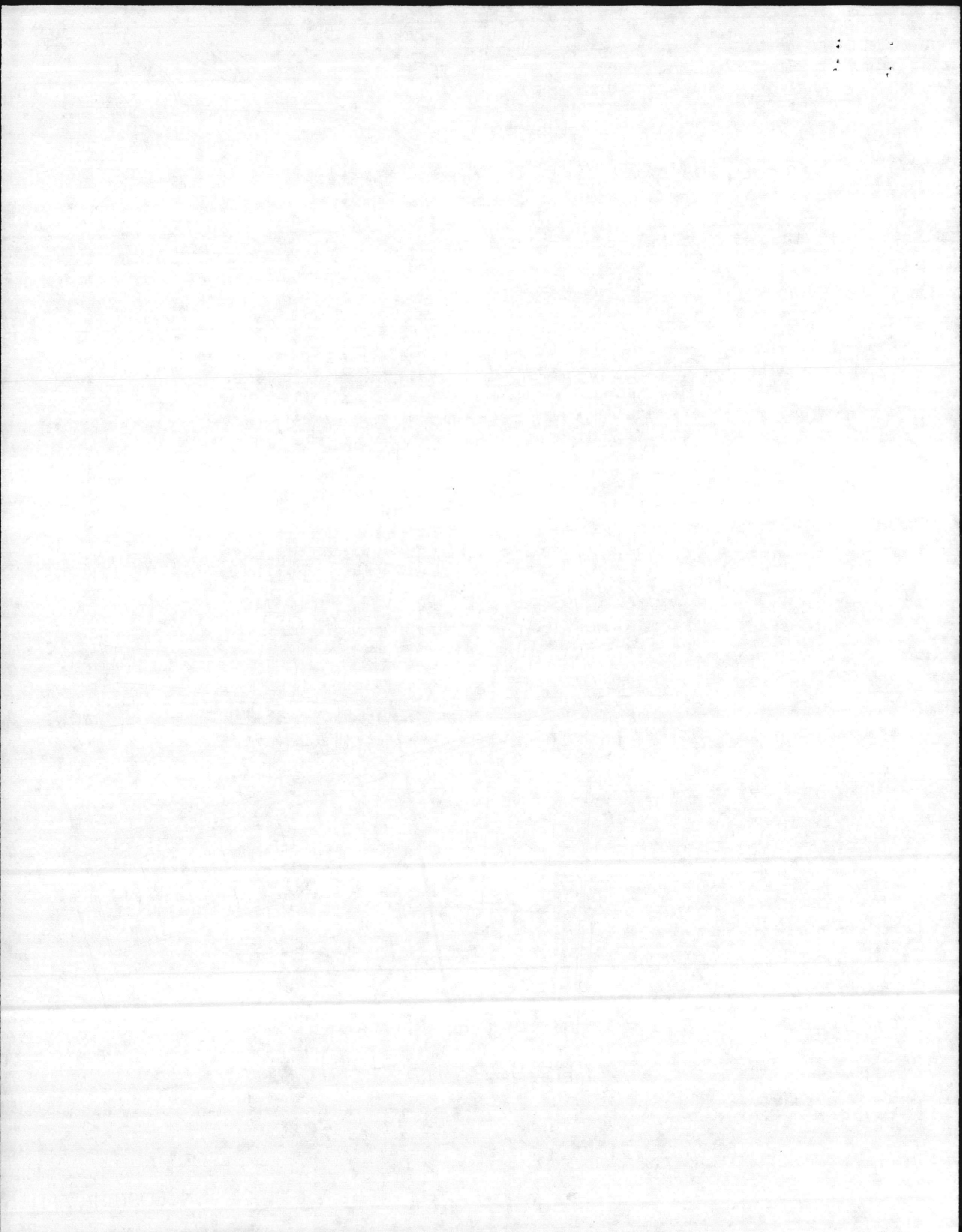
WASTE OIL TANKS  
(S-TT-61, S-TT-62)







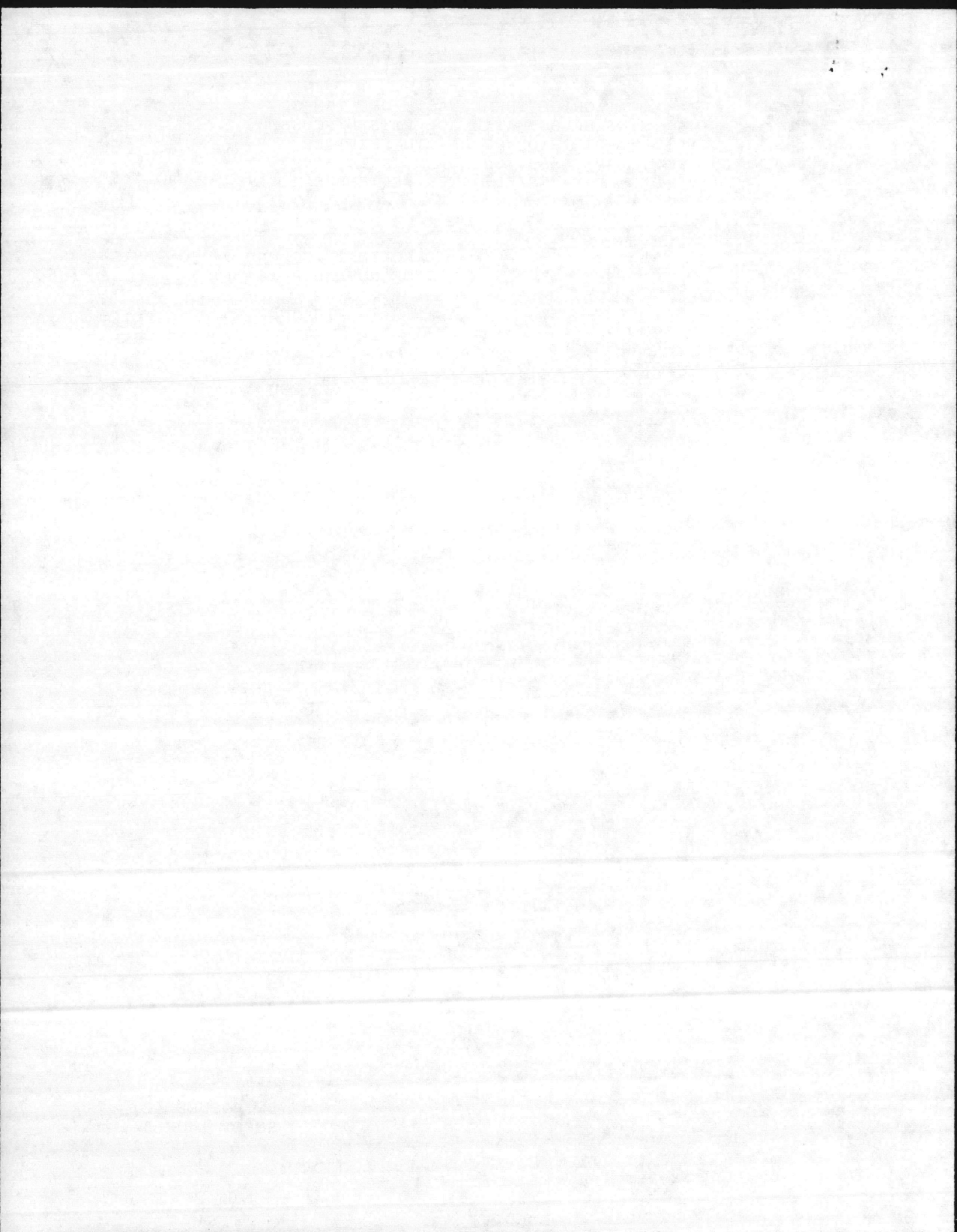
WASTE OIL TANKS  
 (AS-420, AS-421)

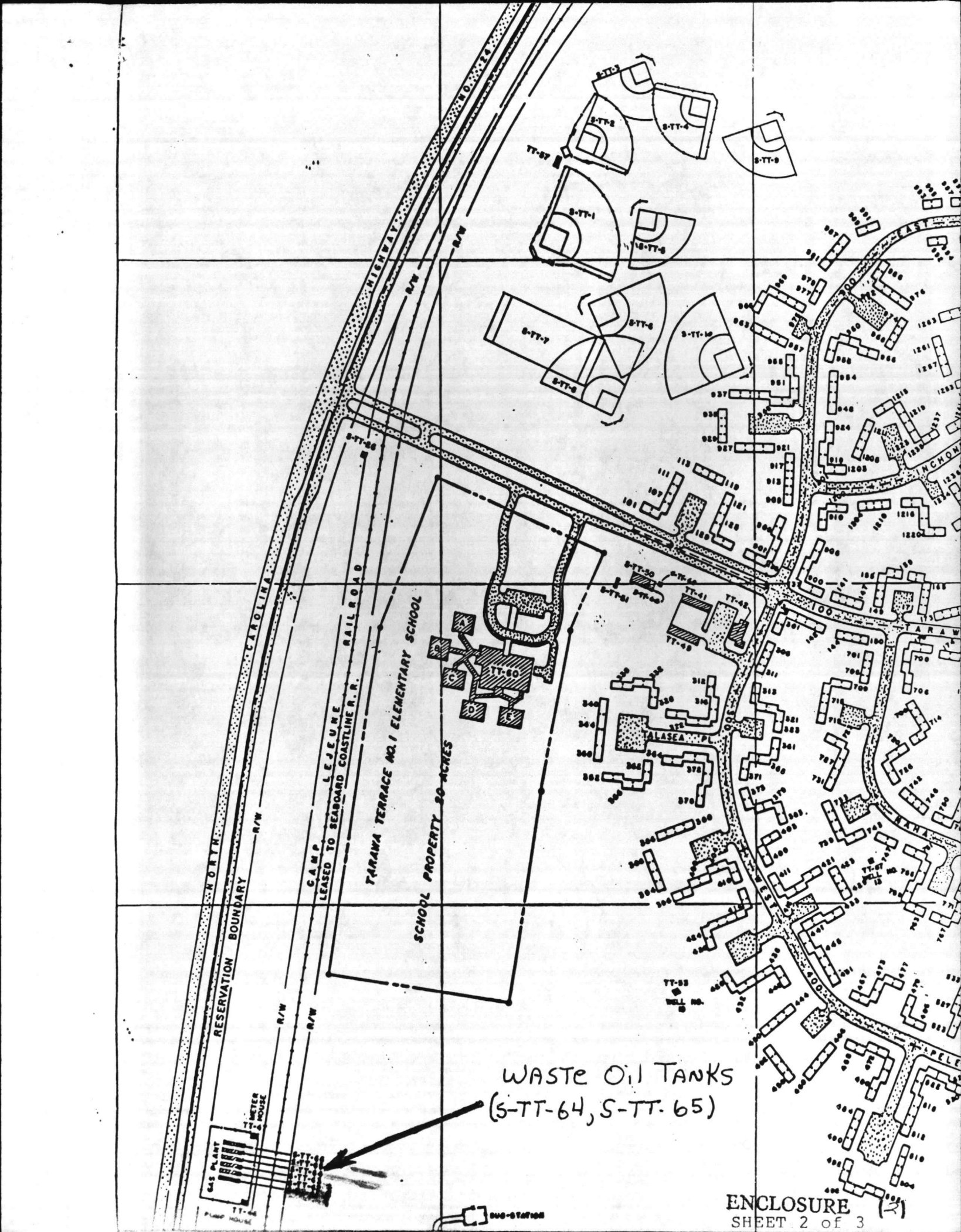


LOCATION OF THREE WASTE OIL TANKS  
CONTAINING HALOGENATED SOLVENTS DISCUSSED  
WITH DIVISION OF HEALTH SERVICES  
(MR. GARY BABB) ON NOVEMBER 18, 1987.  
THESE TANKS WERE TESTED AFTER SEPTEMBER 4, 1987.

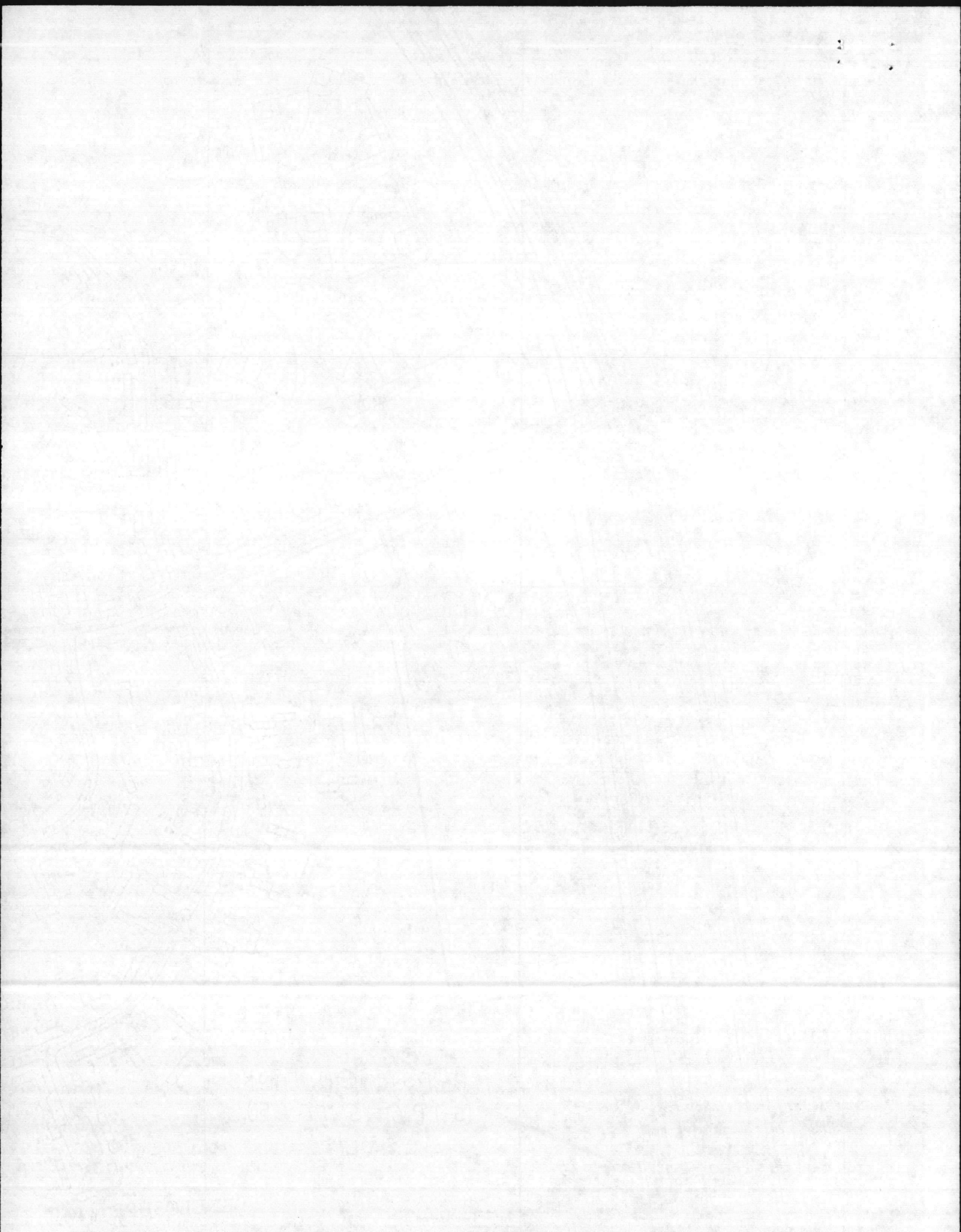
STRUCTURE NUMBER	SHEET NUMBER	APPROXIMATE VOLUME OF CONTENTS AS OF NOVEMBER 18, 1987
STT- 64	2 of 3	18,000
STT-65	2 of 3	15,800
AS-419	3 of 3	22,200



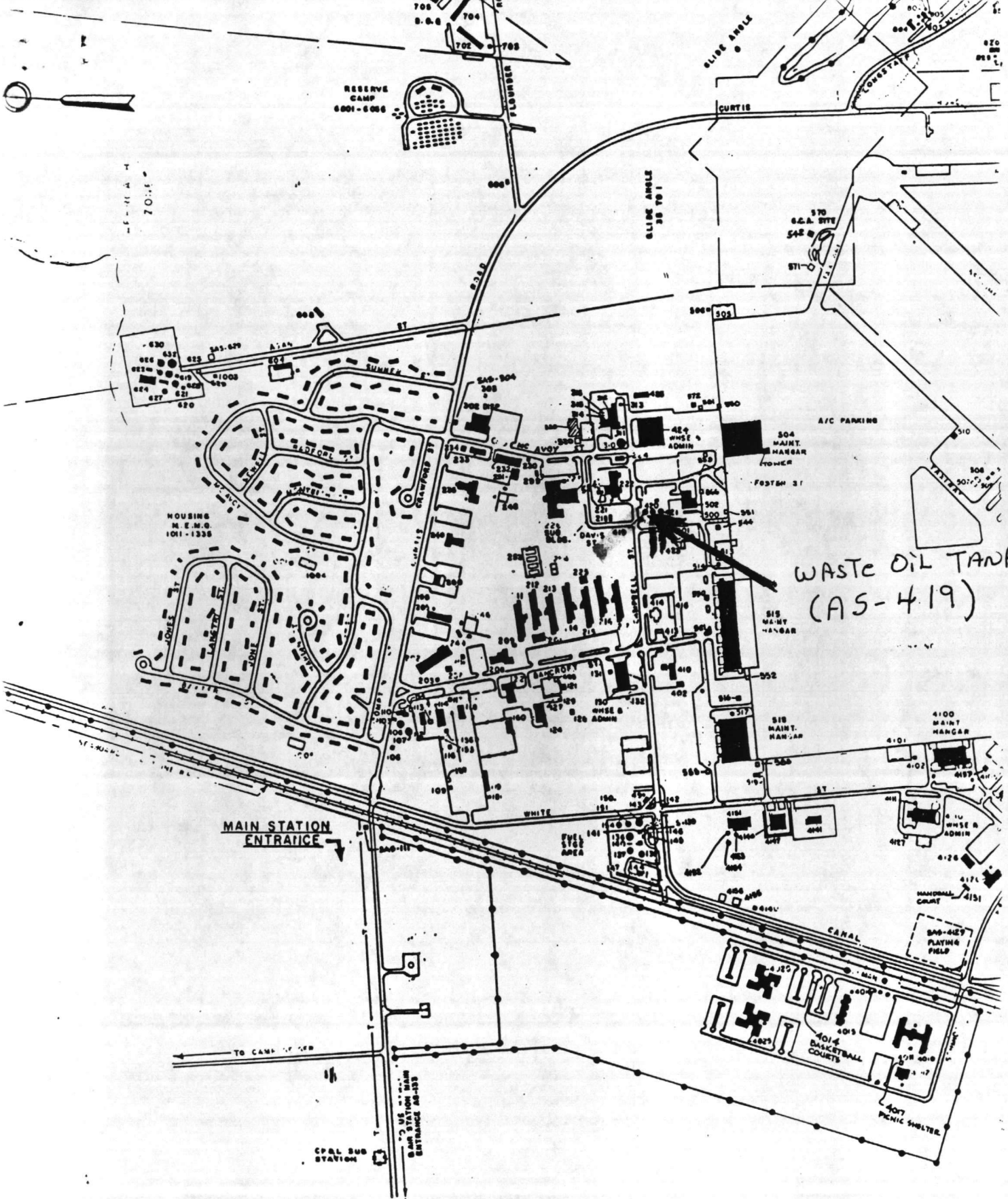




WASTE OIL TANKS  
(S-TT-64, S-TT-65)







100

100

File Oil

NATURAL RESOURCES AND ENVIRONMENTAL AFFAIRS  
Marine Corps Base  
Camp Lejeune, North Carolina 28542

6 Oct 87  
Date

IN REPLY REFER TO:  
11000  
GSO  
7 May 87

From: Director *Julian For*  
To: *Dan Job*  
Subj:

New River  
(Lejeune, North Carolina  
activities)

See attached Air Station  
Survey request for pollution  
Abatement at CGI  
*[Signature]*

Building CG-1, has 24  
hours of operation  
at their airfield  
check to CG-1 for cleaning  
phalt surface and cleaned  
eam unit. The soap,  
e asphalt and onto the  
wing vehicles are cleaned

urvey of this operation  
tary sewer connection for  
and is Mary Wheat,

Ken: please get me a  
copy of a wash pad with  
oil/w separator drawing and  
see if Mr. George Turner,  
BMO can help you work up a  
cost estimate, AS SOON  
AS possible.  
Rough  
D. Shange



W. K. F.

W. K. F.

6240  
NREAD  
14 Dec 87

From: Director, Natural Resources and Environmental Affairs  
Division, Marine Corps Base, Camp Lejeune  
To: Assistant Chief of Staff, Facilities, Marine Corps Base,  
Camp Lejeune

Subj: DISPOSAL OF WASTE OIL

Ref: (a) CG, MCB ltr 6280/2 FAC of 2 Oct 87

Encl: (1) Log of NREAD Waste Oil Management Activity

1. The enclosure is provided per the reference.

J. I. WOOTEN



1950  
1951  
1952

General Director, Federal Bureau of Investigation  
Director, United States Customs Service  
Assistant Chief of Police, New York City  
Chief of Police, New York City

Special Agent in Charge

100-100000-100000

RE: [Illegible]

[Illegible]

[Illegible]



WASTE OIL MANAGEMENT ACTIVITY LOG

23 Nov 87

Tom Barbee, NREAD, met with Mr. Howell, Fuels Division, Marine Corps Air Station (MCAS), concerning waste fuel storage capacity at the rapid refuel area. Each of the four underground tanks need to be emptied.

25 Nov 87

Negative report.

1 - 3 Dec 87

Tom Barbee, NREAD, and Pat Dalton, Heavy Equip., began picking up oil at MCAS. Mr. Barbee performed TOX test. Only "good oil" was picked up. Oil was placed in TT-63. Col Dalzell was advised and concurred. Approximately 900 gallons were picked up.

4 Dec 87

Glenee Smith's last working dat. Danny Sharpe began maintaining log on waste oil.

7 Dec 87

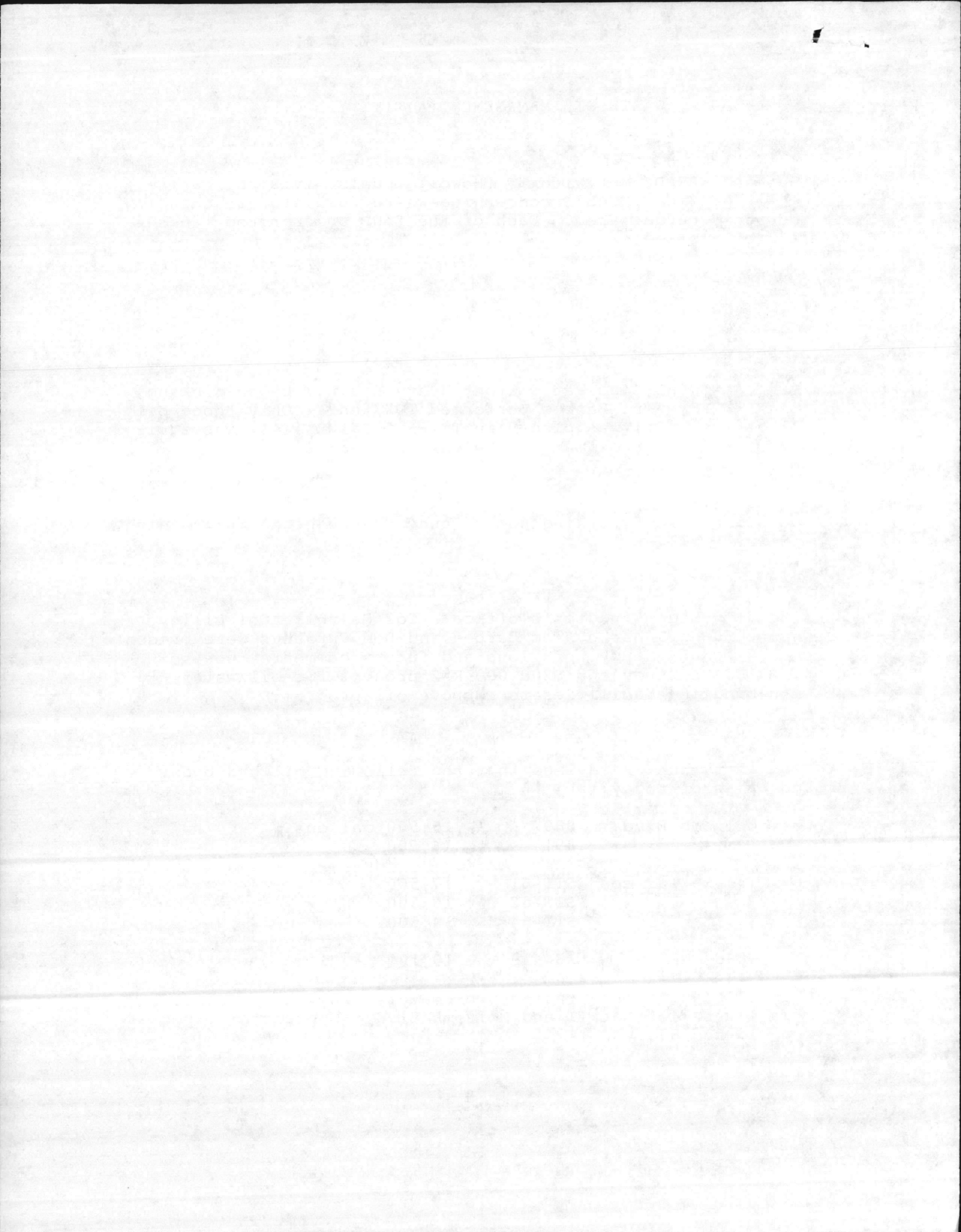
Meeting at Design Director's office: Col Dalzell, Col Lilley, Fred Cone, Danny Sharpe, Tom Barbee and Don Gurganus were present. Discussed ENSAFE Study, previous and future comments, how to utilize ENSAFE Study and \$200,000 R-2 project for oil/water skimmin handling facilities to improve oil program.

8 Dec 87

1. Mr. Larry Hunter advised that the following oil had been picked up as of today:

a.	Holcomb Blvd:	889	15,500	gallons
		891	14,700	"
b.	Tarawa Terrace	STT-61	17,500	"
		STT-62	15,500	"
		STT-64	14,500	"
c.	MCAS, NR	AS-419	10,100	"

Mr. Hunter also advised that approximately two truck loads of water/oil were left at TT and Holcomb Blvd. Contractor expected back on 15 Dec 87.



9 Dec 87

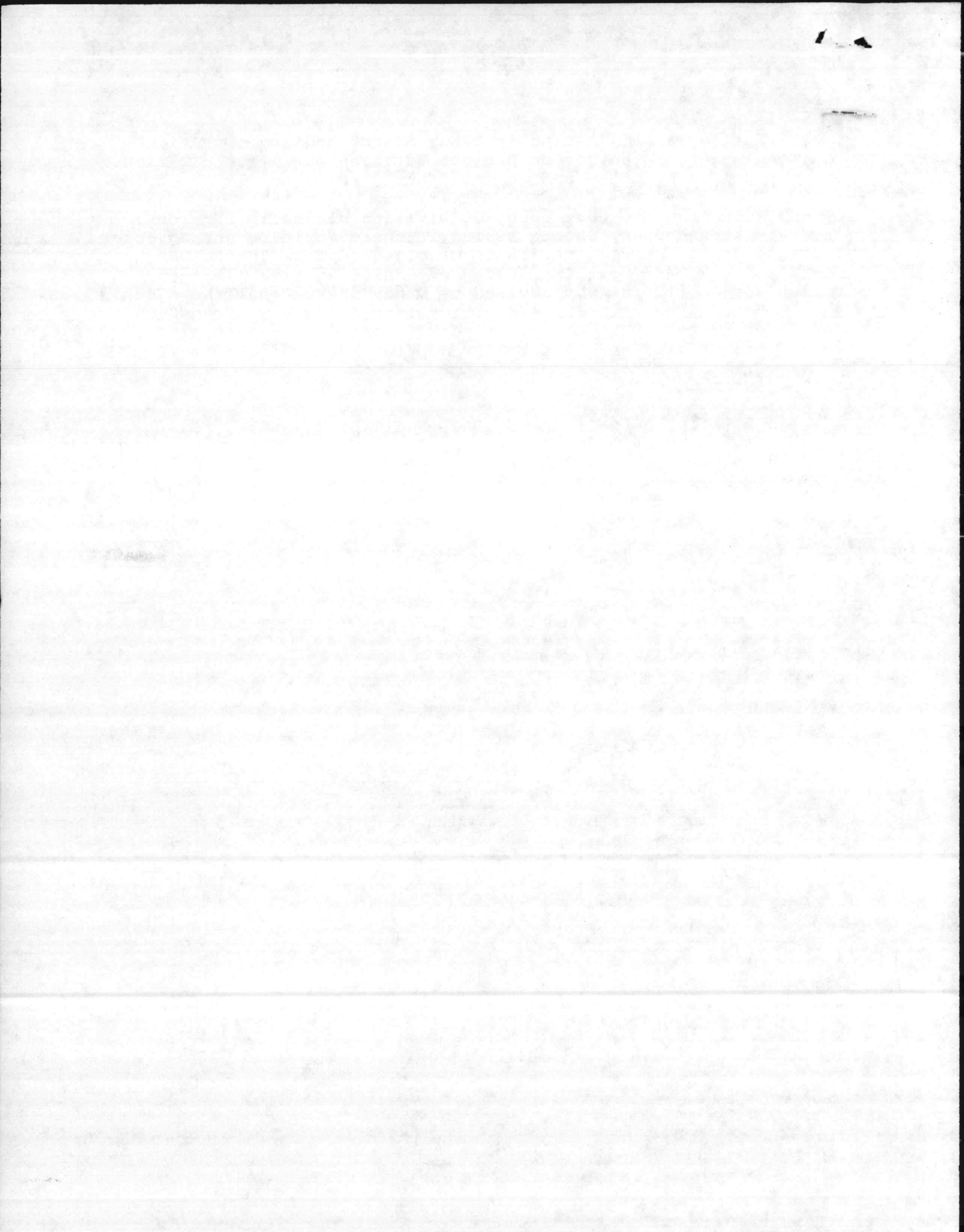
1. Col Lilley called asking if Danny Sharpe had any objection to being point of contact on project to clean out waste oil tank. He was advised by Danny Sharpe that there were none.

2. PHONCON from Mr. Gary Babb, NC Division of Health Services. Mr. Babb phoned Danny Sharpe asking if there would be any adverse reaction to his raising the issue of closure plans in the DHS response to MCB request for 30 day extension on time limit to remove waste oil. He was advised by Danny Sharpe that the MCB had not concurred with EPA's position that closure was required. Mr. Babb advised that he understood MCB position, and that he would consult with Mr. Ellison, EPA, prior to sending letter.

11 Dec 87

Advised both Col Dalzell, AC/S, FAC, and Capt Dougherty, SJA, of Gary Babbs' 9 Dec 87 call on closure.







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

IN REPLY REFER TO:  
6240  
NREAD  
16 Nov 87

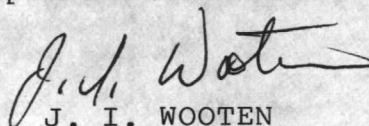
From: Director, Natural Resources and Environmental Affairs  
Division, Marine Corps Base, Camp Lejeune  
To: Assistant Chief of Staff, Facilities, Marine Corps Base,  
Camp Lejeune

Subj: DISPOSAL OF WASTE OIL

Ref: (a) CG, MCB ltr 6280/2 FAC of 2 Oct 87

Encl: (1) Log of NREAD Waste Oil Management Activity

1. The enclosure is provided per the reference.

  
J. I. WOOTEN

*Note,*

*Returned to me at Staff meeting 15 Dec 87 by Col Dabzell*

*J I W*

UNITED STATES MARINE CORPS  
HEADQUARTERS MARINE CORPS  
WASHINGTON, D.C. 20380



1988  
[Faint, illegible text]

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[Faint, illegible text]

[Faint, illegible text]





WASTE OIL MANAGEMENT ACTIVITY LOG

27 Oct 87

1. Waste Conversion, Incorporated pumped 4,000 gallons of hazardous waste oil from the Air Station.

28 Oct 87

1. Tom Barbee and Manuel Martin measured the volume of contents of all fourteen waste oil storage tanks.

29 Oct 87

1. Tom Barbee and Manuel Martin determined that approximately 5,750 gallons of sludge was in tank S-781.

30 Oct 87

1. Tom Barbee developed a chart which summarizes volume of the contents of fourteen waste oil storage tanks used by BMO for storage of waste oil collected within the activity.

2 Nov 87

1. The Environmental Chemistry and Microbiology Section received TOX test kits for determination of chlorine from Battalion Supply.

3 Nov 87

1. A letter was prepared by NREAD for CG, MCB, on Waste Oil Management concerning the inventory of the contents of the waste oil storage tanks. Copies were distributed to DRMO, BMO, and Facilities.

2. Waste Conversion, Incorporated pumped 11,000 gallons of hazardous waste oil from tank AS-421 at the Air Station.

3. Richard Gay, Department of Human Resources, notified Commanding General, via Director, NREAD, in writing of the inspection requirements of hazardous waste stored in tanks.

4. Sam Gwynn, NREAD advised Carl Baker that Base Maintenance was in violation of storing hazardous waste on site exceeding 90 days. Mr. Gwynn advised Mr. Baker that he should dispose of the hazardous waste fuel as requested on 30 September 1987.

4 Nov 87

1. The Environmental Chemistry and Microbiology Section performed TOX analyses on twenty samples taken from MAG's 26 and 29, at the Air Station. Nine samples tested negative and eleven samples tested positive.



4 Nov 87 continued

2. Waste Conversion, Incorporated pumped 5,800 gallons of hazardous waste oil from tank AS-420 at Marine Corps Air Station.

5 Nov 87

1. Waste Conversion, Incorporated pumped 11,600 gallons of hazardous waste oil from the Air Station.

6 Nov 87

1. Elizabeth Betz and Tom Barbee sampled waste oil storage tanks AS-419 and STT-66, to be tested for TOX, heavy metals and flash point.

2. Waste Conversion, Incorporated pumped 2,200 gallons of hazardous waste oil from tanks AS-420 and AS-421.

9 Nov 87

1. Tom Barbee researched information on the subject "How empty is empty" in storage tanks that previously contained hazardous waste oil. It has been determined that EPA standards for "empty" do not exist for stationary tanks. Steam cleaning has been found to be an acceptable means of cleaning a tank prior to reusing it.

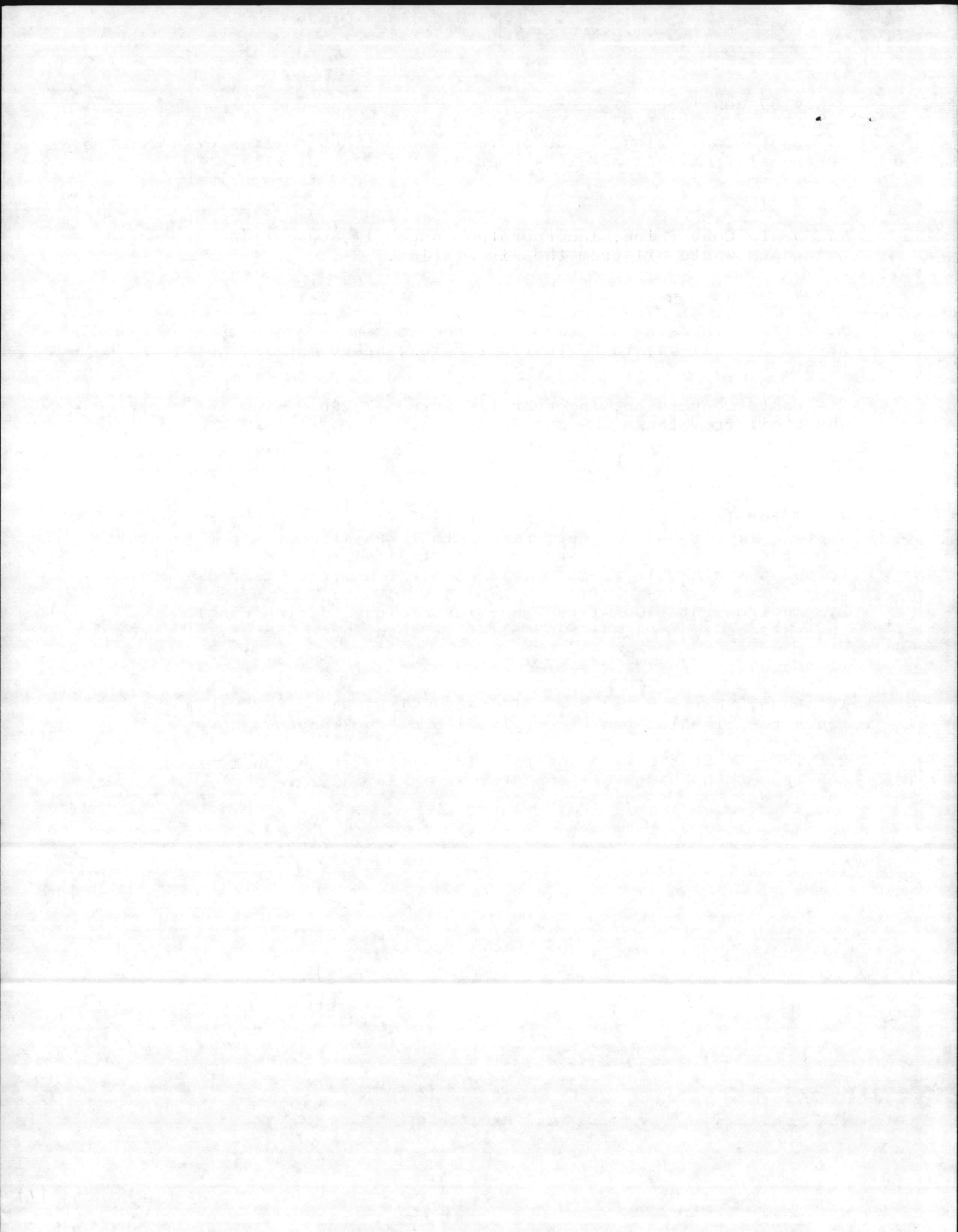
2. Environmental Chemistry and Microbiology Section ran TOX analyses of tanks AS-419 and STT-66. Both were 750ppm.

12 Nov 87

1. Danny Sharpe began communications with EPA and DHS on requirements for cleaning tanks in following up on 9 Nov 87 above.

2. The Air Station was notified in writing of the analytical results of the waste oil tanks at MAG's 26 and 29.





6240  
NREAD  
16 Nov 87

From: Director, Natural Resources and Environmental Affairs  
Division, Marine Corps Base, Camp Lejeune  
To: Assistant Chief of Staff, Facilities, Marine Corps Base,  
Camp Lejeune

Subj: DISPOSAL OF WASTE OIL

Ref: (a) CG, MCB ltr 6280/2 FAC of 2 Oct 87

Encl: (1) Log of NREAD Waste Oil Management Activity

1. The enclosure is provided per the reference.

J. I. WOOTEN

8210  
WRAD  
18 NOV 87

From: Director, National Resources and Environmental Affairs  
Division, Marine Corps Base, Camp Lejeune  
For: Assistant Chief of Staff, Facilities, Marine Corps Base,  
Camp Lejeune

SUBJECT: DISPOSAL OF WASTE OIL

REF: (a) CE MCB (at 220) (C of 3 Oct 87)

ENCL: (1) Log of WRAD Waste Oil Management Activity

1. The enclosure is provided for the reference.

J. L. WOOTEN



6240  
NREAD

OCT 13 1987

From: Director, Natural Resources and Environmental Affairs  
Division, Marine Corps Base, Camp Lejeune  
To: Base Maintenance Officer, Marine Corps Base, Camp Lejeune

Subj: TRAINING CLASS FOR PERSONNEL FROM BASE MAINTENANCE WHO  
ARE INSPECTING HAZARDOUS WASTE OIL STORAGE TANKS

Ref: (a) BO 6240.5A

Encl: (1) Hazardous Waste Training Record  
(2) List of Attendees

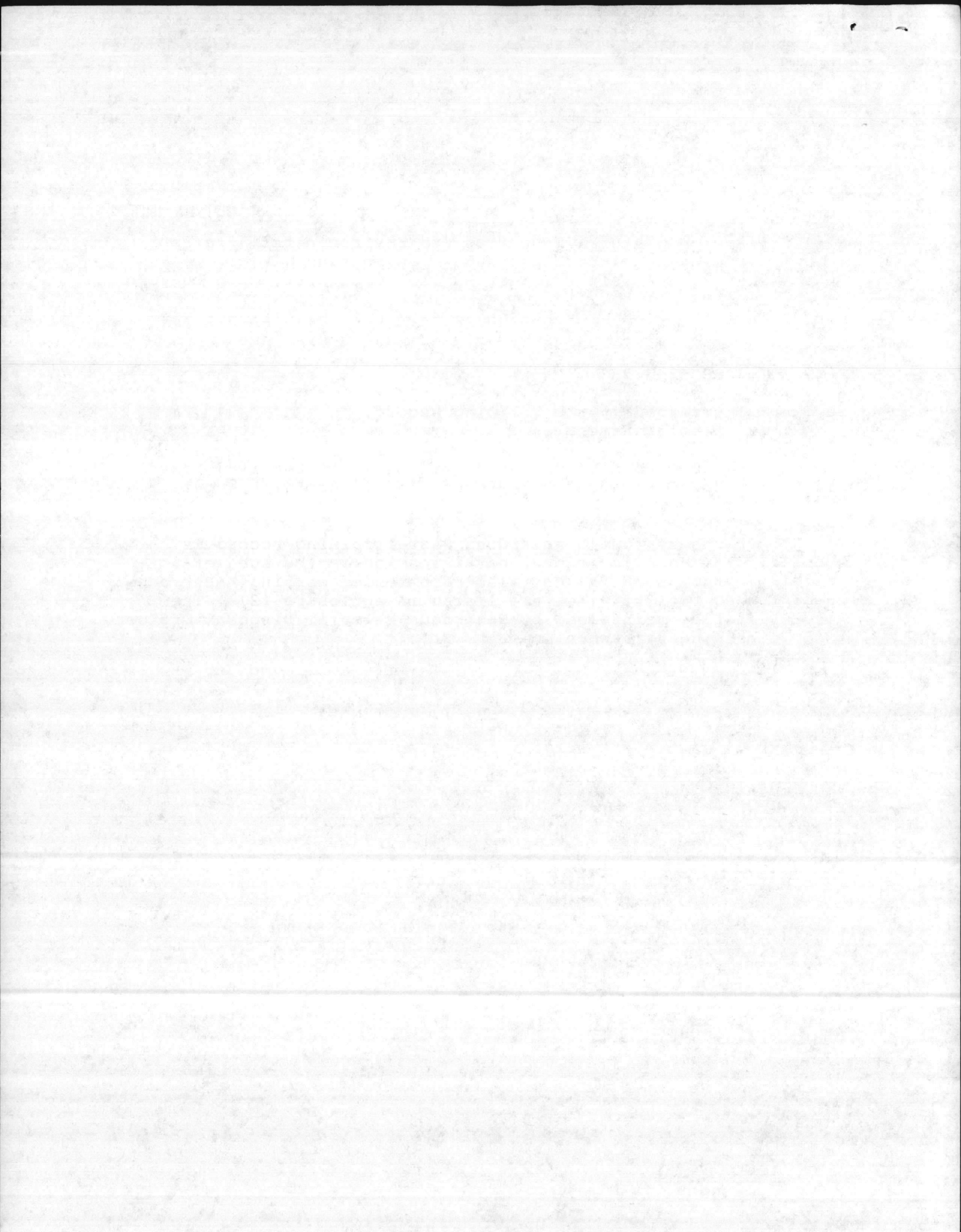
1. The subject training was conducted on 6 October 1987, per Mr. L. D. Shepard's request to ensure compliance with regulations contained in the reference.

2. Please ensure that a hazardous waste training record is completed for each individual participating in the subject training. Enclosure (1) contains recommended wording. Personnel who attended the training, are listed in enclosure (2). The records must be maintained by Hazardous Material Disposal Officer, (HMDO), per the reference.

J. I. WOOTEN

Copy to:  
AC/S, FAC  
HMDO, BMAIN

*Jol*  
*Supply Enc.*



PART I

RECORD OF HAZARDOUS WASTE TRAINING

1. Employee Name: JOHN DOE
2. Job Title/MOS: MAINTENANCE MECHANIC
3. Name of Organization: BASE MAINTENANCE DIVISION
4. Date this Record Established: 8 OCTOBER 1987
5. Description of HW Duty: Perform daily inspections of tanks used to store hazardous waste oil, maintains inspection records and notifies supervisor or designated official of discrepancies requiring corrective action.

6. Description of HW Training Completed:

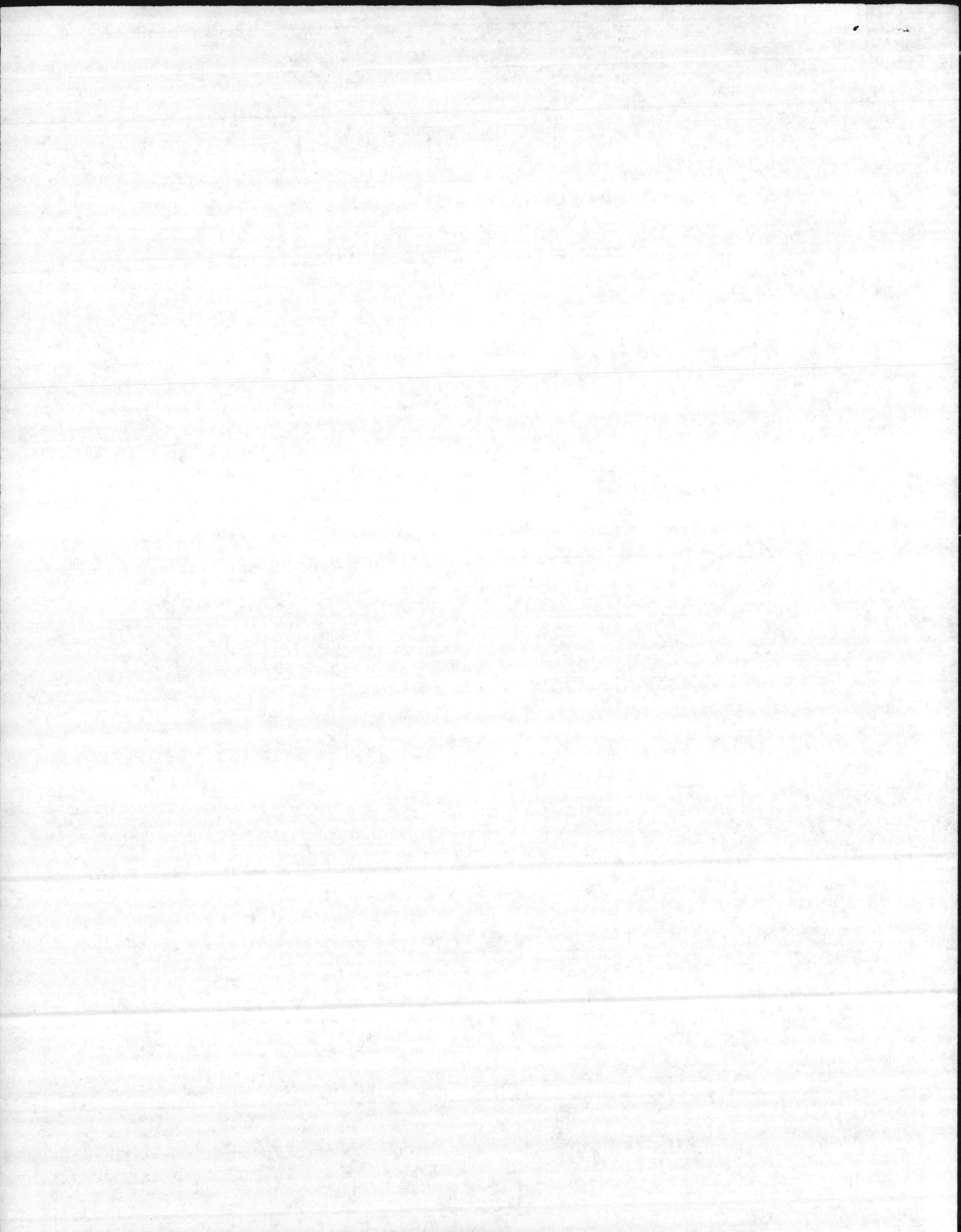
a. Date	b. Description of Training/Name of Trainer	c. Signature and Date
6 OCT 87	Danny Sharpe, Supervisory Ecologist Natural Resources and Environmental Affairs Division, (NREAD), provided 1½ hours of formal classroom training on State and Federal Hazardous Waste Regulations and the history of the current inventories of hazardous waste oil. Daily inspection forms were reviewed and guidance provided on keeping records and indicating correc- tive action. Mr. Ken Warren of NREAD provided a 1 hour session at the Lot 803 facility on what to look for on inspection.	John Doe 6 Oct 87

Appendix A to  
ENCLOSURE (3)





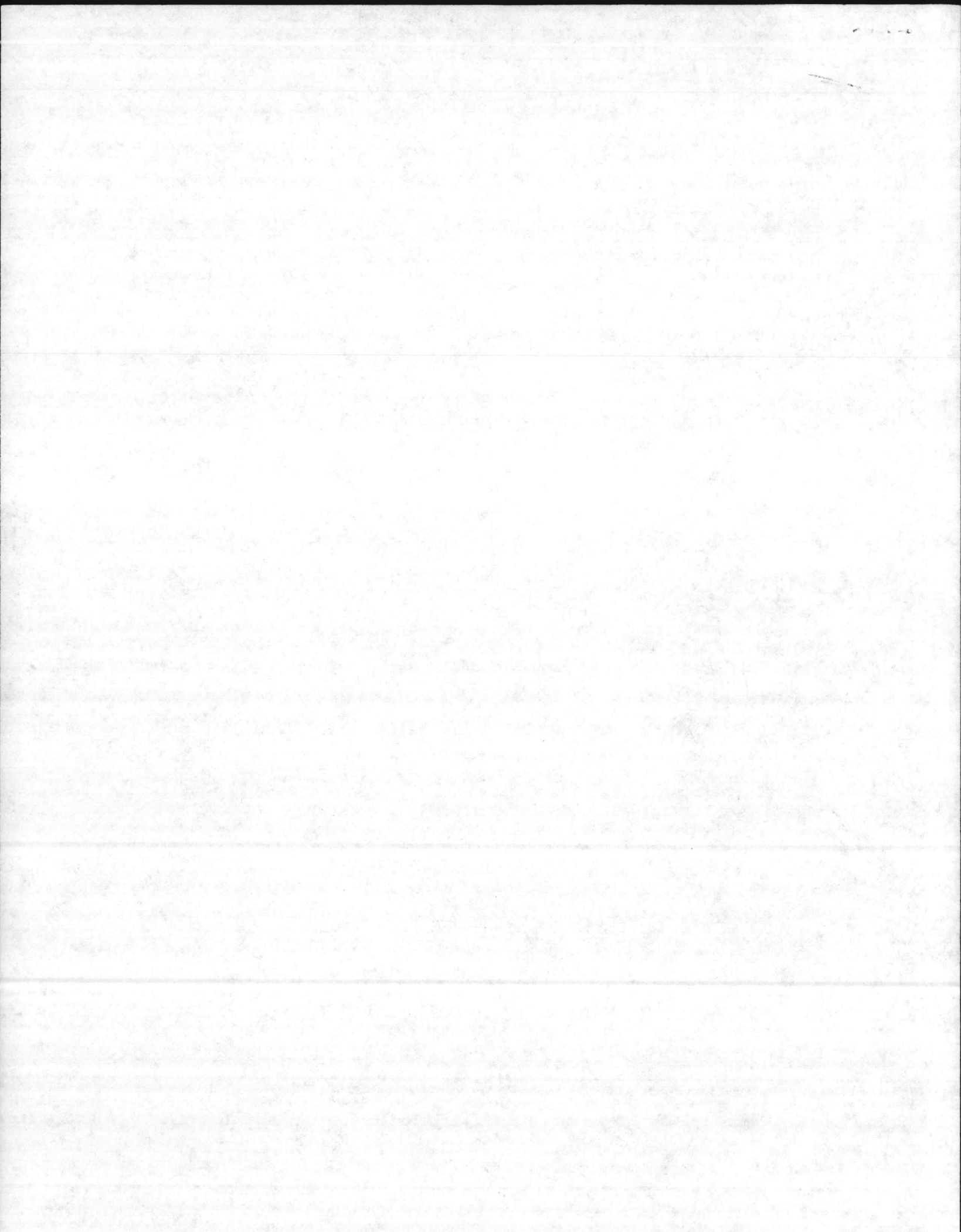






LIST OF ATTENDEES

NAME	BASE MAINTENANCE BRANCH
ROBERT HUFFMAN	HEAVY EQUIPMENT - MCB
AMOS GARRIS	" "
PAT DALTON	" "
ESLEY JARMAN	" "
LUIS CRAIG	" "
LARRY HUNT	" "
KENNETH TREISTER	GROUNDSKEEPING - MCAS
CARL JONES	" "
BERRY BRANTLEY	GROUNDSKEEPING - MCB
BRUCE MARKWICK	" "
PHILIP SMITH	" "
PAUL MULL	EMERGENCY MAINTENANCE - TT
DAVID GREER	" "



6240  
NREAD  
19 Nov 87

**From:** Director, Natural Resources and Environmental Affairs  
Division, Marine Corps Base, Camp Lejeune

**To:** Assistant Chief of Staff, Facilities, Marine Corps Base,  
Camp Lejeune

**Subj:** CLEANING OF WASTE OIL TANKS WHICH PREVIOUSLY CONTAINED  
REGULATED QUANTITIES OF BULK STORAGE TOTAL ORGANIC HALOGENS

**Ref:** (a) PHONCON btwn Mr. Dave Ellison, EPA, Region IV, and  
Mr. D. Sharpe, NREAD of 16 Nov 87  
(b) Resource Conservation and Recovery Act  
(c) PHONCON btwn Mr. Gary Babb, DHS, Raleigh, NC, and  
Mr. D. Sharpe, NREAD of 16 Nov 87  
(d) PHONCON btwn Mr. Paul Hubbell, CMC, (Code LFL) and  
Mr. D. Sharpe, NREAD of 18 Nov 87  
(e) PHONCON btwn Mr. Paul Rakowski, Atlantic Division,  
NAVFACENGCOM (Code 114), of 18 Nov 87  
(f) PHONCON btwn Mr. Doug Holyfield, DHS, Raleigh, NC, and  
Mr. D. Sharpe, NREAD of 13 Nov 87  
(g) PHONCON btwn Mr. Andy Simmons, Highrise Service Company,  
(371-2325), Wilmington, NC and Mr. D. Sharpe, NREAD  
of 13 Nov 87

1. This memorandum summarizes information obtained during various contacts made by NREAD regarding the subject issue. These contacts were made upon the recommendation of Mr. Steve Olsen, Atlantic Division, Naval Facilities Engineering Command, (Code 114) and Mr. Paul Hubbell, CMC (Code LFL). Prior to the contacts referenced in the memorandum, NREAD contacted several industry sources of information provided by Mr. Olsen regarding technologies related to tank cleaning. During reference (a), the Environmental Protection Agency (EPA) hazardous waste (HW) enforcement representative who handles this activity advised that each of the subject tanks would require closure per regulations promulgated under reference (b). Camp Lejeune would be required to submit a written plan for accomplishing this closure to the Division of Health Services (DHS) for approval. During reference (c), a DHS authority, Mr. Gary Babb, advised that processing closure plans generally takes several months and would involve a public hearing.

2. However, the DHS representative did not appear to agree with the EPA representative's position that formal closure of the subject tanks was required. Mr. Ellison's position is based on assumption that HW has been stored in the tanks for over 90 days. The DHS representative's position appears to be still based on an accumulation start date of 1 September 1987.





6240  
NREAD  
19 Nov 87

Subj: CLEANING OF WASTE OIL TANKS WHICH PREVIOUSLY CONTAINED  
REGULATED QUANTITIES OF BULK STORAGE TOTAL ORGANIC HALOGENS

During references (d) and (e), Mr. Hubbell and Mr. Rakowski both advised that this activity not automatically accept Mr. Ellison's position and that strong action be taken to ensure the DHS position prevails. Mr. Rakowski was particularly adamant on this matter.

3. During reference (f), Mr. Doug Holyfield, an authority with DHS, advised that closure of the subject tanks would require decontamination and that use of a professional tank cleaning service was, in his opinion, an appropriate method. Reference (g) was made to determine cost estimates for cleaning tanks similar to the subject tanks. Cost estimates ranged from \$1,600 for individual tanks such as those at MCAS, New River, to \$3,000, for a large tank, such as the one at Building 45. Entry capability (port approximately 16-18 inches in diameter) is a factor. Also, the above estimates were based on residues being turned over to customer for disposal.

4. Both Mr. Ellison and Mr. Babb concurred during references (a) and (c), respectively, that use of a competent commercial cleaning firm would be an excellent approach which would add to the credibility of the subject action. Both indicated that once cleaned, there was no regulation precluding immediate use of tank to store waste oil. These comments were made after both officials were advised of the shortage of storage capacity. Both appeared more concerned about adequacy of local efforts to prevent continued dumping of halogenated solvents and other HW into waste oil. Mr. Babb advised that such reuse was our decision, and there was a risk involved were closure plans to be required.

5. NREAD has concluded there is significant conflict between DHS and EPA on the interpretation of regulations relative to closure of HW facilities promulgated under reference (b). Mr. Sharpe made it clear to Mr. Babb that the issues discussed during references (a), (c), (f) and (g) would be reviewed locally and an official position taken. Mr. Babb's comments, in general, indicated an inclination to avoid confrontation with Mr. Ellison on this matter. One point of importance, is that Mr. Ellison, Mr. Babb and Mr. Holyfield looked favorably on our actions to identify the source of the subject contamination and to resolve issues related thereto.



13 Nov 87  
REBAG  
2240

3. CLEANING OF WASTE OIL TANKS WHICH PREVIOUSLY CONTAINED  
RESIDUAL QUANTITIES OF BULK STORAGE TOTAL ORGANIC CARBONS

During reference (b) and (c), Mr. Huppel and Mr. Rakowski both  
advised that this activity is not chemically active. Mr. Ellison's  
position and that strong action is taken to ensure the OMC  
position overall. Mr. Rakowski was particularly adamant in this  
matter.

3. During reference (a), Mr. Huppel advised, in authority with  
the subject tank owners of the subject tanks would require  
documentation and that use of a professional tank cleaning  
service was, in his opinion, an appropriate method. Reference (a)  
was made to determine cost estimates for cleaning tanks similar  
to the subject tanks. Cost estimates ranged from \$1,000 for  
individual tanks such as those at WCA, to \$10,000 for  
a large tank such as the one at Building 15. Entry capability  
(not approximately 18-24 inches in diameter) is a factor. Also,  
the above estimates were based on factors being turned over to  
customer for disposal.

4. Both Mr. Ellison and Mr. Huppel advised during reference  
(a) and (c), respectively, that use of a competent commercial  
cleaning firm would be an excellent approach which would add  
to the credibility of the subject action. Both indicated that  
once cleaned, there are no residual hydrocarbon remains use  
of tank for other waste oil. There are some who are after both  
officials were advised of the advice of disposal capability. Both  
expressed some concern about economy of local sites to prevent  
contaminated burning or hydrocarbon spills and other risks. Mr.  
Ellison advised that such risks were not negligible and  
there was a risk involved were cases where to be retained.

5. WREBA has concluded there is significant confidence in  
EPA and WCA on the interpretation of residual concentrations to  
closure of the existing prohibited water tanks (b).  
Mr. Huppel made it clear that the issue discussed  
during reference (a), (b) and (c) would be resolved  
locally and an official position taken. Mr. Huppel commented  
in general, that as inclination to avoid contamination  
with Mr. Ellison on this matter. One point of departure is  
that Mr. Ellison, Mr. Huppel and Mr. Huppel looked favorably  
on our actions to identify the source of the subject contamination  
and to resolve issues related thereto.



6240  
NREAD  
19 Nov 87

Subj: CLEANING OF WASTE OIL TANKS WHICH PREVIOUSLY CONTAINED  
REGULATED QUANTITIES OF BULK STORAGE TOTAL ORGANIC HALOGENS

6. It is NREAD's opinion that a good working relationship exists with both DHS and EPA at this point in time. There are definite risks that this relationship could suffer seriously if this issue is mishandled. It is recommended that a copy of this memo be provided to SJA along with a request for guidance.

J. I. WOOTEN

0230  
WRIAD  
12-10-57

SUBJECT: CLEARING OF WASTE OIL TANKS WHICH PREVIOUSLY CONTAINED  
REGULATED QUANTITIES OF HAZARDOUS MATERIALS

It is noted that a certain type of good working relationship exists  
with both DCS and EPA at this point in time. There are definite  
flexibilities in this relationship which could assist significantly in this  
project. It is recommended that a copy of this memo be  
provided to the assigned staff for their guidance.

U. L. ROOPER



NREAD

UNITED STATES MARINE CORPS  
Marine Corps Base  
Camp Lejeune, North Carolina 28542-5001

6240  
NREAD  
DEC 08 1987

*WJ*  
*Supp 802*  
*WJ*

From: Assistant Chief of Staff, Facilities, Marine Corps Base,  
Camp Lejeune  
To: Base Maintenance Officer, Marine Corps Base, Camp Lejeune  
Director, Natural Resources and Environmental Affairs  
Division, Marine Corps Base, Camp Lejeune  
Subj: WASTE OIL BULK STORAGE TANKS CONTAMINATED BY HALOGENATED  
SOLVENTS

✓

1. The purpose of this letter is to request various actions leading to the decontamination of waste oil storage tanks required for continued storage of waste oil.
2. The Base Maintenance Officer is requested to obtain a service contract to clean the following tanks:
  - a. Three 25,000 - gallon tanks at MCAS, New River, (AS-419, AS-420, and AS-421)
  - b. The 17,585 and 30,000 - gallon tanks at the Holcomb Boulevard storage site (S-889 and S-891)
3. The Director, Natural Resources and Environmental Affairs Division, is requested to evaluate the tanks at Building 45 and Tarawa Terrace, and develop a plan to decontaminate each tank/facility and to dismantle tanks/facilities not required for operation of the waste oil program.
4. Addressees are requested to explore all practical alternatives to segregate waste oil collected aboard Marine Corps Air Station, New River, until the problem of contamination by halogenated solvents is corrected. Until further notice, Marine Corps Air Station, New River, waste oil shall only be stored aboard Marine Corps Air Station, New River, unless otherwise approved by this office. The Director, NREAD is requested to develop guidelines and procedures to be implemented by waste oil collection personnel to test waste oil prior to removal from those generation sites with significant potential for halogen contamination.
5. Request monthly status reports on actions taken.

T. J. DALZELL

Copy to:  
Env Engr



1987

DEC 08 1987

1987  
10/1

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*Juw*  
ASSISTANT CHIEF OF STAFF, FACILITIES  
HEADQUARTERS, MARINE CORPS BASE

DATE 11-30-87

TO:

BASE MAINT O

DIR, FAMILY HOUSING

PUBLIC WORKS O

DIR, BACHELOR HOUSING

COMM-ELECT O

BASE FIRE CHIEF

DIR., NAT. RESOURCES & ENV. AFFAIRS

ATTN: *Mr. Shays*

1. Attached is forwarded for info/action.
2. Please initial, or comment, and return all papers to this office.
3. Your file copy.

*BUW*  
*By di*

"LET'S THINK OF A FEW REASONS  
WHY IT CAN BE DONE"

11

11-11-11

11-11-11

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11-11-11





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

IN REPLY REFER TO:  
6240  
NREAD  
25 Nov 87

From: Director, Natural Resources and Environmental Affairs  
Division, Marine Corps Base, Camp Lejeune  
To: Assistant Chief of Staff, Facilities, Marine Corps Base,  
Camp Lejeune

Subj: DISPOSAL OF WASTE OIL

Ref: (a) CG, MCB ltr 6280/2 FAC of 2 Oct 87

Encl: (1) Log of NREAD Waste Oil Management Activity

1. The enclosure is provided per the reference.

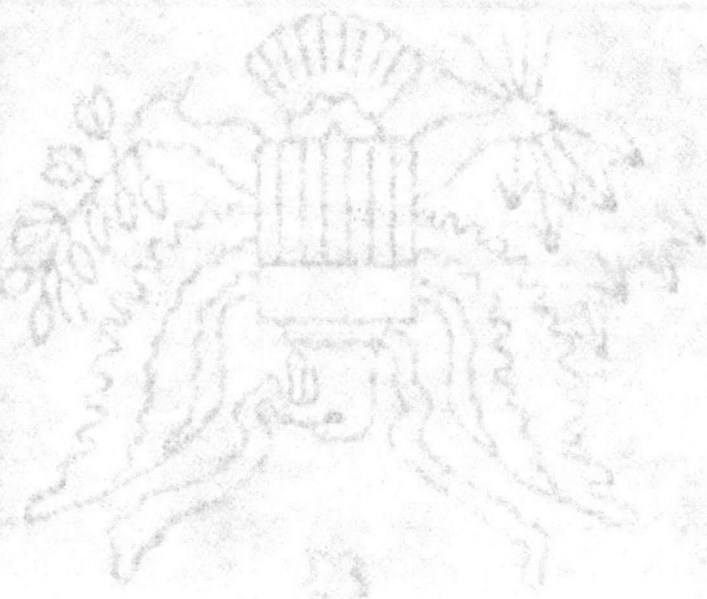
A handwritten signature in cursive script, reading "J. I. Wooten", is positioned above the typed name.

J. I. WOOTEN





8881



*[Faint handwritten signature]*

*[Faint, illegible text, possibly a letter or document header]*



*[Faint text at the bottom center, possibly a footer or address]*

WASTE OIL MANAGEMENT ACTIVITY LOG

16 Nov 87

The Environmental Chemistry and Microbiology Section, sent six oil samples from Mags 26 and 29 to JTC Environmental Consultants, Incorporated for analysis.

16 Nov 87

A letter was prepared by NREAD for CG, MCB, concerning the disposal of waste oil storage tanks; AS-419, STT-64; and STT-65. It is requested that the contents of the subject tanks be disposed of.

18 Nov 87

Tom Barbee, Environmental Control Specialist, analyzed waste oil from building 1601 for TOX. There was none detected.

19 Nov 87

NREAD letter concerning the cleaning of waste oil tanks which previously contained regulated quantities of bulk storage total organic halogens was sent to Assistant Chief of Staff, Facilities. Various contacts which were made by NREAD regarding the subject issue, were referenced in the letter.

20 Nov 87

Letter concerning waste oil bulk storage tanks contaminated by halogenated solvents was sent to Assistant Chief of Staff, Facilities for signature. The purpose of this letter is to initiate action to decontaminate the subject tanks.

ENCLOSURE (1)





6240  
NREAD  
25 Nov 87

From: Director, Natural Resources and Environmental Affairs  
Division, Marine Corps Base, Camp Lejeune  
To: Assistant Chief of Staff, Facilities, Marine Corps Base,  
Camp Lejeune

Subj: DISPOSAL OF WASTE OIL

Ref: (a) CG, MCB ltr 6280/2 FAC of 2 Oct 87

Encl: (1) Log of NREAD Waste Oil Management Activity

1. The enclosure is provided per the reference.

J. I. WOOTEN

1940  
1940  
1940

Director, Natural Resources and Development  
Division, Marine Corps Base, Camp Lejeune  
Assistant Chief of Staff, Facilities, Marine Corps Base  
Camp Lejeune

Subject: DISPOSITION OF WASTE OIL

Re: (a) GC, W&P 4330, 2 FAC of 2 Oct 67

and: (b) Log of Hazard Waste Oil Management Activity

The enclosure is provided for your reference.

T. WOODRIF



6240  
NREAD  
25 Nov 87

From: Director, Natural Resources and Environmental Affairs  
Division, Marine Corps Base, Camp Lejeune  
To: Assistant Chief of Staff, Facilities, Marine Corps Base,  
Camp Lejeune

Subj: DISPOSAL OF WASTE OIL

Ref: (a) CG, MCB ltr 6280/2 FAC of 2 Oct 87

Encl: (1) Log of NREAD Waste Oil Management Activity

1. The enclosure is provided per the reference.

J. I. WOOTEN

*gla*  
*Steneé*

1234  
1234  
1234

From: Director, Federal Bureau of Investigation  
Division: Criminal Division  
Assistant Chief of Office, Criminal Division  
Camp Lejeune

Subject: [Illegible]

Re: [Illegible]

Enclosure (1) - [Illegible]

The following is provided as the [Illegible]

[Illegible]

*[Handwritten mark]*

WASTE OIL MANAGEMENT ACTIVITY LOG

16 Nov 87

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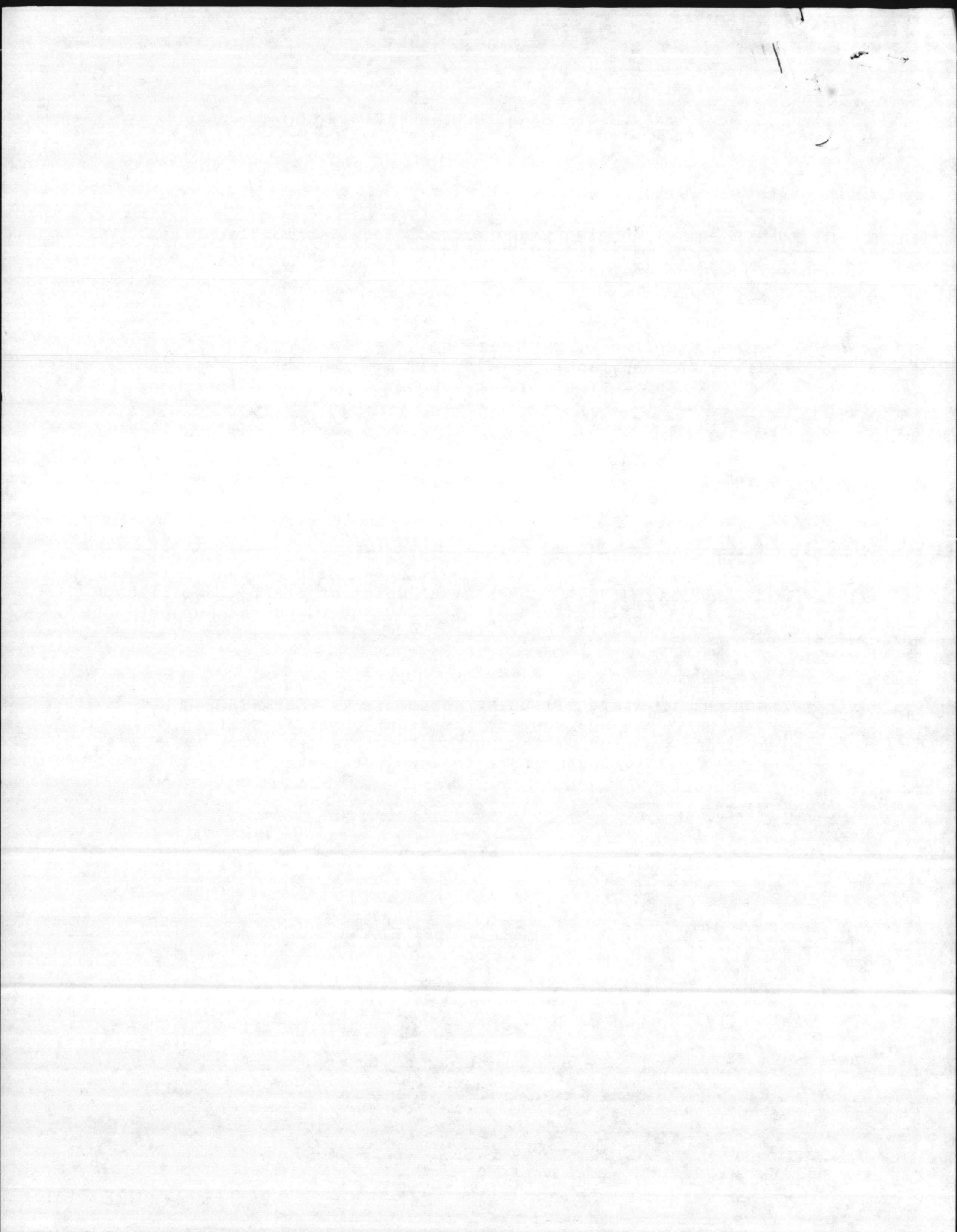
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20 Nov 87

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# Memorandum

6280/2  
FAC

DATE: 23 JUL 1986

*DDP*  
*CalD 25 Nov*  
*has copy of these*  
*is contact LANTDIV*  
*to get moving*  
*9 MW*

FROM: Assistant Chief of Staff  
Lejeune  
TO: Director, Natural Resources

Marine Corps Base, Camp  
Environmental Affairs Division

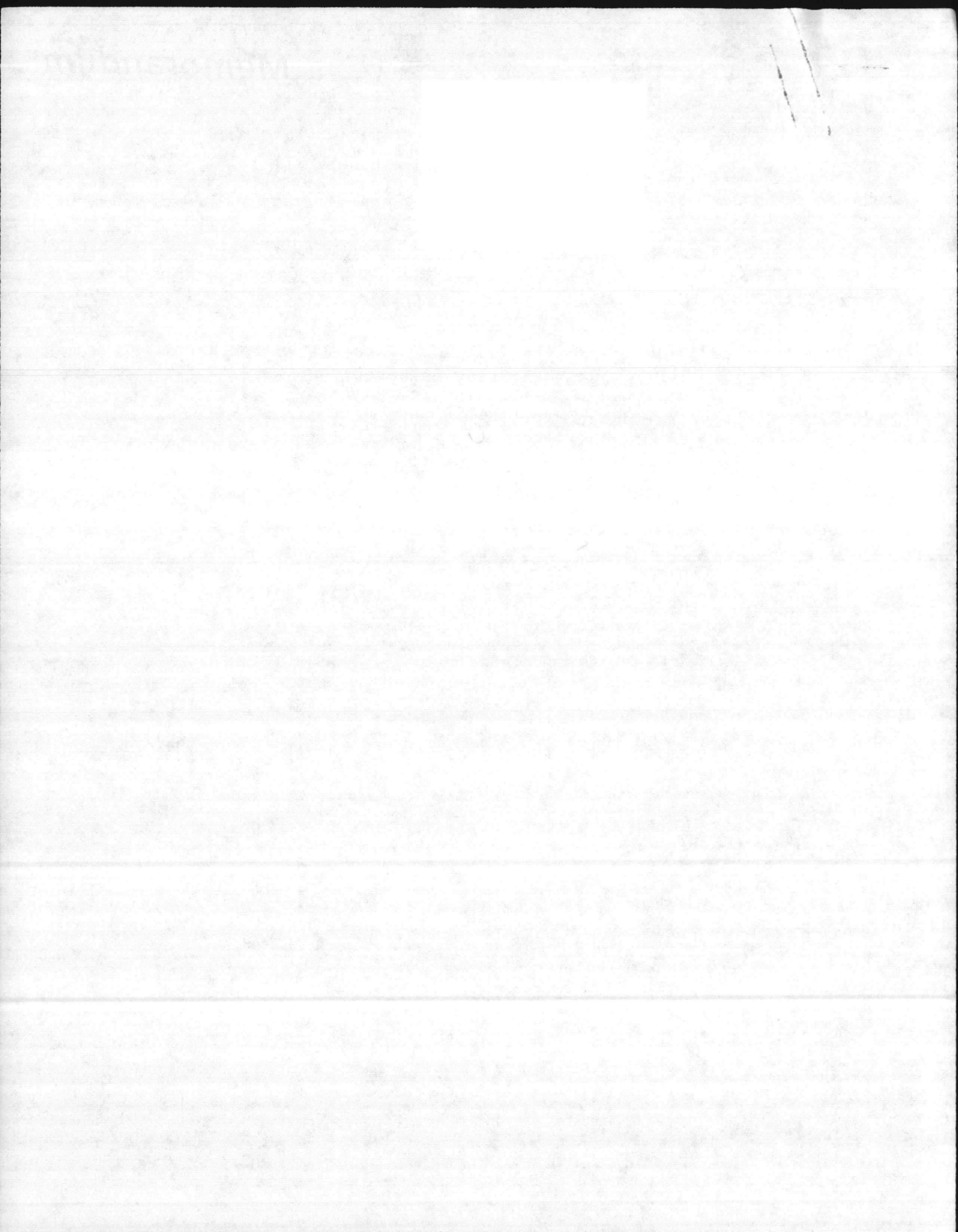
SUBJ: REVIEW OF HAZARDOUS MATERIAL/WASTE AND USED OIL STUDY

Ref: (a) Dir, NREAD memo dtd 11 Jul 86

1. As requested in the reference, responsibility for a review and comments on the subject study is hereby assigned to your office. Mr. Alexander will assist in the review and provide comments for forwarding to LANTDIV and ENSAFE.
2. Request you develop and coordinate with Mr. Alexander on a schedule for the review.

*B. W. Elston*  
B. W. ELSTON  
By direction

Copy to:  
EnvEngr





**Memorandum**

6280/2  
FAC

DATE: 23 JUL 1986

ROM: Assistant Chief of Staff, Facilities, Marine Corps Base, Camp  
Lejeune  
TO: Director, Natural Resources and Environmental Affairs Division

SUBJ: REVIEW OF HAZARDOUS MATERIAL/WASTE AND USED OIL STUDY

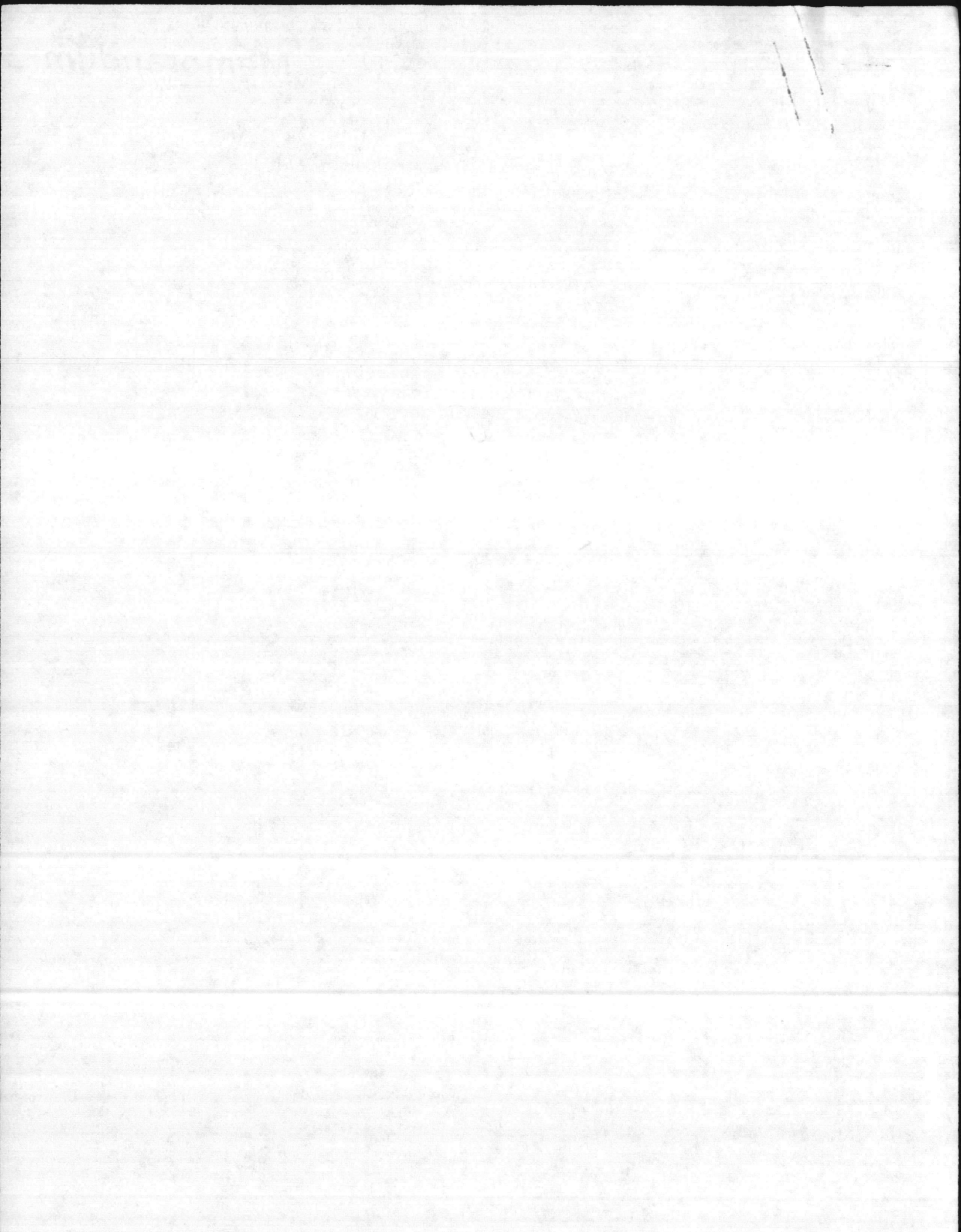
Ref: (a) Dir, NREAD memo dtd 11 Jul 86

1. As requested in the reference, responsibility for a review and comments on the subject study is hereby assigned to your office. Mr. Alexander will assist in the review and provide comments for forwarding to LANTDIV and ENSAFE.
2. Request you develop and coordinate with Mr. Alexander on a schedule for the review.



B. W. ELSTON  
By direction

Copy to:  
EnvEngr



6240  
NREAD  
7 Jan 87

**From:** Director, Natural Resources and Environmental Affairs  
Division, Marine Corps Base, Camp Lejeune  
**To:** Assistant Chief of Staff, Facilities, Marine Corps Base,  
Camp Lejeune, (Attn: Environmental Engineer)

**Subj:** COMMENTS ON ENSAFE STUDY

**Ref:** (a) AC/S, PAC ltr 6280/2 FAC of 23 July 1986

**Encl:** (1) Draft HW Mgt Plan, Contract #N62470-85-B-7979  
(2) Draft Used Oil Mgt Plan, Contract #N62470-85-B-7979  
(3) Draft Comments on HW MGT Plan and Used Oil Mgt Plan

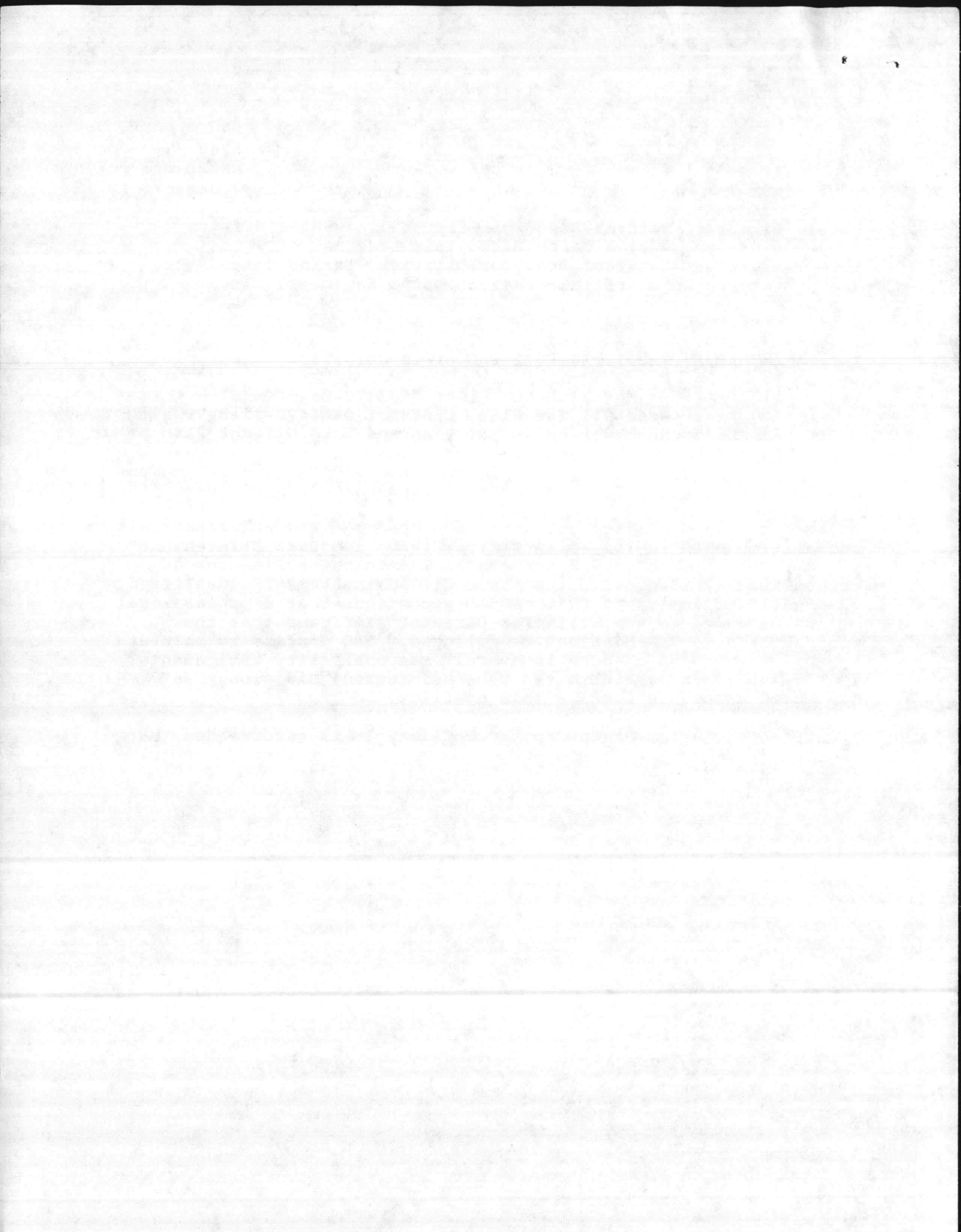
*to thick  
see Danny*

1. Enclosures (1) and (2) are returned for your action per recent conversation between Environmental Engineer and Danny Sharpe, Natural Resources and Environmental Affairs Division, (NREAD). Enclosure (3) represents comments developed per the reference in cooperation with Public Works Officer (PWO) and Base Maintenance Officer (BMO). The only known conflict involves assignment of responsibility to provide the "Used Oil Administrator" identified on page 10 of enclosure (2). NREAD recommends that a professional billet be added to the Utilities Director staff and that the contractor's recommendations be followed. BMO prefers to maintain status quo with no changes in overall responsibility assignments, if the functions remain in the Base Maintenance Division. We have been unable to resolve this conflict.

2. Upon resolution of the above conflict, it is recommended that the enclosed comments be forwarded to Mr. Paul Parker, LantDiv, (Code 114).

J. I. WOOTEN





MARINE CORPS BASE, CAMP LEJEUNE

COMMENTS ON HAZARDOUS MATERIAL/HAZARDOUS WASTE  
MANAGEMENT PLAN AND USED OIL MANAGEMENT PLAN  
PREPARED BY ENVIRONMENTAL AND SAFETY DESIGNS, INC.  
FOR ATLANTIC DIVISION, NAVFACENCOM, CONTRACT NO: N62470-85-B-7979

1. General Comments:

a. The Hazardous Material/Hazardous Waste Management Plan (HM/HWM Plan) fails to adequately explore local disposal options for HM and those items classified as hazardous waste because of general characteristics of ignitability, corrosivity, etc... Industrial waste pretreatment and disposal through the sanitary sewer per NPDES permit should be explored in more depth. Combining management of this function with that proposed for the Used Oil Administrator by the Used Oil Management Plan (UOM Plan) appears to be a hard requirement. Addition of a full time professional manager as an assistant to the Utilities Engineer/Director appears to be a viable alternative. The study should further analyze this alternative.

b. The HM/HWM Plan does not promote HW minimization to the extent needed. Needs to be more forth right on the role of procurement and maintenance managers in substitution of non/less hazardous alternatives.

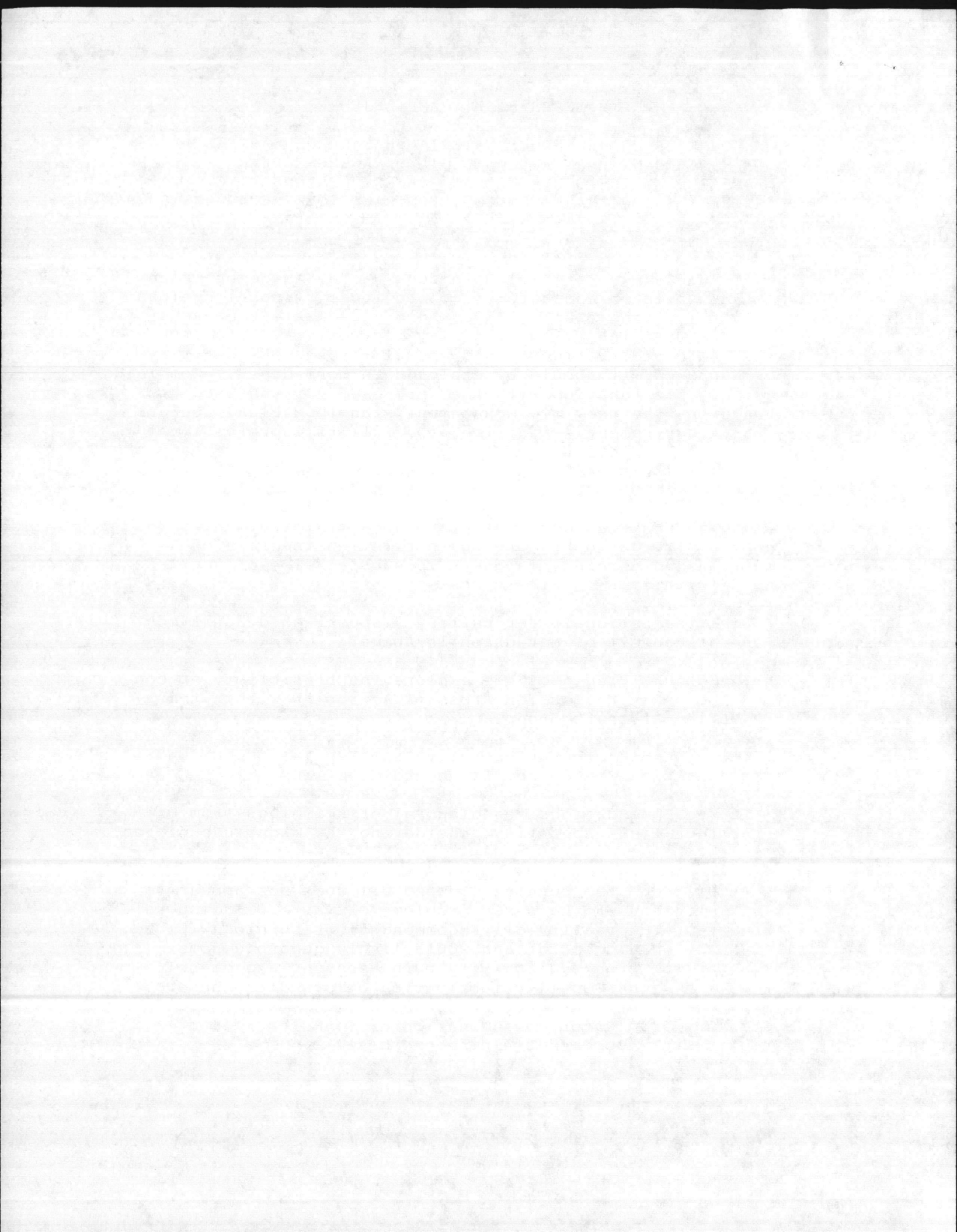
c. Does the rationale for battery disposal hold up if considered in the context of paragraph 1a above?

d. The HM/HWM Plan does not explore the feasibility of consolidating Temporary Collection Areas (TCA) for HW within the Battalion/Marine Aircraft Group.

e. There needs to be an executive summary for the HM/HWM Plan which clarifies issues and recommended actions.

f. The recommendations for disposal of skimmings from oil water separators lacks specificity considering the magnitude of the problem to the Base.

g. As written, the burning of used oil does not appear to be a solution to any of the basic problems of waste oil disposal. Once segregated, the quality oil recommended for burning will be relatively easy to dispose of and would likely generate some revenues. Can the proposed facility burn kerosene and diesel fuel mixed with higher quality lubricating oils? Both these light oils make up a large percent of waste oil. They result from spills and from water contamination of tanks/barrels of oil from garrison shops and training exercises.





SPECIFIC COMMENTS ON  
ENSAFE HAZARDOUS MATERIAL/HAZARDOUS WASTE MANAGEMENT PLAN

Comment #1, page 1-1. Need to list significant references.

Comment #2, page 1-2. Need to clarify the role the EPA plays relative to inspection of Lejeune as a TSDF.

Comment #3, pages 2-1, 2-2, 2-3 & 3-1. The write up does not emphasize the role of the Commanding Officers of Marine Aircraft Groups, Battalions and Separate Companies in implementing the HW collection and disposal program. It would be more accurate to refer to these organizations as generators, rather than the Major Commands. The write up does not explain the relationship between HMDO and HMDC roles. Also; there should be a generic description of the various common types of HW generation sites, i.e., motor transport maintenance shops, tactical vehicle maintenance shops, communication shops, NBC warfare wastes, aircraft maintenance facilities, etc... This will assist the military commander at the battalion/MAG level understand the scope of HW responsibility assigned to the HMDO/commander.

Comment #4, page 3-22. Can photo chemicals be discharged to the Base sanitary sewer after removal of silver?

Comment #5, pages 4-3, 4-22, 6-14. There is no guidance which points out opportunities for recycling or disposal through NPDES permitted wastewater treatment plant. The plan does not adequately promote waste minimization consistent with overall requirements of RCRA/regulatory objectives. The D001 and D002 wastes appear frequently in the various listings in the HM/HWM Plan. Are there not other alternatives other than HW disposal through DRMO?

SPECIFIC COMMENTS ON USED OIL MANAGEMENT PLAN

Section - page 2, Second sentence. Unclear

Section - page 2, para. 4a. "battalion and separate company" vice "separate battalion and company..."

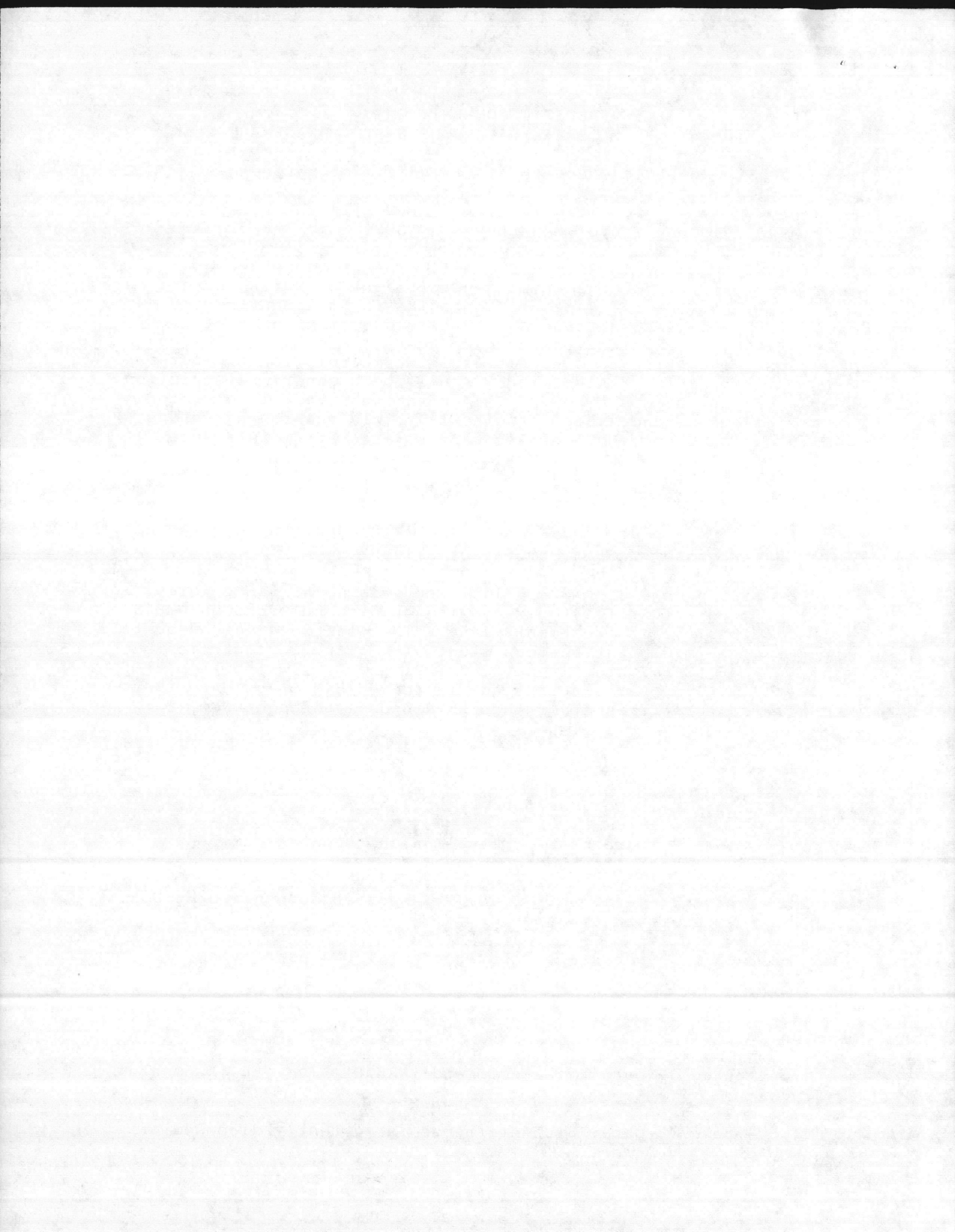
Section - page 3, para. 4b. "...by Transporter authorized by UOA.." vice "...by permitted transporter."

Section - page 3, para. 4f. "Environmental Engineer" vice "Natural Resources"

Section - page 3, para. 5. Should be revised to address present status

Section - page 3, para. 7. Recommend "NREAD" vice "Environmental Engineer"

Section - page 4, para. 8. Antifreeze is currently disposed of through Sanitary Sewer.



Section - page 4, para. 11. Would DRMO not be required to arrange contract?

Section - page 5; para. 4. No conflict with change recommended for page 3, para. 7.

Section - page 7, para. 1.3. Authority needs to be specifically referenced to written Marine Corps instruction.

Section - page 7, para. 1.4. Recommend attaching Appendix which provides correct definitions.

Section - page 8, para. 1.8. "Volume 1, Section 2.3.2" does not exist.

Section - page 9, para. 2.0. "Oil from storm water storage tanks and oil water separators" vice "oil from storm water separators."

Section - page 10, para. 3.1, para. 3.2.1. Unresolved issue, i.e., who is AC/S Facilities going to designate as used oil administrator. Key decision required before plan can be published.

Section - page 11, para. 3.2.1. "Navy on-scene-commander" vice "Emergency Coordinator." Note, Fire Chief provides this coordination and notifies responsible officials.

Section - page 11, para. 3.2.2.d. Servicing of tanks should be a routine schedule, not on call by work center (except in an emergency)

Section - page 11, para. 3,2,3a. Recommend wording as follows: "Ensure segregation and proper containerization and identification of used oil generated at work centers within HMDO's cognizance.

Section - page 11, para. 3.2.3b. Notify cognizant Hazardous Material Disposal Coordinator if a used oil cannot be adequately identified.

Section - page 11, para. 3.2.3d. "ensure maintenance of" ...vice "maintain compliance..."

Section - page 12, para. 3.2.6b. Clarify meaning

Section - page 12, para. 3.2.8. "Base Safety Officer" vice "Safety Department"

Section - page 12, para. 3.2.9b. Reassign "Rent-a-Solvent" to NREAD

Section - page 12, para. 3.2.9b. Update antifreeze

Section - page 13, para. 3,2,9c. What does this mean?

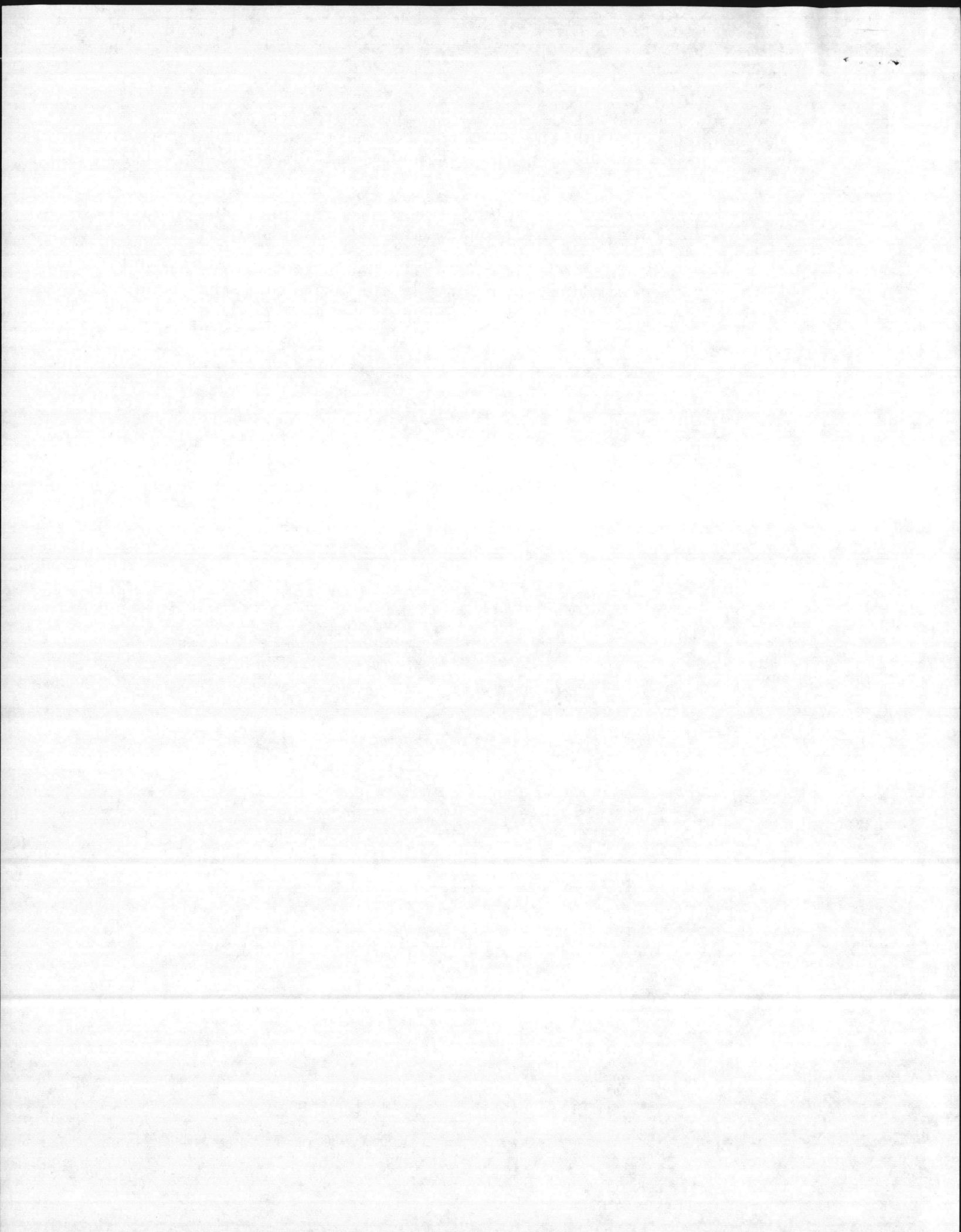




Section - page 13, para. 4.1.1. Recommend adding the following after first sentence, "NREAD, HMDO and UOA must work closely together to ensure proper segregation and identification of oily wastes."

Section - page 17, para. 6. Antifreeze write-up should be updated to show present procedure of discharge to sanitary sewer.

Section - page 23, para. 6.1, para. 6.3. Needs to clarify the problems associated with not segregating the skimmings from storm waste storage tanks or oil water separators.





*Danny DPS*  
*Glence glen*

6280/2  
FAC  
MAR 03 1987

From: Commanding General, Marine Corps Base, Camp Lejeune, North Carolina

To: Commander, Atlantic Division, Naval Facilities Engineering Command, Norfolk, Virginia 23511-6287 (Code 114)

Subj: DRAFT HAZARDOUS MATERIAL/WASTE MANAGEMENT PLAN

Encl: (1) Camp Lejeune Review Comments

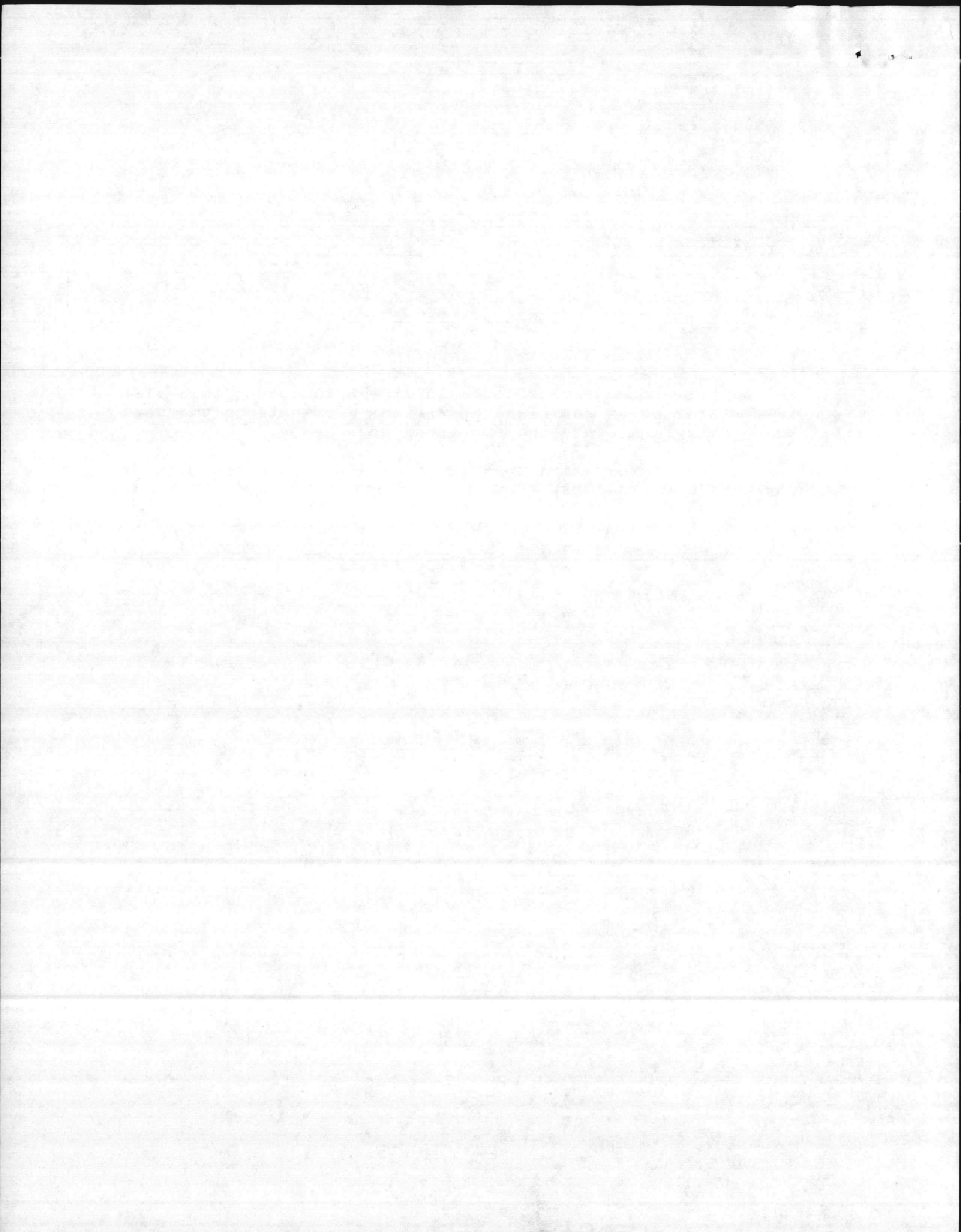
1. We are forwarding review comments at the enclosure to assist you in preparation of the final HM/W Plan. Comments on the Used Oil Management Plan are being forwarded separately.
2. For further information on these comments, please contact Mr. Danny Sharpe, AV 484-5003.

T. J. DALZELL  
By direction

Copy to:  
CMC (LFL)



Blind copy to:  
NREAD  
BMO  
PWO  
EnvEngr



MARINE CORPS BASE, CAMP LEJEUNE

COMMENTS ON HAZARDOUS MATERIAL/HAZARDOUS WASTE  
MANAGEMENT PLAN AND USED OIL MANAGEMENT PLAN  
PREPARED BY ENVIRONMENTAL AND SAFETY DESIGNS, INC.  
FOR ATLANTIC DIVISION, NAVFACENCOM, CONTRACT NO: N62470-85-B-7979

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c. Does the rationale for battery disposal hold up if considered in the context of paragraph 1a above?

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g. As written, the burning of used oil does not appear to be a solution to any of the basic problems of waste oil disposal. Once segregated, the quality oil recommended for burning will be relatively easy to dispose of and would likely generate some revenues. Can the proposed facility burn kerosene and diesel fuel mixed with higher quality lubricating oils? Both these light oils make up a large percent of waste oil. They result from spills and from water contamination of tanks/barrels of oil from garrison shops and training exercises.





SPECIFIC COMMENTS ON  
ENSAFE HAZARDOUS MATERIAL/HAZARDOUS WASTE MANAGEMENT PLAN

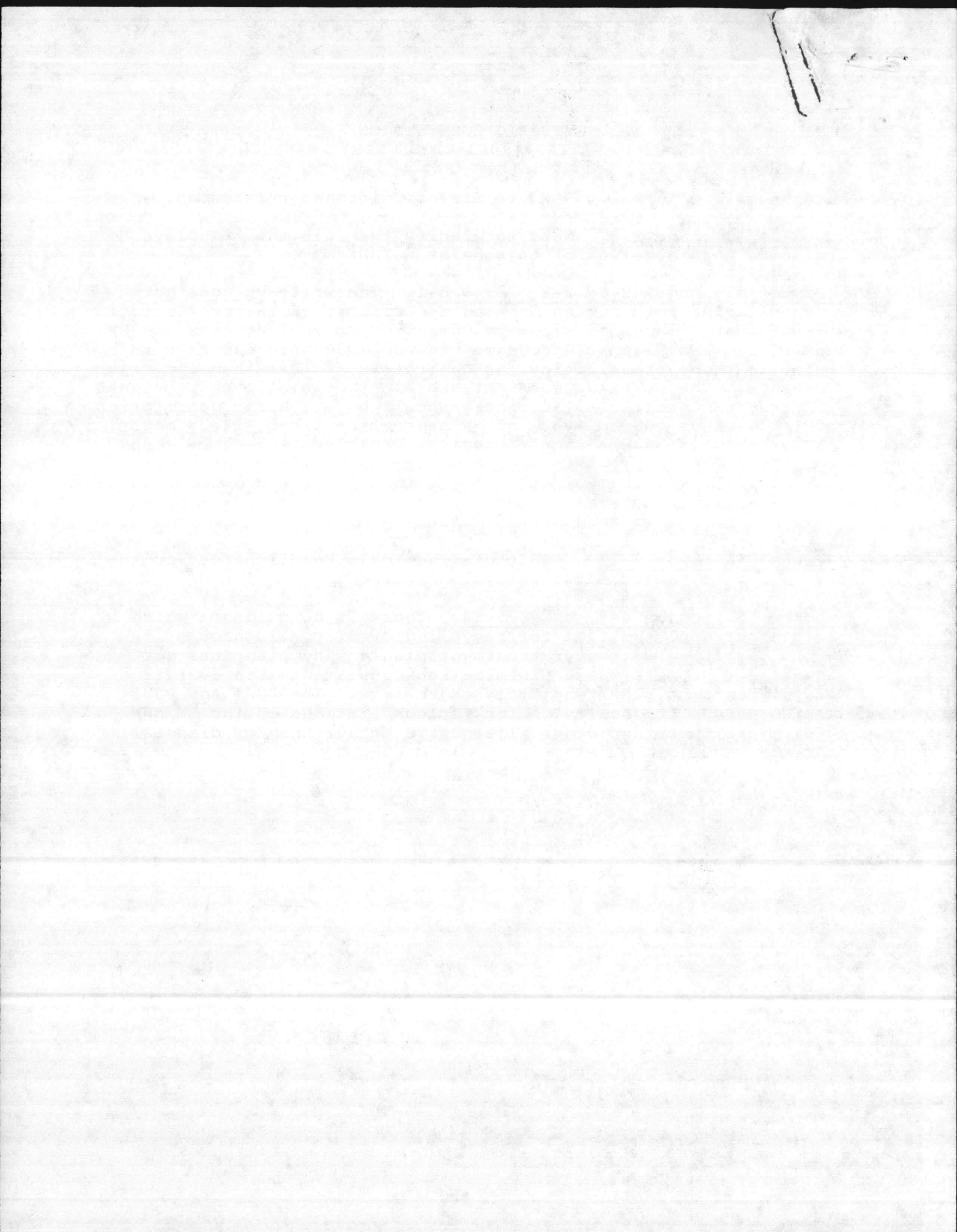
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JOINT MESSAGEFORM

SECURITY CLASSIFICATION

UNCLASSIFIED

(P)

PAGE 01 OF 02	DTG/RELEASER TIME			PRECEDENCE		CLASS	SPECAT	LMF	CIC	ORIG/MSG IDENT
	DATE TIME	MONTH	YR	ACT	INFO	UUUU				03161500

BOOK ADMIN MESSAGE HANDLING INSTRUCTIONS

FROM: CG MCB 'CAMP LEJEUNE NC

TO: CO MCAS NEW RIVER NC

INFO CG SECOND MAW

CO MAG 26

CO MAG 29

UNCLAS //N06240//

SUBJ: UNAUTHORIZED DISPOSAL OF HAZARDOUS WASTE {HW} INTO WASTE OIL BY MAG 26 AND MAG 29 AIRCRAFT MAINTENANCE OPERATIONS

A. DIV OF HEALTH SERVICES HW COMPLIANCE ORDER DTD 11 AUG 87

B. BO 6240-5A

1. COOPERATIVE EFFORTS BY MCB AND MCAS, NEW RIVER, ENVIRONMENTAL PERSONNEL HAVE IDENTIFIED THE SUBJ DISPOSAL AS THE DIRECT CAUSE OF CONTAMINATION OF HUNDREDS OF THOUSANDS OF GALLONS OF WASTE OIL WITH HALOGENATED SOLVENTS AND DEGREASERS. THE MOST SIGNIFICANT IS FREON FROM "PATCH TESTS" ON AIRCRAFT HYDRAULIC SYSTEMS. THE COOPERATION BY MAG 26, MAG 29 AND MCAS NEW RIVER IN ADDRESSING THE SUBJECT ISSUE ARE APPRECIATED.

2. THE SUBJECT ACTIVITY LED TO THIS CMD BEING CITED FOR VIOLATIONS OF STATE AND FEDERAL HW REGULATIONS AND THE ISSUANCE OF REF {A}.

DISTR NREA|BFAC|BSJA|OICB|BCOS|CEOA|

DRAFTER TYPED NAME, TITLE, OFFICE SYMBOL, PHONE  
*D. Sharpe*  
 D. SHARPE, NREA, GS-11, 5003

SPECIAL INSTRUCTIONS  
 SJA \_\_\_\_\_

RELEASER TYPED NAME, TITLE, OFFICE SYMBOL AND PHONE  
 T. J. DALZELL, AC/S FAC 3034

SIGNATURE

SECURITY CLASSIFICATION  
 UNCLASSIFIED

DATE TIME GROUP

9

JOINT MESSAGEFORM

SECURITY CLASSIFICATION

UNCLASSIFIED

PAGE 02 OF 02	DTG/RELEASER TIME			PRECEDENCE		CLASS	SPECAT	LMF	CIC	ORIG/MSG IDENT
	DATE TIME	MONTH	YR	ACT	INFO	UUUU				03161500
BOOK	MESSAGE HANDLING INSTRUCTIONS									
ADMIN										

IN ORDER FOR THIS CMD TO PROPERLY RESPOND TO REGULATORY AGENCIES, ADDRESSEE IS REQUESTED TO PROVIDE A WRITTEN SUMMARY OF ACTION TAKEN AND PLANNED TO ADDRESS THE FOLLOWING:

A. ENSURE PROPER COLLECTION, SEGREGATION AND DISPOSAL OF THE SUBJ HW PER REF {B} AND

B. PREVENTING THE DISPOSAL OF HW INTO WASTE OIL COLLECTION CONTAINERS AND TANKS.

THIS CMD CANNOT OVER EMPHASIZE THE IMPORTANCE OF ENSURING ONGOING RESOLUTION OF THE SUBJ PROBLEM. A REPOSE IS REQUESTED NLT 20 NOV 1987. POC WITH THIS MATTER IS MR. DANNY SHARPE, NREAD, EXTENSIONS 2083 AND 2195.

DISTR:

DRAFTER TYPED NAME, TITLE, OFFICE SYMBOL, PHONE

SPECIAL INSTRUCTIONS

TYPED NAME, TITLE, OFFICE SYMBOL AND PHONE

RELEASER

SIGNATURE

SECURITY CLASSIFICATION  
UNCLASSIFIED

DATE TIME GROUP







North Carolina Department of Human Resources  
Eastern Regional Office • 404 Saint Andrews Drive • Greenville, N. C. 27834

James G. Martin, Governor

David T. Flaherty, Secretary

November 3, 1987

Commander General  
Marine Corp Base  
Camp Lejeune, NC 28542

ATT: Director NREAD

Dear Sir:

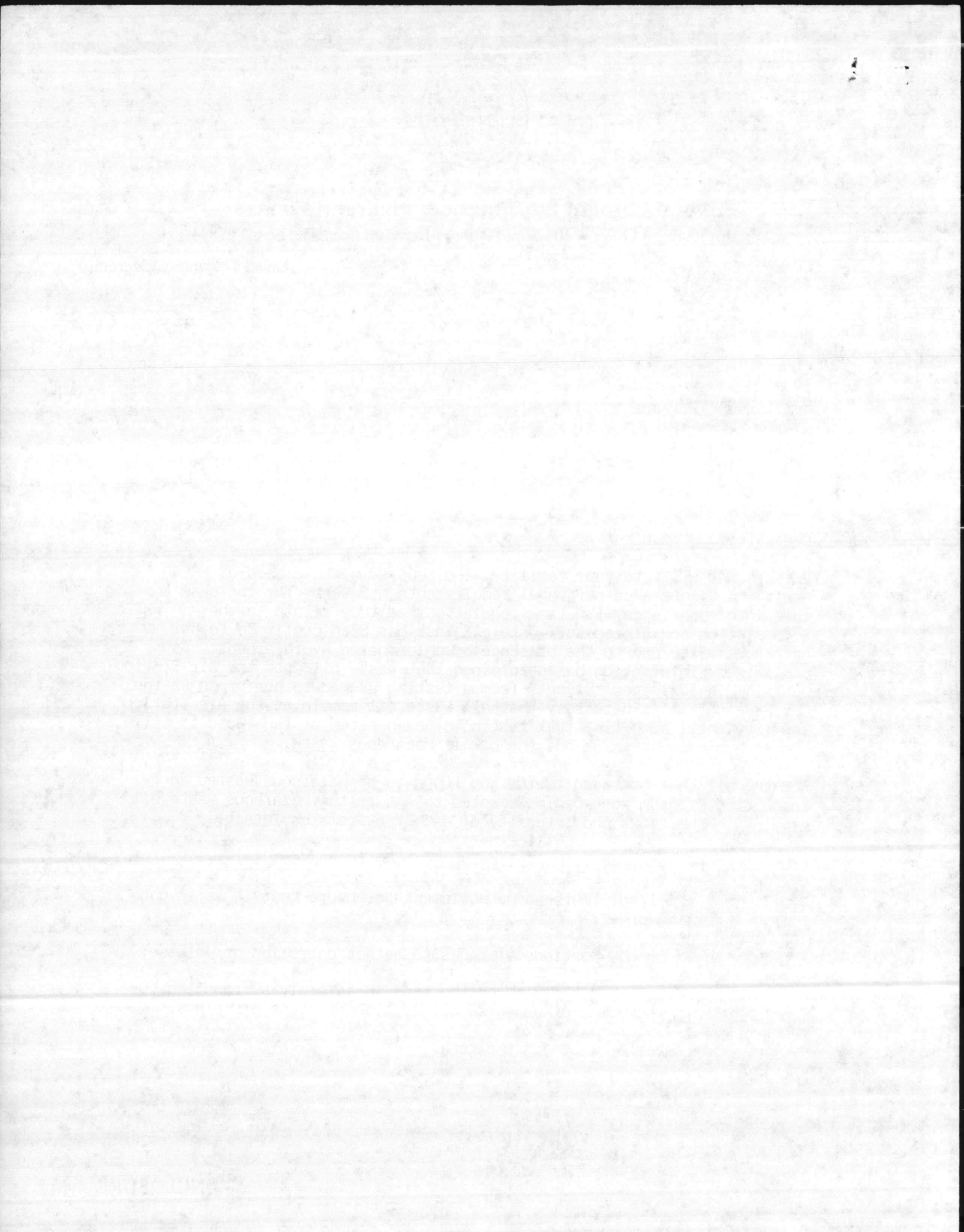
On a recent visit to your facility, I discussed with members of NREAD staff and maintenance personnel requirements necessary for the base to come into compliance with tank regulations as they relate to the accumulation and storage of waste oil that has been confirmed to be hazardous waste due to the presence of chlorinated hydrocarbons. As preliminary information has determined that waste oil from the Air Station contained chlorinated solvents from a testing procedure performed at the Air Station, it is necessary that all waste oil remain at the Air Station facility until such time that testing of each batch or tank load of oil can determine whether or not the oil is hazardous waste.

For the oil that has been tested and found to be hazardous waste, an inspection program must be implemented to ensure the hazardous waste oil remains in the tanks and integrity of each tank remains intact.

Once each operating day, the following must be inspected:

1. overfill/spill/discharge equipment to ensure that it is in good working order;
2. above ground portions of tanks to detect corrosion or release;
3. construction materials and the area immediately surrounding the tanks including dikes to detect erosion or signs of releases; and
4. the level of waste in the tank.

ENCLOSURE (1)





Page 2  
November 3, 1987

An exception can be made to #4 if the discharge/fill valves are locked to ensure that no waste is added to or removed from any hazardous waste tank unless a person trained in hazardous management is present. The keys should remain with trained individuals in order to meet this requirement.

Any person making inspections should be properly trained according to 40CFR 265.16.

The above requirements should be followed until such time as all hazardous waste is removed from the tanks and the tanks are closed. The inspection records should be retained for a period of at least 3 years.

If you have questions regarding the storage of hazardous waste oil in tanks, please call on me.

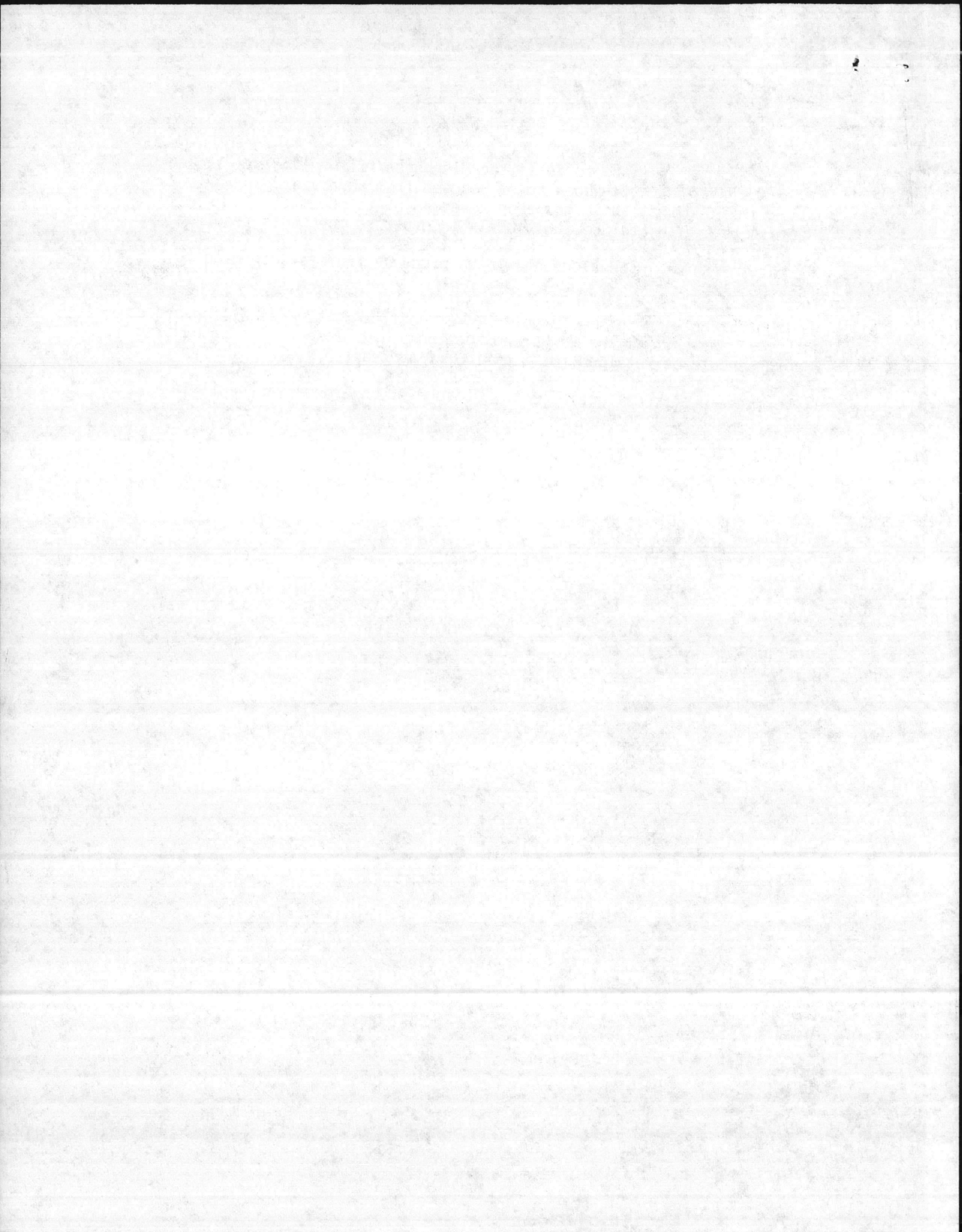
Sincerely,

*Richard L. Gay/ors*

Richard L. Gay  
Waste Management Specialist  
Solid and Hazardous Waste Management Branch

sle

cc: Doug Holyfield  
Dave Ellison



6240  
NREAD  
16 Nov 87

*gle*  
*6 Nov 87*

From: Director, Natural Resources and Environmental Affairs  
Division, Marine Corps Base, Camp Lejeune  
To: Assistant Chief of Staff, Facilities, Marine Corps Base,  
Camp Lejeune

Subj: DISPOSAL OF WASTE OIL

Ref: (a) CG, MCB ltr 6280/2 FAC of 2 Oct 87

Encl: (1) Log of NREAD Waste Oil Management Activity

1. The enclosure is provided per the reference.

J. I. WOOTEN



6113  
WASH  
JAN 20 1954

From: Director, Federal Bureau of Investigation, and Environmental Affairs  
Division, Marine Corps Base, Camp Lejeune  
To: Assistant Chief of Staff, Logistics, Marine Corps Base,  
Camp Lejeune

Subject: Request for Waste Oil

Re: (a) Request for Waste Oil on 10/1/53

(b) Request for Waste Oil on 10/1/53

The enclosure is provided for the information of

Very truly yours,  
L. J. [Name]

WASTE OIL MANAGEMENT ACTIVITY LOG

27 Oct 87

1. Waste Conversion, Incorporated pumped 4,000 gallons of hazardous waste oil from the Air Station.

28 Oct 87

1. Tom Barbee and Manuel Martin measured the volume of contents of all fourteen waste oil storage tanks.

29 Oct 87

1. Tom Barbee and Manuel Martin determined that approximately 5,750 gallons of sludge was in tank S-781.

30 Oct 87

1. Tom Barbee developed a chart which summarizes volume of the contents of fourteen waste oil storage tanks used by BMO for storage of waste oil collected within the activity.

2 Nov 87

1. The Environmental Chemistry and Microbiology Section received TOX test kits for determination of chlorine from Battalion Supply.

3 Nov 87

1. A letter was prepared by NREAD for CG, MCB, on Waste Oil Management concerning the inventory of the contents of the waste oil storage tanks. Copies were distributed to DRMO, BMO, and Facilities.

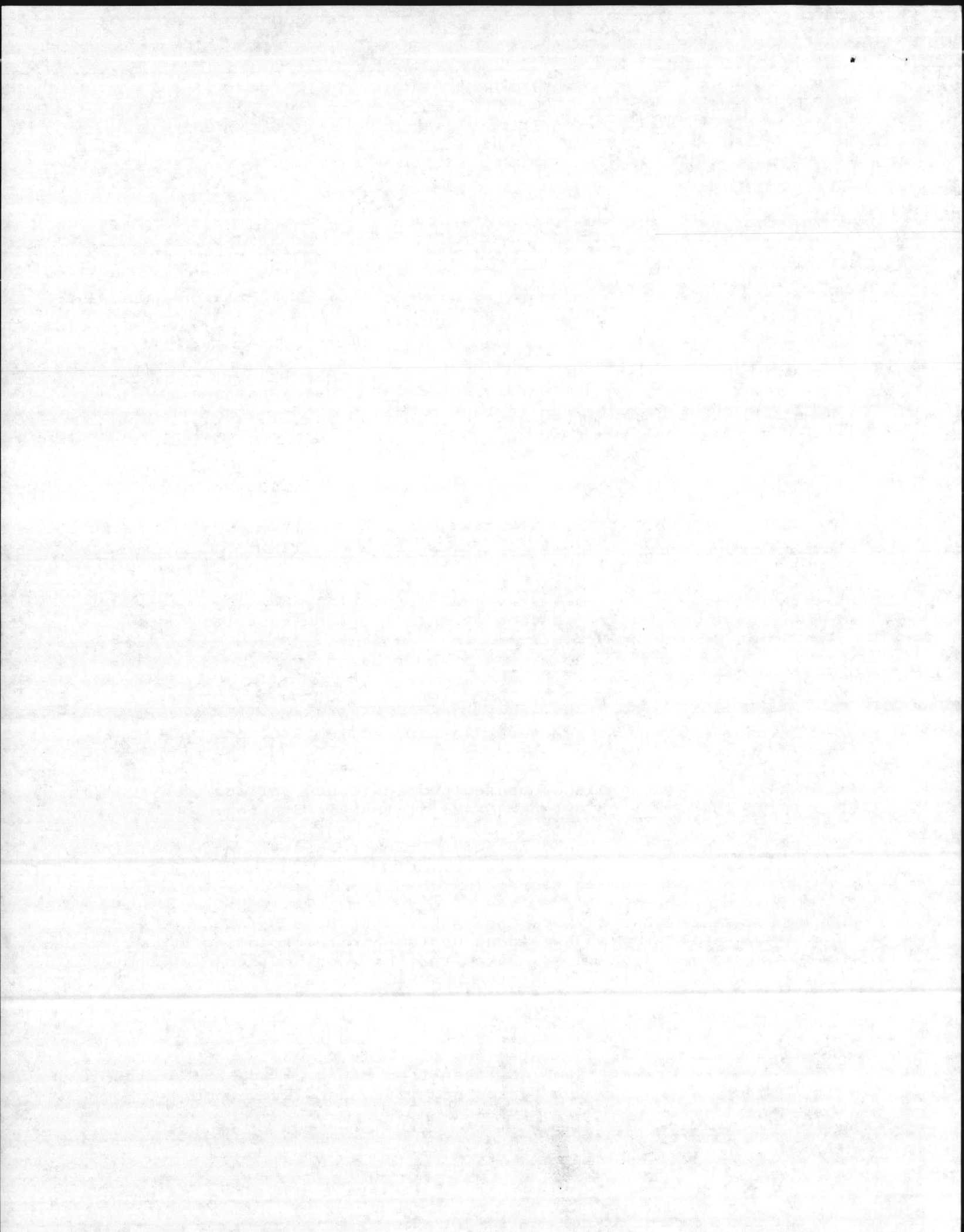
2. Waste Conversion, Incorporated pumped 11,000 gallons of hazardous waste oil from tank AS-421 at the Air Station.

3. Richard Gay, Department of Human Resources, notified Commanding General, via Director, NREAD, in writing of the inspection requirements of hazardous waste stored in tanks.

4. Sam Gwynn, NREAD advised Carl Baker that Base Maintenance was in violation of storing hazardous waste on site exceeding 90 days. Mr. Gwynn advised Mr. Baker that he should dispose of the hazardous waste fuel as requested on 30 September 1987.

4 Nov 87

1. The Environmental Chemistry and Microbiology Section performed TOX analyses on twenty samples taken from MAG's 26 and 29, at the Air Station. Nine samples tested negative and eleven samples tested positive.





4 Nov 87 continued

2. Waste Conversion, Incorporated pumped 5,800 gallons of hazardous waste oil from tank AS-420 at Marine Corps Air Station.

5 Nov 87

1. Waste Conversion, Incorporated pumped 11,600 gallons of hazardous waste oil from the Air Station.

6 Nov 87

1. Elizabeth Betz and Tom Barbee sampled waste oil storage tanks AS-419 and STT-66, to be tested for TOX, heavy metals and flash point.

2. Waste Conversion, Incorporated pumped 2,200 gallons of hazardous waste oil from tanks AS-420 and AS-421.

9 Nov 87

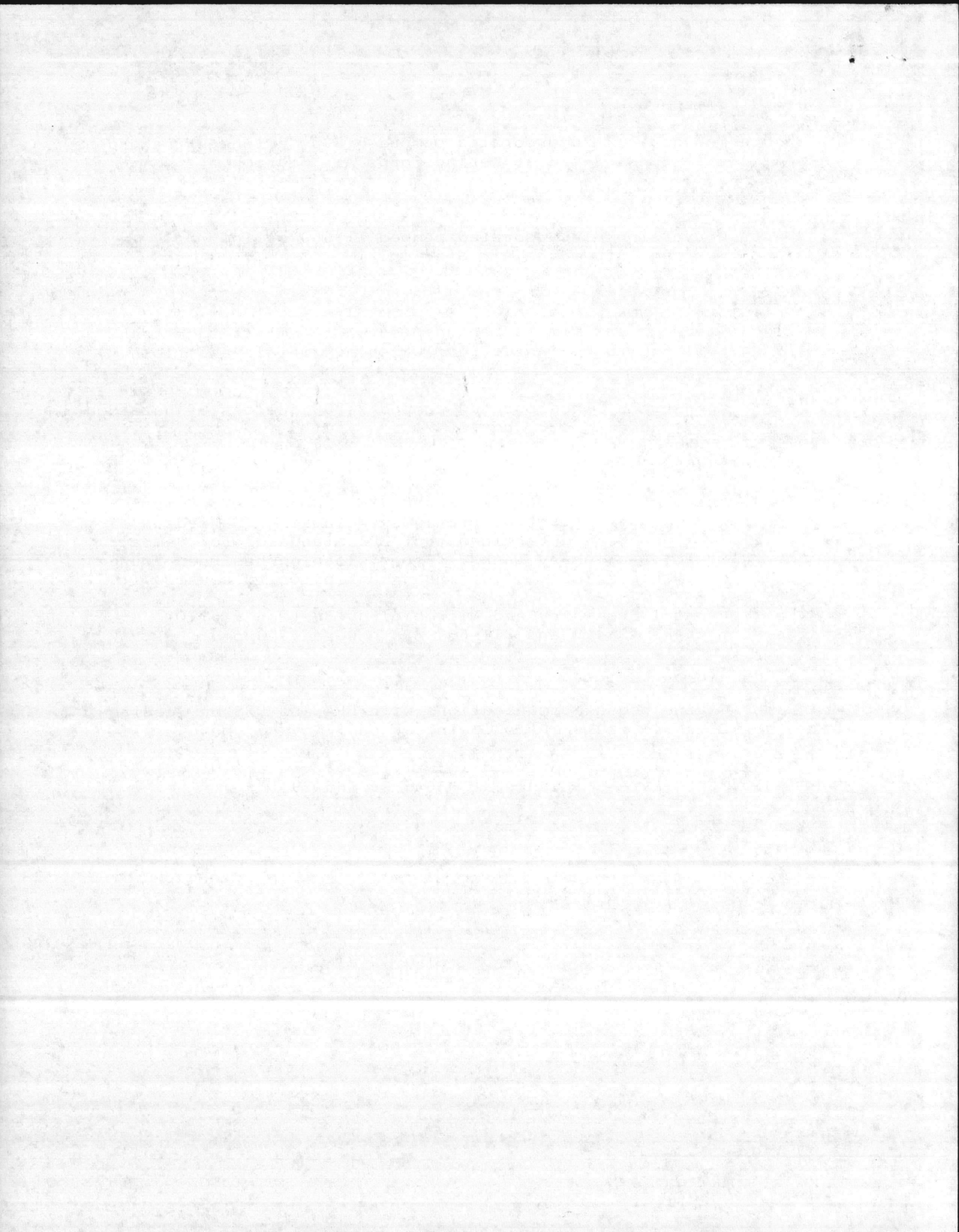
1. Tom Barbee researched information on the subject "How empty is empty" in storage tanks that previously contained hazardous waste oil. It has been determined that EPA standards for "empty" do not exist for stationary tanks. Steam cleaning has been found to be an acceptable means of cleaning a tank prior to reusing it.

2. Environmental Chemistry and Microbiology Section ran TOX analyses of tanks AS-419 and STT-66. Both were 750ppm.

12 Nov 87

1. Danny Sharpe began communications with EPA and DHS on requirements for cleaning tanks in following up on 9 Nov 87 above.

2. The Air Station was notified in writing of the analytical results of the waste oil tanks at MAG's 26 and 29.



# Memorandum

DATE: 28 Oct 87

FROM: HMDO, Base Maintenance Division

TO: HMC, Natural Resources

SUBJ: REQUEST FOR ANALYSIS OF CONTENTS IN STORAGE TANK AS-419

1. It is requested that the subject tank be sampled, analysis conducted, and two copies of the analysis be furnished to this Office. Further, it is requested that your analysis include the following:

- a. TOX-total Hologens in PPM
- b. Flashpoint-in degress Farenheight
- c. Arsenic content - in PPM
- d. Cadmium - in PPM
- e. Chromium - in PPM
- f. Lead - in PPM

2. Storage space for used oil storage is very limited at this time, therefore, it is requested that this request be expedited.

*David K. Bullock*  
DAVID K. BULLOCK

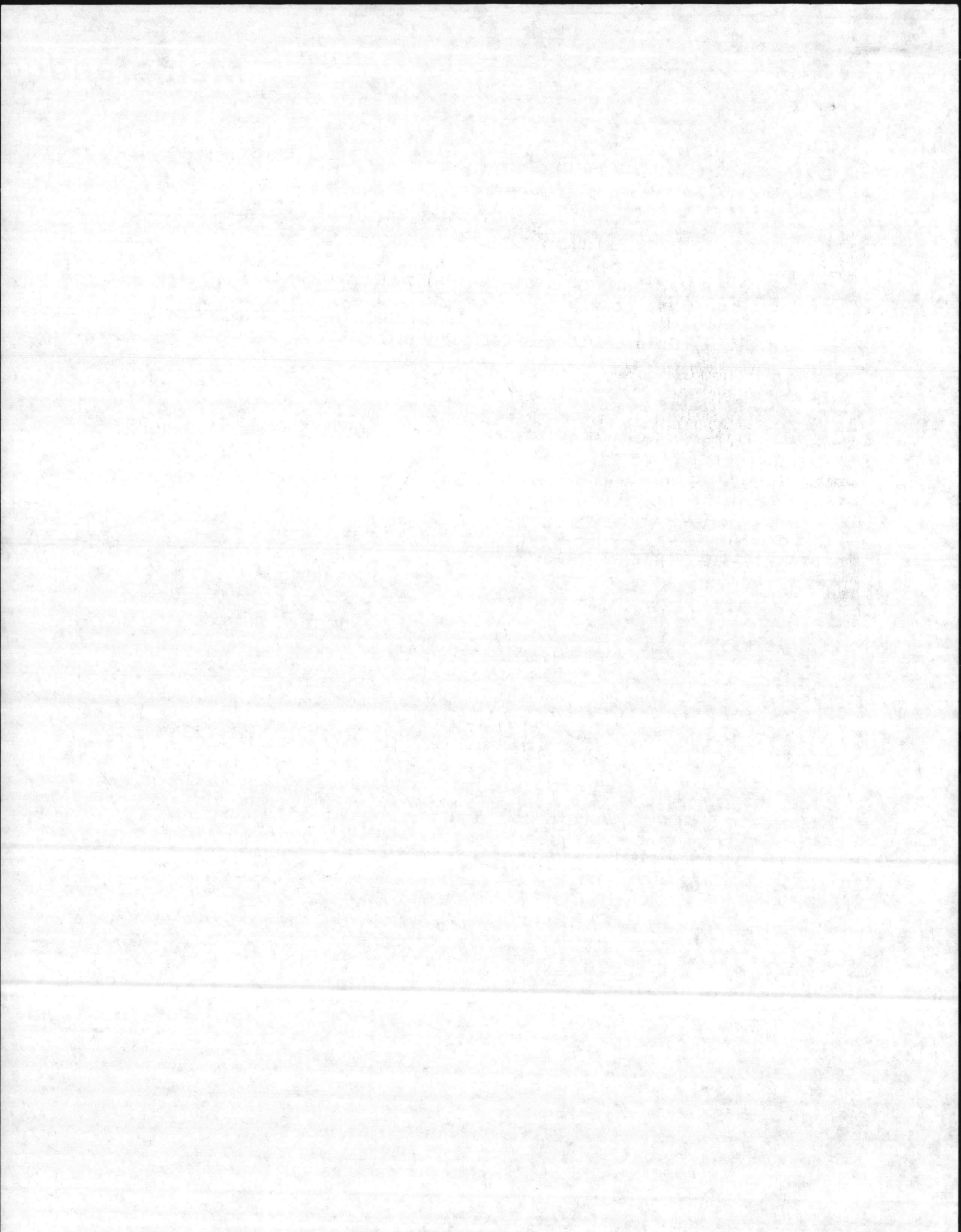
TO: EBetz, ~~and~~ (Copy to S. Gwynn)

Please make personal contact with DRMO,  
Verify their additional requirements, and  
Take necessary action to ensure data  
Provided to support expedited removal.

*D. Sharpe*

24 Oct 87





NREAD

11090  
NREAD  
NOV 12 1987

From: Commanding General, Marine Corps Base, Camp Lejeune  
To: Distribution List  
Subj: MARINE CORPS AIR STATION, NEW RIVER, WASTE OIL TANKS;  
ANALYSIS OF  
Ref: (a) BO 6240.5A  
Encl: (1) Analysis of MAG-26 Waste Oil  
(2) Analysis of MAG-29 Waste Oil

*DDS  
Supply & Co.*

1. The Environmental Chemistry and Microbiology Section sampled the waste oil tanks at the units within MAG-26 and MAG-29 from 16 October 1987 to 21 October 1987. When the Chemtrics Total Organic Halogen (TOX) test kits which detects halogens in waste oil in concentrations greater than 750 ppm, were received, the Section analyzed the samples of waste oil.
2. MAG-26 has 12 tanks. Two were underground tanks. Of the eleven tanks in use, only three had no detectable level of halogens. The rest should be handled as hazardous waste per paragraph 4 below.
3. MAG-29 has 9 tanks. One was underground. Of these 9 tanks, 6 had no detectable level of halogens. The other three should be handled as hazardous waste per paragraph 4 below.
4. The halogens in these tanks could have been left over from past practices. The contaminated tanks must be completely pumped out before reusing. It is recommended that units responsible for the unauthorized dumping of the halogenated solvents be required to pump the contents of these tanks into proper containers, and turn them into Defense Reutilization and Marketing Officer, as a HW per the reference.
5. Point of contact is Mr. Danny Sharpe, Natural Resources and Environmental Affairs Division, extensions 2083/1690.

B. W. ELSTON  
By direction

Distribution:  
CO, MCAS, NR  
DRMO  
AC/S, PAC  
BMO  
SJA



NOV 1 5 1981

USA

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**UNITED STATES MARINE CORPS**  
 Natural Resources and Environmental Affairs Division  
 Marine Corps Base  
 Camp Lejeune, North Carolina 28542

File:

Environmental Chemistry & Microbiology Section

Miscellaneous Analysis Report

Sample Date: 16+19 OCTOBER 1987 Analysis: 4 NOVEMBER 1987

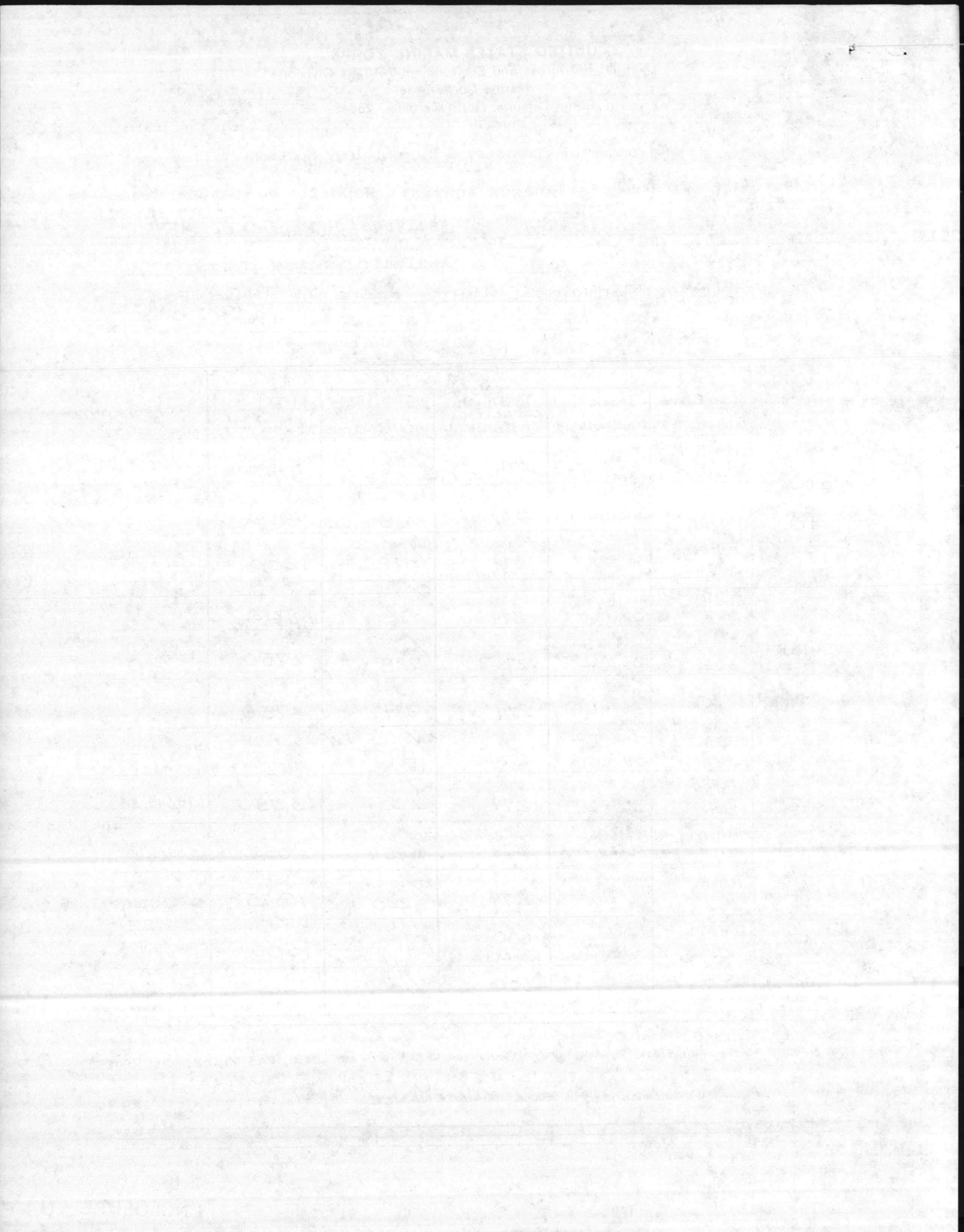
Sampler: BETZ, BARBEE Analyst: BARBEE, BETZ

Sample Description: INDIVIDUAL UNIT'S WASTE OIL TANKS FOR  
 MAG-26

Table 1 of 1

Sample #	RESPONSIBLE UNIT	TANK DIMENSIONS	TANK CAPACITY (GALLONS)	LIQUID LEVEL INCH/GALLONS	TOX PPM	PREVIOUS
						%TOX/FREON (PPM) READINGS
88-06	HMT 204	36" x 61"	274	18 / 136	5250	NOTE 1.
88-07	HMT 204	DRUM	55	(1/3 FULL) 18	<750	
88-08	HMH 461	36" x 61"	274	16 / 118	1200	NOTE 2.
88-09	HMH 362	36" x 61"	274	4" / <2	NOTE 3	
88-10	HMH 362	36" x 61"	274	14 / 98	<750	
88-11	HML 167	36" x 61"	274	274	<750	
88-12	HMM 264	36" x 61"	274	24 / 193	2,250	0.33/9,200
88-13	HMM 264	36" x 61"	274	6 / 30	3,750	1.78/45,300
88-14	HMM 261	36" x 61"	274	20 / 156	1,050	<0.05/1,100
88-15	HMM 266	36" x 61"	274	27 / 220	1,875	<0.05/1,700
88-16	H+MS 26	UNDER GROUND	600 NOTE 4	12 /	1,500	0.46/6,900
88-17	GSE	UNDER GROUND	600 NOTE 4	24 /	825	<0.05/900

Remarks: NOTES (1) MOBILE TANK  
 (2) TANK PUMPED 1/2 DOWN ON 15 OCT 87. A LOCK WAS PLACED ON TANK BY UNIT.  
 (3) TANK LABELLED "DO NOT USE, HAS HOLES". NOT SAMPLED.  
 (4) ACCORDING TO BASE MAINTENANCE





**UNITED STATES MARINE CORPS**  
 Natural Resources and Environmental Affairs Division  
 Marine Corps Base  
 Camp Lejeune, North Carolina 28542

File:

Environmental Chemistry & Microbiology Section

Miscellaneous Analysis Report

Sample Date: 20+21 OCTOBER 1987 Analysis: 4 NOVEMBER 1987

Sampler: BETZ, BARBEE + MARTIN Analyst: BARBEE, BETZ

Sample Description: INDIVIDUAL UNIT'S WASTE OIL TANKS FOR  
MAG 29

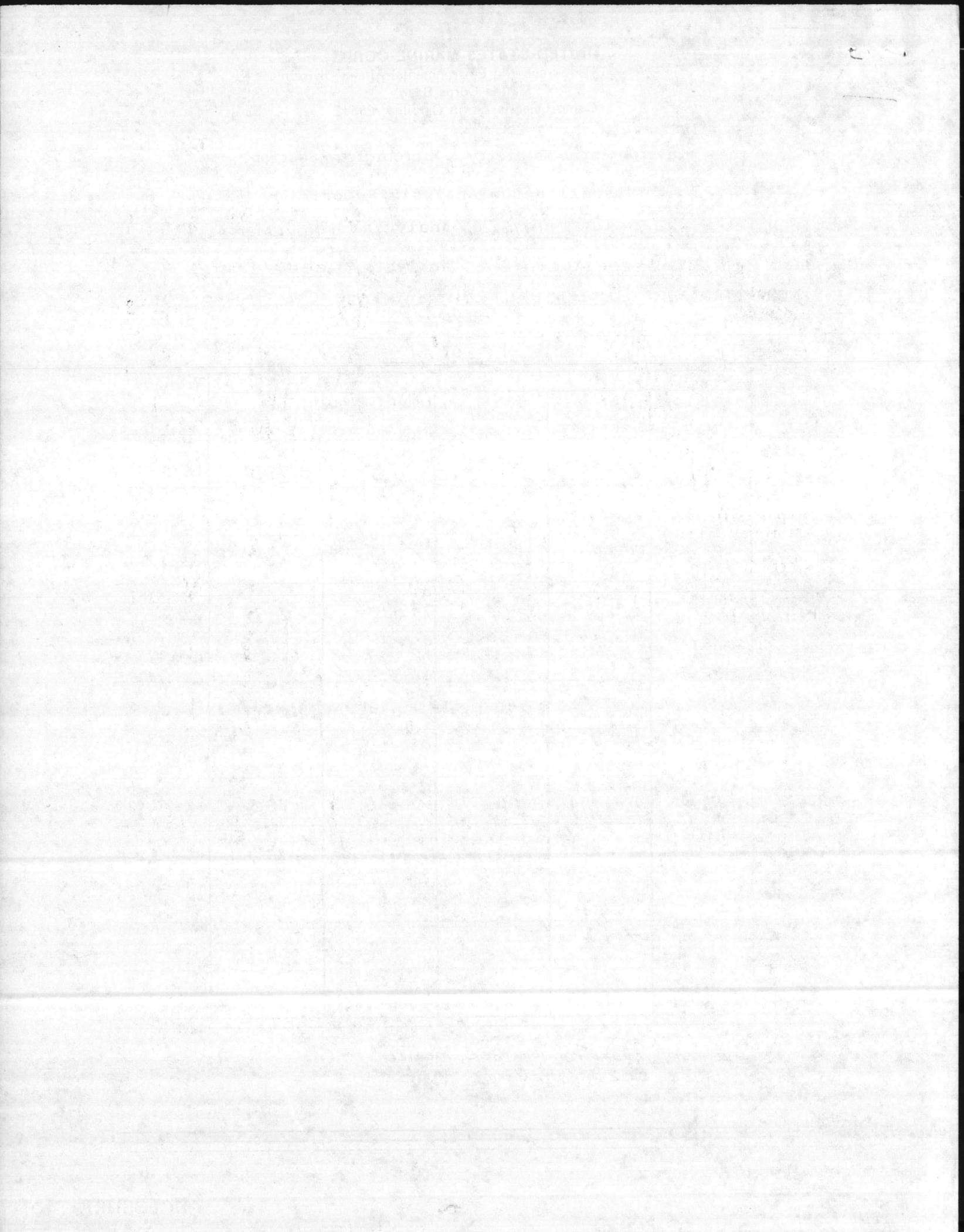
Table 1 of 1

Sample #	RESPONSIBLE UNIT	TANK DIMENSIONS	TANK CAPACITY (GALLONS)	LIQUID LEVEL INCH/GALLONS	TOX PPM	PREVIOUS
						%TOX/FREON(TPM) READINGS
88-18	VMO	46" x 72"	550	14 / 141	<750	
88-19	VMO	22" x 70"	110 NOTE 1	19 /	3,750	
88-20	VMO	UNDER GROUND	600 NOTE 2	FULL / 600	<750	<0.05/ND
88-21	HMM 162	36" x 61"	274	9 / 54	<750	
88-22	HMM 365	36" x 61"	274	9.5 / 58	825	0.28/3,300
88-23	HMM 365	36" x 61"	274	15.5 / 113	1,350	
88-24	HMLA 269	NOTE 3 36" x 61"	274	20 / 156	<750	<0.05/ND
88-25	H+MS	NOTE 3 36" x 61"	274	18 / 136	<750	0.28/4,900
88-26	HMH 464	45" x 75"	550	14 / 141	<750	<0.05/3,200

Remarks:

- NOTE: (1) TWO 55 GALLON DRUMS PUT TOGETHER, MOBILE  
 (2) ACCORDING TO BASE MAINTENANCE.  
 (3) PARTIALLY BURIED





5200  
NREAD  
4 Nov 87

From: Director, Natural Resources and Environmental Affairs  
Division, Marine Corps Base, Camp Lejeune  
To: Civilian Personnel Officer, Marine Corps Base, Camp Lejeune  
Via: Assistant Chief of Staff, Facilities, Marine Corps Base,  
Camp Lejeune

Subj: HAZARDOUS WASTE AND WASTE OIL COLLECTION, HANDLING, DISPOSAL  
AND RELATED EMERGENCY RESPONSE

Ref: (a) Mtg btwn Deputy AC/S, Facilities, BMO, and Dir, NREAD  
on 30 Oct 87  
(b) NCAC 10F NC Hazardous Waste Management Rules (NOTAL)  
(c) BO 6240.5A

Encl: (1) Excerpts from NCAC 10F, Rule 0033 (NOTAL)

1. During reference (a), the Base Maintenance Officer advised that only two position descriptions within Base Maintenance Division (BMD) have been revised to include the subject duties. By failing to accurately reflect the duties of the many personnel within BMD involved in the subject work, violations of reference (b) may have occurred. As a minimum, vital information required for classification of positions, establishing sound personnel training priorities and protecting personnel health and safety is not being provided. It could be that the subject duties should be critical elements for individuals appointed to serve as Hazardous Material Disposal Officers, per reference (c).

2. Mr. John Moran, CPD, and Mr. Sam Gwynn, NREAD, have been working closely to establish a hazardous waste training program. It is recommended that the Civilian Personnel Officer, in cooperation with this office, conduct a survey of civilian personnel within the Camp Lejeune complex in order to identify both who is working in the subject areas, and the accuracy of their position descriptions relative to the subject duties. This information is vital to developing a hazardous waste training program which fully satisfies the requirements of reference (c), the enclosure and related state and federal regulations. Mr. Gwynn, at extensions 2083/1690, is available to assist with this matter.

J. I. WOOTEN



1950  
1951  
1952

From: Director, Federal Bureau of Investigation  
To: Director, Central Intelligence Agency  
Subject: [Illegible]

Reference is made to the report of the [Illegible] dated [Illegible].

The [Illegible] of the [Illegible] is [Illegible].

The [Illegible] of the [Illegible] is [Illegible].

The [Illegible] of the [Illegible] is [Illegible].

The [Illegible] of the [Illegible] is [Illegible].



(c) The owner or operator must remedy any deterioration or malfunction of equipment or structures which the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action must be taken immediately.

(d) The owner or operator must record inspections in an inspection log or summary. He must keep these records for at least three years from the date of inspection. At a minimum, these records must include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

#### 265.16 Personnel training.

- (a) (1) Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this part. The owner or operator must ensure that this program includes all the elements described in the document required under paragraph (d)(3) of this section.
- (2) This program must be directed by a person trained in hazardous waste management procedures, and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.
- (3) At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including where applicable:
  - (i) Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;
  - (ii) Key parameters for automatic waste feed cut-off systems;
  - (iii) Communications or alarm systems;
  - (iv) Response to fires or explosions;
  - (v) Response to groundwater contamination incidents; and
  - (vi) Shutdown of operations.

(b) Facility personnel must successfully complete the program required in paragraph (a) of this section within six months after the effective date of these regulations or six months after the date of their employment or assignment to a facility, or to a new position at a facility, whichever is later. Employees hired after the effective date of these regulations must not work in unsupervised positions until they have completed the training requirements of paragraph (a) of this section.

(c) Facility personnel must take part in an annual review of the initial training required in paragraph (a) of this section.

(d) The owner or operator must maintain the following documents and records at the facility:

- (1) The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job;
- (2) A written job description for each position listed under paragraph (d)(1) of this section. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but must include the requisite skill, education, or other qualifications, and duties of facility personnel assigned to each position;
- (3) A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under paragraph (d)(1) of this section;
- (4) Records that document that the training or job experience required under paragraphs (a), (b), and (c) of this section has been given to, and completed by, facility personnel.

(e) Training records on current personnel must be kept until closure of the facility. Training records on former employees must be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.

#### 265.17 General requirements for ignitable, reactive, or incompatible wastes.

(a) The owner or operator must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste must be separated and protected from sources of ignition or reaction including but not limited to: open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat. While ignitable or reactive waste is being handled, the owner or operator must confine smoking and open flame to specially designated locations. "No Smoking" signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

(b) Where specifically required by other sections of this part, the treatment, storage, or disposal of ignitable or reactive waste, and the mixture of commingling of incompatible wastes, or incompatible wastes and materials, must be conducted so that it does not:

- (1) Generate extreme heat or pressure, fire or explosion, or violent reaction;
- (2) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health;

12

ENCLOSURE (1)

# Memorandum

**DATE:** 6 Nov 87

**FROM:** HMDO, Base Maintenance Division

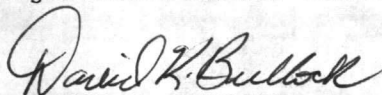
**TO:** Head, Natural Resources

**SUBJ:** Funding Document for Sampling of Waster Oil Storage Tanks

Ref: (a) Your handwritten memo dated 4 Nov 87

1. Your memo implied that Col. Lilley wanted to review all request for analysis of oil and other hazardous waste. Discussion with Col. Lilley reveal that he does not desire to review the request for analysis, however, he does want to review all analysis results.

2. The funding Job Order Number to be charge is the standing job order number AM823K8112392T as appears in the Base Maintenance job order number booklet.

  
DAVID K. BULLOCK



1870

Wm. H. ...

# Memorandum

*J.L.D. File Hg Waste to Now*

DATE: 6 Nov 87

FROM: HMDO, Base Maintenance Division

TO: Head, Natural Resources

SUBJ: Funding Document for Sampling of Waster Oil Storage Tanks

Ref: (a) Your handwritten memo dated 4 Nov 87

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2. The funding Job Order Number to be charge is the standing job order number AM823K8112392T as appears in the Base Maintenance job order number booklet.

*David K. Bullock*  
DAVID K. BULLOCK





# Memorandum

DATE: 05 NOV 1987

6280  
MAIN

FROM: Base Maintenance Officer

TO: Director, Natural Resources and Environmental Affairs Division

SUBJ: ANALYSIS OF WASTE OIL

Ref: (a) PHONCON btwn Mr. Carl Baker and Mr. Danny Sharpe of 3 Nov 87  
(b) Dir NREAD memo 6240/2 NREAD of 11 Jun 87  
(c) PHONCON btwn Mrs. N. Hipp, DRMO and Mr. Cliff Powell of 22 Oct 87

1. During reference (a), Mr. Sharpe indicated that written justification would be required prior to re-testing fuel located in small tanks at several steam plants. The analysis forwarded by reference (b) provided results for TOX and flashpoint only.

2. RCRA requires used oil to be analyzed for arsenic, cadmium, chromium, lead, flashpoint and total halogens. ENSAFE, in their draft reports on hazardous waste and used oil management, reiterated these requirements. These properties are stated almost any time used oil specification for resource recovery is discussed, mentioned, or written.

3. During reference (c), Mrs. Hipp stated DRMO's desire that used oil be analyzed for the properties mentioned above. In the absence of an analysis showing concentration of each, a statement certifying the purity or contamination of used oil will suffice.

4. Used oil analysis in the past has been confusing, to say the least. Some analyses contain extraneous information, while some contain insufficient information. There has been a general lack of consistency from one analysis to another. Analysis for contaminants required by RCRA would be extremely beneficial so that each and every transaction dealing with used oil would be dealt with consistently.

5. Accordingly, it is requested that the following tanks be analyzed so that the appropriate information can be determined:

- a. Tank at Bldg 1700
- b. Underground tank at Bldg 625
- c. Underground tank at Bldg G-650
- d. Above-ground tank at Bldg G-650

Base Maintenance Officer

Director, Natural Resources and Environmental Affairs Division

ANALYSIS OF WASTE OIL

- REF: (a) PHONON P.W. Mr. Carl Baker and Mr. Danny Phago of 3 Nov 81  
 (b) DIR NREAG memo 0244V2 NREAG of 11 Jun 81  
 (c) PHONON P.W. Mr. W. Hipp, DMO and Mr. OISE POW of 22 Oct 81

1. During reference (a), Mr. Phago indicated that written dis-  
 tinction would be required prior to re-estimating fuel located in  
 small tanks at several steam plants. The analysis forwarded by  
 reference (c) provided results for VOX and 2-saholol only.

2. FOR analysis used oil to be analyzed for specific, random,  
 carbon, lead, flashpoint and total hydrogen sulfide. In their  
 field reports on hazardous waste and used oil management, rail-  
 related these requirements. These properties are stated almost  
 any time used oil specification for a better recovery is dis-  
 cussed, mentioned, or written.

3. During reference (c), Mr. Hipp stated DMO's desire was  
 that oil be analyzed for the properties mentioned above. In the  
 absence of an analysis showing concentration of each, a state-  
 ment certifying the purity or composition of used oil will  
 suffice.

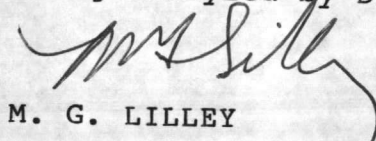
As used oil analysis in the past has been continuing to try to  
 locate some analysis to control excessive information, while some  
 control insufficient information, there has been a general lack  
 of consistency from one analysis to another. Analysis for con-  
 taminants required by RMA would be extremely beneficial so that  
 each and every transaction dealing with used oil would be dealt  
 with consistently.

4. Accordingly, it is suggested that the following tanks be sus-  
 pended so that the appropriate information can be determined:

- a. Tank at Bldg 1088
- b. Underground tank at Bldg 815
- c. Underground tank at Bldg 0-882
- d. Above-ground tank at Bldg 0-828

Subj: ANALYSIS OF WASTE OIL

- e. Tank at Bldg AS-4151
  - f. Underground tank at Bldg RR-15
  - g. Underground tank at BB-9
  - h. Above-ground tank at BB-9
6. The underground tank at M-625 containing fuel that exceeds the 1000 ppm threshold is being analyzed by DRMO.



M. G. LILLEY



TANK NO. 2-11-11

1. Underground tank at 1100 West 11th St.

2. Underground tank at 1100 West 11th St.

3. Underground tank at 1100 West 11th St.

4. The underground tank at 1100 West 11th St. was analyzed on 11/11/11.

*[Handwritten signature]*

W. W. H. H.

# Memorandum

6280  
MAIN

05 NOV 1987

*File*  
*Waste Oil*  
*JLW*

TO: Base Maintenance  
Director, Naval

Naval Affairs Division

SUBJECT: ANALYSIS OF

- of: (a) PHONCON
- (b) Dir NREA
- (c) PHONCON

Mr. Danny Sharpe of 3 Nov 87  
87  
Mr. Cliff Powell of

22 Oct 87

1. During reference (a), Mr. Sharpe indicated that written justification would be required prior to re-testing fuel located in small tanks at several steam plants. The analysis forwarded by reference (b) provided results for TOX and flashpoint only.

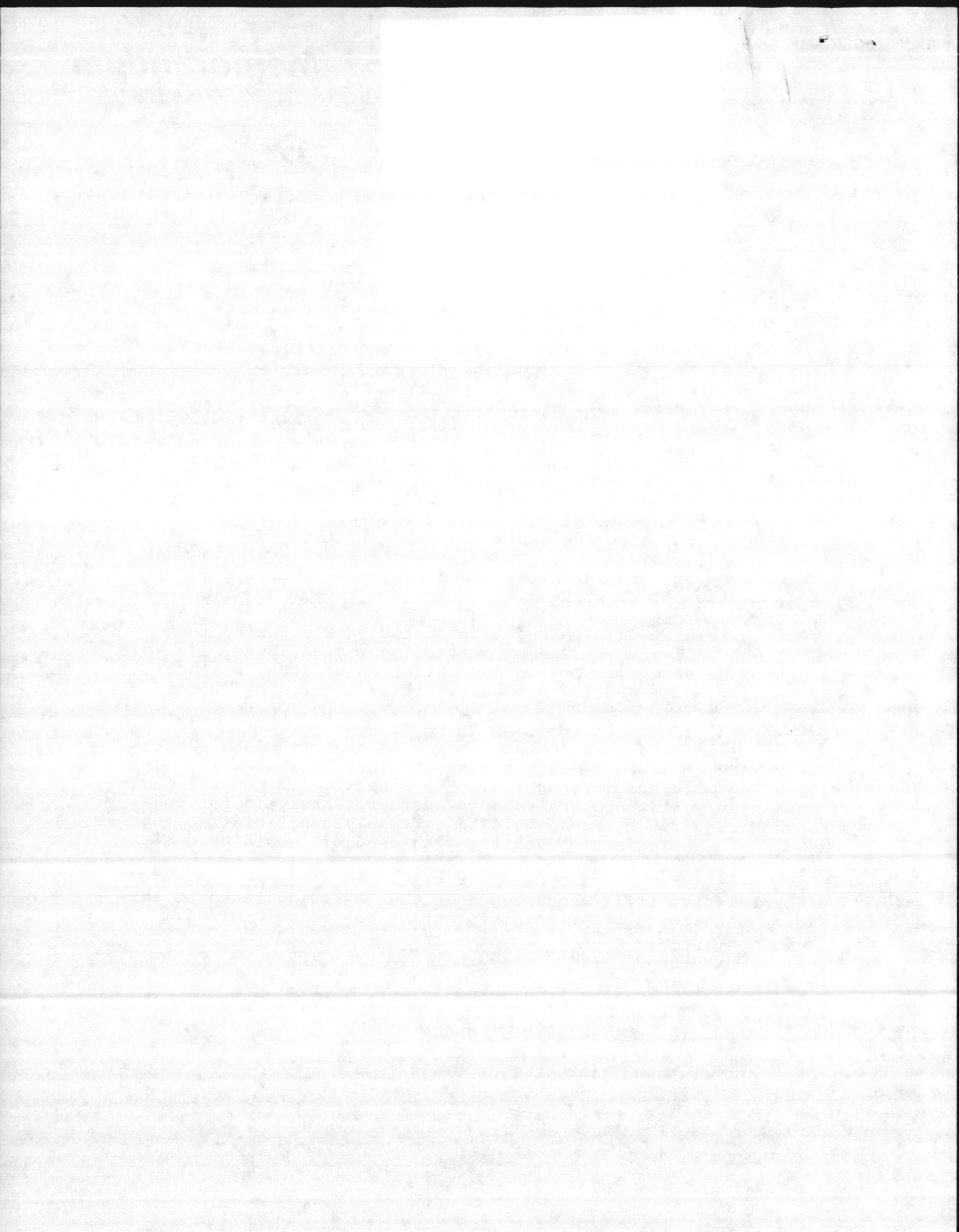
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5. Accordingly, it is requested that the following tanks be analyzed so that the appropriate information can be determined:

- a. Tank at Bldg 1700
- b. Underground tank at Bldg 625
- c. Underground tank at Bldg G-650
- d. Above-ground tank at Bldg G-650





# Memorandum

6280  
MAIN

05 NOV 1987

TO:

FROM: Base Maintenance Officer

Director, Natural Resources and Environmental Affairs Division

SUBJECT: ANALYSIS OF WASTE OIL

- REFERENCES:
- (a) PHONCON btwn Mr. Carl Baker and Mr. Danny Sharpe of 3 Nov 87
  - (b) Dir NREAD memo 6240/2 NREAD of 11 Jun 87
  - (c) PHONCON btwn Mrs. N. Hipp, DRMO and Mr. Cliff Powell of 22 Oct 87

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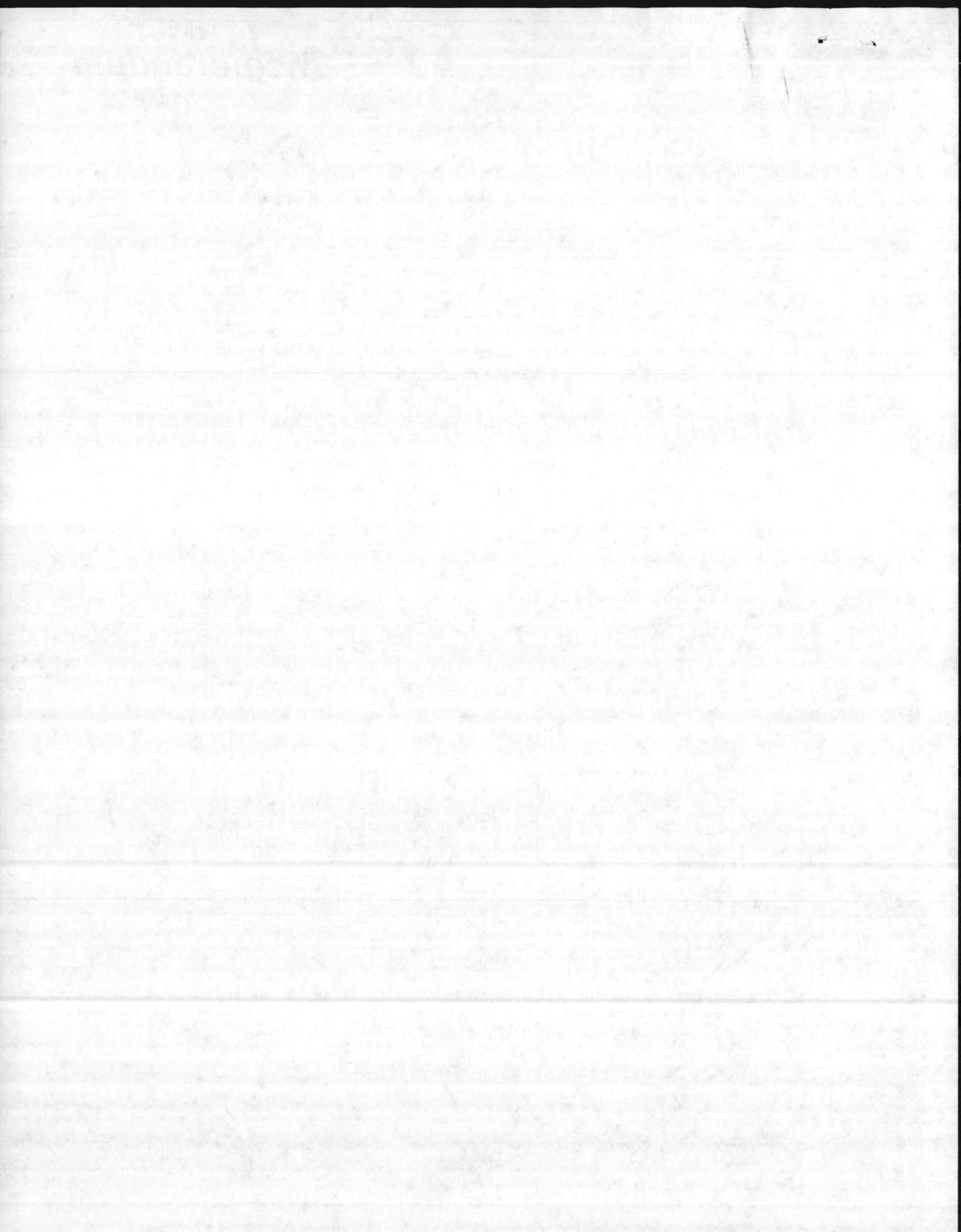
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3. During reference (c), Mrs. Hipp stated DRMO's desire that used oil be analyzed for the properties mentioned above. In the absence of an analysis showing concentration of each, a statement certifying the purity or contamination of used oil will suffice.

4. Used oil analysis in the past has been confusing, to say the least. Some analyses contain extraneous information, while some contain insufficient information. There has been a general lack of consistency from one analysis to another. Analysis for contaminants required by RCRA would be extremely beneficial so that each and every transaction dealing with used oil would be dealt with consistently.

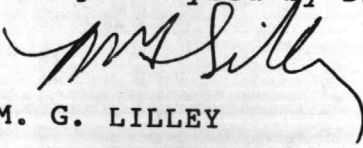
5. Accordingly, it is requested that the following tanks be analyzed so that the appropriate information can be determined:

- a. Tank at Bldg 1700
- b. Underground tank at Bldg 625
- c. Underground tank at Bldg G-650
- d. Above-ground tank at Bldg G-650



Subj: ANALYSIS OF WASTE OIL

- e. Tank at Bldg AS-4151
  - f. Underground tank at Bldg RR-15
  - g. Underground tank at BB-9
  - h. Above-ground tank at BB-9
6. The underground tank at M-625 containing fuel that exceeds the 1000 ppm threshold is being analyzed by DRMO.

  
M. G. LILLEY



11

6240  
NREAD  
3 Nov 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 MANAGEMENT

**Encl:** (1) Daily Inspections of Waste Oil Tanks S-889, S-891,  
S-781, STT-61, STT-62, STT-64, STT-65, AS-419, AS-420,  
and AS-421 for 19-27 Oct 87

1. The daily inspection logs contained in the enclosure have been reviewed with your General Services Section, Roads and Grounds personnel and corrective action is in progress. Recommend addressee monitor progress of corrective action. Point of contact with this matter is Mr. Danny Sharpe, x2083.

JULIAN I. WOOTEN

Copy to:  
AC/S FAC (w/o encls)

5118  
WASA  
13 May 57

Special Director, Bureau of Reclamation and Environmental Affairs  
1111 G Street, N.W., Washington, D.C. 20540  
Dear Sir:

Enclosed for your information are two copies of the report  
dated 11-15-56, titled "Water Quality in the Potomac River  
and 28-421 for 11-15-56".

The report is a preliminary report and is not intended to  
be a final report. It is intended to provide you with  
information on the water quality in the Potomac River  
and to provide you with information on the water quality  
in the Potomac River. The report is intended to provide  
you with information on the water quality in the Potomac  
River and to provide you with information on the water  
quality in the Potomac River.

Very truly yours,  
William J. Woodrow

WASA  
13 May 57



Ⓟ

6240  
NREAD  
3 Nov 87

**From: Commanding General, Marine Corps Base, Camp Lejeune**  
**To: Distribution List**

**Subj: WASTE OIL MANAGEMENT**

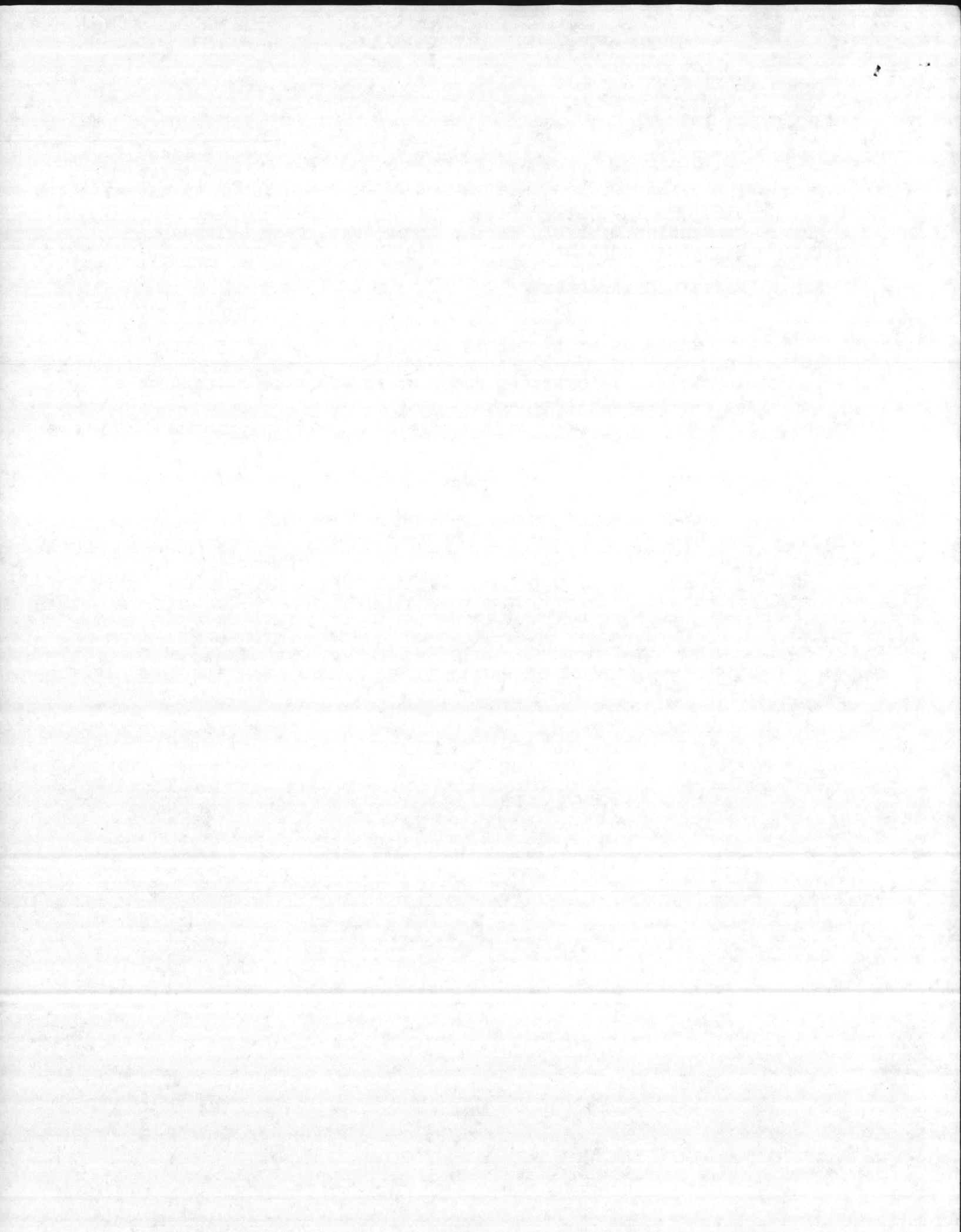
**Encl: (1) Inventory of Contents of Central Waste Oil Storage  
Tanks as of 28 Oct 87**

1. The enclosure is provided for your information and use as a waste oil management tool.

2. Point of contact is Mr. Tom Barbee, extension 2083.

**JULIAN I. WOOTEN**  
By direction

Copy to:  
DRMO  
BMO  
FAC



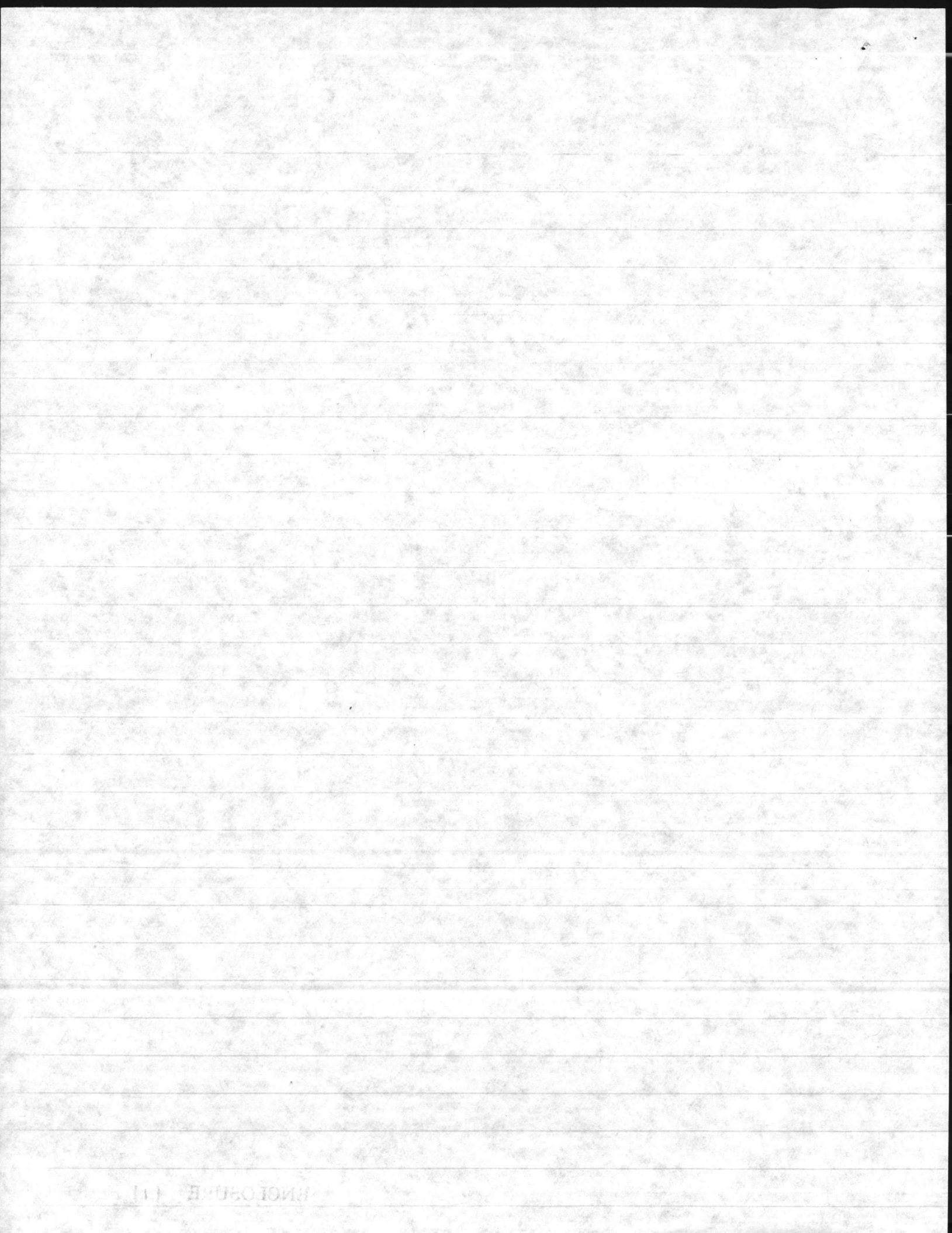
INVENTORY OF CONTENTS OF CENTRAL WASTE OIL STORAGE TANKS  
AS OF 28 OCT 1987 \*

STORAGE LOCATION	QUANTITY ON HAND, IN GALLONS		
	WASTE OIL	HAZARDOUS WASTE OIL	SLUDGE
S-781 (Bldg. 45)			5,750 *
AS-419		22,202	
AS-420		19,697	
AS-421		13,776	
STT-61		18,783	
STT-62		19,898	
STT-63	3,670		
STT-64		18,025	
STT-65		15,758	
STT-66 **	14,223		
S-888	7,257		
S-889		14,279	
S-890	16,313		
S-891		23,010	
TOTALS	41,463	165,428	5,750

\* Based on measurements and calculations by Mr. Tom Barber and Mr. Manuel Martin, NREAD. Work sheet is attached. Formula from BASIC TRADE MATHEMATICS.

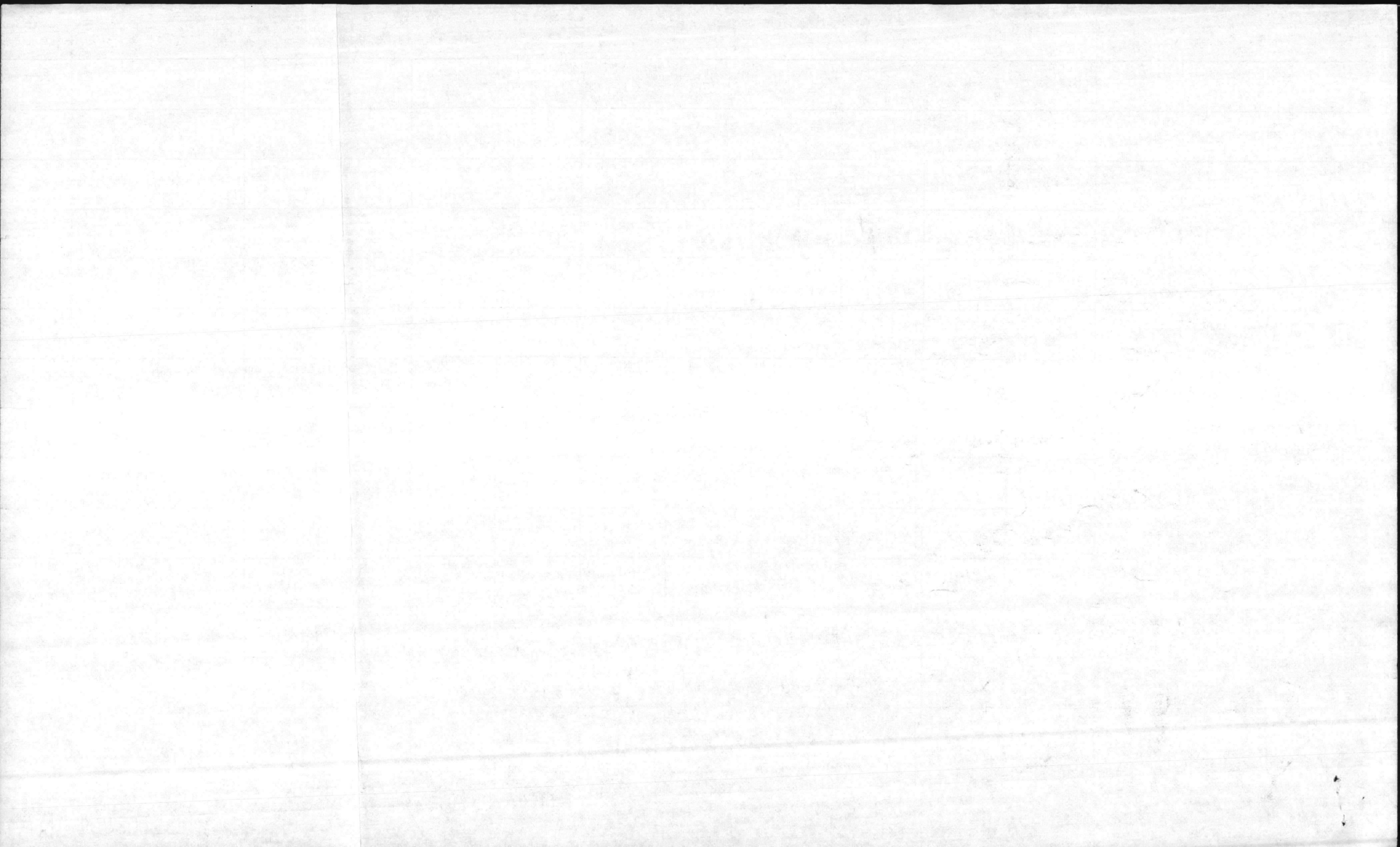
\*\* Tank currently being used for storage of current pickups from generation sites.





UNIVERSITY OF TORONTO

STORAGE LOCATION	DATA FROM PLANS OR TANKS				MEASUREMENTS BY MARTIN AND BARBEE 28 OCT 1987				COMPUTED GALLONS INSIDE	INCHES SLUDGE IN TANK	COMPUTED GALLONS OF SLUDGE	COMPUTED CAPACITY OF TANK GALLONS
	CIRCUMFERENCE FT-INCHES	DIAMETER FT-IN	HEIGHT OR LENGTH FT-IN	CAPACITY IN GALLONS	CIRCUMFERENCE FT-IN	DIAMETER FT-IN	HEIGHT OR LENGTH FT-IN	DEPTH OF LIQUID IN TANK FT-IN (IN.)				
S-7819	120'-0"	38'-0"	29'-3"	(248,113 MAX CALCULATED) 200,000 (STATED ON PLAN)	120'-4"	38'-3"	29'-3"	0'-8"	5,750	08.5"	5,750	252,119
AS 419	} PLANS NOT SEEN				47'-5"	15'-3"	18'-0"	16'-3"	22,202	0	0	24,593
AS 420					47'-5"	15'-3"	18'-0"	14'-5"	19,697	0	0	24,593
AS 421					47'-5"	15'-3"	18'-0"	10'-1"	13,776	0	0	24,593
STT-61	} PLANS NOT SEEN			(PLAQUE ON TANK) 30,000	28'-4"	9-0	63-0	(65)	18,783	0	0	29,979
STT-62				30,000	28'-4"	9-0	63-0	(68.5)	19,898	0	0	29,979
STT-63				30,000	28'-4"	9-0	63-0	(19.5)	3,670	0	0	29,979
STT-64				30,000	28'-4"	9-0	63-0	(63)	18,025	0	0	29,979
STT-65				30,000	28'-4"	9-0	63-0	(56)	15,758	0	0	29,979
STT-66				30,000	28'-4"	9-0	63-0	(52)	14,223	0	0	29,979
S-888	-	8- $\frac{1}{2}$	50-1 $\frac{1}{4}$	17,585	25-3	8- $\frac{1}{2}$	47-4	(39)	7,257	0	0	17,975
S-889	-	8- $\frac{1}{2}$	50-1 $\frac{1}{4}$	17,585	25-3	8- $\frac{1}{2}$	47-4	(68)	14,279	0	0	17,975
S-890	-	8- $\frac{1}{2}$	50-1 $\frac{1}{4}$	17,585	25-3	8- $\frac{1}{2}$	47-4	(78)	16,313	0	0	17,975
S-891	-	9- $\frac{1}{2}$	64-8	30,000	28-9 $\frac{1}{2}$	9-2	60-4	(75.5)	23,010	$\frac{1}{4}$	-	29,783







UNITED STATES MARINE CORPS  
MARINE CORPS BASE  
CAMP LEJEUNE, NORTH CAROLINA 28542

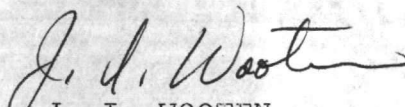
IN REPLY REFER TO  
11090  
NREAD  
6 Nov 87

From: Commanding General, Marine Corps Base, Camp Lejeune  
To: Distribution List

Subj: WASTE OIL MANAGEMENT

Encl: (1) NC Dept of Human Resources ltr of 3 Nov 87

1. The enclosure is provided for your information and action as appropriate.

  
J. I. WOOTEN  
By direction

DISTRIBUTION

CO MCAS NR  
AC/S FAC  
BMO

U.S. DEPARTMENT OF JUSTICE  
FEDERAL BUREAU OF INVESTIGATION  
WASHINGTON, D. C. 20535

11090  
NREAD  
6 Nov 87

From: Commanding General, Marine Corps Base, Camp Lejeune  
To: Distribution List

Subj: WASTE OIL MANAGEMENT

Encl: (1) NC Dept of Human Resources ltr of 3 Nov 87

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J. I. WOOTEN  
By direction

DISTRIBUTION

CD NCAS NR  
AC/S PAC  
BNO





11090  
NREAD  
6 Nov 87

From: Commanding General, Marine Corps Base, Camp Lejeune  
To: Distribution List

Subj: WASTE OIL MANAGEMENT

Encl: (1) NC Dept of Human Resources ltr of 3 Nov 87

1. The enclosure is provided for your information and action as appropriate.

J. L. WOOLLEN  
By direction

DISTRIBUTION

CO MCAS NR  
AC/S FAC  
BNO









North Carolina Department of Human Resources  
Eastern Regional Office • 404 Saint Andrews Drive • Greenville, N. C. 27834

James G. Martin, Governor

David T. Flaherty, Secretary

November 3, 1987

Commander General  
Marine Corp Base  
Camp Lejeune, NC 28542

ATT: Director NREAD

Dear Sir:

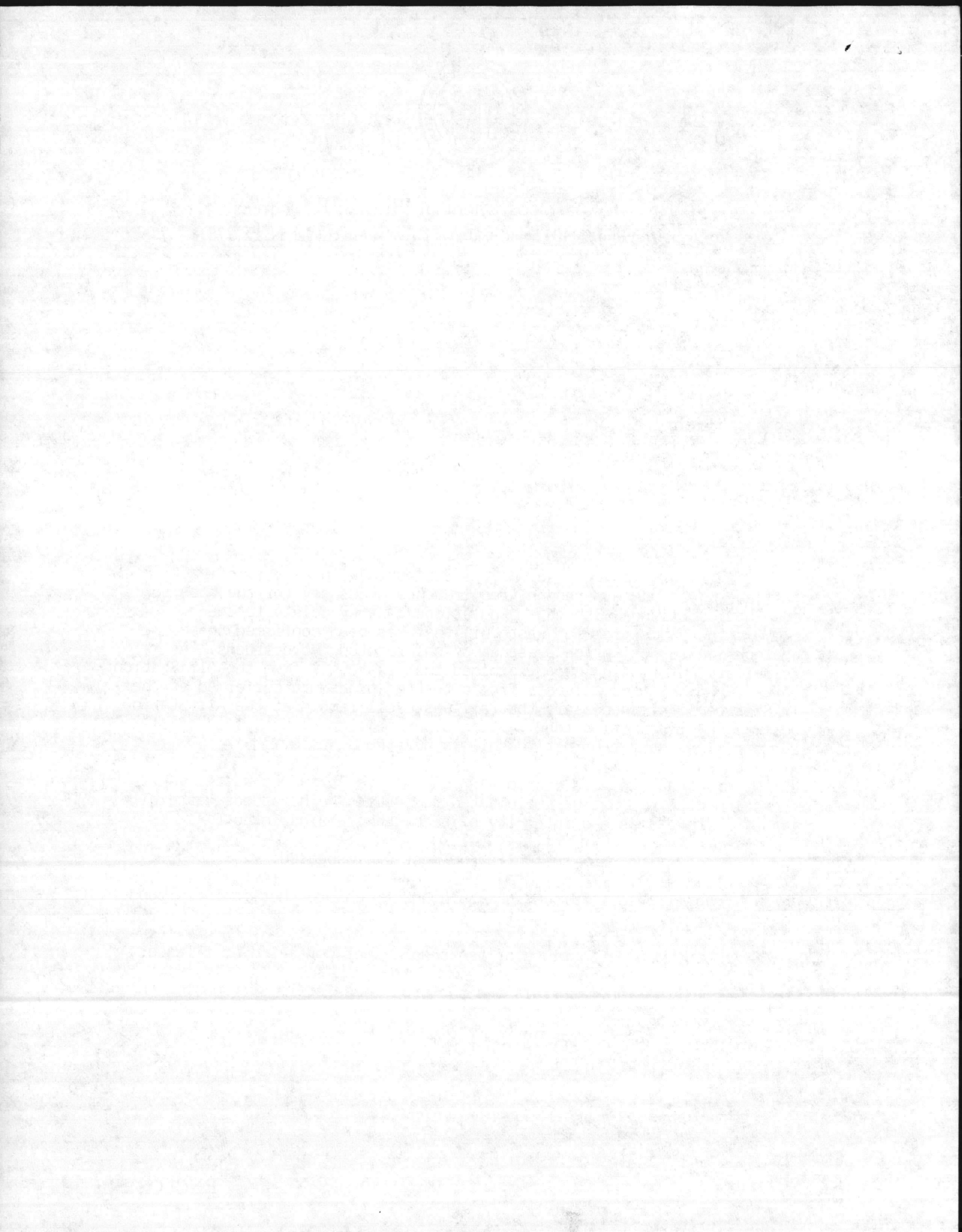
On a recent visit to your facility, I discussed with members of NREAD staff and maintenance personnel requirements necessary for the base to come into compliance with tank regulations as they relate to the accumulation and storage of waste oil that has been confirmed to be hazardous waste due to the presence of chlorinated hydrocarbons. As preliminary information has determined that waste oil from the Air Station contained chlorinated solvents from a testing procedure performed at the Air Station, it is necessary that all waste oil remain at the Air Station facility until such time that testing of each batch or tank load of oil can determine whether or not the oil is hazardous waste.

For the oil that has been tested and found to be hazardous waste, an inspection program must be implemented to ensure the hazardous waste oil remains in the tanks and integrity of each tank remains intact.

Once each operating day, the following must be inspected:

1. overfill/spill/discharge equipment to ensure that it is in good working order;
2. above ground portions of tanks to detect corrosion or release;
3. construction materials and the area immediately surrounding the tanks including dikes to detect erosion or signs of releases; and
4. the level of waste in the tank.

ENCLOSURE (1)



Page 2  
November 3, 1987

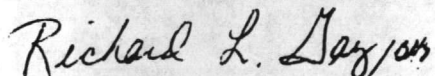
An exception can be made to #4 if the discharge/fill valves are locked to ensure that no waste is added to or removed from any hazardous waste tank unless a person trained in hazardous management is present. The keys should remain with trained individuals in order to meet this requirement.

Any person making inspections should be properly trained according to 40CFR 265.16.

The above requirements should be followed until such time as all hazardous waste is removed from the tanks and the tanks are closed. The inspection records should be retained for a period of at least 3 years.

If you have questions regarding the storage of hazardous waste oil in tanks, please call on me.

Sincerely,

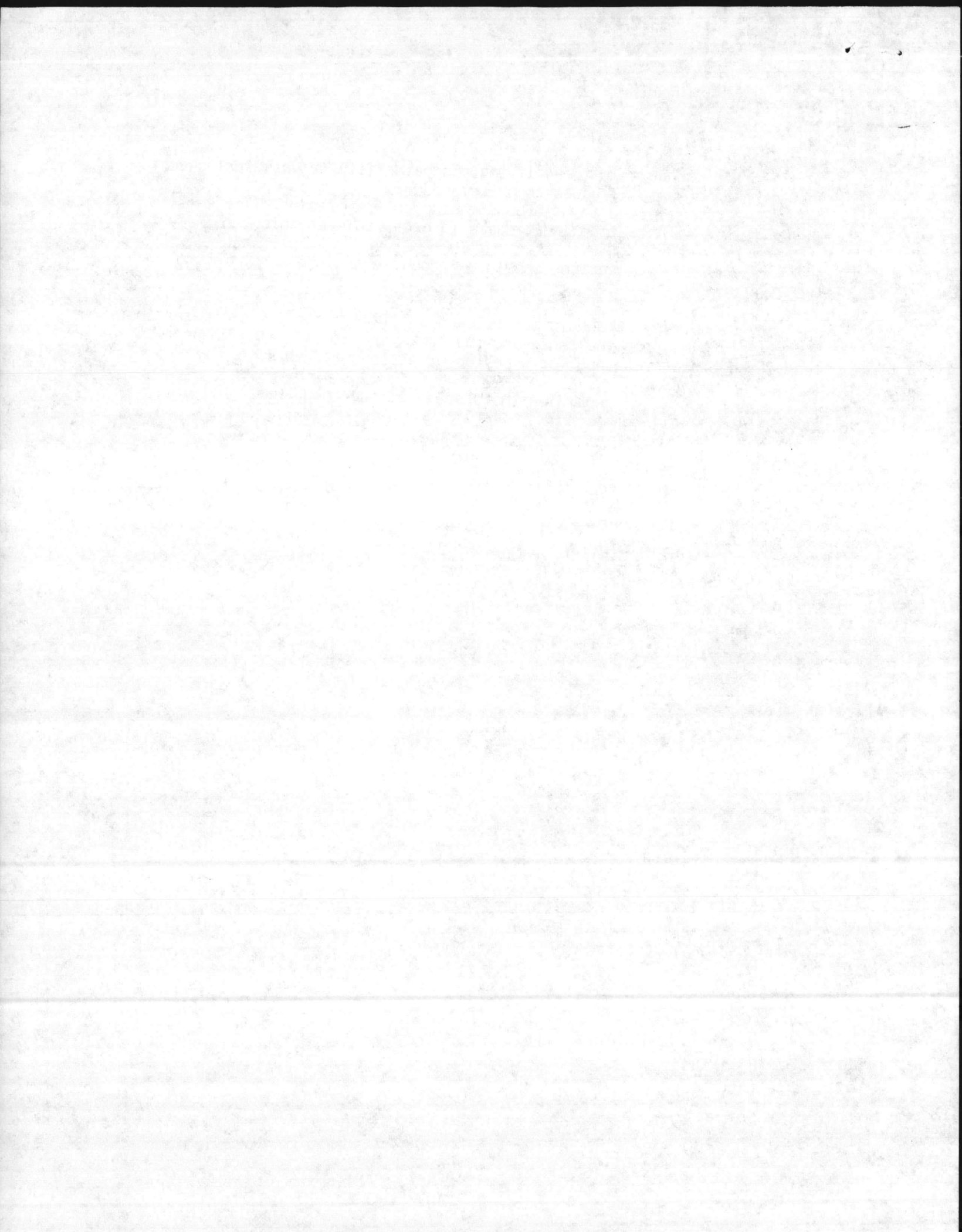


Richard L. Gay  
Waste Management Specialist  
Solid and Hazardous Waste Management Branch

sle

cc: Doug Holyfield  
Dave Ellison





*File - Hg Worth*



North Carolina Department of Human Resources

Eastern Regional Office • 404 Saint Andrews Drive • Greenville, N. C. 27834

James G. Martin, Governor

David T. Flaherty, Secretary

November 3, 1987

Commander General  
Marine Corp Base  
Camp Lejeune, NC 28542

ATT: Director NREAD

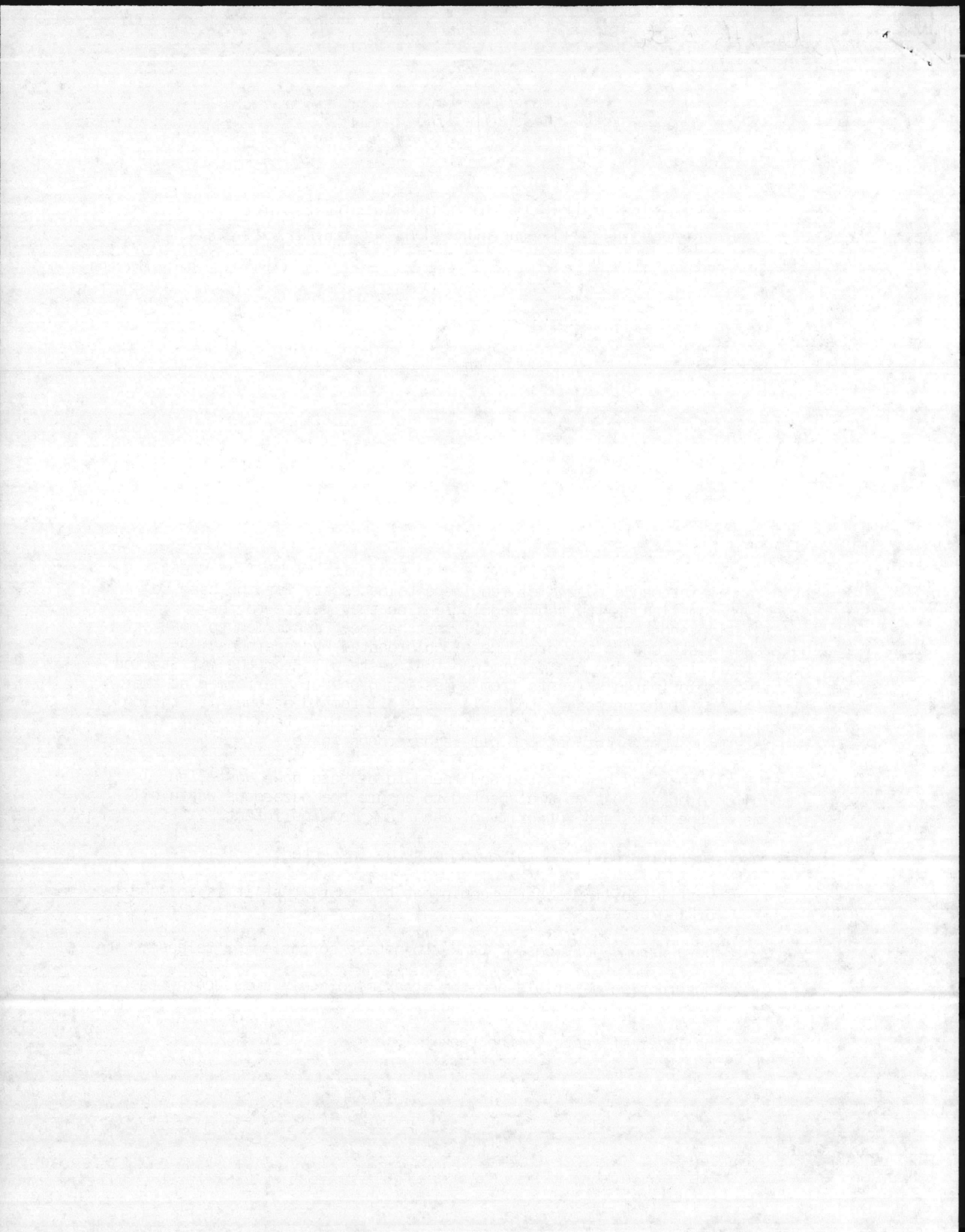
Dear Sir:

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3. construction materials and the area immediately surrounding the tanks including dikes to detect erosion or signs of releases; and
4. the level of waste in the tank.





Page 2  
November 3, 1987

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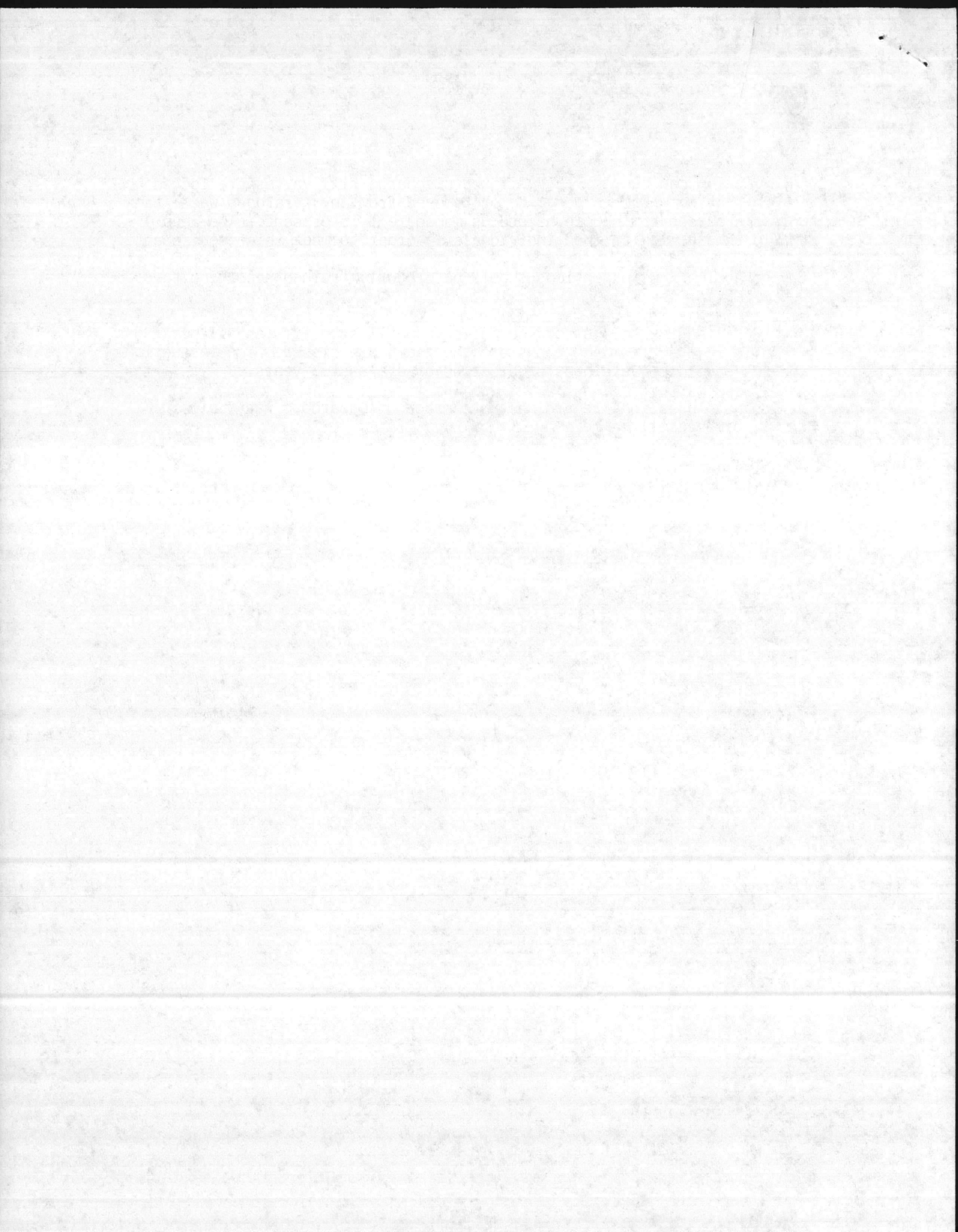
Sincerely,

*Richard L. Gay/043*

Richard L. Gay  
Waste Management Specialist  
Solid and Hazardous Waste Management Branch

sle

cc: Doug Holyfield  
Dave Ellison



*filed*  
Dany *DPS*  
Col *Ball* advised 30 Oct he was reviewing test request and instructions  
Dany Ball or k. *filed*

6280  
MAIN

2 Nov 87

Transportation General Foreman  
Property Management Section

WASTE OIL

1. Tank STT-66 is at maximum capacity. It is requested that this tank be sampled, analysis conducted, and disposed of immediately due to the limited storage capacity available.

DONALD GURGANUS

Blind Copy to:  
→ DirNREA  
BMO  
DirM&R  
GrdStruGenFore



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D. J. ...  
W. J. ...  
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6280  
NREAD  
30 Oct 87

From: Director, Natural Resources and Environmental Affairs  
Division, Marine Corps Base, Camp Lejeune  
To: Assistant Chief of Staff, Facilities, Marine Corps Base,  
Camp Lejeune

Subj: MCAS NEW RIVER REQUEST FOR ANALYSIS

Ref: (a) Mtg btwn AC/S FAC and Dir, NREAD on 28 Oct 87

Encl: (1) CO MCAS NR memo 6280 GSO of 23 Oct 87

1. In accordance with the reference, the enclosure is provided for funding guidance.
2. Air Station personnel have advised the dumping apparently was by military personnel. The manhole was a concrete structure removed from the ground and left by the contractor. The dumping apparently occurred later. Air Station personnel are continuing to look into the matter.
3. NREAD is planning to go ahead with sampling but will not address funding source until guidance is received from the Assistant Chief of Staff, Facilities.

JULIAN I. WOOTEN



20-501-11  
-11231  
8230

For Assistant Chief of Staff, Garrison, Kansas Corps Area  
Division, Marine Corps Base, Camp Lejeune  
This message, which is being sent to you by

Special Agent in Charge, Kansas City, Missouri  
has been received from the Office of the

Assistant Chief of Staff, Garrison, Kansas Corps Area  
and is being forwarded to you for your information.

The subject of this message is the proposed  
transfer of the 1st Battalion, 1st Marine  
Division, Marine Corps Base, Camp Lejeune  
to the 1st Marine Division, Marine Corps Base,  
Camp Lejeune.

The proposed transfer is being made as a  
result of the reorganization of the 1st  
Marine Division, Marine Corps Base, Camp  
Lejeune.

Very truly yours,  
L. J. WOODS





**UNITED STATES MARINE CORPS**

**MARINE CORPS AIR STATION  
NEW RIVER, JACKSONVILLE  
NORTH CAROLINA 28545-5001**

IN REPLY REFER TO  
6280  
GSO

23 October 1987

**From:** Commanding Officer, Marine Corps Air Station, New River  
**To:** Commanding General, Marine Corps Base, Camp Lejeune, North Carolina 28542  
(Attn: Director, Natural Resources & Environmental Affairs)

**Subj:** REQUEST FOR ANALYSIS

1. It is requested that samples be taken and analysis provided for the following containers:

a. One 55-gallon drum located at Naval Air Maintenance Training Detachment 1047, building AS-222. It is believed to contain epoxy primers, methyl ethyl ketone, methyl isobutyl ketone, toluene, freon, and other petroleums, oils and lubricants (POL's).

b. Thirteen 55-gallon drums located adjacent to the aircraft washrack, AS-505. These drums are filled with a mixture of rainwater, POL's, and fluorescent penetrant that was pumped out of a manhole abandoned by a contractor. A composite sample can be made from all drums. A work request has been submitted to remove the emptied manhole.

2. Point of contact at this Command is Mary Wheat, extensions 6506 or 6518.

A handwritten signature in cursive script, appearing to read "M. W. Bolish", is written above the typed name.

M. W. BOLISH  
By direction

ENCLOSURE ( )

ENCLOSURE (1)

6241/2  
NREAD  
30 Oct 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 TANKS AT STT-64 AND STT-65

Ref: (a) BMAIN Memo 6280 Main of 26 Oct 87  
(b) PHONECON btwn Ms. N. Hipp of DRMO and Ms. E. Betz of  
NREAD on 27 Oct 87  
(c) Dir, NREAD ltr 6241/2 NREAD of 19 Oct 87

1. The action requested in reference (a) is no longer needed per reference (b). During reference (b), when advised that the analysis provided in reference (c) on the subject tanks classified them as Hazardous Waste Fuel, Ms. Hipp stated no further analysis would be necessary. BMO should submit a Form 1348-1 to DRMO as soon as possible.

2. The analysis provided in reference (c) showed the contents of STT-66 to be off-specification used oil at the time of sampling. STT-66 will require further testing when it is full to determine if the contents are still an off-specification used oil or if it has become hazardous waste fuel. Addressee is requested to advise immediately when STT-66 is filled.

J. I. WOOTEN

Copy to:  
DRMO  
AC/S, FAC

*DDJ*  
*Supply*  
*fuel.*



024114  
024114  
30 024 87

FROM: Director, Naval Facilities and Environmental Affairs  
Division, Marine Corps Base, Camp Lejeune  
TO: Base Maintenance Officer, Marine Corps Base, Camp Lejeune

SUBJECT: ALL TANKS AT 317-01 AND 317-02

Re: (a) Initial report dated 28 Oct 87 from the  
and (b) PROBLEM dated 28 Oct 87 from the  
dated 27 Oct 87  
(c) DTIC report 144 624114 dated 19 Oct 87

1. Two action requests in reference (a) are in longer needed per  
reference (b). During reference (b) when advised that the analysis  
provided in reference (c) of the subject tanks classified them as  
hazardous waste fuel. This has led to further analysis which  
is necessary. EMO should submit a Form 1348-1 to DPMO as soon as  
possible.

2. The analysis provided in reference (c) showed the contents of  
the tanks to be off-specification hazardous at the time of sampling.  
DTIC will require further testing which is left to determination  
if the contents are still an off-specification used oil or if they  
have become hazardous waste fuel. Analysis is requested to advise  
immediately when DTIC is notified.

11-1-80

Copy for  
DPMO  
BAC

*Danny DDS*

# Memorandum

6280  
MAIN

DATE: 26 OCT 1987

FROM: Base Maintenance Officer

TO: Director, Natural Resources and Environmental Affairs Division

SUBJ: WASTE OIL TANKS AT STT-64 AND STT-65

Ref: (a) BMain HMDO memo of 19 Oct 87  
(b) Dir NREAD ltr 6241/2 dated 19 Oct 87

*File*

1. The action originally requested in reference (a) is still needed. DRMO advises the analysis for the two subject tanks must be conducted after they are secured. Therefore, the analysis conducted in September is not valid for disposal purposes.

2. Accordingly, please provide an appropriate certifiable analysis so that disposal action can be initiated promptly. POC is our HMDO, Dave Bullock, X5300.

*C. G. Powell*  
C. G. POWELL  
By direction

Copy to:  
DRMO  
Dir, M&R Br  
BMain HMDO

*COPY TO: Elizabeth Betz:*

*Please make personal contact with Ms. Nadine Hipp and verify their specific information needs. Please determine the optimum turn around time for analysis. I recommend considering the shortest available unless funds not available from BMO.*

*D. Sturge*  
26 OCT 87

6288  
MAIL

2 OCT 1987

*Handwritten:* 252

Best Maintenance Officer  
Director, National Resources and Environmental Affairs Division

WASTE OIL TANKS AT 871-25 AND 871-25

(a) E-mail BMDG memo of 13 Oct 87  
(b) Dir MRPD for 82A12 WREOD of 13 Oct 87

The action originally requested in reference (a) is still needed. BMDG advise the analysis for the two subject tanks must be conducted after the tanks are secured. Therefore, the analysis conducted in Reference is not valid for disposal purposes.

Accordingly, please provide an appropriate certificate of analysis so that disposal action can be initiated promptly. For your BMDG, Dave Bullock, K232.

C. D. FOWLER  
By Signature

Copy for:  
BMDG  
Dir, MRPD

*Handwritten:* Copy to: Checklist, Bets

Please note personal contact with  
Mr. Markie Hupp and verify their specific  
information needs. Please determine the optimum  
time to advise them for analysis. A summary  
will be provided to the BMDG.

*Handwritten:* D. Hupp  
26 OCT 87



*Danny DDS*

# Memorandum

6280  
MAIN

DATE: 26 OCT 1987

FROM: Base Maintenance Officer

TO: Director, Natural Resources and Environmental Affairs Division

SUBJ: WASTE OIL TANKS AT STT-64 AND STT-65

Ref: (a) BMain HMDO memo of 19 Oct 87  
(b) Dir NREAD ltr 6241/2 NREAD of 19 Oct 87

1. The action originally requested in reference (a) is still needed. DRMO advises the analysis for the two subject tanks must be conducted after the tanks are secured. Therefore, the analysis conducted in September is not valid for disposal purposes.

2. Accordingly, please provide an appropriate certifiable analysis so that disposal action can be initiated promptly. POC is our HMDO, Dave Bullock, X5300.

*C. G. Powell*  
C. G. POWELL  
By direction

Copy to:  
DRMO  
Dir, M&R Br  
BMain HMDO

*COPY TO: Elizabeth Betz:*

*Please make personal contact with Ms. Nadine Hipp and verify their specific information needs. Please determine the optimum turn around time for analysis. I recommend considering the shortest available unless funds not available from BMO.*

*D. Sturge*  
26 OCT 87

5288  
MIAM

3 OCT 1987

Base Maintenance Officer

Director, Naval Resources and Environmental Affairs Division

WASTE OIL TANKS AT ST-33 AND ST-32

RE: (a) BIRMINGHAM memo of 13 Oct 87  
(b) DIX HEADIER 124 02412 WRECK of 13 Oct 87

1. The action originally reported in reference (a) is still needed. DIRM advise the analysis for the two subject tanks must be conducted after the tanks are sound. Therefore, the analysis conducted in September is not valid for disposal purposes.

2. Accordingly, you provide an appropriate certificate analysis so that disposal action can be initiated. This is our UMDO, Dave Ballou, X224.

C. G. POWELL  
BY direction

Copy to:  
DIRM  
DIX, HBR 2X

COPY TO: Everett Potts

Please take please contact with  
Mr. Robert Hoff and verify their specific  
information needs. Please determine the optimum  
time and date for analysis. I recommend  
the use of the most complete analysis possible  
available from BMD.

D. K. Hopper  
25 OCT 87

6240  
NREAD  
26 Oct 87

From: Director, Natural Resources and Environmental Affairs  
Division, Marine Corps Base, Camp Lejeune  
To: Assistant Chief of Staff, Facilities, Marine Corps Base,  
Camp Lejeune

Subj: DISPOSAL OF WASTE OIL

Ref: (a) CG, MCB ltr 6280/2 FAC of 2 Oct 87

Encl: (1) Log of NREAD Waste Oil Management Activity

1. The enclosure is provided per the reference.

J. I. WOOTEN

*gls*  
*Encl. Sent*  
*AS*  
*Supply*



Page 2  
of 3

Director, National Institute of Environmental Health  
Division, National Center for Environmental Health  
for assistance in the development of a  
State Report

and to provide comments on

the report to the Director

and to the Director of the Agency

The enclosed report is for the Director

Very truly yours,  
John F. Kennedy

*Handwritten notes:*  
1/24/64  
1/24/64

WASTE OIL MANAGEMENT ACTIVITY LOG

19 Oct 1987

1. Waste Conversion, Incorporated pumped 5,000 gallons of hazardous waste oil from tank S-781 at Building 45.
2. The Environmental Chemistry and Microbiology Section sampled seven individual waste oil tanks at MAG 26, MCAS, New River.
3. NREAD began daily inspections of waste oil tanks used by Base Maintenance Officer for central storage of waste oil contaminated by halogens. Numerous problems with leaking piping and valves have been identified. Base Safety Office is assisting with preliminary evaluation of the facilities to include insulation and possible asbestos problems. Many of the discrepancies have been brought to the attention of Mr. L. D. Shepard. A thorough review of each facility with a Roads and Grounds Foreman is scheduled for the week of 26 October 1987. The findings of inspection to date, will be formally forwarded in writing to the Base Maintenance Officer.
4. Analysis of STT-64, STT-65 and STT-66 were sent to BMO and DRMO. STT-64 and STT-65 contained over 1000 ppm TOX. BMO advised that STT-64 and STT-65 were filled.

20 Oct 1987

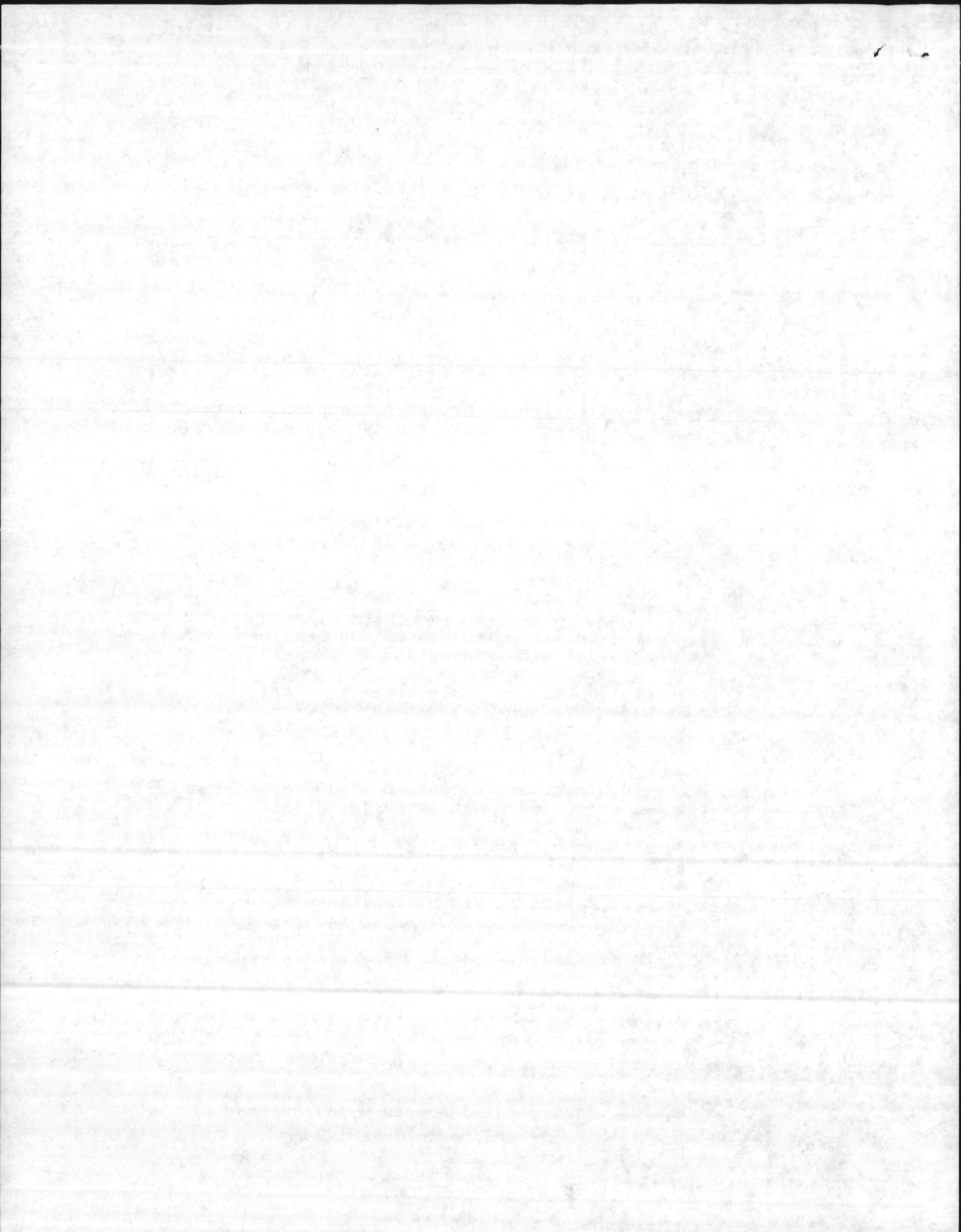
1. Waste Conversion, Incorporated pumped 5300 gallons of hazardous waste oil from tank S-781 at Building 45.
2. The Environmental Chemistry and Microbiology Section sampled seven individual waste oil tanks at MAG 29, MCAS, New River.

21 Oct 1987

1. Waste Conversion, Incorporated pumped 15,450 gallons of hazardous waste oil from tank S-781 at Building 45.
2. Auburn University pumped 6500 gallons of used oil from tank STT-63 at Tarawa Terrace.
3. The Environmental Chemistry and Microbiology Section sampled the remaining individual waste oil tanks at MAG 29, MCAS, New River.
4. Tom Barbee, Environmental Control Specialist, experimented with the test kits for the determination of Chlorine in used oil, on some of the tanks previously analyzed by JTC Environmental Consultants, Incorporated. The correlation of data appears very promising.

22 Oct 1987

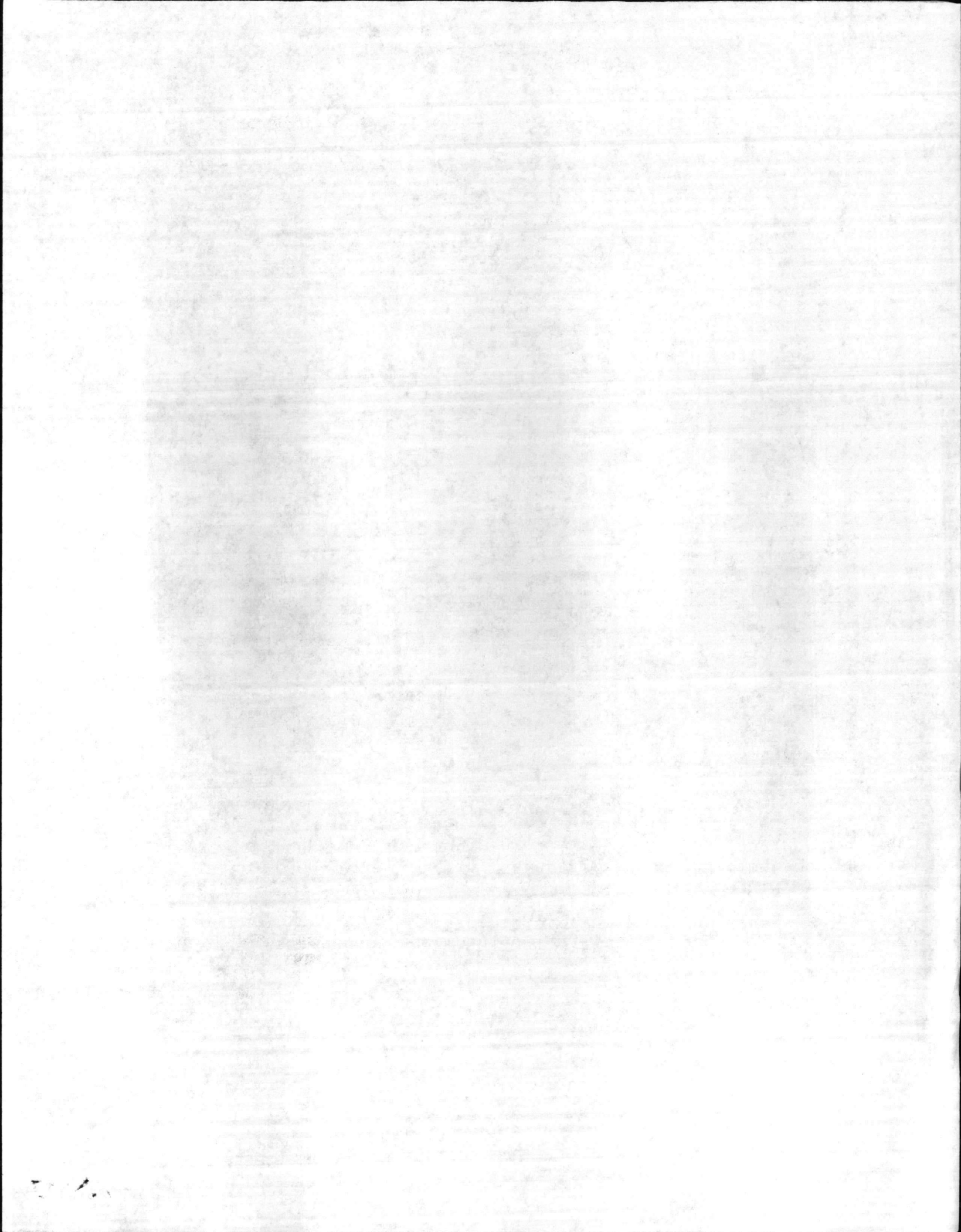
1. Waste Conversion, Incorporated pumped 8,187 gallons of hazardous waste oil from tank S-781 at Building 45.





23 Oct 1987

1. Waste Conversion, Incorporated pumped 10,200 gallons of hazardous waste oil from tank S-781 at Building 45, and 8,950 gallons from tank AS-421 at MCAS, New River.
2. Tank S-781 is empty, except for the sludge residues at the bottom.
3. Glenee Smith, NREAD, accompanied Tex Ritter, Base Safety on a safety inspection of the waste oil storage tank facilities located at Holcomb Boulevard, Tarawa Terrace, and MCAS, New River.
4. Tom Barbee and Manuel Martin, NREAD, measured the dimensions and depths of the waste oil tanks at Holcomb Boulevard and MCAS.
5. TOX test kits were received by Inspector's Office.



6240  
NREAD  
26 Oct 87

From: Director, Natural Resources and Environmental Affairs  
Division, Marine Corps Base, Camp Lejeune  
To: Base Maintenance Officer, Marine Corps Base, Camp Lejeune  
Subj: DAILY INSPECTIONS OF HAZARDOUS WASTE TANKS AT MARINE CORPS  
AIR STATION, NEW RIVER

*JWS*  
*July 80*

1. On 19 October, 1987 personnel from NREAD began performing daily inspections of three oil tanks located at the New River Air Station. These are labelled AS-419, AS-420, AS-421. These tanks contain hazardous waste (HW).

2. The following discrepancies have been identified regarding the pump house and related piping:

a. Several yards in front of the oil tanks to the left is a pump house. Inside the pump house are pipes covered with a white powdered layer. This layer should be tested for asbestos and appropriate action taken.

b. There is a hose connected to a pipe from each tank. Although the hose has been plugged, it continues to leak, causing the soil underneath to be contaminated. Certain areas in front and back of the pump house have also been contaminated. There is a nearby drain approximately 4 to 5 feet from the end of the hose.

3. The following discrepancies on tank AS-419 have been identified:

a. The soil around the footing is contaminated.

b. There is an open top container containing waste oil, approximately 5 gallons.

c. There is oil spill residues under the valves in the back.

d. The tank has been mislabelled with "JP-5". These words should be removed and replaced with "Hazardous Waste", and "Waste Petroleum Oil".

4. The following discrepancies have been identified with tank AS-420:

a. There are spill residues in front of the tank and under a leaking 2" gate valve has been contaminated.

b. There is an open top container containing waste oil.

c. There are several open pipes which require securing.

d. A small area of soil in the back of the tank contains oil spill residues.



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6240  
NREAD  
26 Oct 87

Subj: DAILY INSPECTIONS OF HAZARDOUS WASTE TANKS AT MARINE CORPS  
AIR STATION, NEW RIVER

e. The tank is mislabelled. It should have the correct identification "Hazardous Waste", and "Waste Petroleum Oil".

5. The following discrepancies have been identified with tank AS-421:

a. In the front of the tank, the oil/water drain needs to be pumped out.

b. In the back there is an open 55 gallon drum containing waste oil.

c. Open pipes in the back require securing.

d. Other pipes and fittings in the back are leaking. Waste oil is dripping onto the soil.

e. This tank has also been mislabelled "Used Oil", and should have proper label "Hazardous waste" and "Waste Petroleum Oil".

6. It is recommended that all spill residues be immediately removed and managed as a hazardous waste. Care should be taken to minimize the quantity of soil removed. The spill residues should be placed in DOT approved containers such as salvage drums.

7. Sufficient drip pans should be available to support operations. The contents of drip pans must be emptied daily and placed into the appropriate tank. All drip pans should be managed in a manner that prevents exposure to rain and discharge to the environment.

8. Immediate action to repair to replace leaking fittings and valves is required.

9. Operators must be provided written instructions on how to deal with leaks and spills. Leaks should be promptly reported to the Base Fire Department and action be taken in the emergency mode to contain and clean up spilled materials, regardless of quantity.

10. Point of contact with this matter is Mr. Danny Sharpe, extensions 2083/1690. Please advise in writing of any problems encountered in accomplishing prompt resolutions of the above discrepancies.

J. I. WOOTEN

Copy to:  
AC/S, FAC



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UNITED STATES MARINE CORPS  
MARINE CORPS AIR STATION  
NEW RIVER, JACKSONVILLE  
NORTH CAROLINA 28545-5001

IN REPLY REFER TO:  
6280  
GSO

23 October 1987

From: Commanding Officer, Marine Corps Air Station, New River  
To: Commanding General, Marine Corps Base, Camp Lejeune, North Carolina 28542  
(Attn: Director, Natural Resources & Environmental Affairs)

Subj: REQUEST FOR ANALYSIS

1. It is requested that samples be taken and analysis provided for the following containers:

a. One 55-gallon drum located at Naval Air Maintenance Training Detachment 1047, building AS-222. It is believed to contain epoxy primers, methyl ethyl ketone, methyl isobutyl ketone, toluene, freon, and other petroleums, oils and lubricants (POL's).

b. Thirteen 55-gallon drums located adjacent to the aircraft washrack, AS-505. These drums are filled with a mixture of rainwater, POL's, and fluorescent penetrant that was pumped out of a manhole abandoned by a contractor. A composite sample can be made from all drums. A work request has been submitted to remove the emptied manhole.

2. Point of contact at this Command is Mary Wheat, extensions 6506 or 6518.

*M. W. Bolish*  
M. W. BOLISH  
By direction

The dumping apparently was by marines. The man hole was a concrete structure removed from ground and left by contractor. The dumping apparently occurred later. Barbara Coogler is checking for me. DRS.

UNITED STATES MARINE CORPS  
MARINE CORPS HEADQUARTERS  
WASHINGTON, D. C. 20380  
FORM 100-1 (Rev. 1-1-60)



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**UNITED STATES MARINE CORPS**  
MARINE CORPS AIR STATION  
NEW RIVER, JACKSONVILLE  
NORTH CAROLINA 28545-5001

IN REPLY REFER TO:  
6280  
GSO

23 October 1987

From: Commanding Officer, Marine Corps Air Station, New River  
To: Commanding General, Marine Corps Base, Camp Lejeune, North Carolina 28542  
(Attn: Director, Natural Resources & Environmental Affairs)

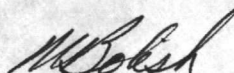
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M. W. BOLISH  
By direction

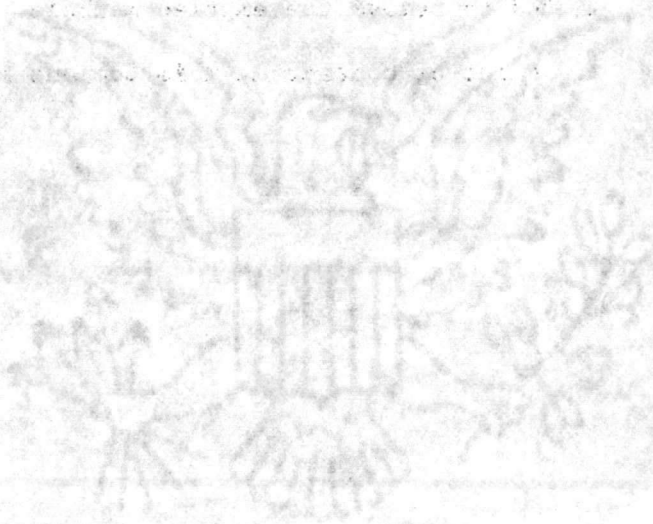


UNITED STATES MARINE CORPS  
MARINE CORPS AIR STATION  
COMMUNICATIONS AND TRANSMISSIONS  
OFFICE



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1943



UNITED STATES MARINE CORPS  
MARINE CORPS AIR STATION  
NEW RIVER, JACKSONVILLE  
NORTH CAROLINA 28545-5001

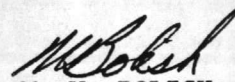
IN REPLY REFER TO:  
6280  
GSO

23 October 1987

From: Commanding Officer, Marine Corps Air Station, New River  
To: Commanding General, Marine Corps Base, Camp Lejeune, North Carolina 28542  
(Attn: Director, Natural Resources & Environmental Affairs)

Subj: REQUEST FOR ANALYSIS

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  - b. Thirteen 55-gallon drums located adjacent to the aircraft washrack, AS-505. These drums are filled with a mixture of rainwater, POL's, and fluorescent penetrant that was pumped out of a manhole abandoned by a contractor. A composite sample can be made from all drums. A work request has been submitted to remove the emptied manhole.
2. Point of contact at this Command is Mary Wheat, extensions 6506 or 6518.

  
M. W. BOLISH  
By direction

ENCLOSURE ( )

ENCLOSURE ( )





UNITED STATES MARINE CORPS

MARINE CORPS AIR STATION  
NEW RIVER, JACKSONVILLE  
NORTH CAROLINA 28545-5001

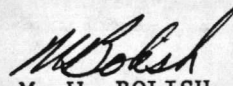
IN REPLY REFER TO  
6280  
GSO

23 October 1987

From: Commanding Officer, Marine Corps Air Station, New River  
To: Commanding General, Marine Corps Base, Camp Lejeune, North Carolina 28542  
(Attn: Director, Natural Resources & Environmental Affairs)

Subj: REQUEST FOR ANALYSIS

1. It is requested that samples be taken and analysis provided for the following containers:
  - a. One 55-gallon drum located at Naval Air Maintenance Training Detachment 1047, building AS-222. It is believed to contain epoxy primers, methyl ethyl ketone, methyl isobutyl ketone, toluene, freon, and other petroleums, oils and lubricants (POL's).
  - b. Thirteen 55-gallon drums located adjacent to the aircraft washrack, AS-505. These drums are filled with a mixture of rainwater, POL's, and fluorescent penetrant that was pumped out of a manhole abandoned by a contractor. A composite sample can be made from all drums. A work request has been submitted to remove the emptied manhole.
2. Point of contact at this Command is Mary Wheat, extensions 6506 or 6518.

  
M. W. BOLISH  
By direction

ENCLOSURE ( )

ENCLOSURE (1)



UNITED STATES MARINE CORPS

MARINE CORPS AIR STATION  
NEW RIVER, JACKSONVILLE  
NORTH CAROLINA 28545-5001

IN REPLY REFER TO:  
6280  
GSO

23 October 1987

From: Commanding Officer, Marine Corps Air Station, New River  
To: Commanding General, Marine Corps Base, Camp Lejeune, North Carolina 28542  
(Attn: Director, Natural Resources & Environmental Affairs)

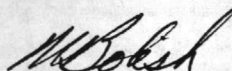
Subj: REQUEST FOR ANALYSIS

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2. Point of contact at this Command is Mary Wheat, extensions 6506 or 6518.

  
M. W. BOLISH  
By direction

ENCLOSURE ( )



ENCLOSURE 11

6241/2  
NREAD  
19 Oct 87

**From:** Director, Natural Resources and Environmental Affairs,  
Marine Corps Base, Camp Lejeune  
**To:** Base Maintenance Officer, Marine Corps Base, Camp Lejeune  
**Subj:** WASTE OIL TANKS; ANALYSIS OF  
**Ref:** (a) CG MCB CLNC ltr 6241/2 of 16 Oct 87  
**Encl:** (1) JTC Environmental Consultants, Inc. Rept. No. 87-444  
Addendum  
(2) BMAIND, HMDO memo of 19 Oct 87  
(3) JTC Environmental Consultants, Inc. Rept. No. 87-441  
(4) JTC Environmental Consultants, Inc. Rept. No. 87-441  
Addendum

1. The following data is forwarded for your information. Enclosure (1) contains the Total Organic Halogen analysis of the third waste oil tank at the Marine Corps Air Station, New River (AS-419). Reference (a) contained the volatile organic chemical analysis on AS-419.

2. In regard to enclosure (2), enclosures (3) and (4) contain analysis of the last three tanks at Tarawa Terrace (STT-64, STT-65 and STT-66). It is recommended that STT-64 and STT-65 tanks be managed as a hazardous waste. Tank STT-66 is currently being filled. Based on the enclosed data, the contents of STT-66 can be managed as off-specification used oil. The volatile organic chemical and metals analysis of these three tanks is still pending and will be forwarded when received. Tank STT-66 will require resampling and testing prior to initiating disposal. Please advise Director, NREAD, when STT-66 is filled.

3. By copy of this memorandum, the Defense Reutilization and Marketing Officer (DRMO) is advised that oil was added to both STT-64 and STT-65 after the samples were taken. Please advise if DRMO requires retesting of these two tanks. POC is Mr. Danny Sharpe, extension 5003.

PETER E. BLACK  
Acting

Copy to:  
DRMO  
AC/S FAC

BCC:  
Lab (2)



[Faint, illegible text covering the majority of the page]

THE END



Addendum

JTC DATA REPORT # 87-444

LABORATORY ANALYSIS ON NAVAL SAMPLES

CONTRACT #N62470-86-C-8754

CASE # 138

PREPARED FOR:

DEPARTMENT OF THE NAVY  
ATLANTIC DIVISION  
NAVAL FACILITIES ENGINEERING COMMAND  
NORFOLK, VIRGINIA 23511-6287

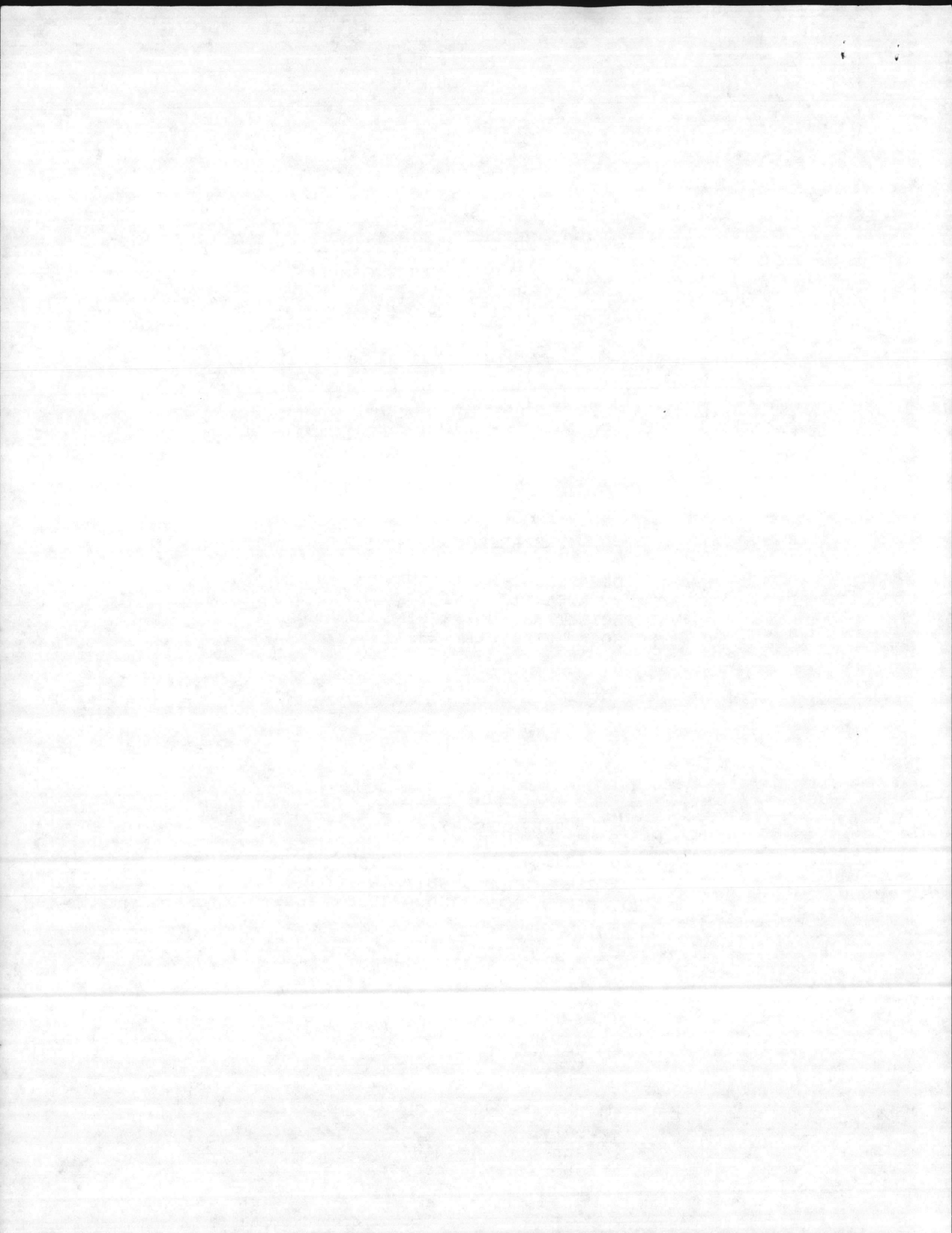
PREPARED BY:

JTC ENVIRONMENTAL CONSULTANTS, INC.  
4 RESEARCH PLACE, SUITE L-10  
ROCKVILLE, MARYLAND 20850

OCTOBER 12, 1987

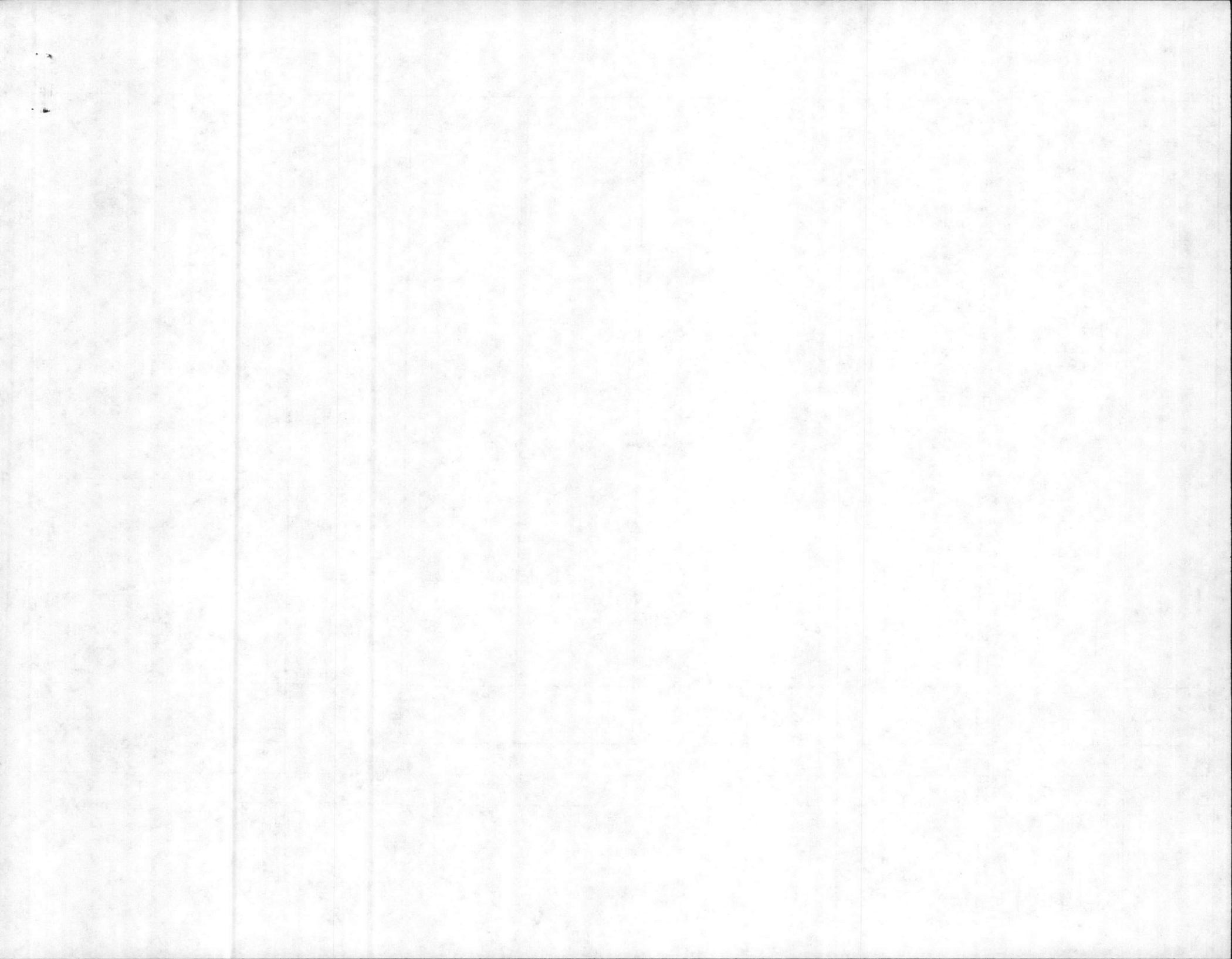
*Ann E Rosecrance*

Ann E. Rosecrance  
Laboratory Director









# Memorandum

DATE: 19 OCT 87

FROM: HMDO, BASE MAINTENANCE DIVISION

TO: HMC, NATURAL RESOURCES

SUBJ: ANALYSIS OF OILS CONTAINED IN TANKS STT-64 AND STT-65

1. It is requested that these two tanks be sampled, analysis conducted, and two copies of the completed analysis be furnished to this office.
2. The appropriate disposal documents will be prepared upon receipt of the completed analysis.
3. Storage space for storage of used oil is very limited at this time, therefore it is requested that this request be expedited.

  
DAVID K. BULLOCK

UNCLASSIFIED

Page 11

THE UNITED STATES OF AMERICA

DEPARTMENT OF JUSTICE

INVESTIGATION OF THE ACTS OF TERRORISM

AND THE ASSASSINATION OF PRESIDENT JOHN F. KENNEDY

IN CONNECTION WITH THE ACTS OF TERRORISM

AND THE ASSASSINATION OF PRESIDENT JOHN F. KENNEDY

*[Handwritten signature]*

1964



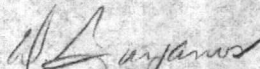
19 October, 1987

Transportation General Foreman

Property Management Section

Waste Oil

Tank #STT-64 and Tank #STT-65 are at maximum capacity. It is requested that these two tanks be Sampled, Analysis conducted, and Disposed of immediately due to the limited storage capacity available.

  
D. Gurganus

Blind Copy To:

✓ Director of NREA

BMO

Director M & R

Ground Structure General Foreman

19 October 1951

Director General

Department of Defense

Dear Sir:

Enclosed for you are two copies of a report on the progress of the work done during the past year. The report is being prepared for the Department of Defense and is being submitted to you for your information and guidance.

Sincerely,  
[Signature]

Very truly yours,  
[Signature]  
Director General  
Department of Defense



Partial Results

JTC DATA REPORT # 87-441

LABORATORY ANALYSIS ON NAVAL SAMPLES

CONTRACT #N62470-86-C-8754

CASE # 136

PREPARED FOR:

DEPARTMENT OF THE NAVY  
ATLANTIC DIVISION  
NAVAL FACILITIES ENGINEERING COMMAND  
NORFOLK, VIRGINIA 23511-6287

PREPARED BY:

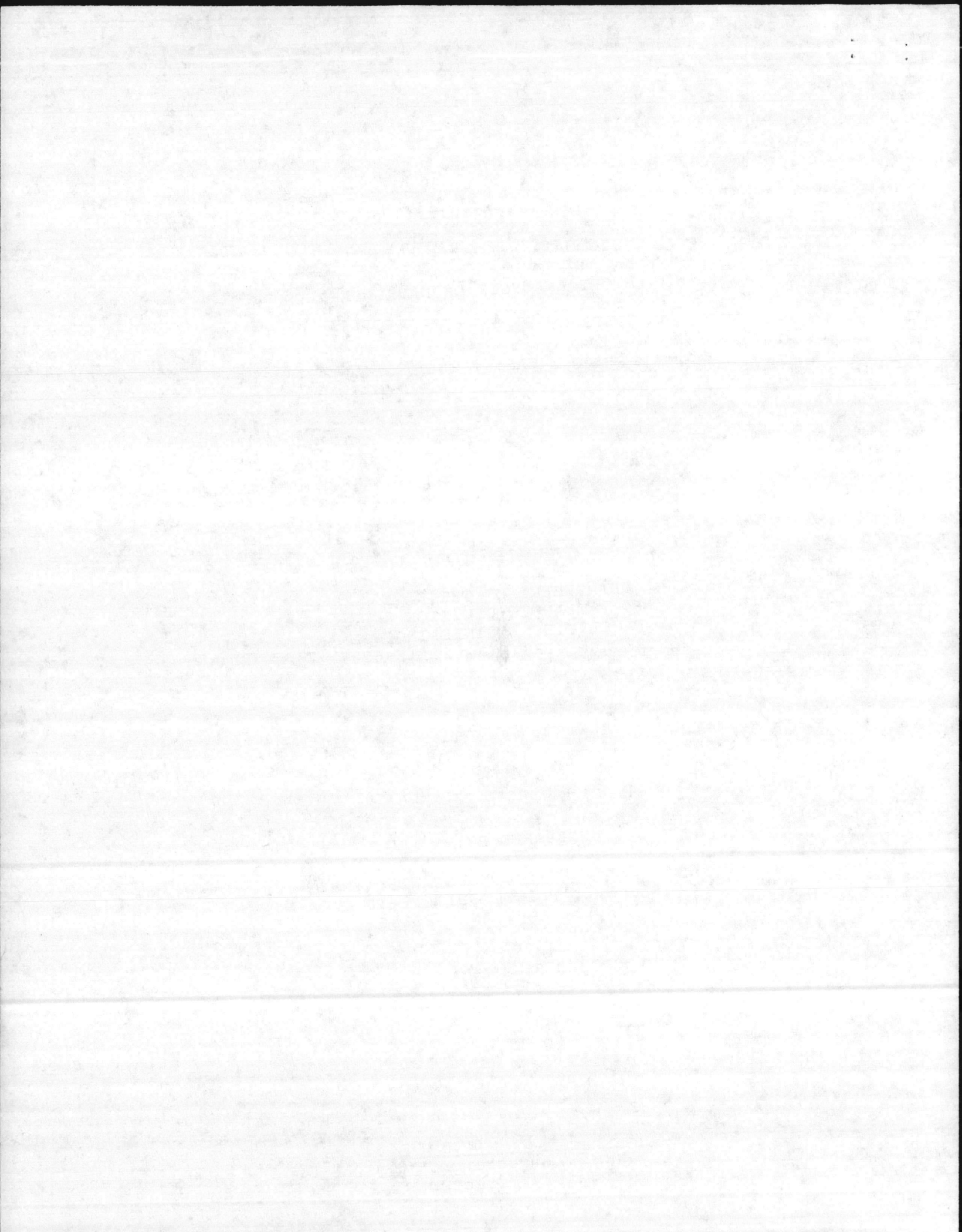
JTC ENVIRONMENTAL CONSULTANTS, INC.  
4 RESEARCH PLACE, SUITE L-10  
ROCKVILLE, MARYLAND 20850

OCTOBER 5, 1987

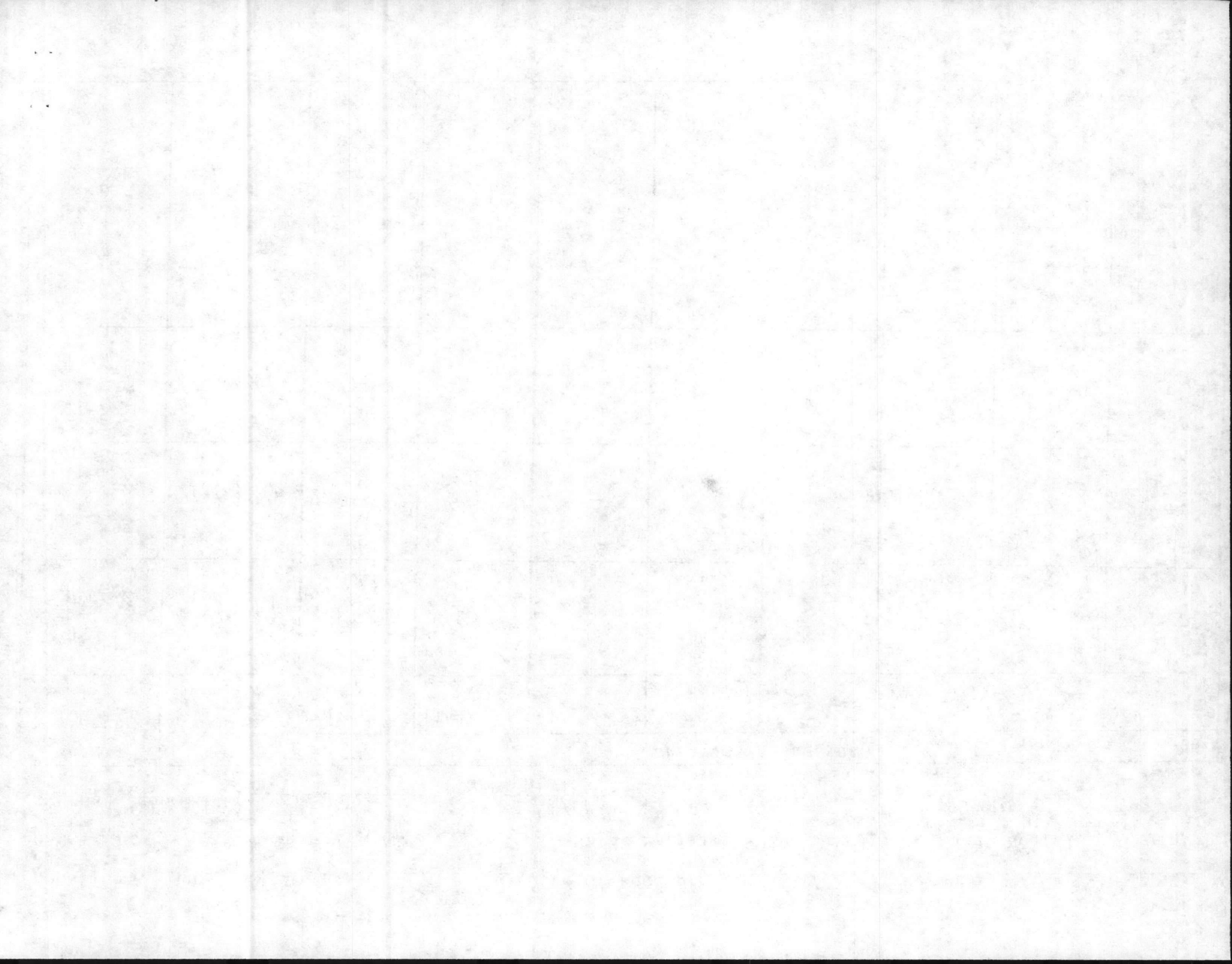
*Ann E. Rosecrance*

Ann E. Rosecrance  
Laboratory Director











Addendum

JTC DATA REPORT # 87-441

LABORATORY ANALYSIS ON NAVAL SAMPLES

CONTRACT #N62470-86-C-8754

CASE # 136

PREPARED FOR:

DEPARTMENT OF THE NAVY  
ATLANTIC DIVISION  
NAVAL FACILITIES ENGINEERING COMMAND  
NORFOLK, VIRGINIA 23511-6287

PREPARED BY:

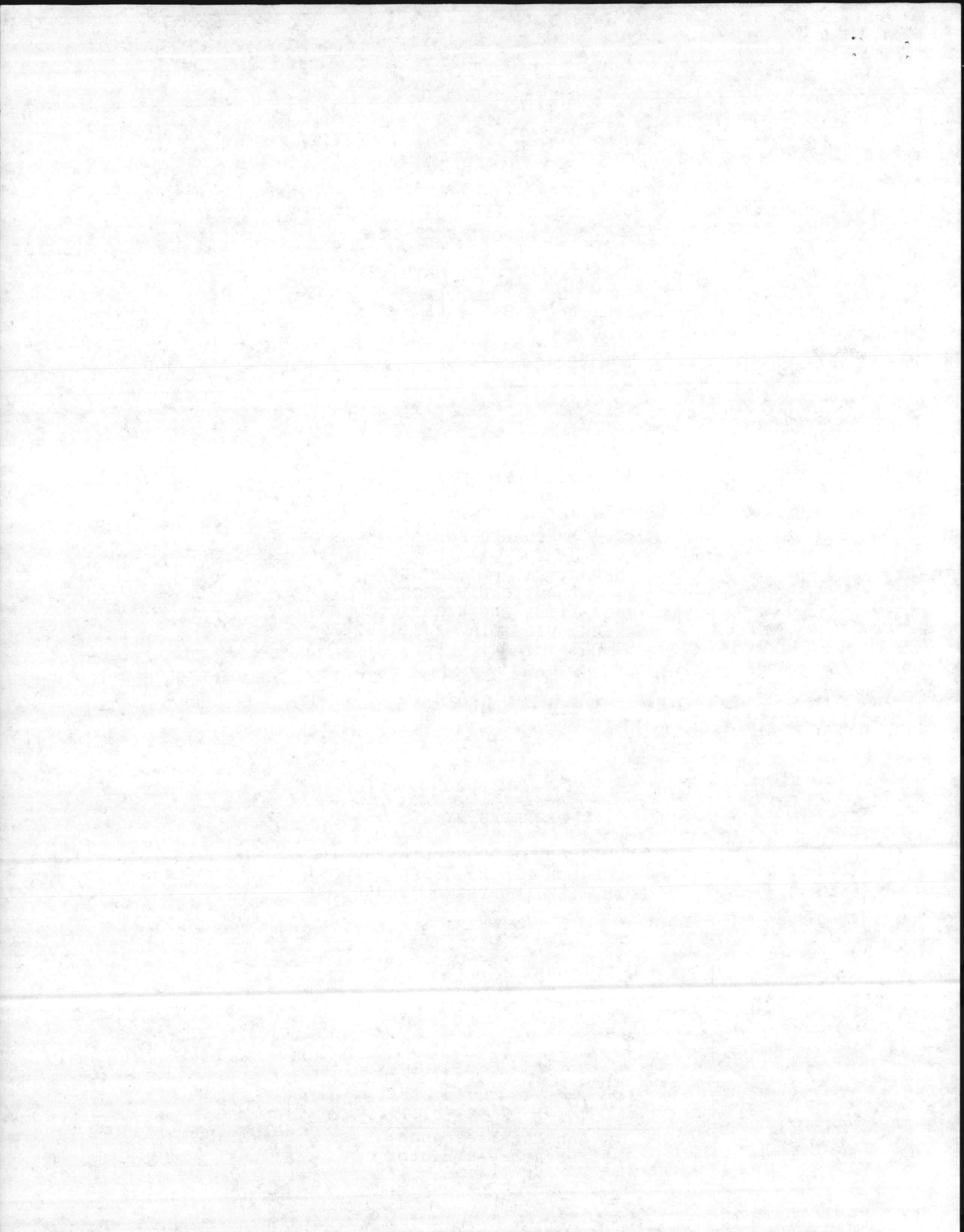
JTC ENVIRONMENTAL CONSULTANTS, INC.  
4 RESEARCH PLACE, SUITE L-10  
ROCKVILLE, MARYLAND 20850

OCTOBER 12, 1987

*Ann E. Rosecrance*

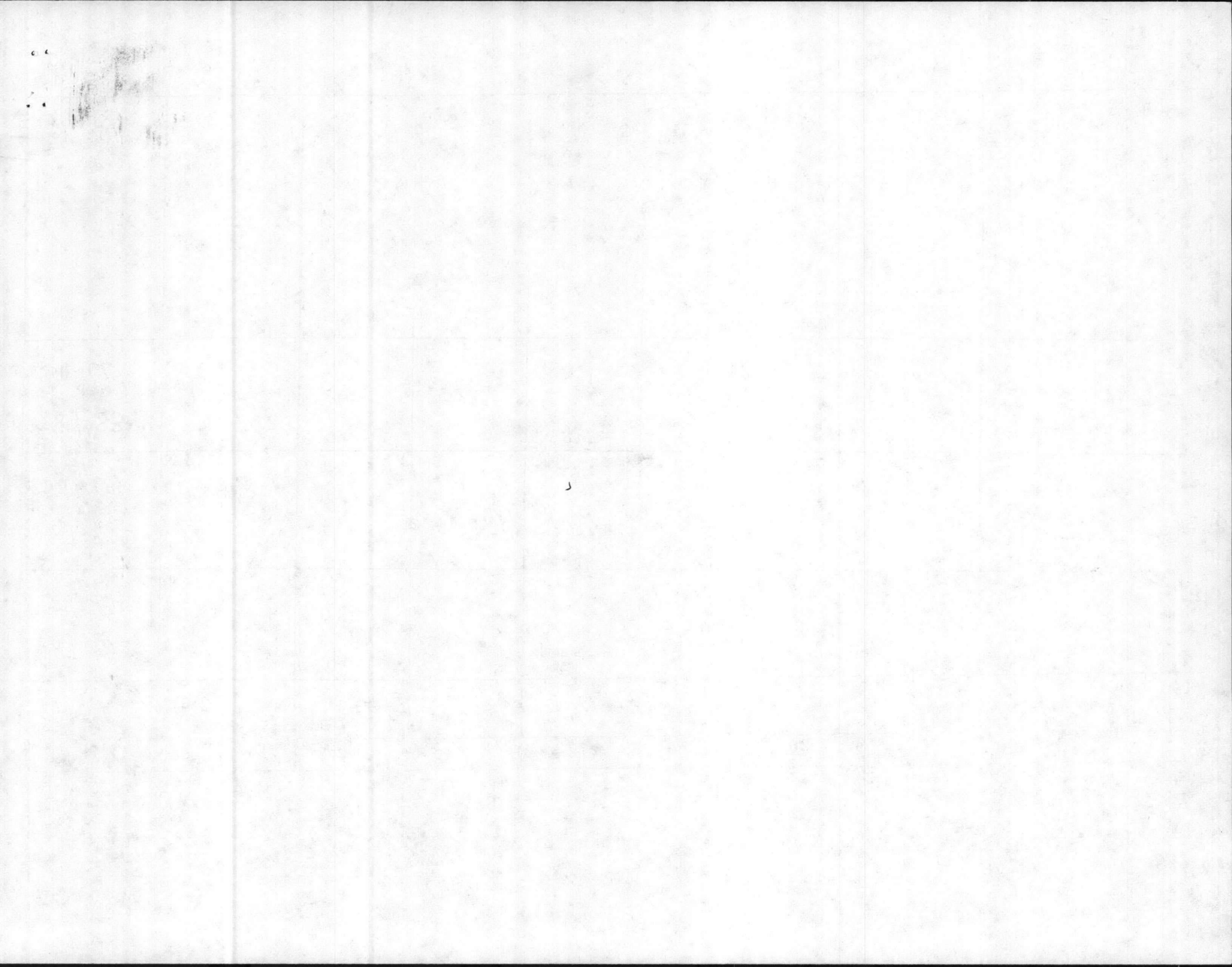
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Ann E. Rosecrance  
Laboratory Director









Ⓟ



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

IN REPLY REFER TO:  
6240  
NREAD  
19 Oct 87

From: Director, Natural Resources and Environmental Affairs  
Division, Marine Corps Base, Camp Lejeune  
To: Assistant Chief of Staff, Facilities, Marine Corps Base,  
Camp Lejeune

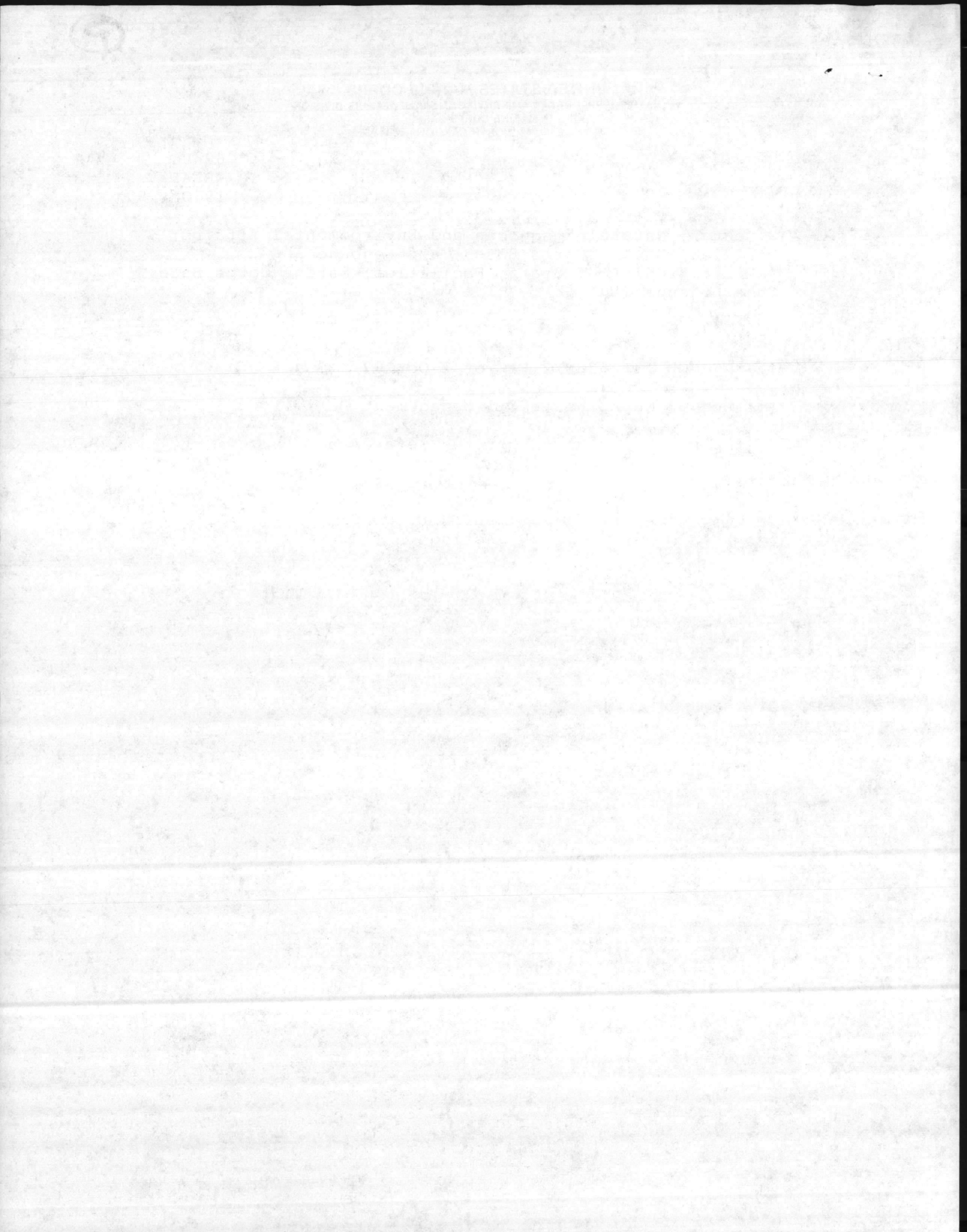
Subj: DISPOSAL OF WASTE OIL

Ref: (a) CG MCB ltr 6280/2 FAC of 2 Oct 87

Encl: (1) Log of NREAD Waste Oil Management Activity

1. The enclosure is provided per the reference.

PETER E. BLACK  
Acting





WASTE OIL MANAGEMENT ACTIVITY LOG

13 Oct 87

1. Auburn Univeristy pumped 6,500 gallons of used oil from tank STT-63.
2. Waste Conversion, Incorporated pumped 15,100 gallons of hazardous waste oil from tank S-781 at Building 45.
3. The Environmental Chemistry and Microbiology Section procured test kits for analyzing TOX in used oil.
4. Colonel Waddell, Commanding Officer, Marine Corps Air Station, New River, met with the Commanding Officers of MAG 26 and MAG 29 to inform them of the freon contamination problem of waste oil and the importance of the legal implications of improper mixing of waste oil.

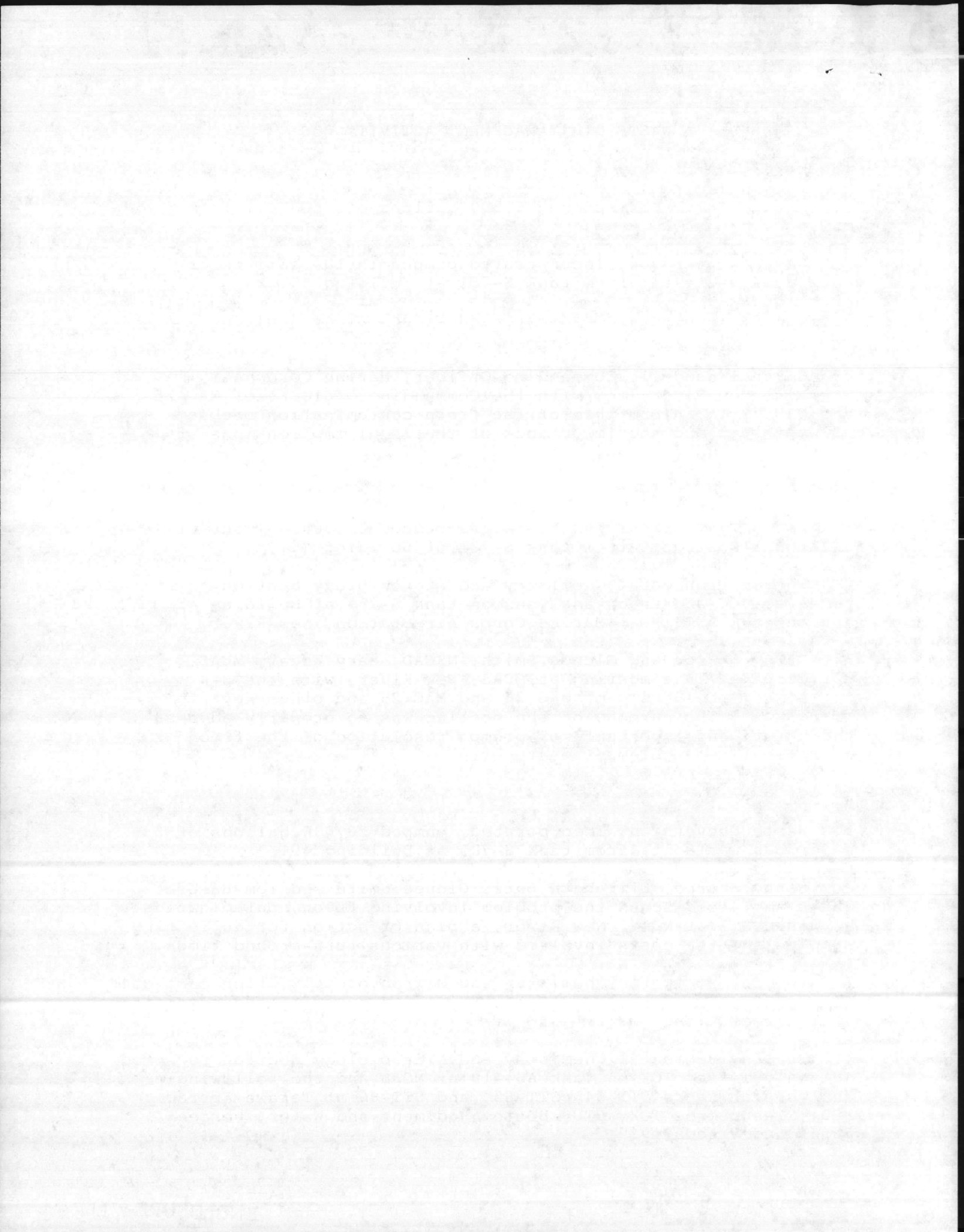
14 Oct 87

1. Waste Conversion, Incorporated, pumped 25,200 gallons of hazardous waste oil from tank S-781 at Building 45.
2. The Environmental Chemistry and Microbiology Section received VOC and freon analyses on tank S-781 at Building 45 and on tank AS-419 at Marine Corps Air Station, New River.
3. Danny Sharpe and Glenée Smith, NREAD, Mary Wheat, MCAS, participated in a meeting at MCAS, New River, with the S-4 of MAG 26, the HMDC's of MAG 26 and MAG 29 and other key officials. The purpose of the meeting was to properly address the nature and importance of prompt resolution of the freon contamination problem of waste oil.

15 Oct 87

1. Waste Conversion, Incorporated, pumped 20,000 gallons of hazardous waste oil from tank S-781 at Building 45.
2. Danny Sharpe, Elizabeth Betz, Glenée Smith and Tom Barbee, NREAD, met to discuss the problem involving freon contamination of waste oil at MCAS, New River, a plan of action for collecting samples and the costs involved with various turn-around times.
3. The Environmental Chemistry and Microbiology Section contacted Velma Duff, Purchasing and Contracting, to expedite the requisition on TOX test kits.
4. The Environmental Chemistry and Microbiology Section received an analysis for TOX on tank AS-419 at MCAS and the following analyses on tanks STT-64, STT-65, and STT-66 at Tarawa Terrace: PCB, Flashpoint, TOX, BTU, Bottom Sediment and Water, Percent Water and Viscosity.

ENCLOSURE (1)

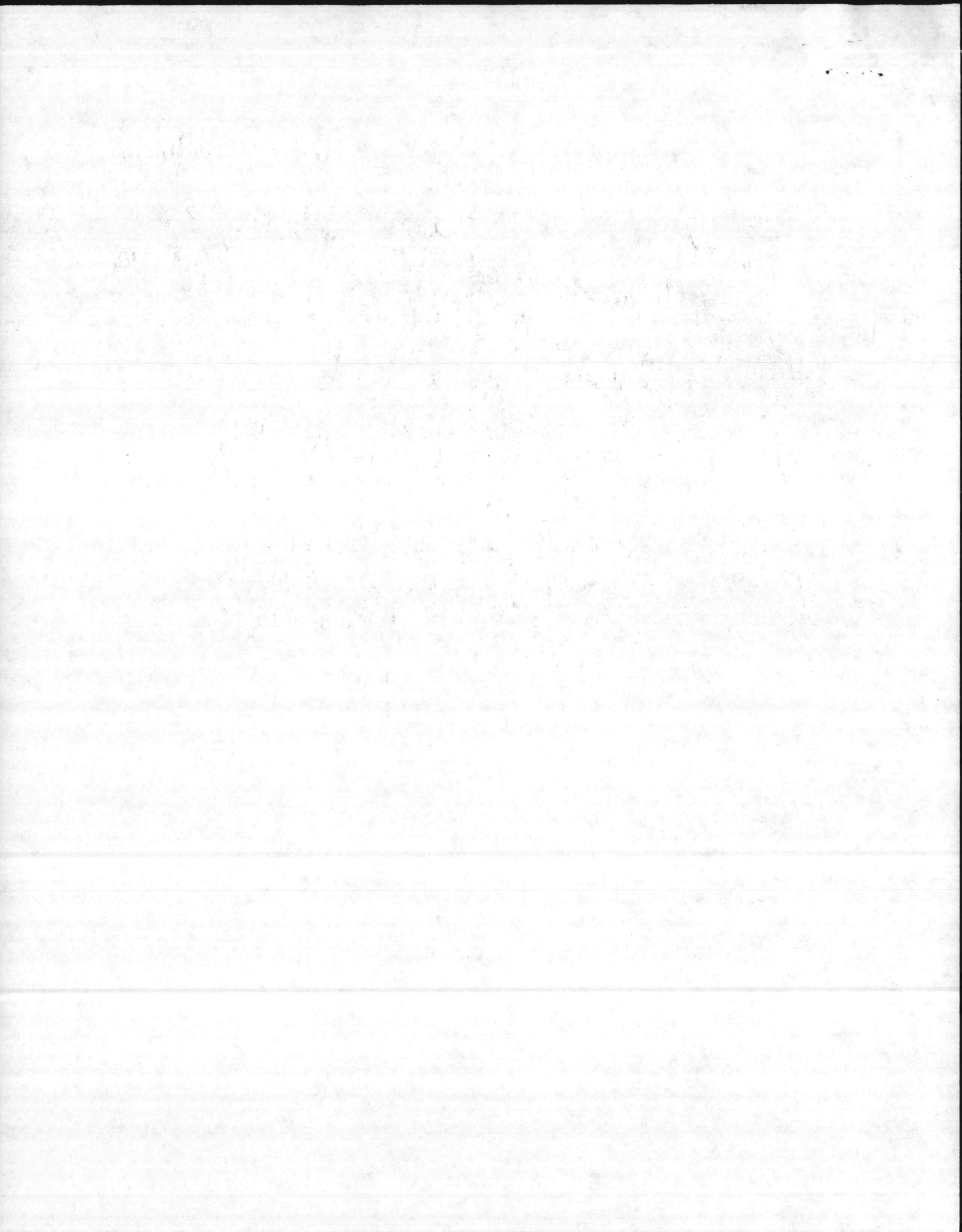


16 Oct 87

1. The Environmental Chemistry and Microbiology Section collected samples of used oil at AS-431, AS-504, and AS-516. For each tank sampled, the following were noted:

- a. Location sketch
- b. Tank size
- c. Level of tank
- d. Presence of sediment
- e. Unit responsible for tank





NREAD

6241/2

NREAD

OCT 16 1987

From: Commanding General, Marine Corps Base, Camp Lejeune  
To: Defense Reutilization and Marketing Officer, Defense  
Logistics Agency, Lejeune, Camp Lejeune, NC 28542-5000

Subj: WASTE OIL STORAGE TANKS; ANALYSIS OF

Ref: (a) BO 6240.5  
(b) Dir NREAD ltr 6241/2 of 4 Jun 87

Encl: (1) JTC Environmental Consultants, Inc. Rept No. 87-444

1. The following data is forwarded for your information. Navy Sample ID No. 87-31 through 87-34 are additional data provided on the large waste oil tank at Bldg 45. The other parameters were provided in reference (b).

2. Navy Sample ID No. 87-89 and 87-90 are the volatile organic chemical analysis on the third waste oil tank at the Marine Corps Air Station, New River (the one furthest from the crash crew). It is recommended that this tank be disposed of as a hazardous waste fuel. DRMO is requested to advise if additional testing is required of this tank for disposal per the existing contract.

T. J. DALZELL  
By direction

Copy to:  
BMO  
CO MCAS NR

100 & 800



Partial Results

JTC DATA REPORT # 87-444

LABORATORY ANALYSIS ON NAVAL SAMPLES

CONTRACT #N62470-86-C-8754

CASE # 138

PREPARED FOR:

DEPARTMENT OF THE NAVY  
ATLANTIC DIVISION  
NAVAL FACILITIES ENGINEERING COMMAND  
NORFOLK, VIRGINIA 23511-6287

PREPARED BY:

JTC ENVIRONMENTAL CONSULTANTS, INC.  
4 RESEARCH PLACE, SUITE L-10  
ROCKVILLE, MARYLAND 20850

OCTOBER 7, 1987

*Ann E. Rosecrance*

Ann E. Rosecrance  
Laboratory Director

ENCLOSURE (1)

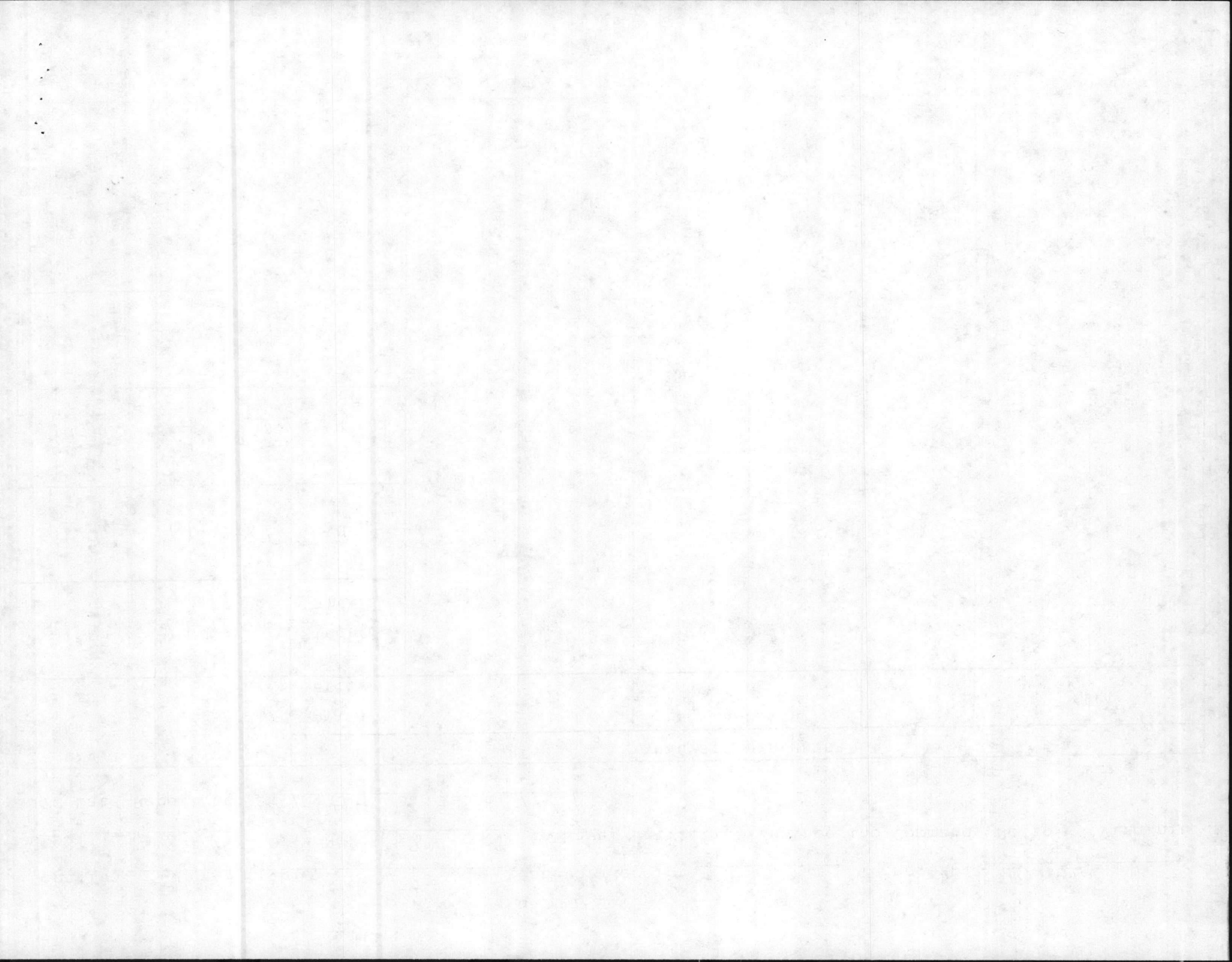
ENCLOSURE ( )

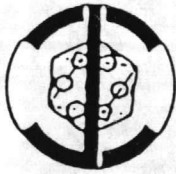
Location: Camp Lejeune Date of Receipt: 9-23-87 Turnaround: 10 days  
Date: 10-7-87 Case No. 138 to Naval Facilities Engineering Command, Norfolk, Virginia

JTC Data Report No. 87-444 Table 1 of 1

NAVY SAMPLE ID	JTC SAMPLE ID	ANALYSIS PARAMETER						
		VOA + Freon						
87-31	61-0986	see attached sheet						
87-32	61-0987	"						
87-33	61-0988	"						
87-34	61-0989	"						
87-79 oil layer composite	61-0990	"						
87-80	61-0991	"						





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T

C Environmental Consultants, Inc.

## PRIORITY POLLUTANT ANALYSIS DATA SHEET

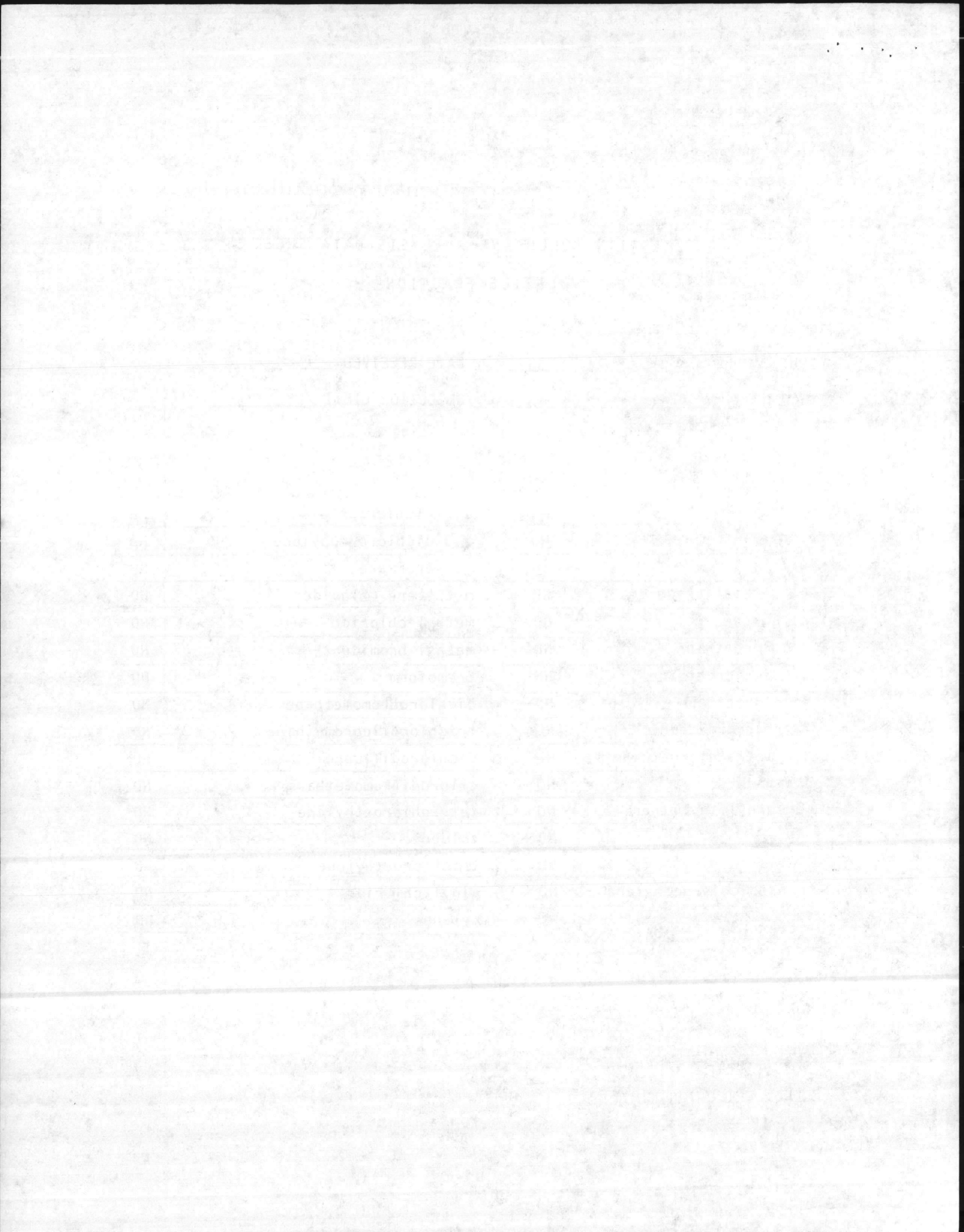
## VOLATILE FRACTION

JTC SAMPLE # 61-0986 PROJECT NO. NF-61 #138  
CLIENT SAMPLE # 87-31 DATE RECEIVED 9-23-87  
METHOD NO. 624 DETECTION LIMIT 250 mg/L

PARAMETER	RESULT mg/L	PARAMETER	RESULT mg/L
acrolein	ND	1,2-dichloropropane	ND
acrylonitrile	ND	1,3-dichloropropylene	ND
benzene	50 * <del>ND</del>	ethylbenzene	100 * <del>ND</del>
carbon tetrachloride	ND	methylene chloride	ND
chlorobenzene	ND	methyl chloride	ND
1,2-dichloroethane	ND	methyl bromide	ND
1,1,1-trichloroethane	100 * <del>ND</del>	bromoform	ND
1,1-dichloroethane	ND	dichlorobromomethane	ND
1,1,2-trichloroethane	ND	trichlorofluoromethane	200 * <del>ND</del>
1,1,2,2-tetrachloroethane	ND	dichlorodifluoromethane	ND
chloroethane	ND	chlorodibromomethane	ND
2-chloroethylvinylether	ND	tetrachloroethylene	ND
chloroform	ND	toluene	390 <del>ND</del>
1,1-dichloroethylene	ND	trichloroethylene	70 * <del>ND</del>
1,2-trans-dichloroethylene	ND	vinyl chloride	ND
2-HEXANONE	430	xylenes	580 <del>ND</del>
		FREON	2900

ND = NOT DETECTED

\* = BELOW DETECTION LIMIT







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Environmental Consultants, Inc.

PRIORITY POLLUTANT ANALYSIS DATA SHEET

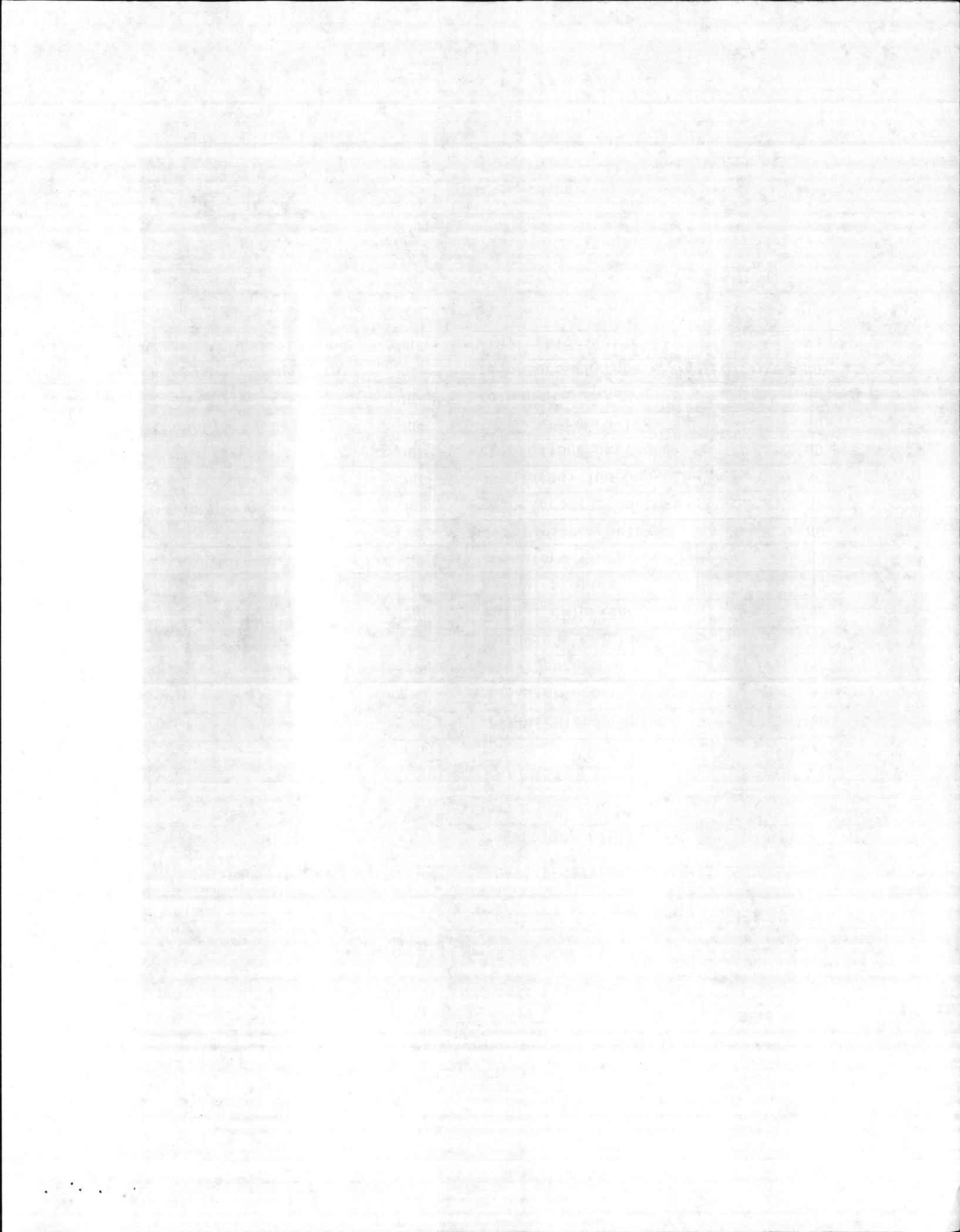
VOLATILE FRACTION

JTC SAMPLE # 61-0987 PROJECT NO. NF-61 #138  
CLIENT SAMPLE # 87-32 DATE RECEIVED 9-23-87  
METHOD NO. 624 DETECTION LIMIT 250 mg/L

PARAMETER	RESULT mg/L	PARAMETER	RESULT mg/L
acrolein	ND	1,2-dichloropropane	ND
acrylonitrile	ND	1,3-dichloropropylene	ND
benzene	200 * <del>ND</del>	ethylbenzene	410 <del>ND</del>
carbon tetrachloride	ND	methylene chloride	ND
chlorobenzene	ND	methyl chloride	ND
1,2-dichloroethane	ND	methyl bromide	ND
1,1,1-trichloroethane	410 <del>ND</del>	bromoform	ND
1,1-dichloroethane	ND	dichlorobromomethane	ND
1,1,2-trichloroethane	ND	trichlorofluoromethane	640 <del>ND</del>
1,1,2,2-tetrachloroethane	ND	dichlorodifluoromethane	ND
chloroethane	ND	chlorodibromomethane	ND
2-chloroethylvinylether	ND	tetrachloroethylene	ND
chloroform	ND	toluene	1300 <del>ND</del>
1,1-dichloroethylene	ND	trichloroethylene	100 * <del>ND</del>
1,2-trans-dichloroethylene	ND	vinyl chloride	ND
ACETONE	1900	xyleneS	1900 <del>ND</del>
2-HEXANONE	1700	FREON	9300
4-METHYL-2-PENTANONE (MIBK)	380		

ND = NOT DETECTED

\* = BELOW DETECTION LIMIT





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T

C Environmental Consultants, Inc.

PRIORITY POLLUTANT ANALYSIS DATA SHEET

VOLATILE FRACTION

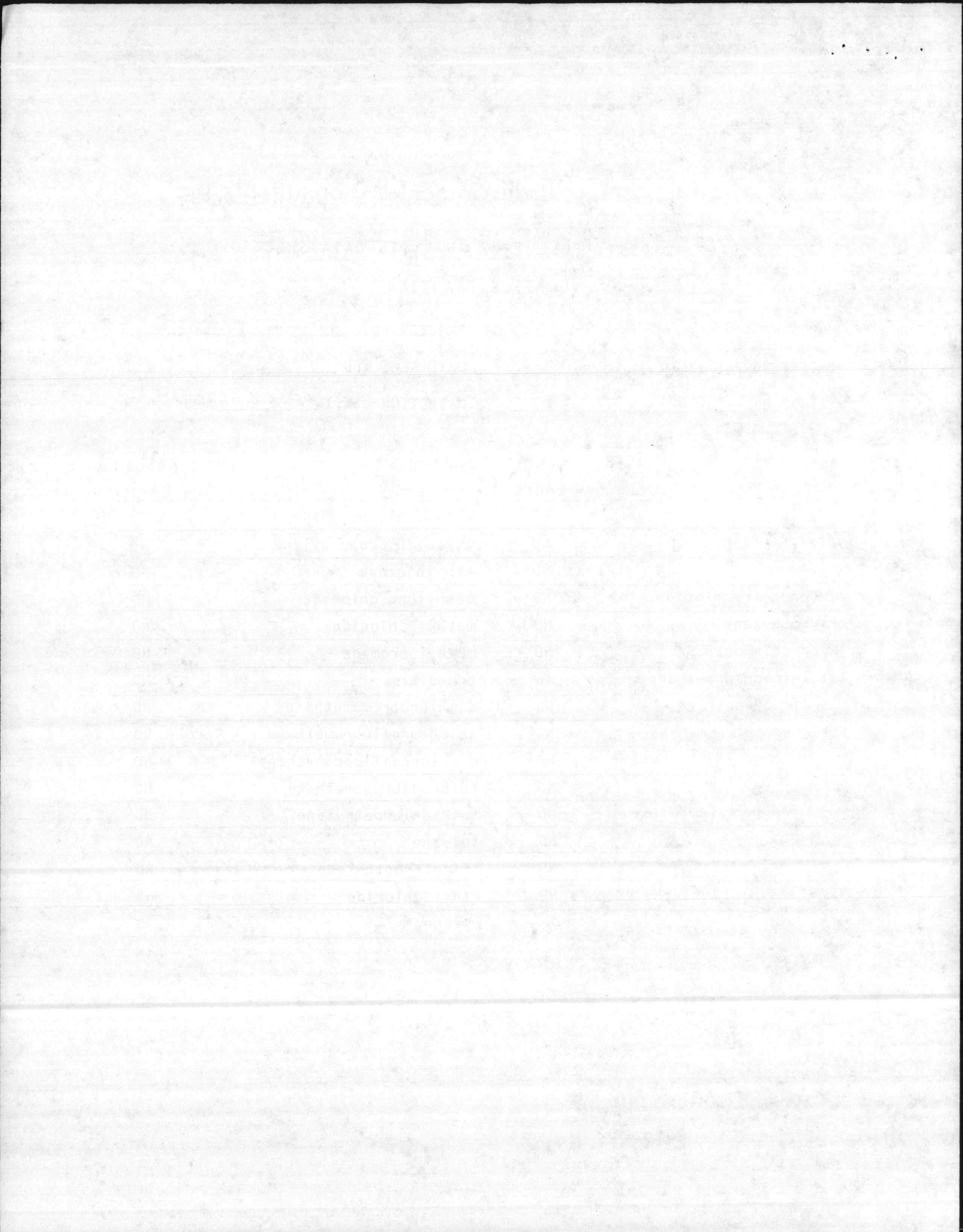
JTC SAMPLE # 61-0988 PROJECT NO. NF-61 #138  
CLIENT SAMPLE # 87-33 DATE RECEIVED 9-23-87  
METHOD NO. 624 DETECTION LIMIT 250 mg/L

PARAMETER	RESULT mg/L	PARAMETER	RESULT mg/L
acrolein	ND	1,2-dichloropropane	ND
acrylonitrile	ND	1,3-dichloropropylene	ND
benzene	200 * <del>ND</del>	ethylbenzene	390 <del>ND</del>
carbon tetrachloride	ND	methylene chloride	ND
chlorobenzene	ND	methyl chloride	ND
1,2-dichloroethane	ND	methyl bromide	ND
1,1,1-trichloroethane	380 <del>ND</del>	bromoform	ND
1,1-dichloroethane	ND	dichlorobromomethane	ND
1,1,2-trichloroethane	ND	trichlorofluoromethane	560 ND
1,1,2,2-tetrachloroethane	ND	dichlorodifluoromethane	ND
chloroethane	ND	chlorodibromomethane	ND
2-chloroethylvinylether	ND	tetrachloroethylene	ND
chloroform	ND	toluene	1300 <del>ND</del>
1,1-dichloroethylene	ND	trichloroethylene	100 * <del>ND</del>
1,2-trans-dichloroethylene	ND	vinyl chloride	ND
ACETONE	1800	xylenes	2000 <del>ND</del>
4-METHYL-2-PENTANONE (MIBK)	380	FREON	8200
2-HEXANONE	1600		

ND = NOT DETECTED

\* = BELOW DETECTION LIMIT







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T

# C Environmental Consultants, Inc.

## PRIORITY POLLUTANT ANALYSIS DATA SHEET

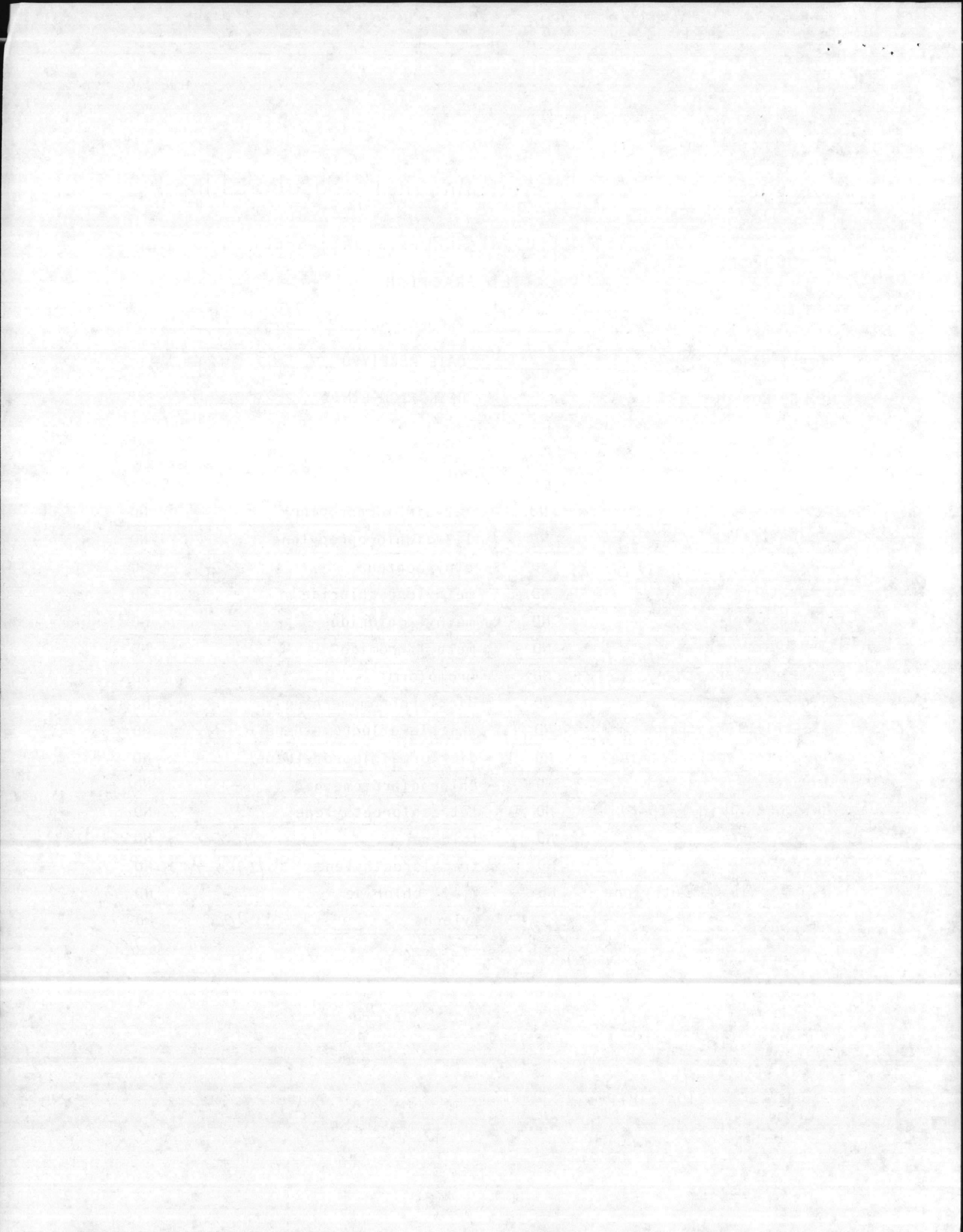
### VOLATILE FRACTION

JTC SAMPLE # 61-0989 PROJECT NO. NF-61 #138  
CLIENT SAMPLE # 87-34 DATE RECEIVED 9-23-87  
METHOD NO. 624 DETECTION LIMIT 250 mg/L

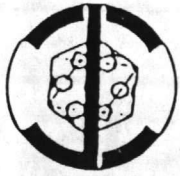
PARAMETER	RESULT mg/L	PARAMETER	RESULT mg/L
acrolein	ND	1,2-dichloropropane	ND
acrylonitrile	ND	1,3-dichloropropylene	ND
benzene	100 * <del>ND</del>	ethylbenzene	620 <del>ND</del>
carbon tetrachloride	ND	methylene chloride	ND
chlorobenzene	ND	methyl chloride	ND
1,2-dichloroethane	ND	methyl bromide	ND
1,1,1-trichloroethane	310 <del>ND</del>	bromoform	ND
1,1-dichloroethane	ND	dichlorobromomethane	ND
1,1,2-trichloroethane	ND	trichlorofluoromethane	310 <del>ND</del>
1,1,2,2-tetrachloroethane	ND	dichlorodifluoromethane	ND
chloroethane	ND	chlorodibromomethane	ND
2-chloroethylvinylether	ND	tetrachloroethylene	ND
chloroform	ND	toluene	1200 <del>ND</del>
1,1-dichloroethylene	ND	trichloroethylene	100 * <del>ND</del>
1,2-trans-dichloroethylene	ND	vinyl chloride	ND
ACETONE	1400	xylenes	2000 <del>ND</del>
4-METHYL-2-PENTANONE (MIBK)	350	FREON	5200
2-HEXANONE	3300		

ND = NOT DETECTED

\* = BELOW DETECTION LIMIT





J  
T

C Environmental Consultants, Inc.

## PRIORITY POLLUTANT ANALYSIS DATA SHEET

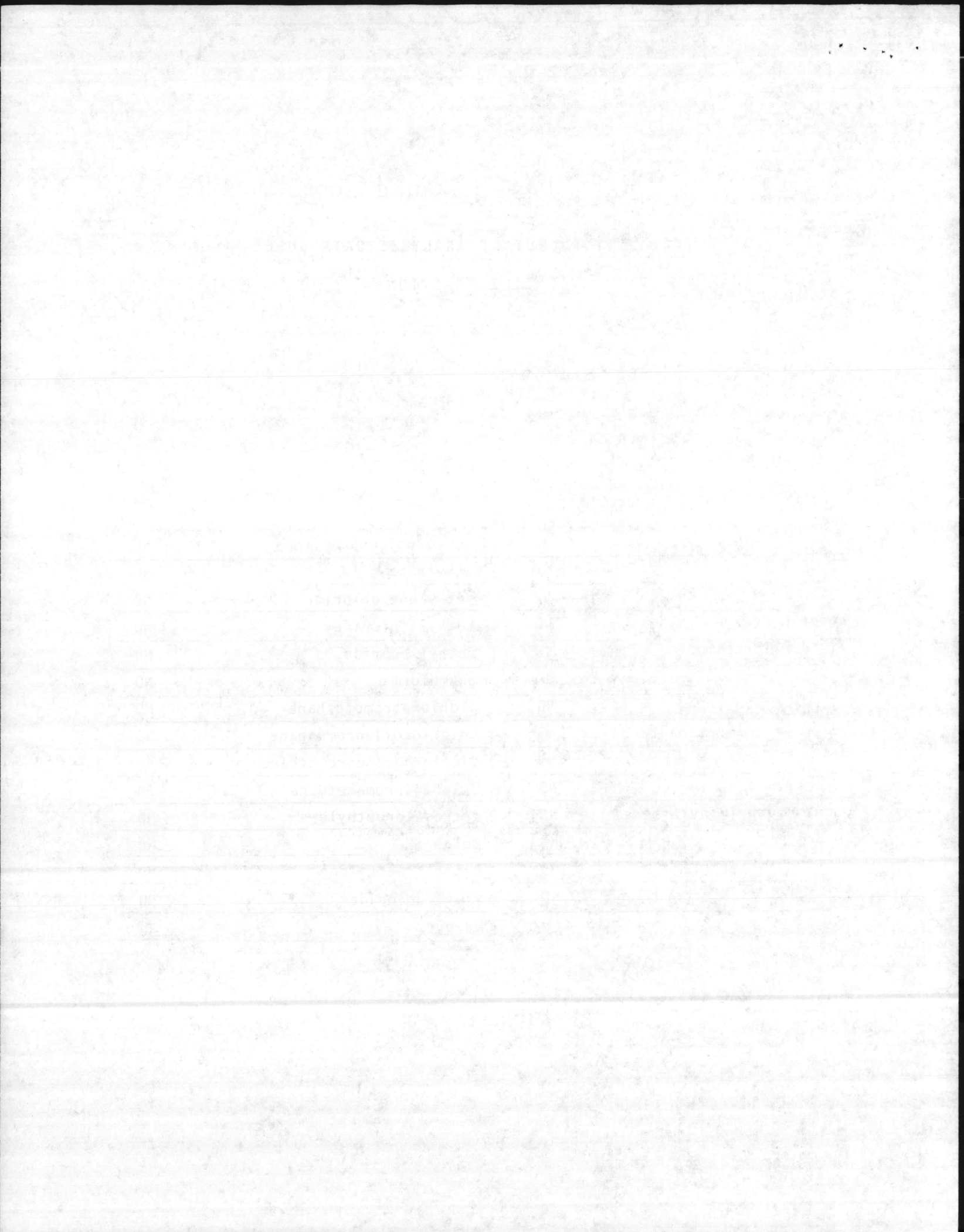
## VOLATILE FRACTION

JTC SAMPLE # 61-0990 COMPOSITE PROJECT NO. NF-61 #138  
CLIENT SAMPLE # 87-79 DATE RECEIVED 9-23-87  
METHOD NO. 624 DETECTION LIMIT 250 mg/L

PARAMETER	RESULT	PARAMETER	RESULT
	mq/L		mq/L
acrolein	ND	1,2-dichloropropane	ND
acrylonitrile	ND	1,3-dichloropropylene	ND
benzene	200* <del>ND</del>	ethylbenzene	720 <del>ND</del>
carbon tetrachloride	ND	methylene chloride	ND
chlorobenzene	ND	methyl chloride	ND
1,2-dichloroethane	ND	methyl bromide	ND
1,1,1-trichloroethane	100* <del>ND</del>	bromoform	ND
1,1-dichloroethane	ND	dichlorobromomethane	ND
1,1,2-trichloroethane	ND	trichlorofluoromethane	ND
1,1,2,2-tetrachloroethane	ND	dichlorodifluoromethane	ND
chloroethane	ND	chlorodibromomethane	ND
2-chloroethylvinylether	ND	tetrachloroethylene	ND
chloroform	ND	toluene	970 <del>ND</del>
1,1-dichloroethylene	ND	trichloroethylene	50* <del>ND</del>
1,2-trans-dichloroethylene	ND	vinyl chloride	ND
ACETONE	1400	xylenes	1500 <del>ND</del>
4-METHYL-2-PENTANONE (MIBK)	330	FREON	1600
2-HEXANONE	1100		

ND = NOT DETECTED

\* = BELOW DETECTION LIMIT



J  
T

C Environmental Consultants, Inc.

## PRIORITY POLLUTANT ANALYSIS DATA SHEET

## VOLATILE FRACTION

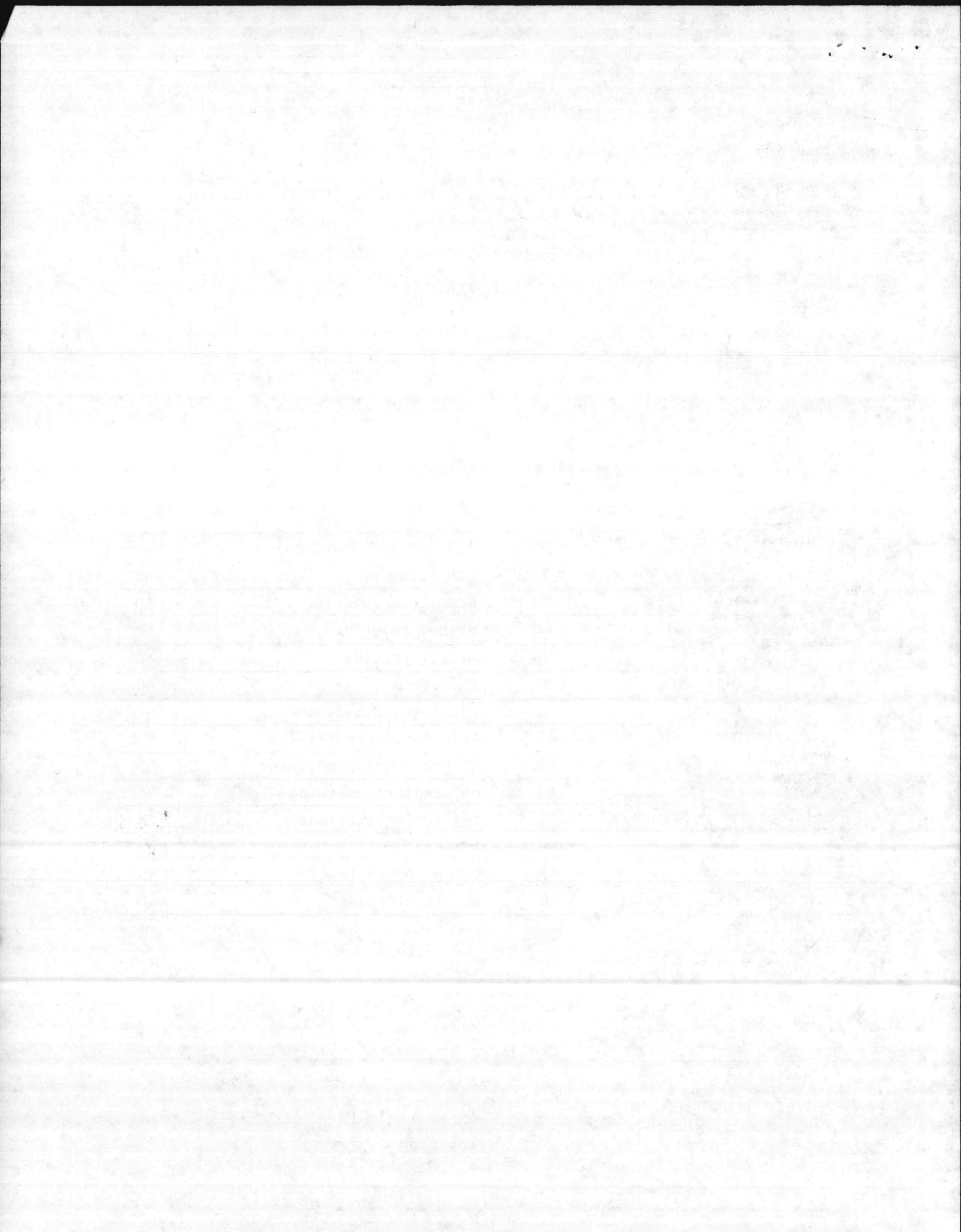
JTC SAMPLE # 61-0991 PROJECT NO. NF-61 #138  
CLIENT SAMPLE # 87-80 DATE RECEIVED 9-23-87  
METHOD NO. 624 DETECTION LIMIT 250 mg/L

PARAMETER	RESULT mg/L	PARAMETER	RESULT mg/L
acrolein	ND	1,2-dichloropropane	ND
acrylonitrile	ND	1,3-dichloropropylene	ND
benzene	200 * <del>ND</del>	ethylbenzene	460 <del>ND</del>
carbon tetrachloride	ND	methylene chloride	ND
chlorobenzene	ND	methyl chloride	ND
1,2-dichloroethane	ND	methyl bromide	ND
1,1,1-trichloroethane	ND	bromoform	ND
1,1-dichloroethane	ND	dichlorobromomethane	ND
1,1,2-trichloroethane	ND	trichlorofluoromethane	ND
1,1,2,2-tetrachloroethane	ND	dichlorodifluoromethane	ND
chloroethane	ND	chlorodibromomethane	ND
2-chloroethylvinylether	ND	tetrachloroethylene	ND
chloroform	ND	toluene	1300 <del>ND</del>
1,1-dichloroethylene	ND	trichloroethylene	ND
1,2-trans-dichloroethylene	ND	vinyl chloride	ND
ACETONE	2300	xylene	2100 <del>ND</del>
4-METHYL-2-PENTANONE (MIBK)	500	FREON	600
2-HEXANONE	1500		

ND = NOT DETECTED

\* = BELOW DETECTION LIMIT





NATURAL RESOURCES AND ENVIRONMENTAL AFFAIRS  
Marine Corps Base  
Camp Lejeune, North Carolina 28542

*file  
copy*

15 Oct 87

Date

From: Director  
To: Base Maintenance Officer

Subj: WASTE OIL STORAGE TANKS; ANALYSIS OF

1. The attached letter is forwarded for your information and has been sent up-the-chain of command for signature.
2. Mr. Gurganus was advised on 14 Oct 87 of the results of the analysis.

PETER E. BLACK  
Acting





6241/2  
NREAD

From: Commanding General, Marine Corps Base, Camp Lejeune  
To: Defense Reutilization and Marketing Officer, Defense  
Logistics Agency, Lejeune, Camp Lejeune, NC 28542-5000

Subj: WASTE OIL STORAGE TANKS; ANALYSIS OF

Ref: (a) BO 6240.5  
(b) Dir NREAD ltr 6241/2 of 4 Jun 87

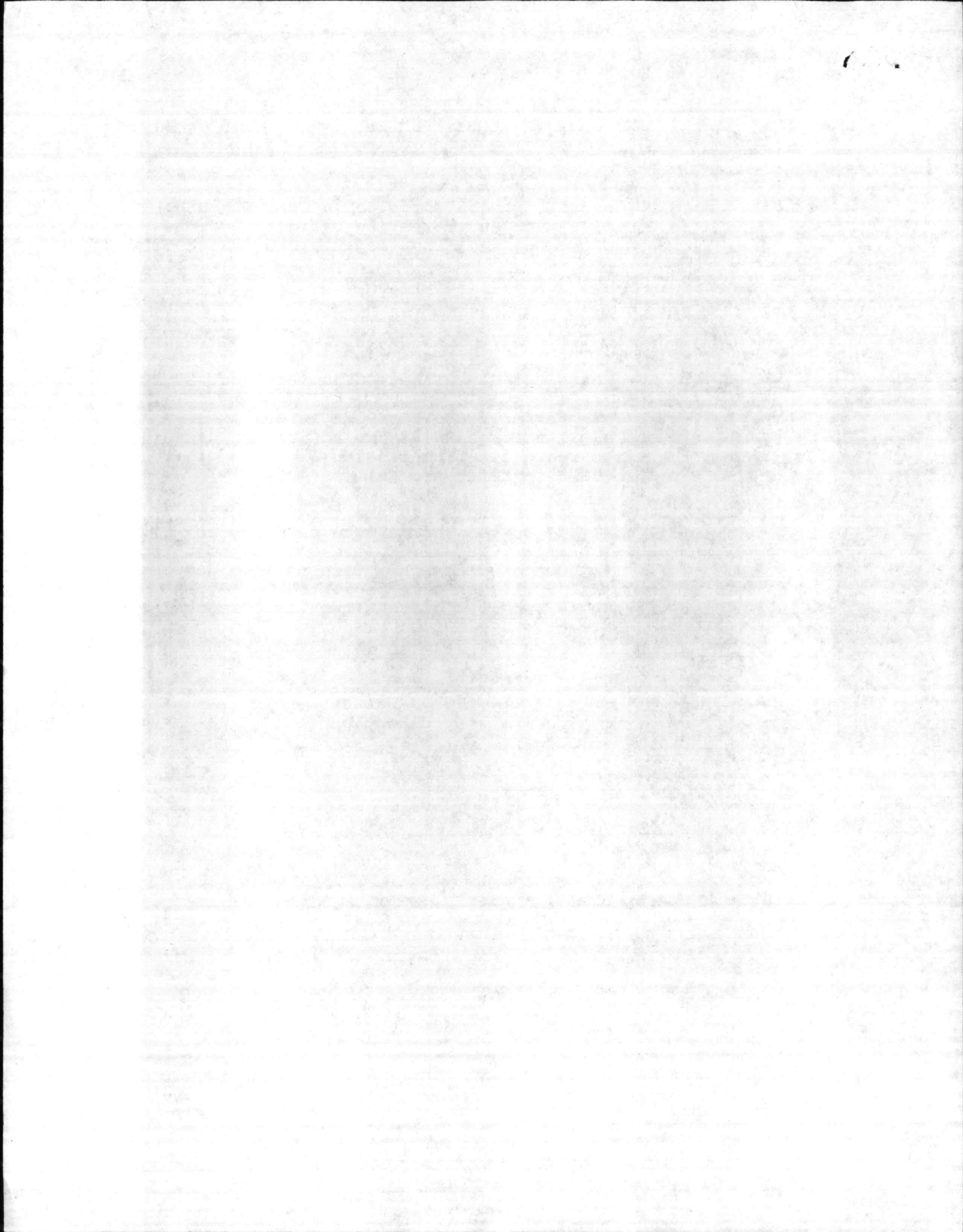
Encl: (1) JTC Environmental Consultants, Inc. Rept No. 87-444

1. The following data is forwarded for your information. Navy Sample ID No. 87-31 through 87-34 are additional data provided on the large waste oil tank at Bldg 65. The other parameters were provided in reference (b).

2. Navy Sample ID No. 87-89 and 87-80 are the volatile organic chemical analysis on the third waste oil tank at the Marine Corps Air Station, New River (the one furthest from the crash crew). It is recommended that this tank be disposed of as a hazardous waste fuel. DRMO is requested to advise if additional testing is required of this tank for disposal per the existing contract.

T. J. DALZELL  
By direction

Copy to:  
BMO  
CO MCAS NR



6240  
NREAD  
14 Oct 87

*J. I. Wooten*  
Env. C. & O. Spec.  
*10/15*  
Supp. Ecology

From: Director, Natural Resources and Environmental Affairs  
Division, Marine Corps Base, Camp Lejeune  
To: Assistant Chief of Staff, Facilities, Marine Corps Base,  
Camp Lejeune

Subj: DISPOSAL OF WASTE OIL

Ref: (a) CG, MCB ltr 6280/2 FAC of 2 Oct 87

Encl: (1) Log of NREAD Waste Oil Management Activity

1. The enclosure is provided per the reference.

J. I. WOOTEN



*Handwritten notes:*  
C. C. [unclear]  
[unclear]

14 Oct 57  
MR. AD

From: Director, Natural Resources and Environmental Affairs  
Division, Marine-Deer Area, Fair Harbor  
To: Assistant Chief of Staff, Facilities, Marine Corps Base  
Camp Lejeune

Subject: DISposal of Waste Oil

Reference is made to your letter of 10 Oct 57

and the fact that you are currently conducting activities

at the location mentioned in the letter.

J. M. WOOD

## WASTE OIL MANAGEMENT ACTIVITY LOG

4 Sep 87

1. NREAD officials participated in a meeting at Raleigh regarding the Used Oil in tank S-781 at Building 45. The Hazardous Waste Compliance Order was discussed during which NREAD officials were advised that the Used Oil was a hazardous waste. The state agreed to allow Camp Lejeune to store the HW oil for 90 days from actual discovery (1 Sep 87). This date was based upon the receipt of laboratory data from JTC Environmental Consultants, Inc., to the Supervisory Chemist showing the content of freon in the used oil.

2. Glenée Smith, NREAD consulted with Steve Olson, Atlantic Division Naval Facilities Engineering Command, about inspection requirements for hazardous waste stored in tanks. Mr. Olson advised Ms. Smith to refer to the provision for tanks in 40 CFR, Subpart J.

8 Sep 87

Auburn University pumped a total of 13,000 gallons of used oil consisting of: 2,000 gallons from Holcomb Boulevard tank S-888 and 11,000 gallons from Tarawa Terrace Tank STT-63.

10 Sep 87

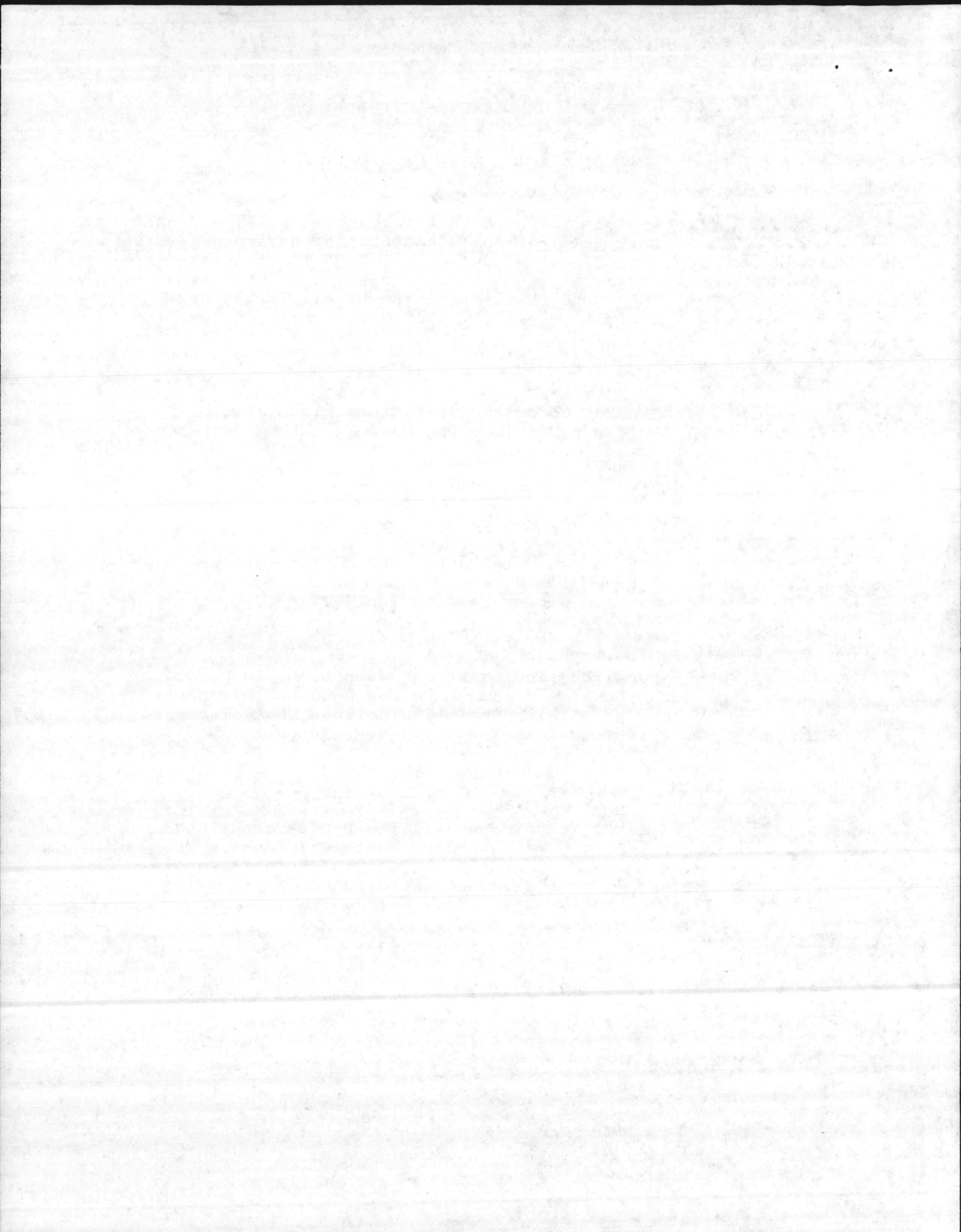
Danny Sharpe, Supervisory Ecologist met with L. D. Shepard, Grounds Structural General Foreman and Don Gurganus, Transportation General Foreman. General Inspection guidelines were discussed and copies of provisions for "Tanks" 40 CFR, Subpart J and EPA Inspection form for tanks were provided.

11 Sep 87

Ken Warren, Biological Technician assisted Don Gurganus and L. D. Shepard on a survey of Hazardous Waste Oil Tanks. Mr. Warren inspected tanks for physical structural defects, and made recommendations for posting required signs and removing contaminated soil.

15 Sep 87

The Environmental Chemistry and Microbiology Section sampled waste oil tank S-781, at Building 45, tanks STT-64, STT-65, STT-66 at Tarawa Terrace, and tank AS-419 at Marine Corps Air Station. The samples were sent to JTC Environmental Consultants, Inc., to be analyzed for EP Toxicity and VOC.





21 Sep 87

Waste Conversion, Inc. pumped 10,128 gallons from tank S-781 at Building 45.

25 Sep 87

Sam Gwynn, Biological Technician, NREAD, inspected the above ground tank locate at Building M-625 at Camp Johnson. A letter was submitted to Base Maintenance with inspection results and recommendations. The tank contained a hazardous waste fuel oil and had been sited in a previous letter dated 11 June 1987.

28 Sep 87

Waste Conversion, Inc., pumped 8,879 gallons from tank S-781 at Building 45.

1 Oct 87

1. Richard Gay, Waste Management Specialist, NC Division of Health Services met with Danny Sharpe and Glenée Smith of NREAD, to review the provision for tanks regarding inspection requirements.

2. Waste Conversion, Inc., pumped 9,875 gallons from tank S-781 at Building 45.

2 Oct 87

1. Glenée Smith and Sam Gwynn, NREAD assisted Don Gurganus and Robert Huffman, Base Maintenance with the first inspection of hazardous waste fuel/oil tanks. Those tanks inspected were: S-889, STT-61, STT-62, S-781, AS-420 and AS-421. NREAD gave guidance on inspection procedures and proper signs to be posted.

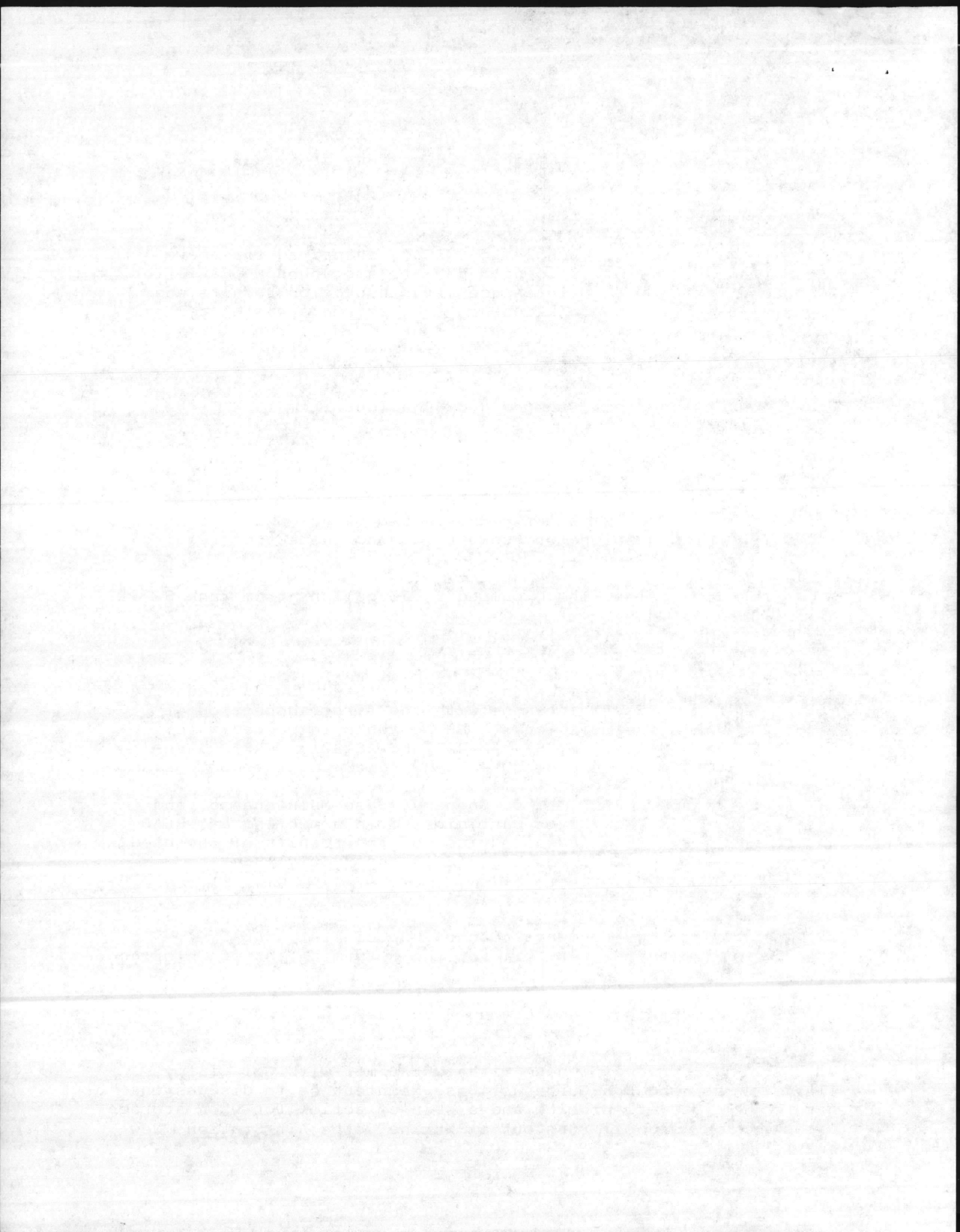
2. Danny Sharpe, NREAD, L. D. Shepard, Base Maintenance, and Mary Wheat, MCAS, New River participated in a meeting at NREAD during which Mr. Shepard was advised of the results of the used oil sampled at the MCAS, during 8 July and 9 July 1987.

5 Oct 87

1. Tom Barbee, Environmental Control Specialist, NREAD, experimented with the test kit for the determination of Chlorine in Used Oil.

2. Waste Conversion, Inc. pumped 9,000 gallons from tank S-781 at Building 45.

3. Danny Sharpe and Glenée Smith, NREAD met with Col Lilley, Cliff Powell, and Don Gurganus, Base Maintenance to discuss the hazardous waste oil problem and a plan of action for when storage capacity for used oil runs out at Marine Corps Air Station, New River.



6 Oct 87

1. Waste Conversion, Inc. pumped 5,000 gallons from tanks S-781 at Building 45.

2. Col Lilley, Base Maintenance Officer, called Julian Wooten, Director of Natural Resources regarding BMO's proposal that the responsibility of Waste Oil Management be shifted to NREAD. Col Lilley advised Mr. Wooten, effective 12 October, 1987, that Base Maintenance intended to discontinue daily inspections of HW fuel/oil tanks on 16 October 1987.

3. Danny Sharpe, and Ken Warren, NREAD provided both classroom and field training to ten Base Maintenance employees at the request of L. D. Shepard, Roads and Grounds. HW regulations applicable to Collection and Transportation of HW oil were discussed. Guidance was provided on performing daily inspections, dealing with leaks and spills, maintaining records of inspections, and follow up corrective action. All employees present participated actively in the session and displayed an appreciation of the significance of the legal management consequences which require them to perform these duties well.

7 Oct 87

Waste Conversion, Inc. pumped 18,000 gallons from tank S-781 at Building 45.

8 Oct 87

Glenée Smith, NREAD was informed by Mary Wheat MCAS, that the Commanding Officers of MAG 26 and MAG 29 have not been properly appraised of the nature and seriousness of the waste oil management problem at MCAS, New River.

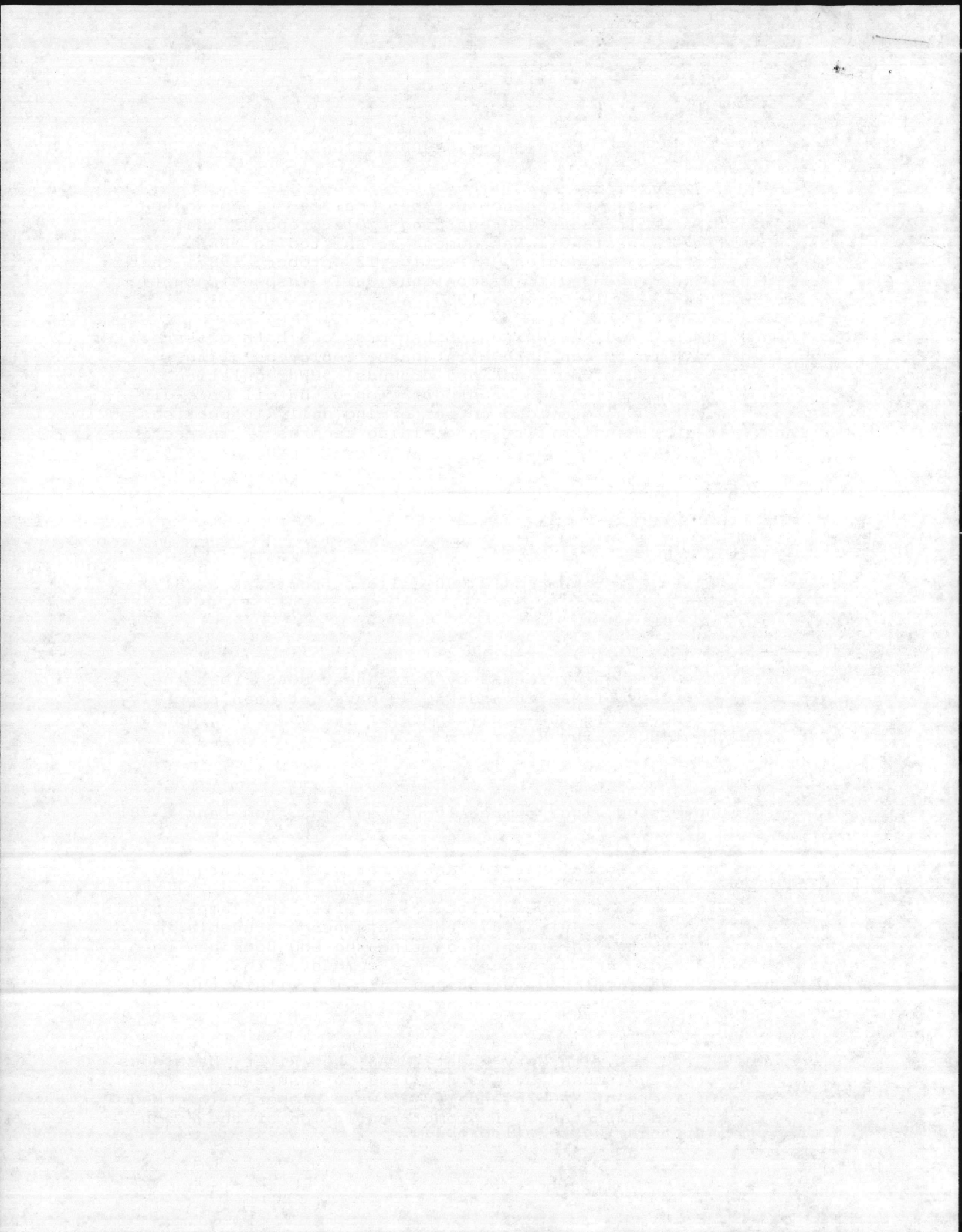
9 Oct 87

1. Waste Conversion, Inc. pumped 10,000 gallons from tank S-781 at Building 45.

2. John Riggs and Manuel Martin, NREAD met with Don Gurganus of Heavy Equipment to determine the dates that the used oil tanks at MCAS, NR were pumped prior to and after the sampling of these tanks on 8 and 9 July 1987. Mr. Gurganus was unable to provide the requested information stating the Log Book had been lost or misplaced. Mr. Gurganus further commented that the previous truck operator had maintained this log within the vehicle, however, upon inspection of the vehicle, the book was not found.

3. Danny Sharpe met with Mary Wheat, MCAS, New River, Hazardous Waste Manager, to discuss actions required to ensure that Commanding Officers of MAG 26 and MAG 29 were properly informed of the nature and importance of prompt resolution of the Freon contamination of the waste oil problem.







UNITED STATES MARINE CORPS  
MARINE CORPS BASE  
CAMP LEJEUNE, NORTH CAROLINA 28542-5001

IN REPLY REFER TO:

6280/2

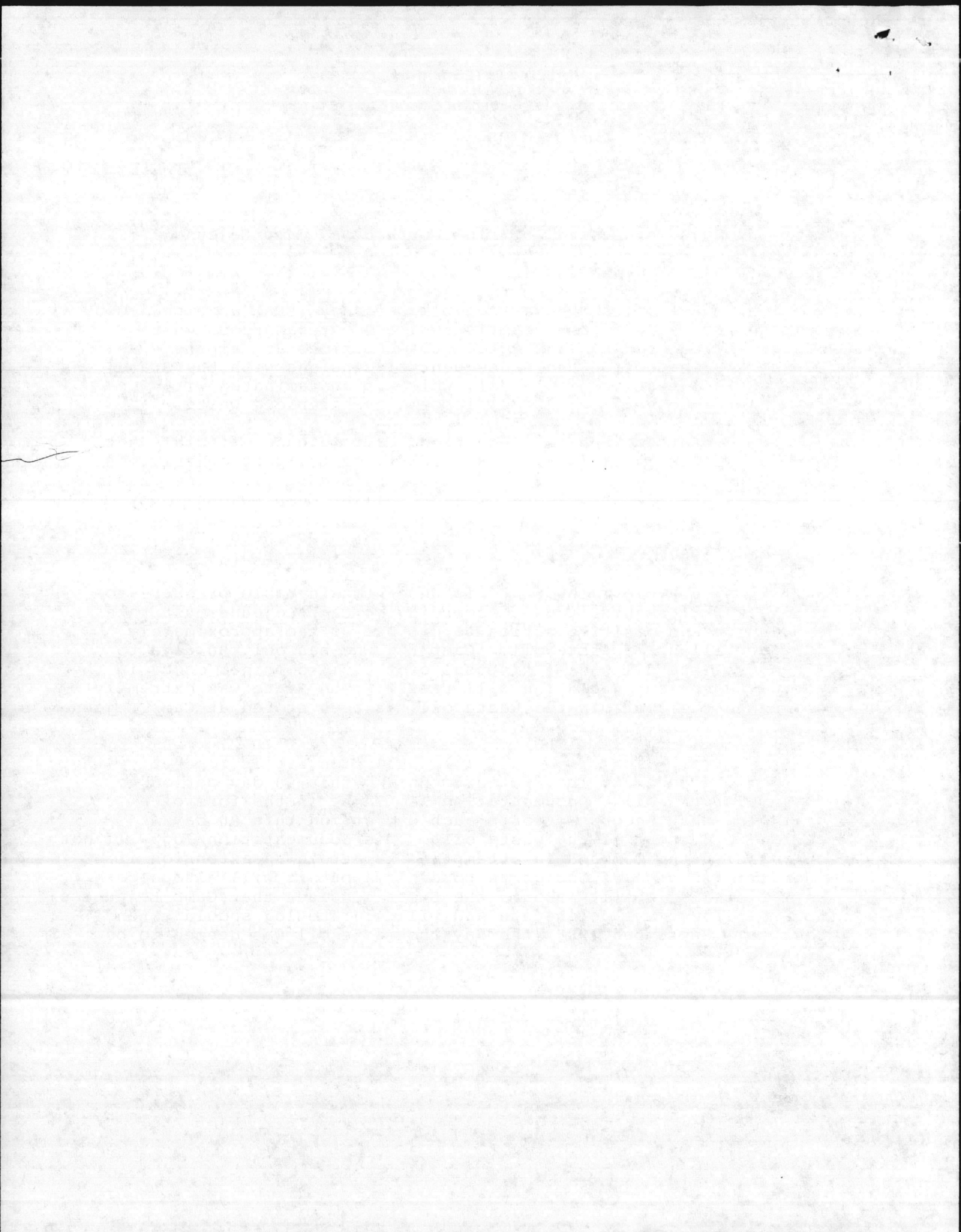
FAC

OCT 02 1987

From: Commanding General, Marine Corps Base, Camp Lejeune

Subj: DISPOSAL OF WASTE OIL


1. The U. S. Environmental Protection Agency (EPA) accompanied by State of North Carolina recently reviewed our hazardous waste management program and inspected our operations at Camp Lejeune. During the inspection and subsequent discussions with the State, we were advised that our waste oil, which is contaminated with halogenated solvents, must be disposed as hazardous waste.
2. Subsequent to the EPA inspection, Camp Lejeune officials met with the State to clarify certain requirements, particularly, procedures and time limits for disposal of waste oil. The State advised that all seven tanks of waste oil at Camp Lejeune must be treated as hazardous waste. The State did agree, however, to allow Camp Lejeune to store the waste for 90 days from actual discovery (1 September 1987).
3. It is very clear the State is under considerable pressure to comply with EPA guidelines. Accordingly, Camp Lejeune must take aggressive and positive action to dispose of the approximately 400,000 gallons of waste oil. Camp Lejeune has only 90 days to dispose of the oil and if disposal of the oil does not occur in that period, a serious violation will result. The State was extremely concerned the contaminated waste oil has been stored at Camp Lejeune for up to two years already.
4. In anticipation of potential legal action, it is imperative that the Command document their efforts during this 90 day period to dispose of the oil. Documentation should be in the form of a daily log that records efforts each day during this 90 day period to dispose of the waste oil. This documentation/log will not only assist the Command in attempting to attain an extension if required (30 days extension is possible), but it will also negate any criminal liability should the State conclude that Camp Lejeune's non-compliance was deliberate and willful. The log should extend back to 1 September 1987 (the day the waste oil was deemed to be hazardous).





Subj: DISPOSAL OF WASTE OIL

5. Request you provide a copy of your log on a weekly basis to the Commanding General, (Attn: AC/S, Facilities). Point of contact for further information is B. W. Elston, extension 3034.

  
T. J. DALZELL  
By direction

Distribution:

AC/S COMPT

AC/S LOG

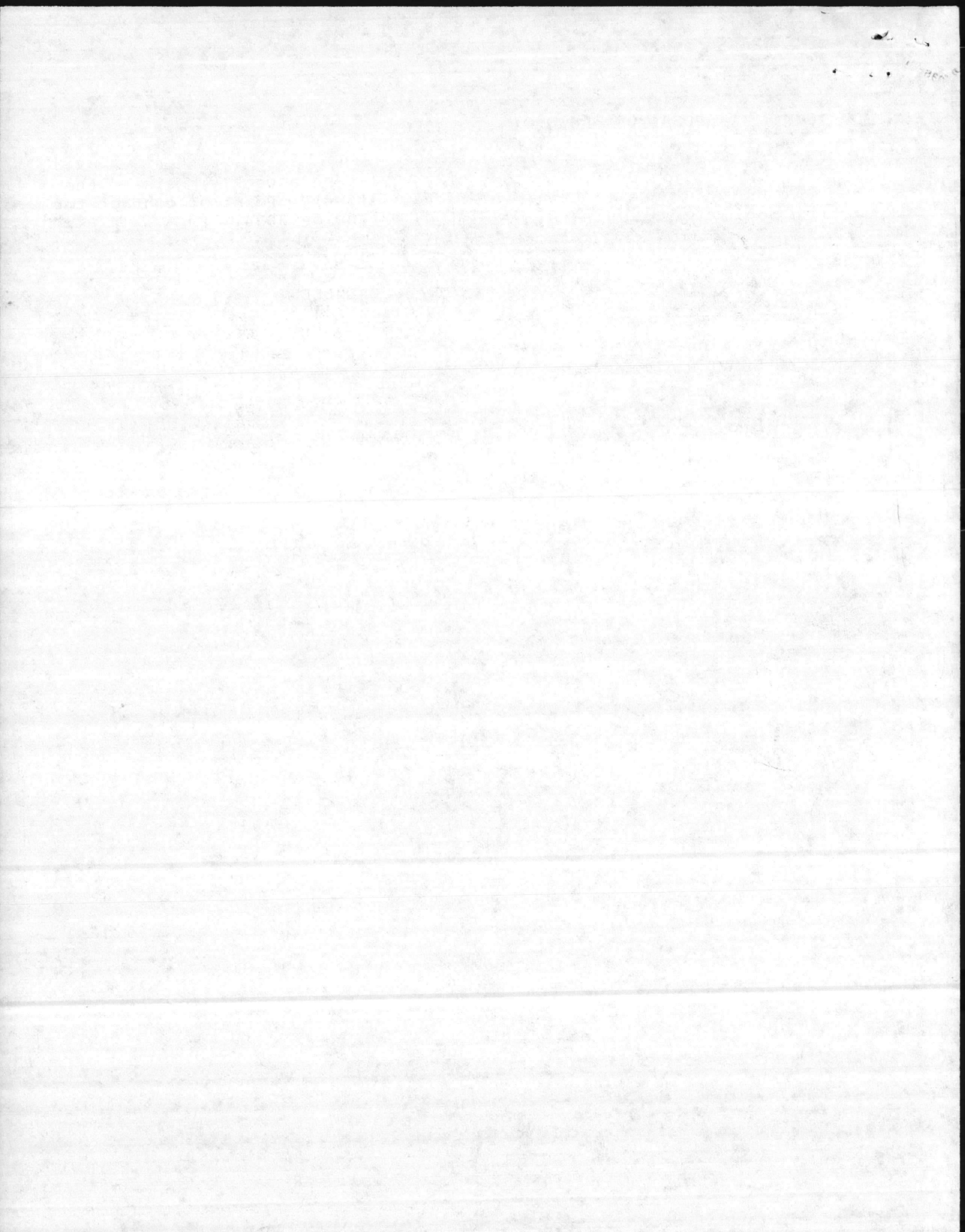
SJA

FacMgmtO

DRMO

BMO

NREAD



6240  
NREAD  
OCT 13 1987

From: Director, Natural Resources and Environmental Affairs  
Division, Marine Corps Base, Camp Lejeune  
To: Base Maintenance Officer, Marine Corps Base, Camp Lejeune  
Subj: TRAINING CLASS FOR PERSONNEL FROM BASE MAINTENANCE WHO  
ARE INSPECTING HAZARDOUS WASTE OIL STORAGE TANKS

Ref: (a) BO 6240.5A

Encl: (1) Hazardous Waste Training Record  
(2) List of Attendees

1. The subject training was conducted on 6 October 1987, per Mr. L. D. Shepard's request to ensure compliance with regulations contained in the reference.

2. Please ensure that a hazardous waste training record is completed for each individual participating in the subject training. Enclosure (1) contains recommended wording. Personnel who attended the training, are listed in enclosure (2). The records must be maintained by Hazardous Material Disposal Officer, (HMDO), per the reference.

J. I. WOOTEN

Copy to:  
AC/S, FAC  
HMDO, BMAIN

*Doc*  
Supply Enc.



OCT 13 1987

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED  
DATE 10/13/87 BY SP-6 [illegible]

EXCEPT WHERE SHOWN OTHERWISE, THIS DOCUMENT IS  
UNCLASSIFIED

DATE 10/13/87 BY SP-6 [illegible]

EXCEPT WHERE SHOWN OTHERWISE, THIS DOCUMENT IS  
UNCLASSIFIED

DATE 10/13/87 BY SP-6 [illegible]

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UNCLASSIFIED

DATE 10/13/87 BY SP-6 [illegible]

EXCEPT WHERE SHOWN OTHERWISE, THIS DOCUMENT IS  
UNCLASSIFIED

DATE 10/13/87 BY SP-6 [illegible]

PART I

RECORD OF HAZARDOUS WASTE TRAINING

1. Employee Name: JOHN DOE
2. Job Title/MOS: MAINTENANCE MECHANIC
3. Name of Organization: BASE MAINTENANCE DIVISION
4. Date this Record Established: 8 OCTOBER 1987
5. Description of HW Duty: Perform daily inspections of tanks used to store hazardous waste oil, maintains inspection records and notifies supervisor or designated official of discrepancies requiring corrective action.

6. Description of HW Training Completed:

a. Date	b. Description of Training/Name of Trainer	c. Signature and Date
6 OCT 87	Danny Sharpe, Supervisory Ecologist	John Doe 6 Oct 87
	Natural Resources and Environmental Affairs Division, (NREAD), provided 1½ hours of formal classroom training on State and Federal Hazardous Waste Regulations and the history of the current inventories of hazardous waste oil. Daily inspection forms were reviewed and guidance provided on keeping records and indicating corrective action. Mr. Ken Warren of NREAD provided a 1 hour session at the Lot 803 facility on what to look for on inspection.	

Appendix A to  
ENCLOSURE (3)

BO 6240.5A  
10 Mar 1987

PART I - Description of HW Training Completed - (continued)

a. Date	b. Description of Training/Name of Trainer	c. Signature and Date

PART II

MINIMUM LEVELS AND RECORD KEEPING FOR HAZARDOUS WASTE MANAGEMENT ORIENTATION TRAINING

Personnel routinely handling HW will be provided sufficient on-the-job training to ensure adequate awareness to the items listed below:

- (1) The types and characteristics of HM/HW handled.
- (2) Applicable activity oil and hazardous substance spill prevention and contingency plan contained in BO 11090.1\_.
- (3) Organizational procedures and policy for implementation of BO 6240.5.
- (4) Procedures to follow in protecting personal safety during HM/HW emergencies.
- (5) The HW Standard Operating Procedure for the organization.
- (6) The employees specific HW handling responsibilities.

Appendix A to  
ENCLOSURE (3)



LIST OF ATTENDEES

NAME	BASE MAINTENANCE BRANCH
ROBERT HUFFMAN	HEAVY EQUIPMENT - MCB
AMOS GARRIS	" "
PAT DALTON	" "
ESLEY JARMAN	" "
LUIS CRAIG	" "
LARRY HUNT	" "
KENNETH TREISTER	GROUNDSKEEPING - MCAS
CARL JONES	" "
BERRY BRANTLEY	GROUNDSKEEPING - MCB
BRUCE MARKWICK	" "
PHILIP SMITH	" "
PAUL MULL	EMERGENCY MAINTENANCE - TT
DAVID GREER	" "

1911

DEPARTMENT OF THE NAVY  
*Memorandum*  
5200  
NREAD

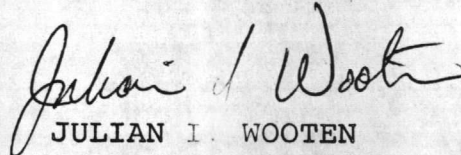
DATE: 7 Oct 1987

FROM: Director, Natural Resources and Environmental Affairs Division,  
Marine Corps Base, Camp Lejeune  
TO: Supervisory Ecologist, Natural Resources and Environmental Affairs Division

SUBJECT: DISPOSAL OF WASTE OIL; DAILY LOG

REFERENCE: (a) AC/S FAC memo 6280/2 FAC of 2 Oct 87

1. In accordance with the reference, it is requested you keep a daily log of NREAD efforts/actions pertaining to the disposal of waste oil and the hazardous waste oil at the Camp Lejeune complex. I will provide information relative to my involvement. The log is to be forwarded to AC/S Facilities formally on each Monday morning and will reflect the previous weekly events relative to the waste oil/hazardous waste oil disposal efforts by NREAD.

  
JULIAN I. WOOTEN

5200  
NREAD

FIRST ENDORSEMENT on Dir, NREAD, ltr 5200 NREAD of 7 Oct 87  
OCT 07 1987

From: Supvy Ecologist  
To: Environmental Protection Specialist

Subj: DISPOSAL OF WASTE OIL; DAILY LOG

1. Forwarded.

2. You are responsible to maintain the log in accordance with instructions above. The log will contain any significant actions taken by NREAD personnel regarding the disposal of hazardous waste oil currently in storage and to prevent future contamination of oil currently being collected with hazardous waste. This also includes actions taken by the Director, NREAD.

3. The report should be submitted to me by 0900 on each Monday morning.

DANNY D. SHARPE





  
*Memorandum*

5200  
NREAD

DATE: 7 Oct 1987

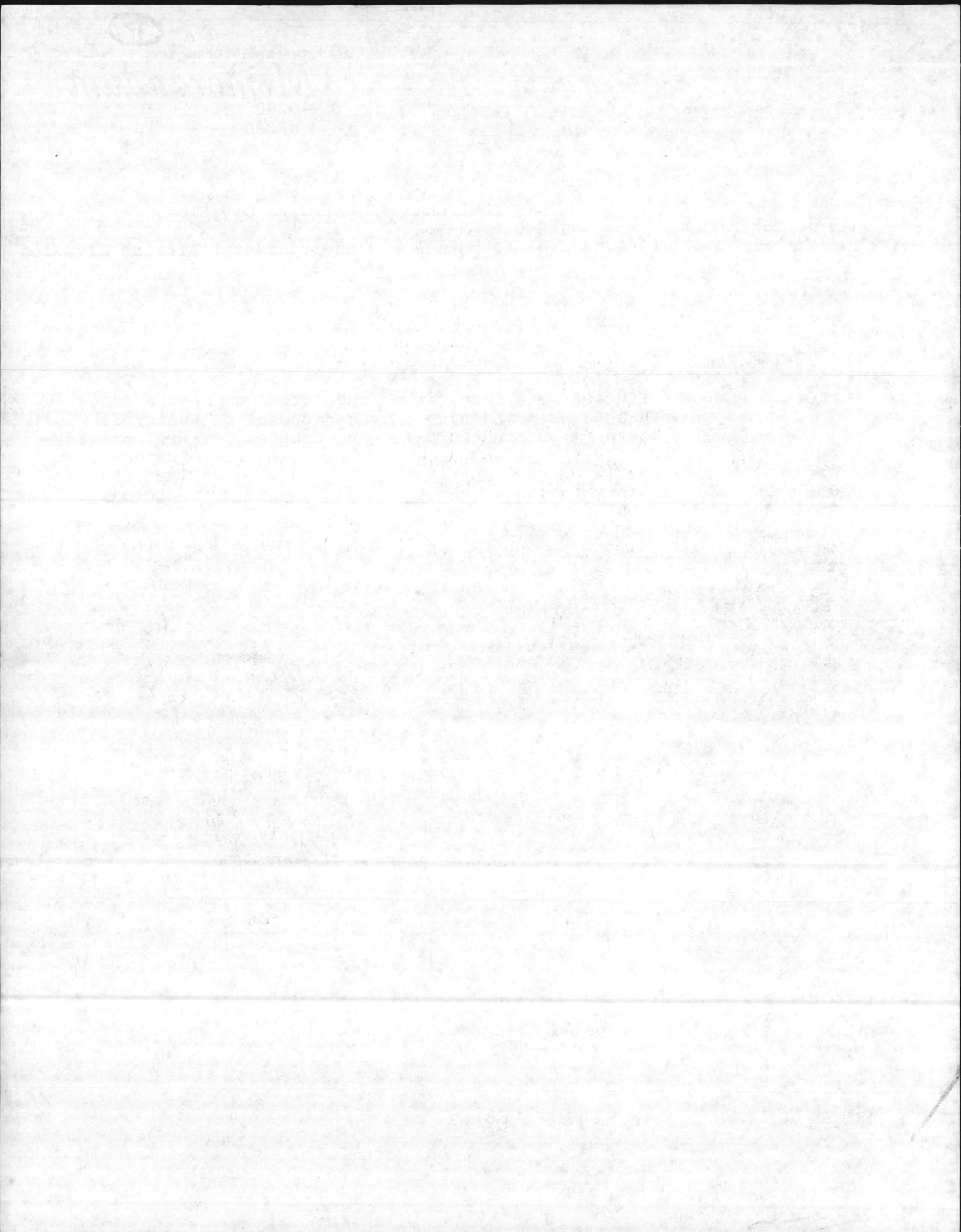
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Marine Corps Base, Camp Lejeune  
TO: Supervisory Ecologist, Natural Resources and Environmental Affairs Division

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REFERENCE: (a) AC/S FAC memo 6280/2 FAC of 2 Oct 87

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JULIAN I. WOOTEN





DSS  
JLW

Julian

Good Letter

✓  
DSS

6280/2  
FAC  
OCT 02 1987

rine Corps Base, Camp Lejeune  
zation and Marketing Office

ion by U. S. Environmental Protection  
th Carolina, this Command was advised  
sposed as a hazardous waste. This  
waste oil being contaminated with

ion, the State of North Carolina agreed  
to allow Camp Lejeune to store the waste oil for 90 days from actual  
discovery that the waste oil contained the halogen (1 September  
1987). Accordingly, the waste oil must be removed by 1 December  
1987. There is a possibility of a 30 day extension if Camp Lejeune  
cannot dispose of the oil within 90 days; however, it is desirable  
the oil be removed without having to request an extension.

3. We are aware that your office is and has been working toward  
removal of the oil. In view of the discussions with the State,  
however, and the potential impact on this Command, it is requested  
that you provide a plan of action and milestones which will ensure  
removal of the oil by the required date. By separate correspondence  
we are also requesting that you maintain a daily log of your effort  
in this endeavor. Request you provide the plan of action and mile-  
stones to Commanding General (Attn: AC/S, Facilities) by 12 October  
1987.

T. J. DALZELL  
By direction

Copy to:  
BMO  
NREAD ←  
SJA

OCT 20 1967

TO THE DIRECTOR, FBI

FROM THE SAC, NEW YORK

RE: [Illegible]

[Illegible]

[Illegible]

[Illegible]

[Illegible]

[Illegible]

[Illegible]

[Illegible]



DSS  
JLW

6280/2  
FAC  
OCT 02 1987

From: Commanding General, Marine Corps Base, Camp Lejeune  
To: Chief, Defense Reutilization and Marketing Office

Subj: DISPOSAL OF WASTE OIL

1. During the recent inspection by U. S. Environmental Protection Agency (EPA) and State of North Carolina, this Command was advised that our waste oil must be disposed as a hazardous waste. This requirement is caused by the waste oil being contaminated with halogenated solvents.
2. Subsequent to the inspection, the State of North Carolina agreed to allow Camp Lejeune to store the waste oil for 90 days from actual discovery that the waste oil contained the halogen (1 September 1987). Accordingly, the waste oil must be removed by 1 December 1987. There is a possibility of a 30 day extension if Camp Lejeune cannot dispose of the oil within 90 days; however, it is desirable the oil be removed without having to request an extension.
3. We are aware that your office is and has been working toward removal of the oil. In view of the discussions with the State, however, and the potential impact on this Command, it is requested that you provide a plan of action and milestones which will ensure removal of the oil by the required date. By separate correspondence we are also requesting that you maintain a daily log of your effort in this endeavor. Request you provide the plan of action and milestones to Commanding General (Attn: AC/S, Facilities) by 12 October 1987.

T. J. DALZELL  
By direction

Copy to:  
BMO  
NREAD ←  
SJA



1981 9 0 100

6240  
NREAD  
2 Oct 87

From: Director, Natural Resources and Environmental Affairs  
Division, Marine Corps Base, Camp Lejeune  
To: Commanding Officer, Marine Corps Air Station, New River

Subj: ANALYSIS OF VARIOUS WASTE OIL TANKS ABOARD MCAS, NR

Encl: (1) Partial Report, JTC Data Report #87-426 dtd 24 Sep 87  
(2) Sampling locations for data provided by JTC Data  
Report #87-426 (Partial) dtd 24 Sep 87

1. Enclosure (1) is provided per Grounds Safety Manager, Marine Corps Air Station, New River request of 1 October 1987. Enclosure (2) correlates data contained in enclosure (1) to sampling locations.

J. I. WOOTEN

*83*  
*Supply Chemist*  
*DDT*  
*Supply Ecol.*



THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF CHEMISTRY

RESEARCH REPORT  
NO. 1000

BY  
J. H. GOLDSTEIN

1954



Partial Report

JTC DATA REPORT # 87-426

LABORATORY ANALYSIS ON NAVAL SAMPLES

CONTRACT #N62470-86-C-8754

CASE # 127

PREPARED FOR:

DEPARTMENT OF THE NAVY  
ATLANTIC DIVISION  
NAVAL FACILITIES ENGINEERING COMMAND  
NORFOLK, VIRGINIA 23511-6287

PREPARED BY:

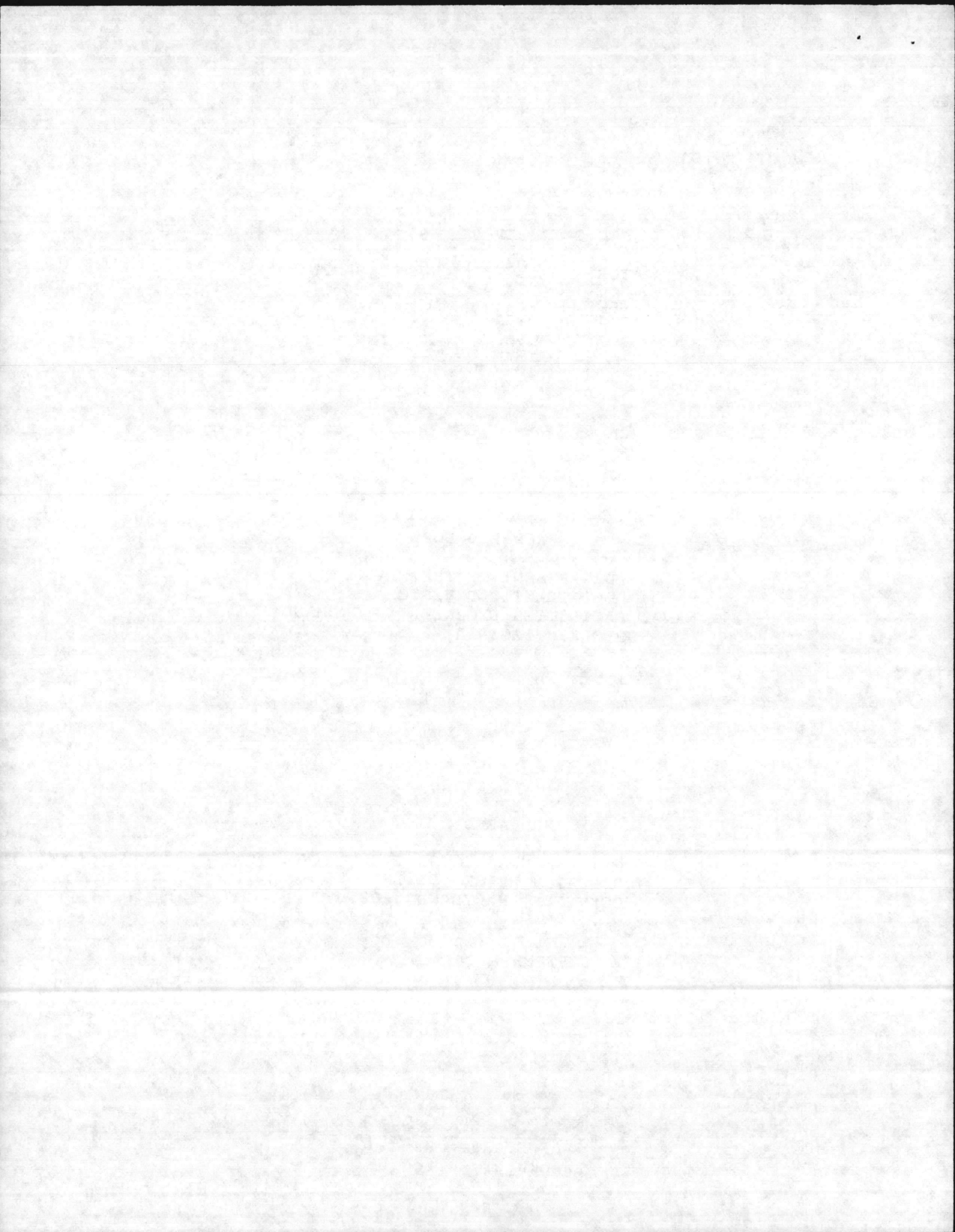
JTC ENVIRONMENTAL CONSULTANTS, INC.  
4 RESEARCH PLACE, SUITE L-10  
ROCKVILLE, MARYLAND 20850

SEPTEMBER 24, 1987

*Ann E. Rosecrance*

Ann E. Rosecrance  
Laboratory Director

ENCLOSURE (1)

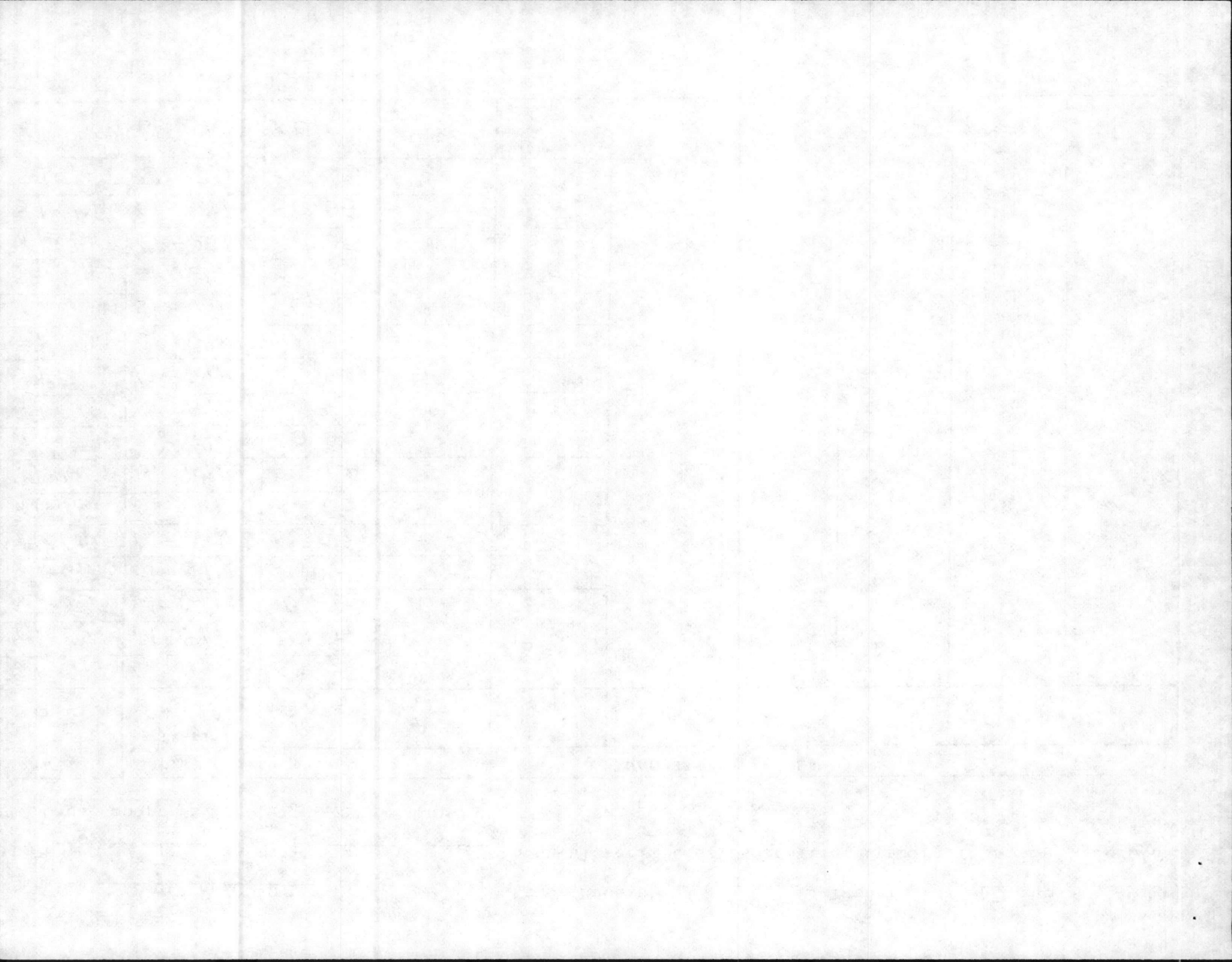


Location: Camp Lejeune Date of Receipt: 9-3-87 Turnaround: 15 days  
 Date: 9-24-87 Case No. 127 to Naval Facilities Engineering Command, Norfolk, Virginia  
 JTC Data Report No. 87-426 Table 1

NAVY SAMPLE ID	JTC SAMPLE ID	ANALYSIS PARAMETER							
		TOX %	VOA + Freon						
87-61	61-0908	<0.05	see attached sheet						
87-62	61-0909	0.28	"						
87-63T	61-0910	0.28	"						
87-63B	61-0910	<0.05	"						
87-64	61-0911	<0.05	"						
87-65	61-0912	<0.05	"						
87-66	61-0913	<0.05	"						
87-67	61-0914	<0.05	"						
87-68	61-0915	0.33	"						
87-69	61-0916	1.78	"						
87-70T	61-0917	0.46	"						
87-70B	61-0917	<0.05	"						
87-71	61-0918	<0.05	"						
87-72T	61-0919	<0.05	"						
87-72B	61-0919	<0.05	"						
87-73T	61-0920	<0.05	"						
87-73B	61-0920	<0.05	"						

T = Top layer B = Bottom layer





J  
T

C Environmental Consultants, Inc.

## PRIORITY POLLUTANT ANALYSIS DATA SHEET

## VOLATILE FRACTION

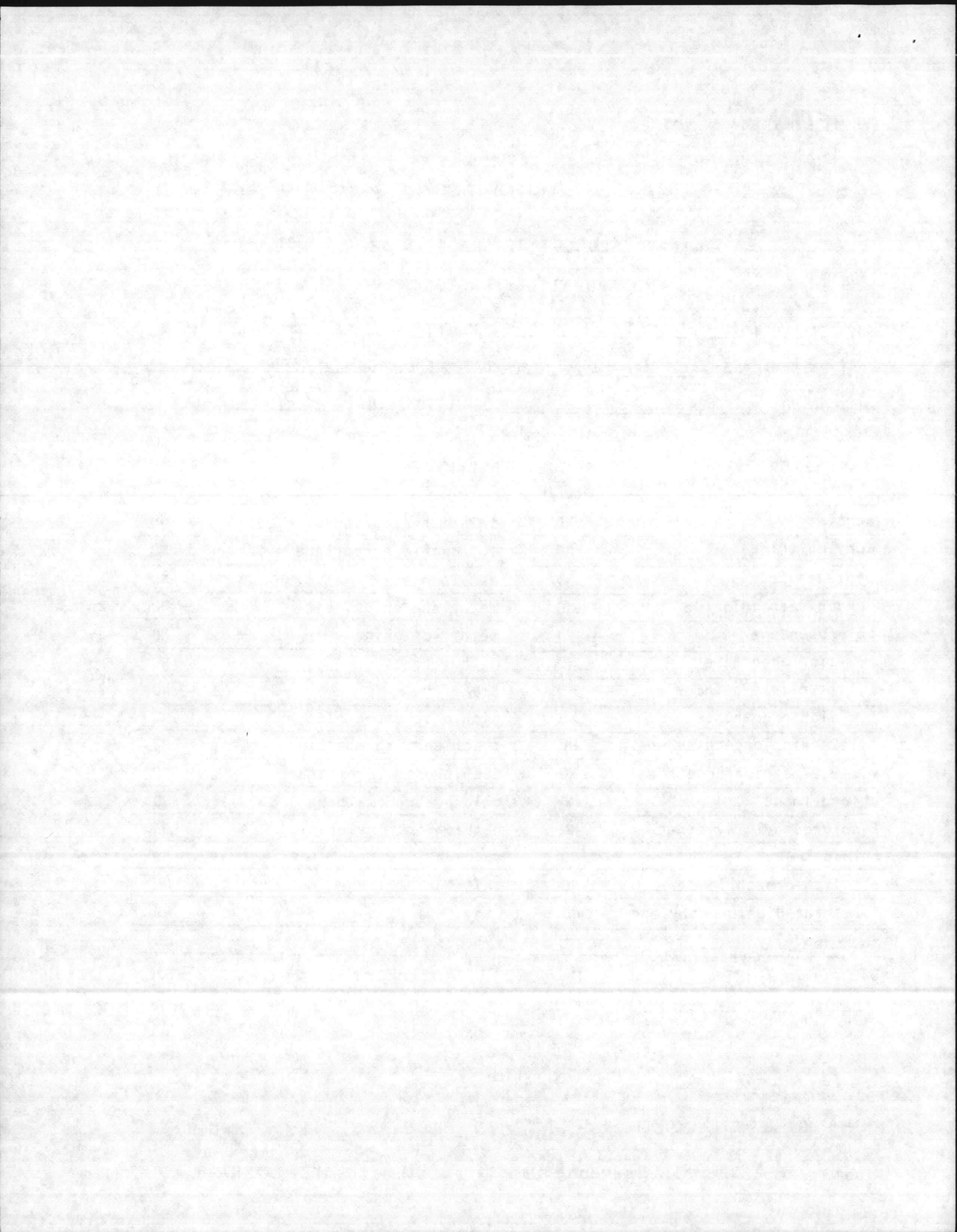
JTC SAMPLE # 61-0908 PROJECT NO. NF61 #127  
CLIENT SAMPLE # 87-61 DATE RECEIVED 9-3-87  
METHOD NO. 624 DETECTION LIMIT 250 mg/L

PARAMETER	RESULT mg/L	PARAMETER	RESULT mg/L
acrolein	ND	1,2-dichloropropane	ND
acrylonitrile	ND	1,3-dichloropropylene	ND
benzene	100* <del>ND</del>	ethylbenzene	ND
carbon tetrachloride	ND	methylene chloride	ND
chlorobenzene	ND	methyl chloride	ND
1,2-dichloroethane	ND	methyl bromide	ND
1,1,1-trichloroethane	25* <del>ND</del>	bromoform	ND
1,1-dichloroethane	ND	dichlorobromomethane	ND
1,1,2-trichloroethane	ND	trichlorofluoromethane	ND
1,1,2,2-tetrachloroethane	ND	dichlorodifluoromethane	ND
chloroethane	ND	chlorodibromomethane	ND
2-chloroethylvinylether	ND	tetrachloroethylene	ND
chloroform	ND	toluene	ND
1,1-dichloroethylene	ND	trichloroethylene	ND
1,2-trans-dichloroethylene	ND	vinyl chloride	ND
acetone	ND	xylenes	ND
2-butanone (MEK)	ND	1,1,2-trichloro-1,2,2,- trifluoroethane (freon)	3200 <del>ND</del>

ND = NOT DETECTED

\* = BELOW DETECTION LIMIT

Note: Sample matrix prevented analysis at a lower detection limit





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## PRIORITY POLLUTANT ANALYSIS DATA SHEET

## VOLATILE FRACTION

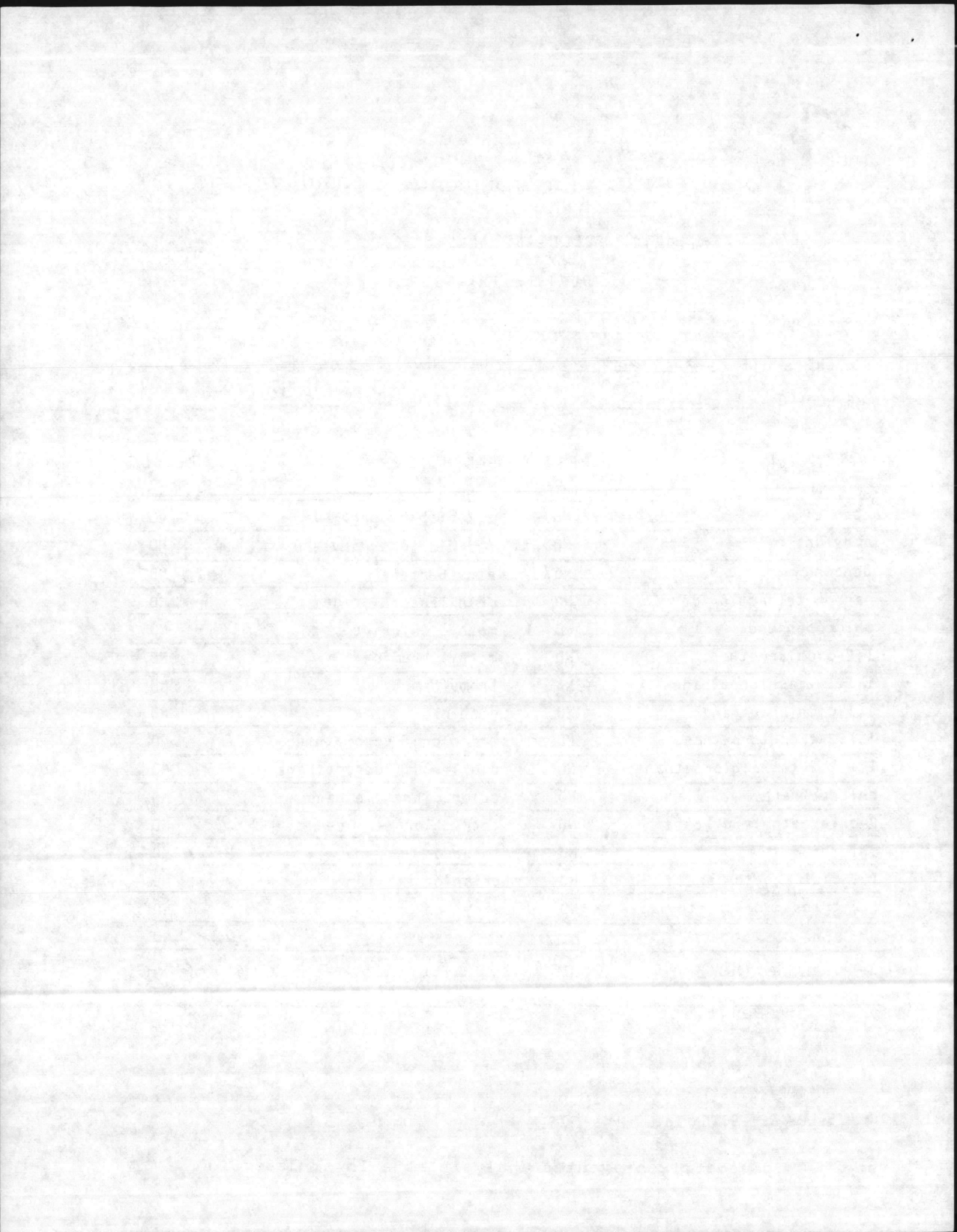
JTC SAMPLE # 61-0909 PROJECT NO. NF61 #127  
CLIENT SAMPLE # 87-62 DATE RECEIVED 9-3-87  
METHOD NO. 624 DETECTION LIMIT 250 mg/L

PARAMETER	RESULT mg/L	PARAMETER	RESULT mg/L
acrolein	ND	1,2-dichloropropane	ND
acrylonitrile	ND	1,3-dichloropropylene	ND
benzene	<del>120*</del>	ethylbenzene	<del>280</del>
carbon tetrachloride	ND	methylene chloride	ND
chlorobenzene	ND	methyl chloride	ND
1,2-dichloroethane	ND	methyl bromide	ND
1,1,1-trichloroethane	<del>50*</del>	bromoform	ND
1,1-dichloroethane	ND	dichlorobromomethane	ND
1,1,2-trichloroethane	ND	trichlorofluoromethane	ND
1,1,2,2-tetrachloroethane	ND	dichlorodifluoromethane	ND
chloroethane	ND	chlorodibromomethane	ND
2-chloroethylvinylether	ND	tetrachloroethylene	ND
chloroform	ND	toluene	<del>580</del>
1,1-dichloroethylene	ND	trichloroethylene	ND
1,2-trans-dichloroethylene	ND	vinyl chloride	ND
acetone	ND	xylene	<del>1200</del>
2-butanone (MEK)	ND	1,1,2-trichloro-1,2,2,- trifluoroethane (freon)	<del>6900</del>

ND = NOT DETECTED

\* = BELOW DETECTION LIMIT

Note: Sample matrix prevented analysis at a lower detection limit



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## PRIORITY POLLUTANT ANALYSIS DATA SHEET

## VOLATILE FRACTION

JTC SAMPLE # 61-0910 PROJECT NO. NF-61 #127  
CLIENT SAMPLE # 87-63 Top layer DATE RECEIVED 9-3-87  
METHOD NO. 624 DETECTION LIMIT 250 mg/L

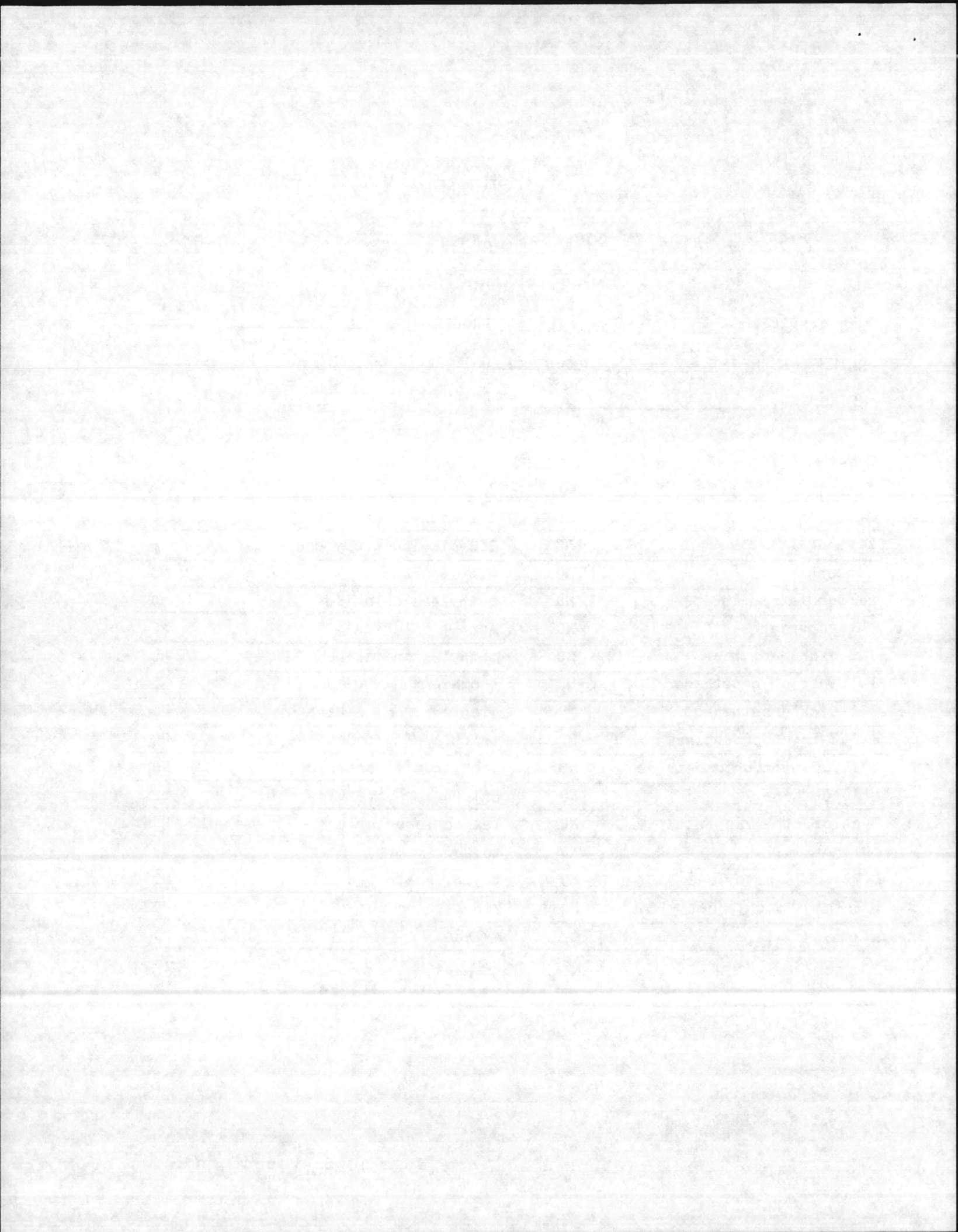
PARAMETER	RESULT mg/L	PARAMETER	RESULT mg/L
acrolein	ND	1,2-dichloropropane	ND
acrylonitrile	ND	1,3-dichloropropylene	ND
benzene	200* <del>ND</del>	ethylbenzene	620 <del>ND</del>
carbon tetrachloride	ND	methylene chloride	ND
chlorobenzene	ND	methyl chloride	ND
1,2-dichloroethane	ND	methyl bromide	ND
1,1,1-trichloroethane	1420 <del>ND</del>	bromoform	ND
1,1-dichloroethane	ND	dichlorobromomethane	ND
1,1,2-trichloroethane	ND	trichlorofluoromethane	ND
1,1,2,2-tetrachloroethane	ND	dichlorodifluoromethane	ND
chloroethane	ND	chlorodibromomethane	ND
2-chloroethylvinylether	ND	tetrachloroethylene	ND
chloroform	ND	toluene	1200 <del>ND</del>
1,1-dichloroethylene	ND	trichloroethylene	ND
1,2-trans-dichloroethylene	ND	vinyl chloride	ND
acetone	ND	xylene	2620 <del>ND</del>
2-butanone (MEK)	ND	1,1,2-trichloro-1,2,2,- trifluoroethane (freon)	3300 <del>ND</del>

ND = NOT DETECTED

\* = BELOW DETECTION LIMIT

Note: Sample matrix prevented analysis at a lower detection limit





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## PRIORITY POLLUTANT ANALYSIS DATA SHEET

## VOLATILE FRACTION

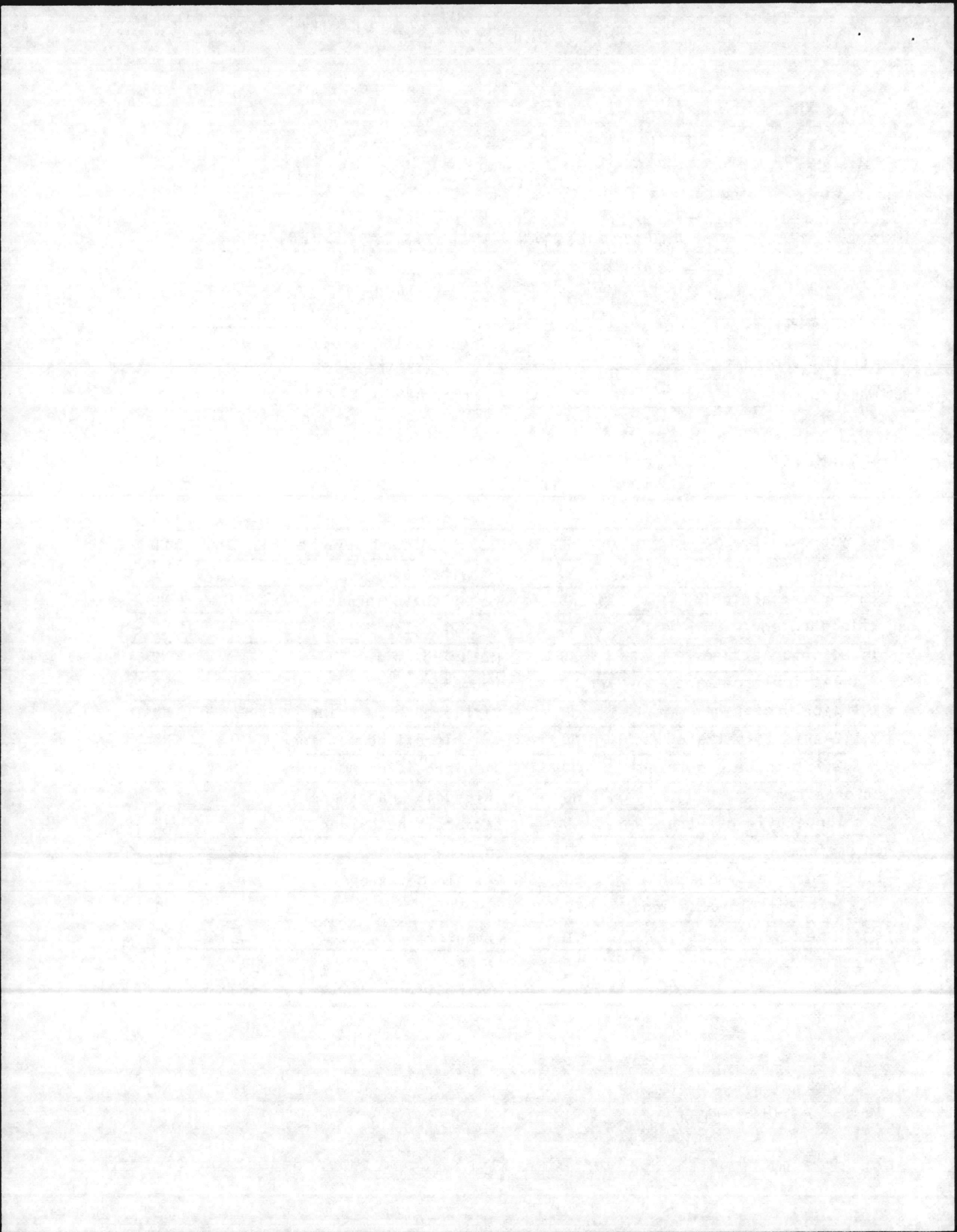
JTC SAMPLE # 61-0910 PROJECT NO. NE61 #127  
CLIENT SAMPLE # 87-63 bottom DATE RECEIVED 9-3-87  
METHOD NO. 624 DETECTION LIMIT 250 mg/L

PARAMETER	RESULT mg/L	PARAMETER	RESULT mg/L
acrolein	ND	1,2-dichloropropane	ND
acrylonitrile	ND	1,3-dichloropropylene	ND
benzene	25* <del>ND</del>	ethylbenzene	120* <del>ND</del>
carbon tetrachloride	ND	methylene chloride	ND
chlorobenzene	ND	methyl chloride	ND
1,2-dichloroethane	ND	methyl bromide	ND
1,1,1-trichloroethane	350 <del>ND</del>	bromoform	ND
1,1-dichloroethane	ND	dichlorobromomethane	ND
1,1,2-trichloroethane	ND	trichlorofluoromethane	ND
1,1,2,2-tetrachloroethane	ND	dichlorodifluoromethane	ND
chloroethane	ND	chlorodibromomethane	ND
2-chloroethylvinylether	ND	tetrachloroethylene	ND
chloroform	ND	toluene	220* <del>ND</del>
1,1-dichloroethylene	ND	trichloroethylene	ND
1,2-trans-dichloroethylene	ND	vinyl chloride	ND
acetone	ND	xylenes	580 <del>ND</del>
2-butanone (MEK)	ND	1,1,2-trichloro-1,2,2,- trifluoroethane (freon)	ND

ND = NOT DETECTED

\* = BELOW DETECTION LIMIT

Note: Sample matrix prevented analysis at a lower detection limit





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## PRIORITY POLLUTANT ANALYSIS DATA SHEET

## VOLATILE FRACTION

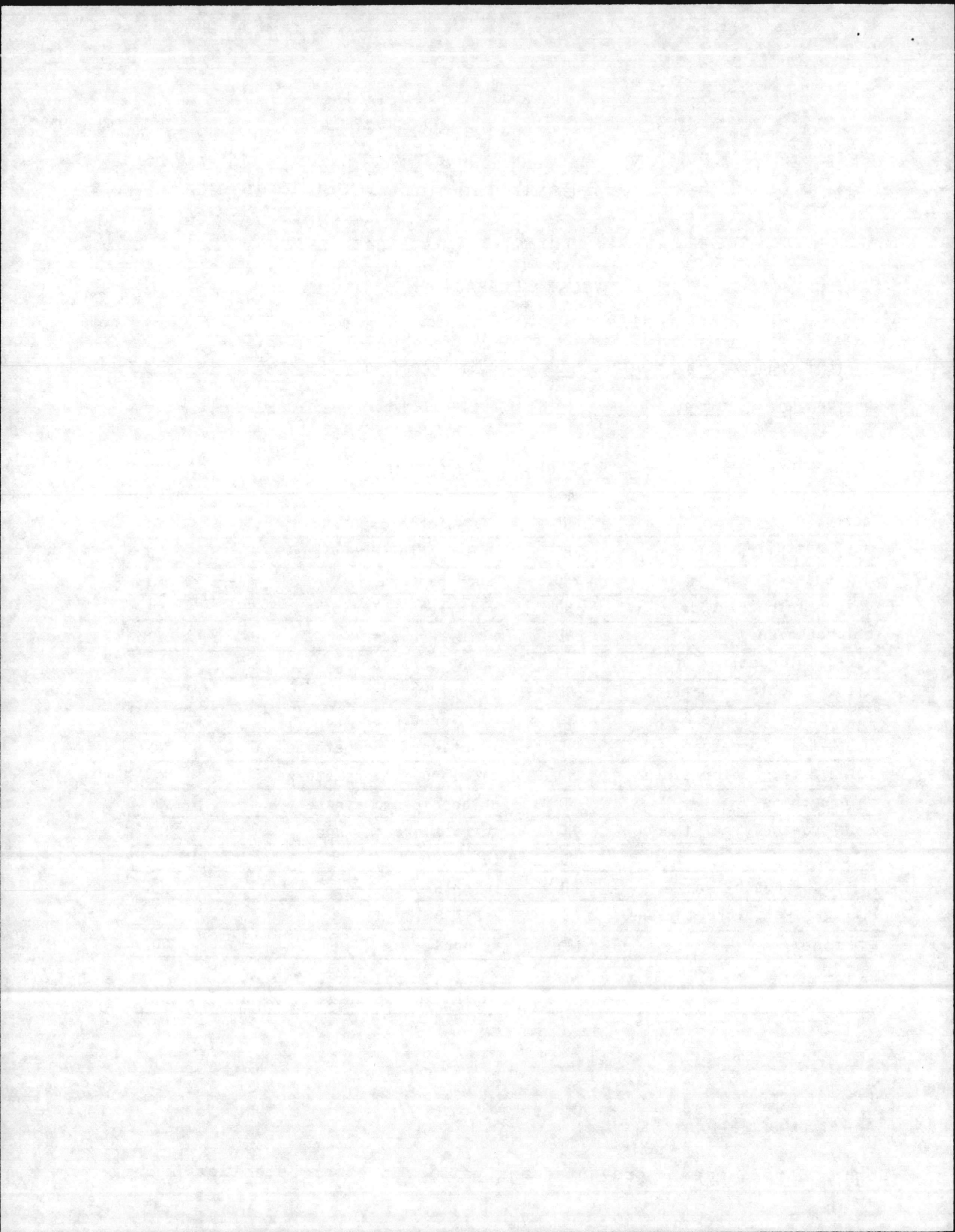
JTC SAMPLE # 61-0911 PROJECT NO. NF-61 #127  
CLIENT SAMPLE # 87-64 DATE RECEIVED 9-3-87  
METHOD NO. 624 DETECTION LIMIT 250 mg/L

PARAMETER	RESULT mg/L	PARAMETER	RESULT mg/L
acrolein	ND	1,2-dichloropropane	ND
acrylonitrile	ND	1,3-dichloropropylene	ND
benzene	ND	ethylbenzene	420 <del>ND</del>
carbon tetrachloride	ND	methylene chloride	ND
chlorobenzene	ND	methyl chloride	ND
1,2-dichloroethane	ND	methyl bromide	ND
1,1,1-trichloroethane	200* <del>ND</del>	bromoform	ND
1,1-dichloroethane	ND	dichlorobromomethane	ND
1,1,2-trichloroethane	ND	trichlorofluoromethane	ND
1,1,2,2-tetrachloroethane	ND	dichlorodifluoromethane	ND
chloroethane	ND	chlorodibromomethane	ND
2-chloroethylvinylether	ND	tetrachloroethylene	ND
chloroform	ND	toluene	180* <del>ND</del>
1,1-dichloroethylene	ND	trichloroethylene	ND
1,2-trans-dichloroethylene	ND	vinyl chloride	ND
acetone	ND	xylene	1420 <del>ND</del>
2-butanone (MEK)	ND	1,1,2-trichloro-1,2,2,- trifluoroethane (freon)	ND

ND = NOT DETECTED

\* = BELOW DETECTION LIMIT

Note: Sample matrix prevented analysis at a lower detection limit



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## PRIORITY POLLUTANT ANALYSIS DATA SHEET

## VOLATILE FRACTION

JTC SAMPLE # 61-0912 PROJECT NO. NF-61 #127  
CLIENT SAMPLE # 87-65 DATE RECEIVED 9-3-87  
METHOD NO. 624 DETECTION LIMIT 250 mg/L

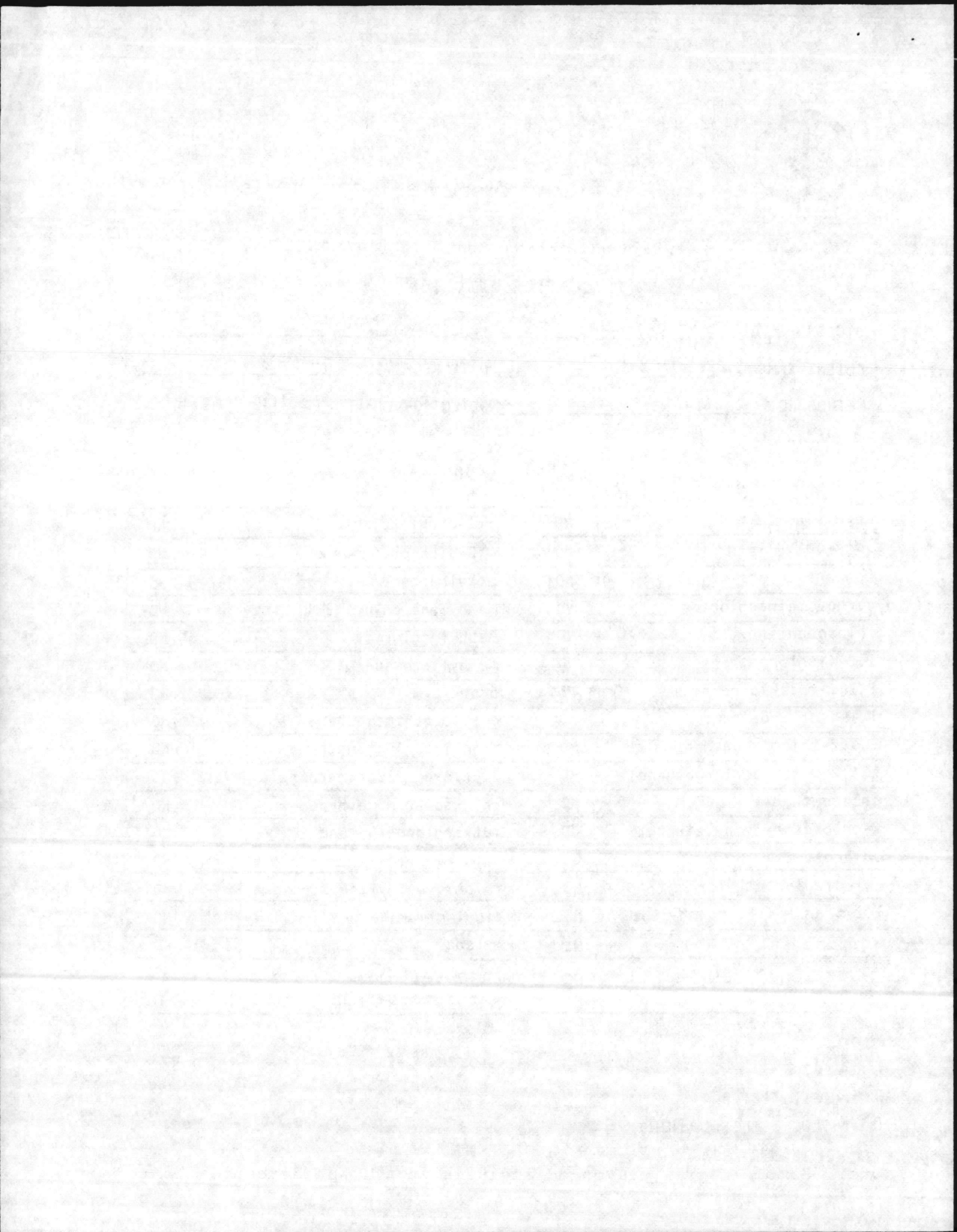
PARAMETER	RESULT mg/L	PARAMETER	RESULT mg/L
acrolein	ND	1,2-dichloropropane	ND
acrylonitrile	ND	1,3-dichloropropylene	ND
benzene	100* <del>ND</del>	ethylbenzene	300 <del>ND</del>
carbon tetrachloride	ND	methylene chloride	ND
chlorobenzene	ND	methyl chloride	ND
1,2-dichloroethane	ND	methyl bromide	ND
1,1,1-trichloroethane	50* <del>ND</del>	bromoform	ND
1,1-dichloroethane	ND	dichlorobromomethane	ND
1,1,2-trichloroethane	ND	trichlorofluoromethane	ND
1,1,2,2-tetrachloroethane	ND	dichlorodifluoromethane	ND
chloroethane	ND	chlorodibromomethane	ND
2-chloroethylvinylether	ND	tetrachloroethylene	ND
chloroform	ND	toluene	550 <del>ND</del>
1,1-dichloroethylene	ND	trichloroethylene	ND
1,2-trans-dichloroethylene	ND	vinyl chloride	ND
acetone	ND	xylenes	1200 <del>ND</del>
2-butanone (MEK)	ND	1,1,2-trichloro-1,2,2,- trifluoroethane (freon)	ND

ND = NOT DETECTED

\* = BELOW DETECTION LIMIT

Note: Sample matrix prevented analysis at a lower detection limit





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## PRIORITY POLLUTANT ANALYSIS DATA SHEET

## VOLATILE FRACTION

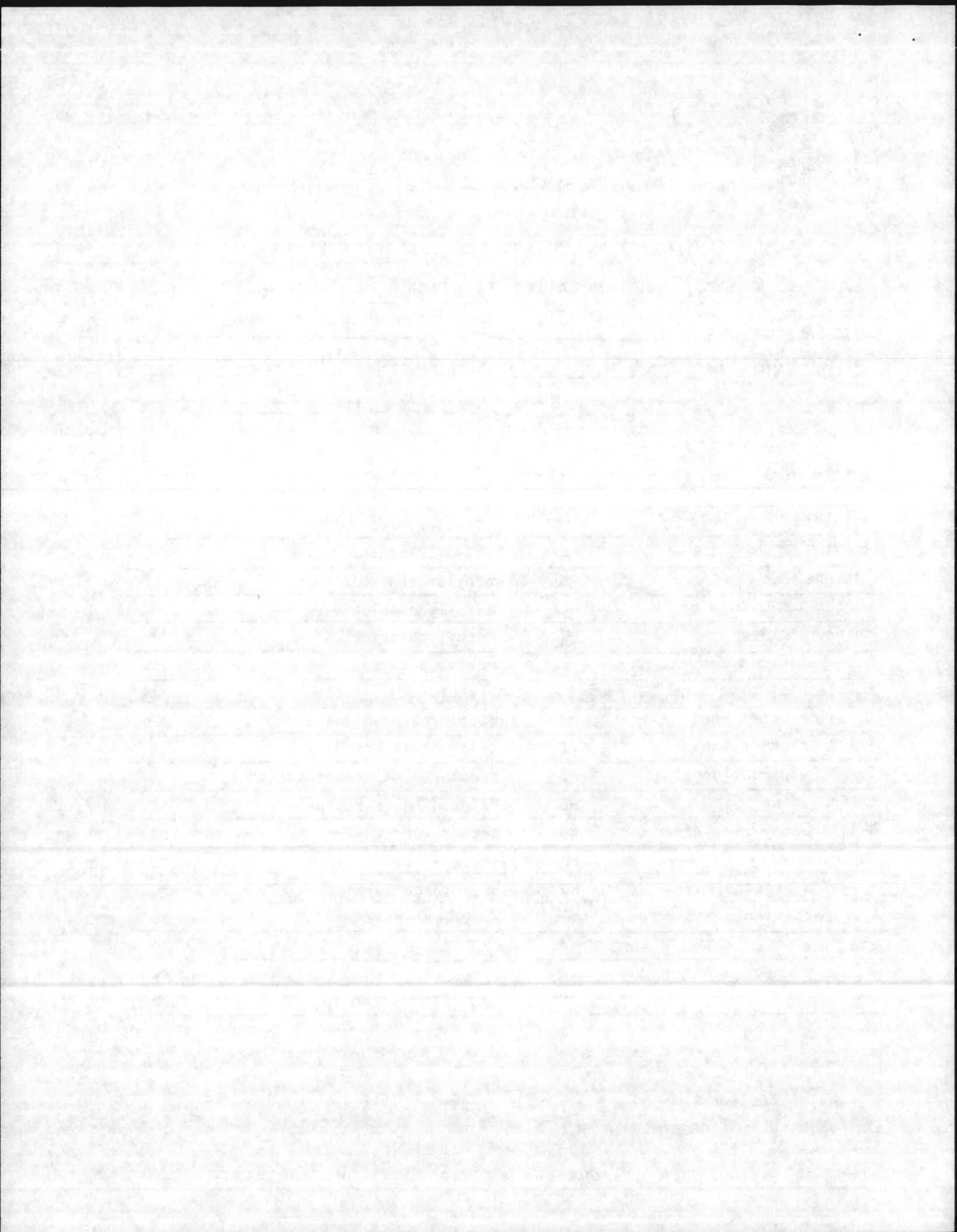
JTC SAMPLE # 61-0913 PROJECT NO. NF-61 #127  
CLIENT SAMPLE # 87-66 DATE RECEIVED 9-3-87  
METHOD NO. 624 DETECTION LIMIT 250 mg/L

PARAMETER	RESULT mg/L	PARAMETER	RESULT mg/L
acrolein	ND	1,2-dichloropropane	ND
acrylonitrile	ND	1,3-dichloropropylene	ND
benzene	<del>25*</del>	ethylbenzene	<del>500</del>
carbon tetrachloride	ND	methylene chloride	ND
chlorobenzene	ND	methyl chloride	ND
1,2-dichloroethane	ND	methyl bromide	ND
1,1,1-trichloroethane	<del>400</del>	bromoform	ND
1,1-dichloroethane	ND	dichlorobromomethane	ND
1,1,2-trichloroethane	ND	trichlorofluoromethane	ND
1,1,2,2-tetrachloroethane	ND	dichlorodifluoromethane	ND
chloroethane	ND	chlorodibromomethane	ND
2-chloroethylvinylether	ND	tetrachloroethylene	ND
chloroform	ND	toluene	<del>280</del>
1,1-dichloroethylene	ND	trichloroethylene	ND
1,2-trans-dichloroethylene	ND	vinyl chloride	ND
acetone	ND	xylene	<del>1450</del>
2-butanone (MEK)	ND	1,1,2-trichloro-1,2,2,- trifluoroethane (freon)	1700 <del>ND</del>

ND = NOT DETECTED

\* = BELOW DETECTION LIMIT

Note: Sample matrix prevented analysis at a lower detection limit





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## PRIORITY POLLUTANT ANALYSIS DATA SHEET

## VOLATILE FRACTION

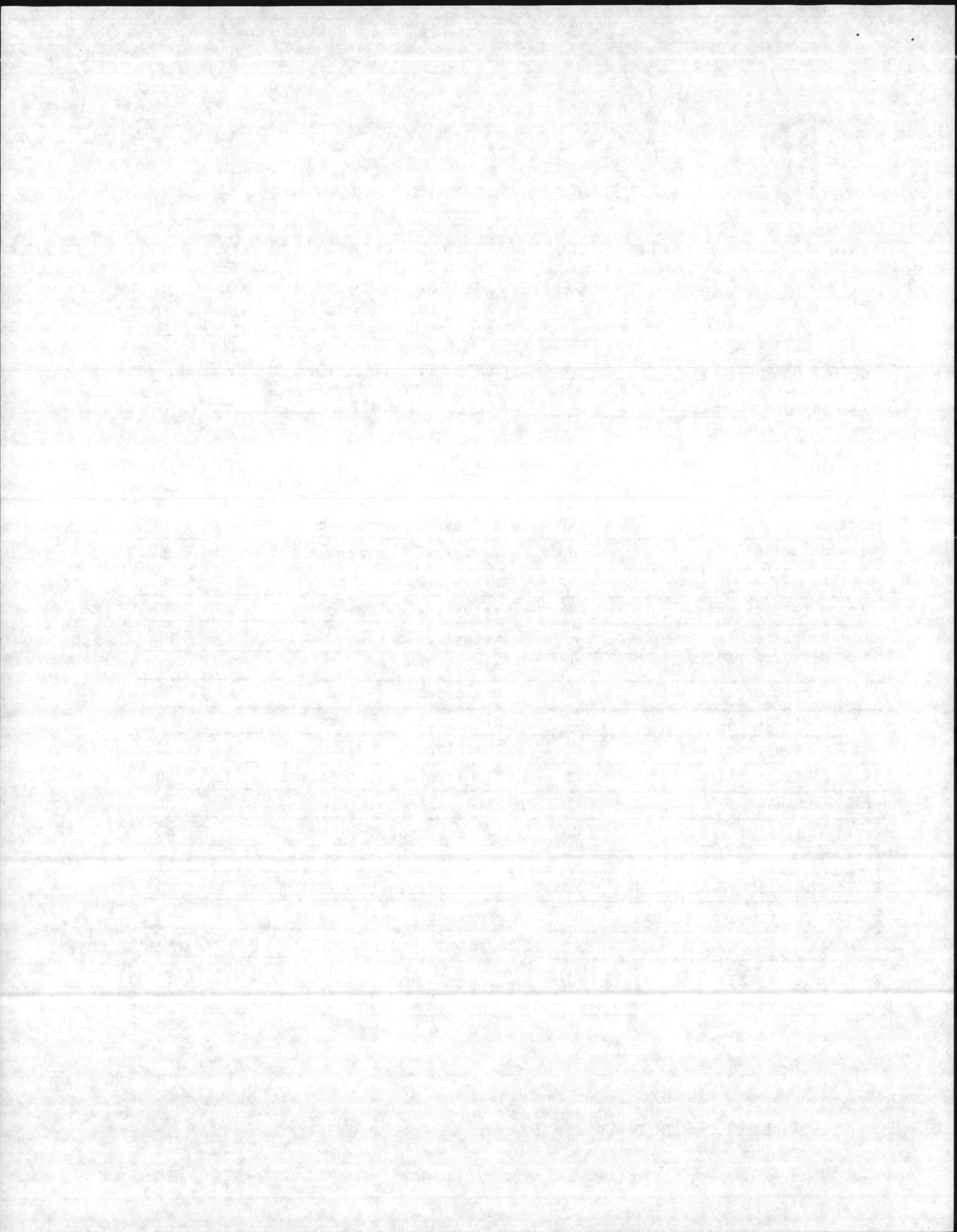
JTC SAMPLE # 61-0914 PROJECT NO. NF61 #127  
CLIENT SAMPLE # 87-67 DATE RECEIVED 9-3-87  
METHOD NO. 624 DETECTION LIMIT 250 mg/L

PARAMETER	RESULT mg/L	PARAMETER	RESULT mg/L
acrolein	ND	1,2-dichloropropane	ND
acrylonitrile	ND	1,3-dichloropropylene	ND
benzene	ND	ethylbenzene	50* <del>ND</del>
carbon tetrachloride	ND	methylene chloride	ND
chlorobenzene	ND	methyl chloride	ND
1,2-dichloroethane	ND	methyl bromide	ND
1,1,1-trichloroethane	ND	bromoform	ND
1,1-dichloroethane	ND	dichlorobromomethane	ND
1,1,2-trichloroethane	ND	trichlorofluoromethane	ND
1,1,2,2-tetrachloroethane	ND	dichlorodifluoromethane	ND
chloroethane	ND	chlorodibromomethane	ND
2-chloroethylvinylether	ND	tetrachloroethylene	ND
chloroform	50* <del>ND</del>	toluene	50* <del>ND</del>
1,1-dichloroethylene	ND	trichloroethylene	ND
1,2-trans-dichloroethylene	ND	vinyl chloride	ND
acetone	ND	xylenes	400 <del>ND</del>
2-butanone (MEK)	ND	1,1,2-trichloro-1,2,2,- trifluoroethane (freon)	1100 <del>ND</del>

ND = NOT DETECTED

\* = BELOW DETECTION LIMIT

Note: Sample matrix prevented analysis at a lower detection limit



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## PRIORITY POLLUTANT ANALYSIS DATA SHEET

## VOLATILE FRACTION

JTC SAMPLE # 61-0915 PROJECT NO. NF61 #127  
CLIENT SAMPLE # 87-68 DATE RECEIVED 9-3-87  
METHOD NO. 624 DETECTION LIMIT 250 mg/L

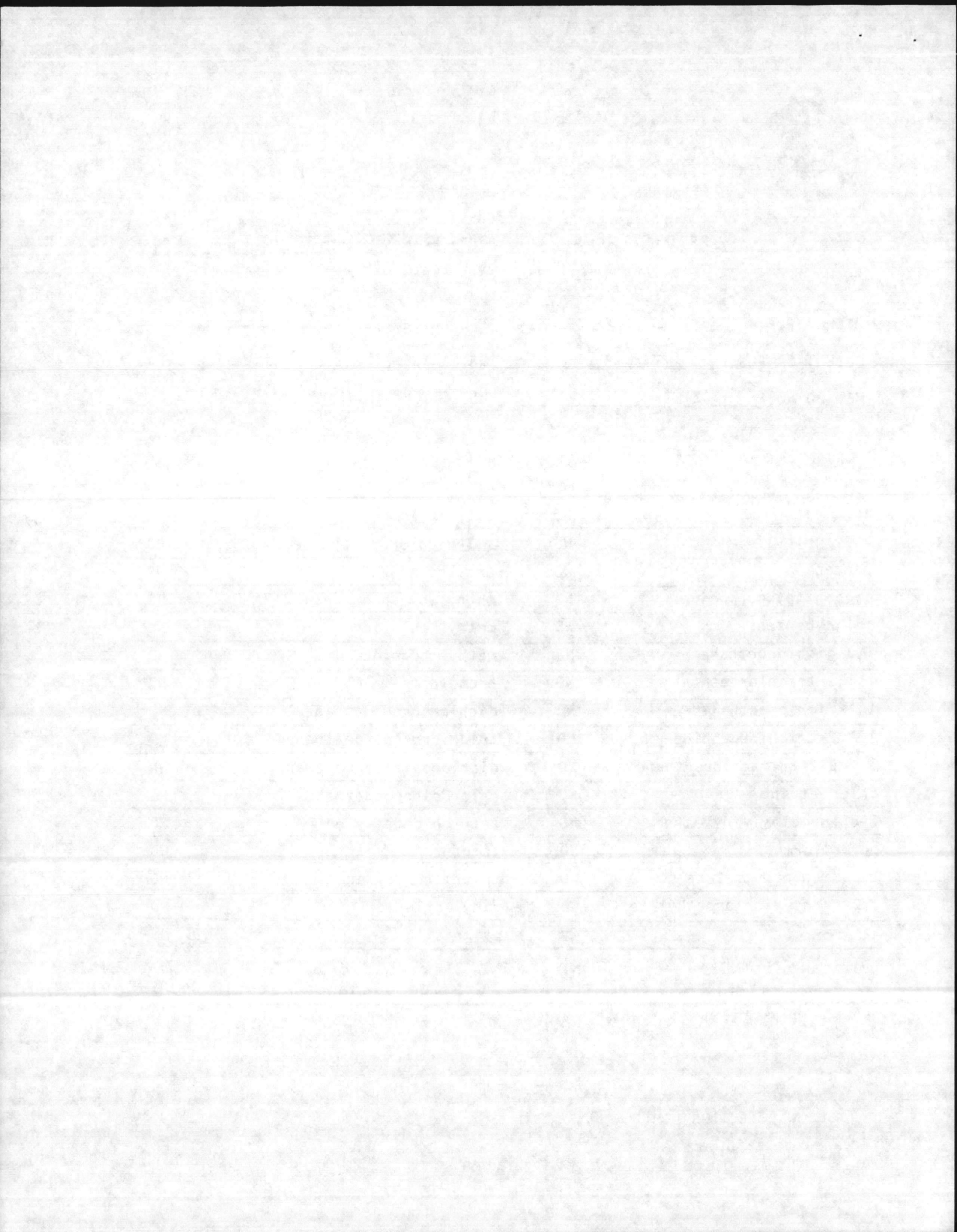
PARAMETER	RESULT mg/L	PARAMETER	RESULT mg/L
acrolein	ND	1,2-dichloropropane	ND
acrylonitrile	ND	1,3-dichloropropylene	ND
benzene	ND	ethylbenzene	420 <del>ND</del>
carbon tetrachloride	ND	methylene chloride	ND
chlorobenzene	ND	methyl chloride	ND
1,2-dichloroethane	ND	methyl bromide	ND
1,1,1-trichloroethane	ND	bromoform	ND
1,1-dichloroethane	ND	dichlorobromomethane	ND
1,1,2-trichloroethane	ND	trichlorofluoromethane	ND
1,1,2,2-tetrachloroethane	ND	dichlorodifluoromethane	ND
chloroethane	ND	chlorodibromomethane	ND
2-chloroethylvinylether	ND	tetrachloroethylene	ND
chloroform	ND	toluene	420 <del>ND</del>
1,1-dichloroethylene	ND	trichloroethylene	ND
1,2-trans-dichloroethylene	ND	vinyl chloride	ND
acetone	ND	xylene	1,220 <del>ND</del>
2-butanone (MEK)	ND	1,1,2-trichloro-1,2,2,- trifluoroethane (freon)	9200 <del>ND</del>

ND = NOT DETECTED

\* = BELOW DETECTION LIMIT

Note: Sample matrix prevented analysis at a lower detection limit





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## PRIORITY POLLUTANT ANALYSIS DATA SHEET

## VOLATILE FRACTION

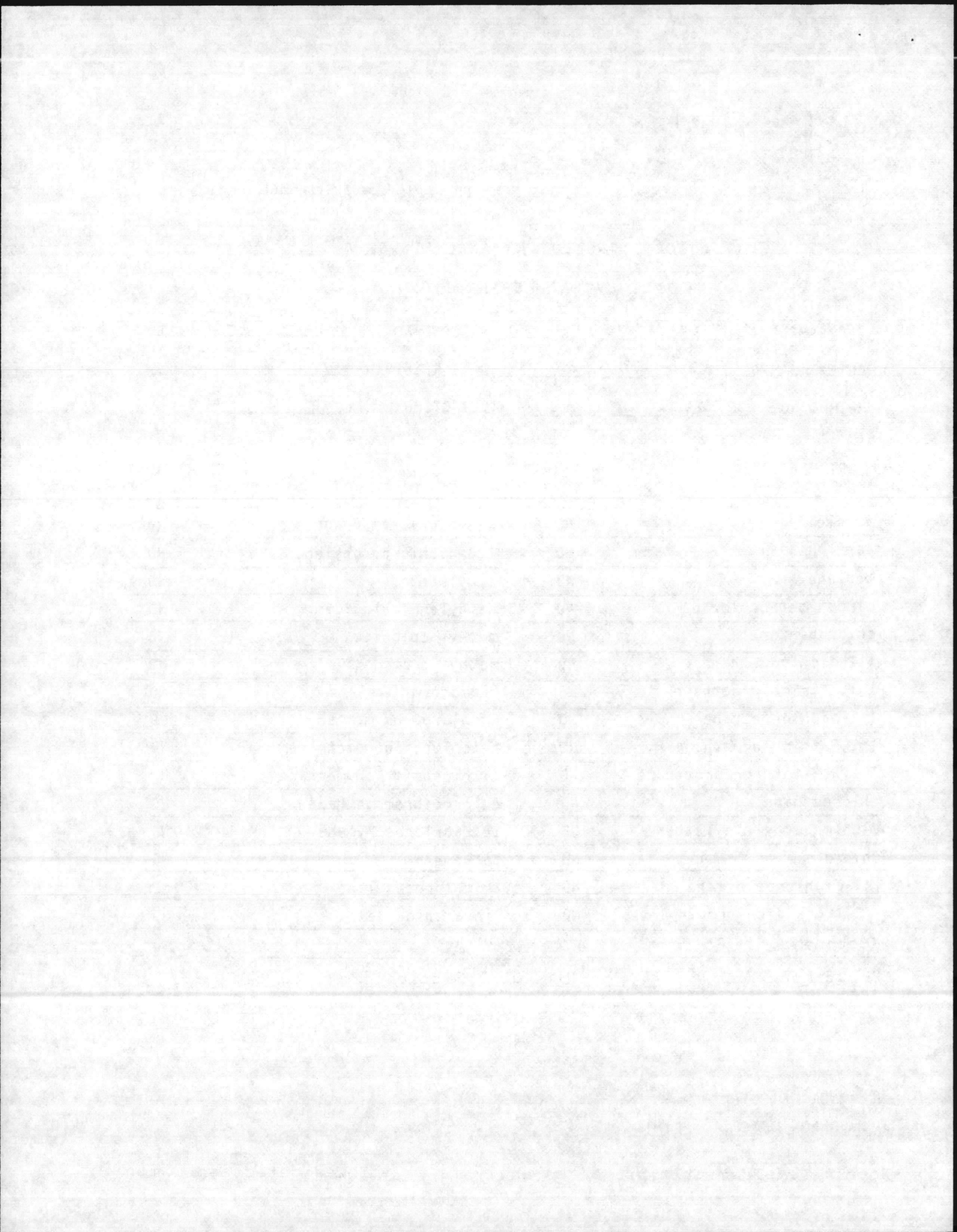
JTC SAMPLE # 61-0916 PROJECT NO. NF-61 #127  
CLIENT SAMPLE # 87-69 DATE RECEIVED 9-3-87  
METHOD NO. 624 DETECTION LIMIT 250 mg/L

PARAMETER	RESULT mg/L	PARAMETER	RESULT mg/L
acrolein	ND	1,2-dichloropropane	ND
acrylonitrile	ND	1,3-dichloropropylene	ND
benzene	ND	ethylbenzene	ND
carbon tetrachloride	ND	methylene chloride	ND
chlorobenzene	ND	methyl chloride	ND
1,2-dichloroethane	ND	methyl bromide	ND
1,1,1-trichloroethane	75* <del>ND</del>	bromoform	ND
1,1-dichloroethane	ND	dichlorobromomethane	ND
1,1,2-trichloroethane	ND	trichlorofluoromethane	ND
1,1,2,2-tetrachloroethane	ND	dichlorodifluoromethane	ND
chloroethane	ND	chlorodibromomethane	ND
2-chloroethylvinylether	ND	tetrachloroethylene	ND
chloroform	ND	toluene	ND
1,1-dichloroethylene	ND	trichloroethylene	ND
1,2-trans-dichloroethylene	ND	vinyl chloride	ND
acetone	ND	xylenes	125* <del>ND</del>
2-butanone (MEK)	ND	1,1,2-trichloro-1,2,2,- trifluoroethane (freon)	45300 <del>ND</del>

ND = NOT DETECTED

\* = BELOW DETECTION LIMIT

Note: Sample matrix prevented analysis at a lower detection limit







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PRIORITY POLLUTANT ANALYSIS DATA SHEET

VOLATILE FRACTION

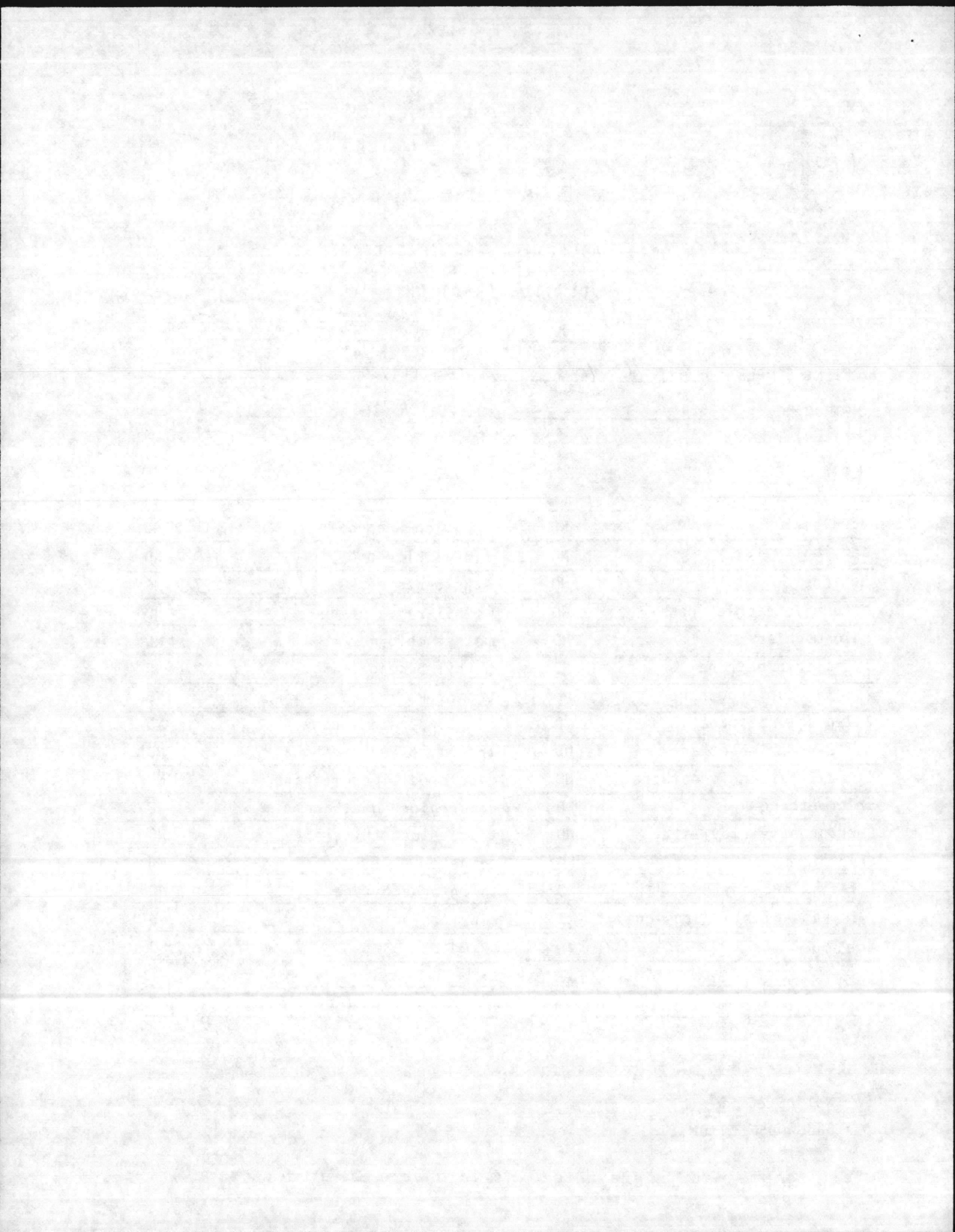
JTC SAMPLE # 61-0917 PROJECT NO. NF61 #127  
CLIENT SAMPLE # 81-70 Top DATE RECEIVED 9-3-87  
METHOD NO. 624 DETECTION LIMIT 250 mg/L

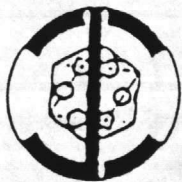
PARAMETER	RESULT	PARAMETER	RESULT
	mq/L		mq/L
acrolein	ND	1,2-dichloropropane	ND
acrylonitrile	ND	1,3-dichloropropylene	ND
benzene	ND	ethylbenzene	280 <del>ND</del>
carbon tetrachloride	ND	methylene chloride	ND
chlorobenzene	ND	methyl chloride	ND
1,2-dichloroethane	ND	methyl bromide	ND
1,1,1-trichloroethane	2250 <del>ND</del>	bromoform	ND
1,1-dichloroethane	ND	dichlorobromomethane	ND
1,1,2-trichloroethane	ND	trichlorofluoromethane	ND
1,1,2,2-tetrachloroethane	ND	dichlorodifluoromethane	ND
chloroethane	ND	chlorodibromomethane	ND
2-chloroethylvinylether	ND	tetrachloroethylene	ND
chloroform	ND	toluene	1020 <del>ND</del>
1,1-dichloroethylene	ND	trichloroethylene	ND
1,2-trans-dichloroethylene	ND	vinyl chloride	ND
acetone	ND	xylene	1380 <del>ND</del>
2-butanone (MEK)	ND	1,1,2-trichloro-1,2,2,- trifluoroethane (freon)	6900 <del>ND</del>

ND = NOT DETECTED

\* = BELOW DETECTION LIMIT

Note: Sample matrix prevented analysis at a lower detection limit



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## PRIORITY POLLUTANT ANALYSIS DATA SHEET

## VOLATILE FRACTION

JTC SAMPLE # 61-0917 PROJECT NO. NE61 #127  
CLIENT SAMPLE # 81-70 Bottom DATE RECEIVED 9-3-87  
METHOD NO. 624 DETECTION LIMIT 250 mg/L

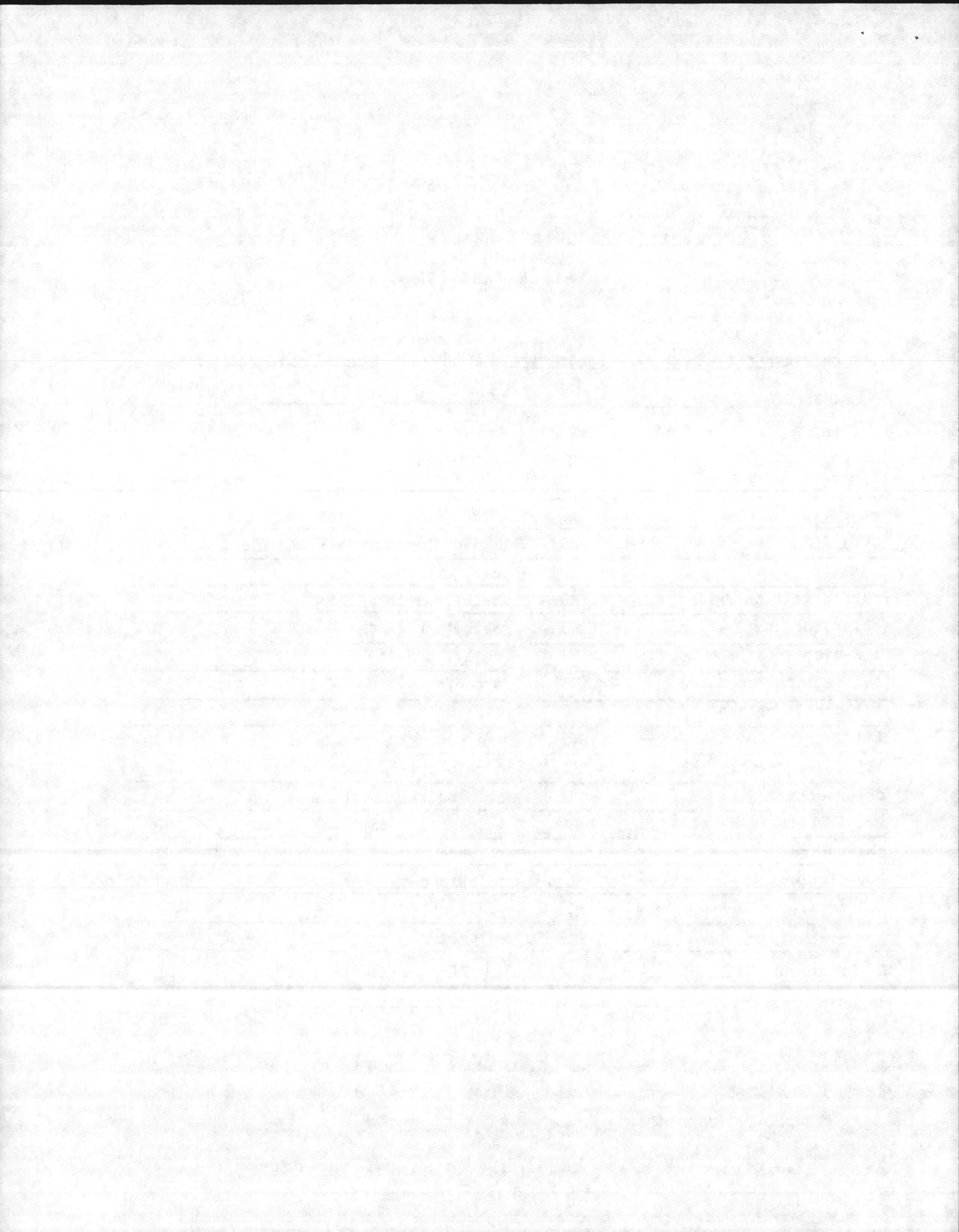
PARAMETER	RESULT mg/L	PARAMETER	RESULT mg/L
acrolein	ND	1,2-dichloropropane	ND
acrylonitrile	ND	1,3-dichloropropylene	ND
benzene	ND	ethylbenzene	ND
carbon tetrachloride	ND	methylene chloride	ND
chlorobenzene	ND	methyl chloride	ND
1,2-dichloroethane	ND	methyl bromide	ND
1,1,1-trichloroethane	280 <del>ND</del>	bromoform	ND
1,1-dichloroethane	ND	dichlorobromomethane	ND
1,1,2-trichloroethane	ND	trichlorofluoromethane	ND
1,1,2,2-tetrachloroethane	ND	dichlorodifluoromethane	ND
chloroethane	ND	chlorodibromomethane	ND
2-chloroethylvinylether	ND	tetrachloroethylene	ND
chloroform	ND	toluene	125* <del>ND</del>
1,1-dichloroethylene	ND	trichloroethylene	ND
1,2-trans-dichloroethylene	ND	vinyl chloride	ND
acetone	ND	xylene	125* <del>ND</del>
2-butanone (MEK)	ND	1,1,2-trichloro-1,2,2,- trifluoroethane (freon)	600 <del>ND</del>

ND = NOT DETECTED

\* = BELOW DETECTION LIMIT

Note: Sample matrix prevented analysis at a lower detection limit





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## PRIORITY POLLUTANT ANALYSIS DATA SHEET

## VOLATILE FRACTION

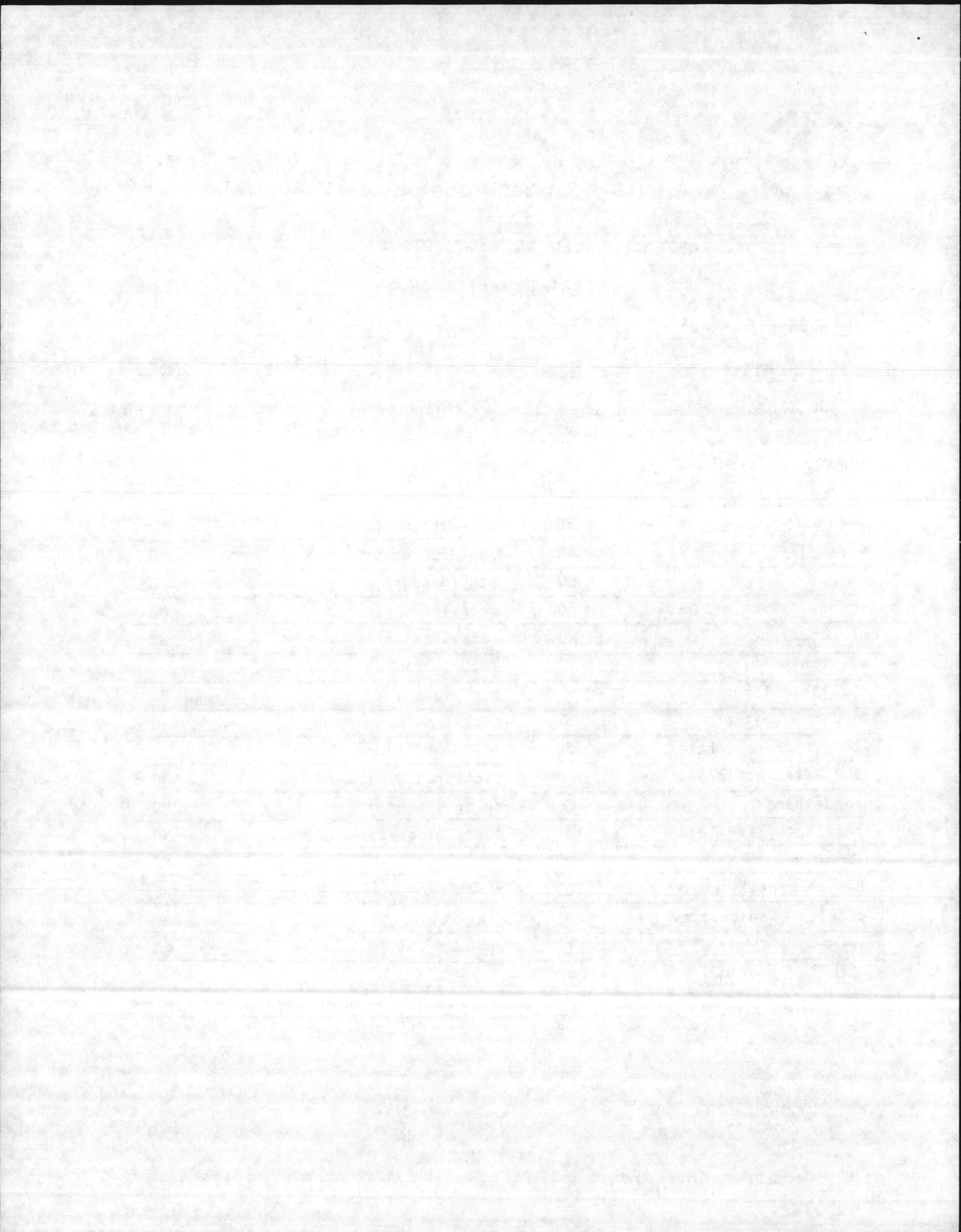
JTC SAMPLE # 61-0918 PROJECT NO. NF-61 #127  
CLIENT SAMPLE # 87-71 DATE RECEIVED 9-3-87  
METHOD NO. 624 DETECTION LIMIT 250 mg/L

PARAMETER	RESULT mg/L	PARAMETER	RESULT mg/L
acrolein	ND	1,2-dichloropropane	ND
acrylonitrile	ND	1,3-dichloropropylene	ND
benzene	25* <del>ND</del>	ethylbenzene	75* <del>ND</del>
carbon tetrachloride	ND	methylene chloride	ND
chlorobenzene	ND	methyl chloride	ND
1,2-dichloroethane	ND	methyl bromide	ND
1,1,1-trichloroethane	75* <del>ND</del>	bromoform	ND
1,1-dichloroethane	ND	dichlorobromomethane	ND
1,1,2-trichloroethane	ND	trichlorofluoromethane	ND
1,1,2,2-tetrachloroethane	ND	dichlorodifluoromethane	ND
chloroethane	ND	chlorodibromomethane	ND
2-chloroethylvinylether	ND	tetrachloroethylene	ND
chloroform	ND	toluene	180* <del>ND</del>
1,1-dichloroethylene	ND	trichloroethylene	ND
1,2-trans-dichloroethylene	ND	vinyl chloride	ND
acetone	ND	xylene	200* <del>ND</del>
2-butanone (MEK)	ND	1,1,2-trichloro-1,2,2,- trifluoroethane (freon)	900 <del>ND</del>

ND = NOT DETECTED

\* = BELOW DETECTION LIMIT

Note: Sample matrix prevented analysis at a lower detection limit





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## PRIORITY POLLUTANT ANALYSIS DATA SHEET

## VOLATILE FRACTION

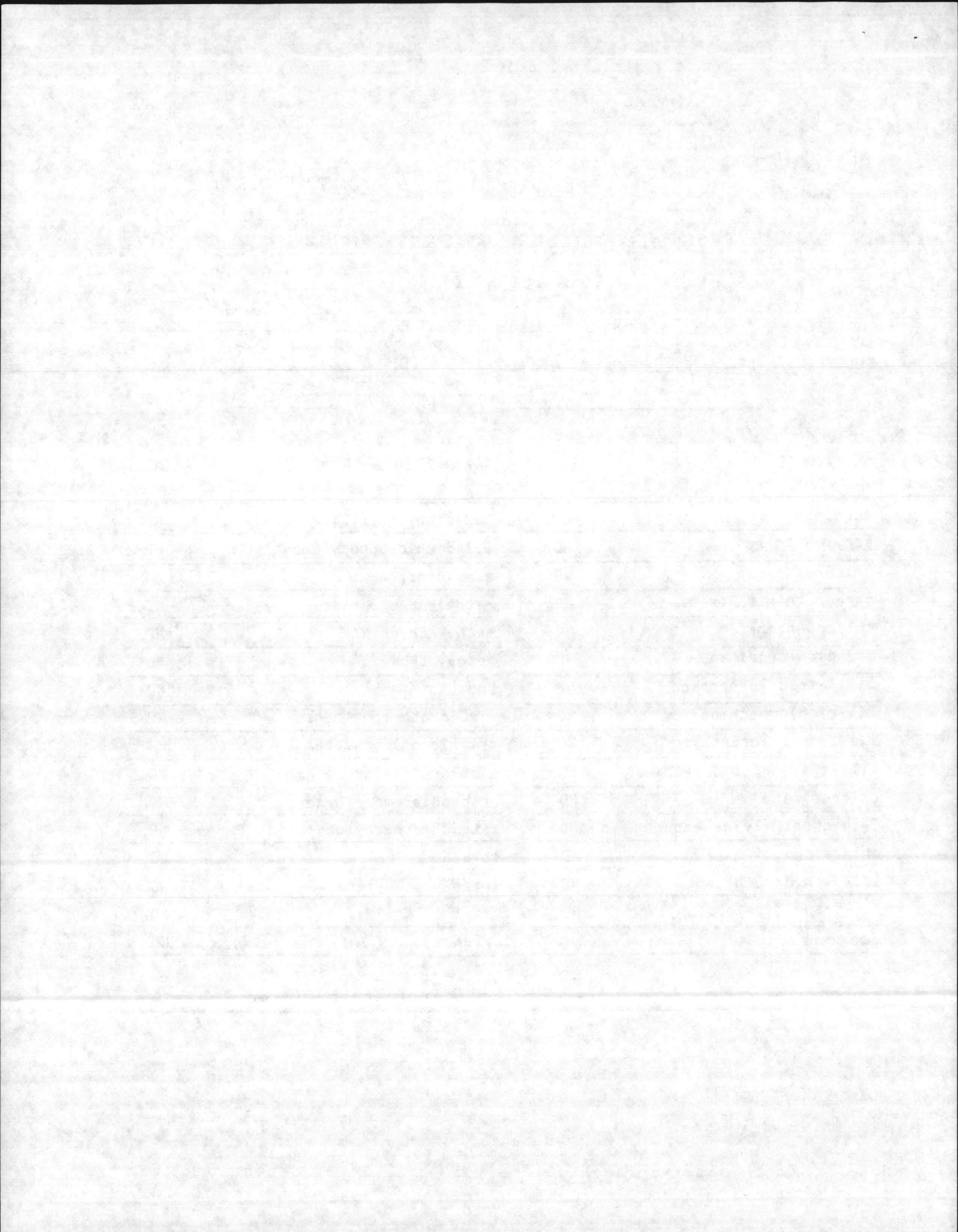
JTC SAMPLE # 61-0919 PROJECT NO. NF-61 #127  
CLIENT SAMPLE # 87-72 Top DATE RECEIVED 9-3-87  
METHOD NO. 624 DETECTION LIMIT 250 mg/L

PARAMETER	RESULT mg/L	PARAMETER	RESULT mg/L
acrolein	ND	1,2-dichloropropane	ND
acrylonitrile	ND	1,3-dichloropropylene	ND
benzene	ND	ethylbenzene	75* <del>ND</del>
carbon tetrachloride	ND	methylene chloride	ND
chlorobenzene	ND	methyl chloride	ND
1,2-dichloroethane	ND	methyl bromide	ND
1,1,1-trichloroethane	ND	bromoform	ND
1,1-dichloroethane	ND	dichlorobromomethane	ND
1,1,2-trichloroethane	ND	trichlorofluoromethane	ND
1,1,2,2-tetrachloroethane	ND	dichlorodifluoromethane	ND
chloroethane	ND	chlorodibromomethane	ND
2-chloroethylvinylether	ND	tetrachloroethylene	ND
chloroform	ND	toluene	ND
1,1-dichloroethylene	ND	trichloroethylene	ND
1,2-trans-dichloroethylene	ND	vinyl chloride	ND
acetone	ND	xylene	125* <del>ND</del>
2-butanone (MEK)	ND	1,1,2-trichloro-1,2,2,- trifluoroethane (freon)	ND

ND = NOT DETECTED

\* = BELOW DETECTION LIMIT

Note: Sample matrix prevented analysis at a lower detection limit



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## PRIORITY POLLUTANT ANALYSIS DATA SHEET

## VOLATILE FRACTION

JTC SAMPLE # 61-0919 PROJECT NO. NF61 #127  
CLIENT SAMPLE # 87-72 Bottom DATE RECEIVED 9-3-87  
METHOD NO. 624 DETECTION LIMIT 250 mg/L

PARAMETER	RESULT mg/L	PARAMETER	RESULT mg/L
acrolein	ND	1,2-dichloropropane	ND
acrylonitrile	ND	1,3-dichloropropylene	ND
benzene	ND	ethylbenzene	ND
carbon tetrachloride	ND	methylene chloride	ND
chlorobenzene	ND	methyl chloride	ND
1,2-dichloroethane	ND	methyl bromide	ND
1,1,1-trichloroethane	100* <del>ND</del>	bromoform	ND
1,1-dichloroethane	ND	dichlorobromomethane	ND
1,1,2-trichloroethane	ND	trichlorofluoromethane	ND
1,1,2,2-tetrachloroethane	ND	dichlorodifluoromethane	ND
chloroethane	ND	chlorodibromomethane	ND
2-chloroethyvinylether	ND	tetrachloroethylene	ND
chloroform	ND	toluene	ND
1,1-dichloroethylene	ND	trichloroethylene	ND
1,2-trans-dichloroethylene	ND	vinyl chloride	ND
acetone	ND	xylenes	ND
2-butanone (MEK)	ND	1,1,2-trichloro-1,2,2,- trifluoroethane (freon)	ND

ND = NOT DETECTED

\* = BELOW DETECTION LIMIT

Note: Sample matrix prevented analysis at a lower detection limit





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C Environmental Consultants, Inc.

## PRIORITY POLLUTANT ANALYSIS DATA SHEET

## VOLATILE FRACTION

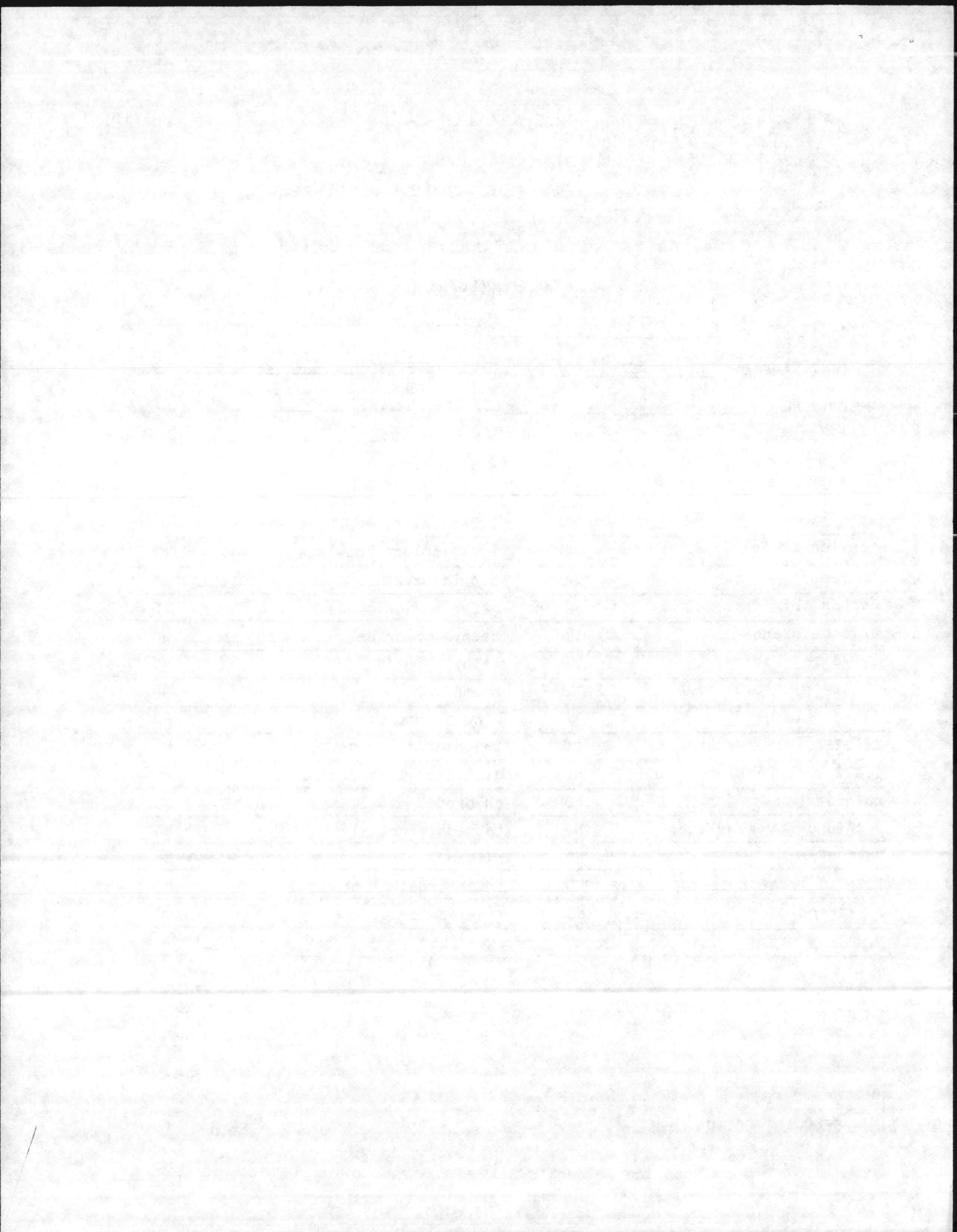
JTC SAMPLE # 61-0920 PROJECT NO. NF-61 #127  
CLIENT SAMPLE # 81-73 top DATE RECEIVED 9-3-87  
METHOD NO. 624 DETECTION LIMIT 250 mg/L

PARAMETER	RESULT mg/L	PARAMETER	RESULT mg/L
acrolein	ND	1,2-dichloropropane	ND
acrylonitrile	ND	1,3-dichloropropylene	ND
benzene	25* <del>ND</del>	ethylbenzene	220* <del>ND</del>
carbon tetrachloride	ND	methylene chloride	ND
chlorobenzene	ND	methyl chloride	ND
1,2-dichloroethane	ND	methyl bromide	ND
1,1,1-trichloroethane	ND	bromoform	ND
1,1-dichloroethane	ND	dichlorobromomethane	ND
1,1,2-trichloroethane	ND	trichlorofluoromethane	ND
1,1,2,2-tetrachloroethane	ND	dichlorodifluoromethane	ND
chloroethane	ND	chlorodibromomethane	ND
2-chloroethylvinylether	ND	tetrachloroethylene	ND
chloroform	ND	toluene	300 <del>ND</del>
1,1-dichloroethylene	ND	trichloroethylene	ND
1,2-trans-dichloroethylene	ND	vinyl chloride	ND
acetone	ND	xylenes	950 <del>ND</del>
2-butanone (MEK)	ND	1,1,2-trichloro-1,2,2,- trifluoroethane (freon)	ND

ND = NOT DETECTED

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Note: Sample matrix prevented analysis at a lower detection limit





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## PRIORITY POLLUTANT ANALYSIS DATA SHEET

## VOLATILE FRACTION

JTC SAMPLE # 61-0920 PROJECT NO. NF-61 #127  
CLIENT SAMPLE # 87-73 bottom DATE RECEIVED 9-3-87  
METHOD NO. 624 DETECTION LIMIT 250 mg/L

PARAMETER	RESULT	PARAMETER	RESULT
	mg/L		mg/L
acrolein	ND	1,2-dichloropropane	ND
acrylonitrile	ND	1,3-dichloropropylene	ND
benzene	ND	ethylbenzene	25* <del>ND</del>
carbon tetrachloride	ND	methylene chloride	ND
chlorobenzene	ND	methyl chloride	ND
1,2-dichloroethane	ND	methyl bromide	ND
1,1,1-trichloroethane	75* <del>ND</del>	bromoform	ND
1,1-dichloroethane	ND	dichlorobromomethane	ND
1,1,2-trichloroethane	ND	trichlorofluoromethane	ND
1,1,2,2-tetrachloroethane	ND	dichlorodifluoromethane	ND
chloroethane	ND	chlorodibromomethane	ND
2-chloroethylvinylether	ND	tetrachloroethylene	ND
chloroform	ND	toluene	50* <del>ND</del>
1,1-dichloroethylene	ND	trichloroethylene	ND
1,2-trans-dichloroethylene	ND	vinyl chloride	ND
acetone	ND	xylenes	75* <del>ND</del>
2-butanone (MEK)	ND	1,1,2-trichloro-1,2,2,- trifluoroethane (freon)	ND

ND = NOT DETECTED

\* = BELOW DETECTION LIMIT

Note: Sample matrix prevented analysis at a lower detection limit



SAMPLING LOCATION FOR DATA BY  
JTC DATA REPORT  
#87-426 (PARTIAL)  
DTD 24 SEP 87

<u>NAVY SAMPLE #</u>	<u>LOCATION OF WASTE OIL TANK</u> <u>BLDG. #</u>
87-61	AS-4100
87-62	AS-4106
87-63	AS-4108
87-64	AS-4108
87-65	AS-4158
87-66	AS-515
87-67	AS-515
87-68	AS-515
87-69	AS-515
87-70	AS-518
87-71	AS-4147
87-72	AS-4108
87-73	CG-1

PREPARED BY: ELIZABETH BETZ  
DATE: 2 OCTOBER 1987



11

**Memorandum**

628072

FAC

DATE: 23 JUL 1986

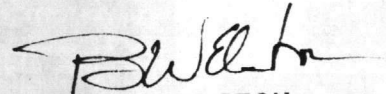
FROM: Assistant Chief of Staff, Facilities, Marine Corps Base, Camp Lejeune  
TO: Director, Natural Resources and Environmental Affairs Division

SUBJ: REVIEW OF HAZARDOUS MATERIAL/WASTE AND USED OIL STUDY

Ref: (a) Dir, NREAD memo dtd 11 Jul 86

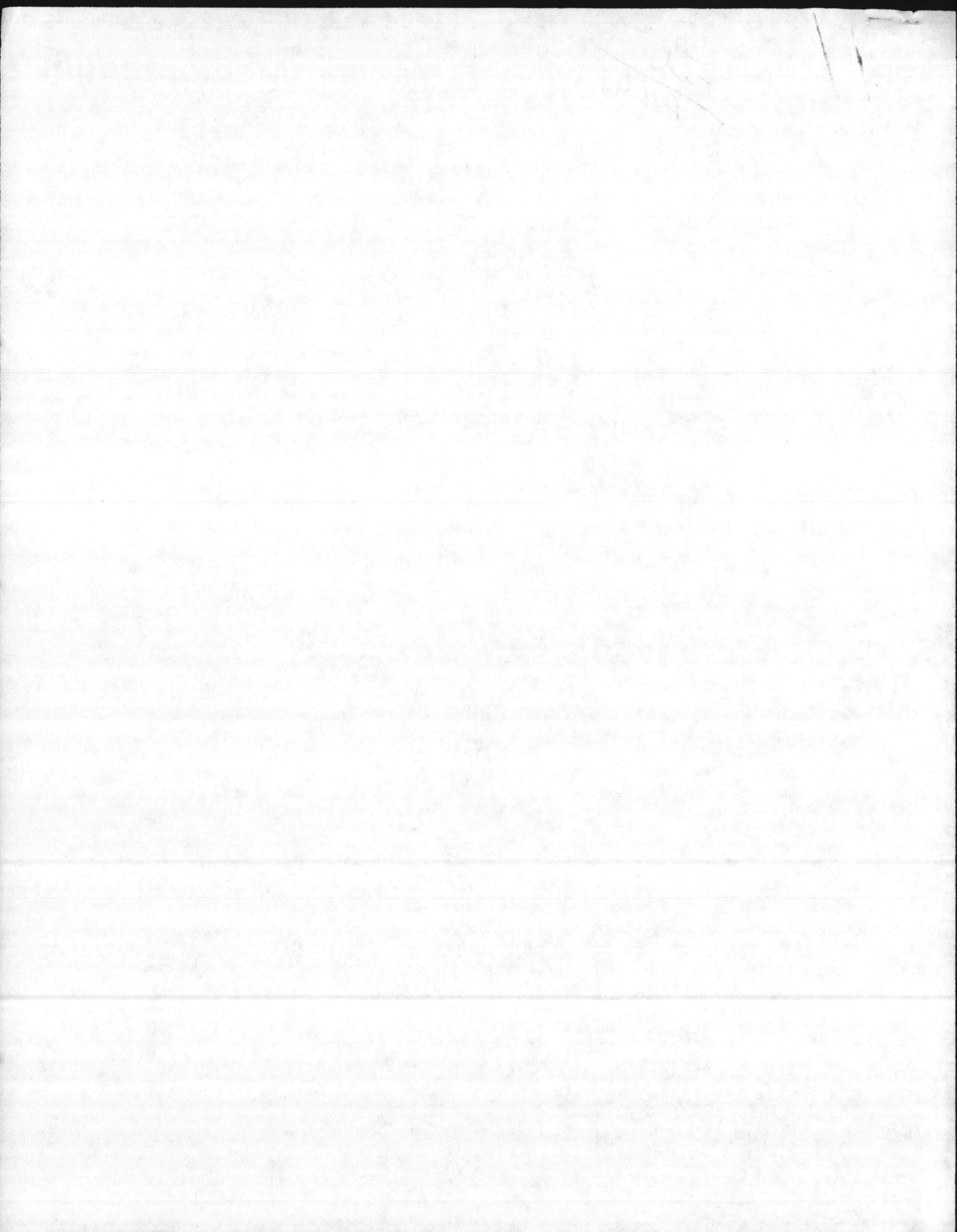
1. As requested in the reference, responsibility for a review and comments on the subject study is hereby assigned to your office. Mr. Alexander will assist in the review and provide comments for forwarding to LANTDIV and ENSAFE.

2. Request you develop and coordinate with Mr. Alexander on a schedule for the review.



B. W. ELSTON  
By direction

Copy to:  
EnvEngr





6240  
NREAD  
7 Jan 87

**From:** Director, Natural Resources and Environmental Affairs  
Division, Marine Corps Base, Camp Lejeune  
**To:** Assistant Chief of Staff, Facilities, Marine Corps Base,  
Camp Lejeune, (Attn: Environmental Engineer)

**Subj:** COMMENTS ON ENSAFE STUDY

**Ref:** (a) AC/S, FAC ltr 6280/2 FAC of 23 July 1986

**Encl:** (1) Draft HW Mgt Plan, Contract #N62470-85-B-7979  
(2) Draft Used Oil Mgt Plan, Contract #N62470-85-B-7979  
(3) Draft Comments on HW MGT Plan and Used Oil Mgt Plan

to thick  
see Danny

1. Enclosures (1) and (2) are returned for your action per recent conversation between Environmental Engineer and Danny Sharpe, Natural Resources and Environmental Affairs Division, (NREAD). Enclosure (3) represents comments developed per the reference in cooperation with Public Works Officer (PWO) and Base Maintenance Officer (BMO). The only known conflict involves assignment of responsibility to provide the "Used Oil Administrator" identified on page 10 of enclosure (2). NREAD recommends that a professional billet be added to the Utilities Director staff and that the contractor's recommendations be followed. BMO prefers to maintain status quo with no changes in overall responsibility assignments, if the functions remain in the Base Maintenance Division. We have been unable to resolve this conflict.

2. Upon resolution of the above conflict, it is recommended that the enclosed comments be forwarded to Mr. Paul Parker, LantDiv, (Code 114).

J. I. WOOTEN



MARINE CORPS BASE, CAMP LEJEUNE

COMMENTS ON HAZARDOUS MATERIAL/HAZARDOUS WASTE  
MANAGEMENT PLAN AND USED OIL MANAGEMENT PLAN  
PREPARED BY ENVIRONMENTAL AND SAFETY DESIGNS, INC.  
FOR ATLANTIC DIVISION, NAVFACENCOM, CONTRACT NO: N62470-85-B-7979

1. General Comments:

a. The Hazardous Material/Hazardous Waste Management Plan (HM/HWM Plan) fails to adequately explore local disposal options for HM and those items classified as hazardous waste because of general characteristics of ignitability, corrosivity, etc... Industrial waste pretreatment and disposal through the sanitary sewer per NPDES permit should be explored in more depth. Combining management of this function with that proposed for the Used Oil Administrator by the Used Oil Management Plan (UOM Plan) appears to be a hard requirement. Addition of a full time professional manager as an assistant to the Utilities Engineer/Director appears to be a viable alternative. The study should further analyze this alternative.

b. The HM/HWM Plan does not promote HW minimization to the extent needed. Needs to be more forth right on the role of procurement and maintenance managers in substitution of non/less hazardous alternatives.

c. Does the rationale for battery disposal hold up if considered in the context of paragraph 1a above?

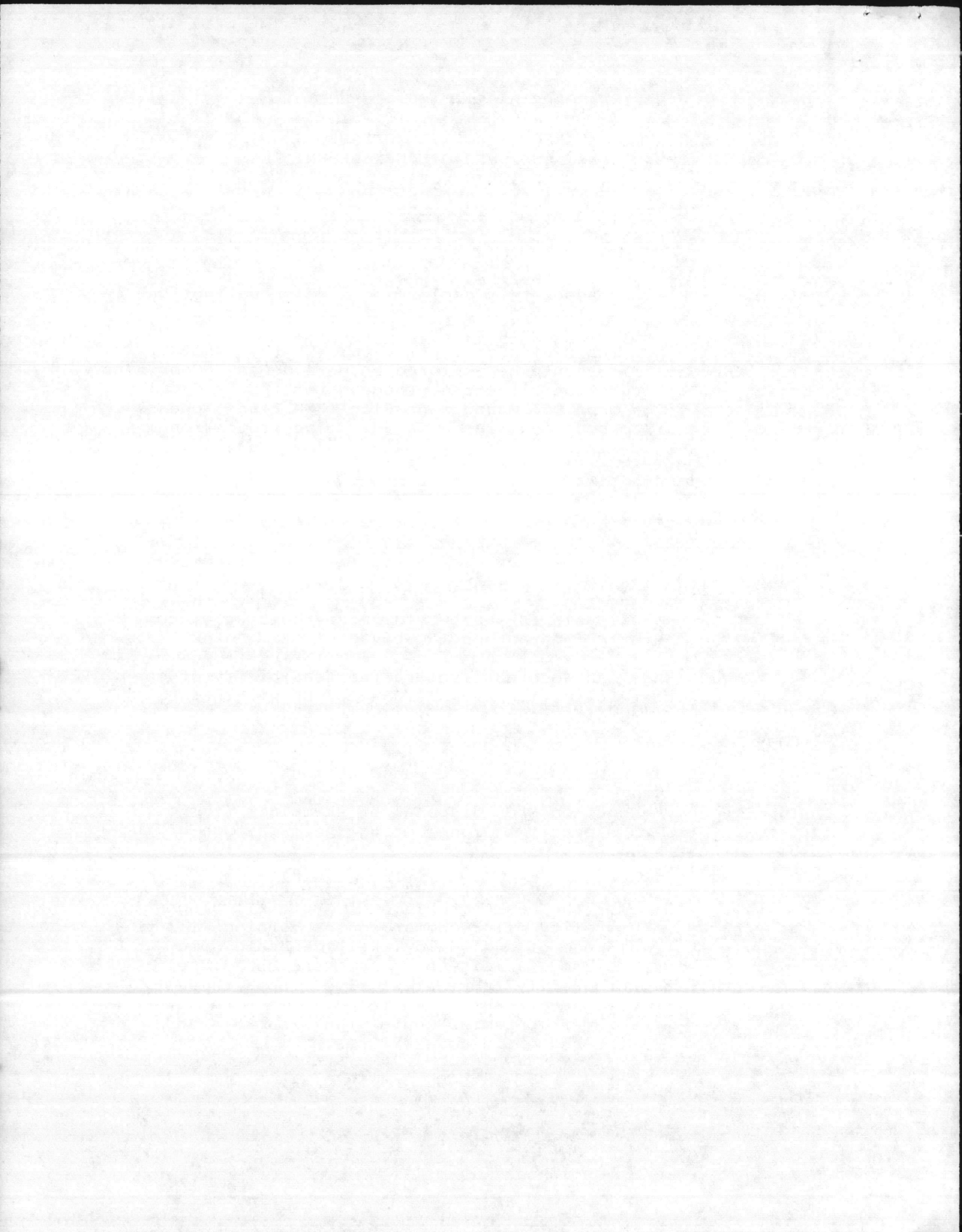
d. The HM/HWM Plan does not explore the feasibility of consolidating Temporary Collection Areas (TCA) for HW within the Battalion/Marine Aircraft Group.

e. There needs to be an executive summary for the HM/HWM Plan which clarifies issues and recommended actions.

f. The recommendations for disposal of skimmings from oil water separators lacks specificity considering the magnitude of the problem to the Base.

g. As written, the burning of used oil does not appear to be a solution to any of the basic problems of waste oil disposal. Once segregated, the quality oil recommended for burning will be relatively easy to dispose of and would likely generate some revenues. Can the proposed facility burn kerosene and diesel fuel mixed with higher quality lubricating oils? Both these light oils make up a large percent of waste oil. They result from spills and from water contamination of tanks/barrels of oil from garrison shops and training exercises.





SPECIFIC COMMENTS ON  
ENSAFE HAZARDOUS MATERIAL/HAZARDOUS WASTE MANAGEMENT PLAN

Comment #1, page 1-1. Need to list significant references.

Comment #2, page 1-2. Need to clarify the role the EPA plays relative to inspection of Lejeune as a TSDF.

Comment #3, pages 2-1, 2-2, 2-3 & 3-1. The write up does not emphasize the role of the Commanding Officers of Marine Aircraft Groups, Battalions and Separate Companies in implementing the HW collection and disposal program. It would be more accurate to refer to these organizations as generators, rather than the Major Commands. The write up does not explain the relationship between HMDO and HMDC roles. Also; there should be a generic description of the various common types of HW generation sites, i.e., motor transport maintenance shops, tactical vehicle maintenance shops, communication shops, NBC warfare wastes, aircraft maintenance facilities, etc... This will assist the military commander at the battalion/MAG level understand the scope of HW responsibility assigned to the HMDO/commander.

Comment #4, page 3-22. Can photo chemicals be discharged to the Base sanitary sewer after removal of silver?

Comment #5, pages 4-3, 4-22, 6-14. There is no guidance which points out opportunities for recycling or disposal through NPDES permitted wastewater treatment plant. The plan does not adequately promote waste minimization consistent with overall requirements of RCRA/regulatory objectives. The D001 and D002 wastes appear frequently in the various listings in the HM/HWM Plan. Are there not other alternatives other than HW disposal through DRMO?

SPECIFIC COMMENTS ON USED OIL MANAGEMENT PLAN

Section - page 2, Second sentence. Unclear

Section - page 2, para. 4a. "battalion and separate company" vice "separate battalion and company..."

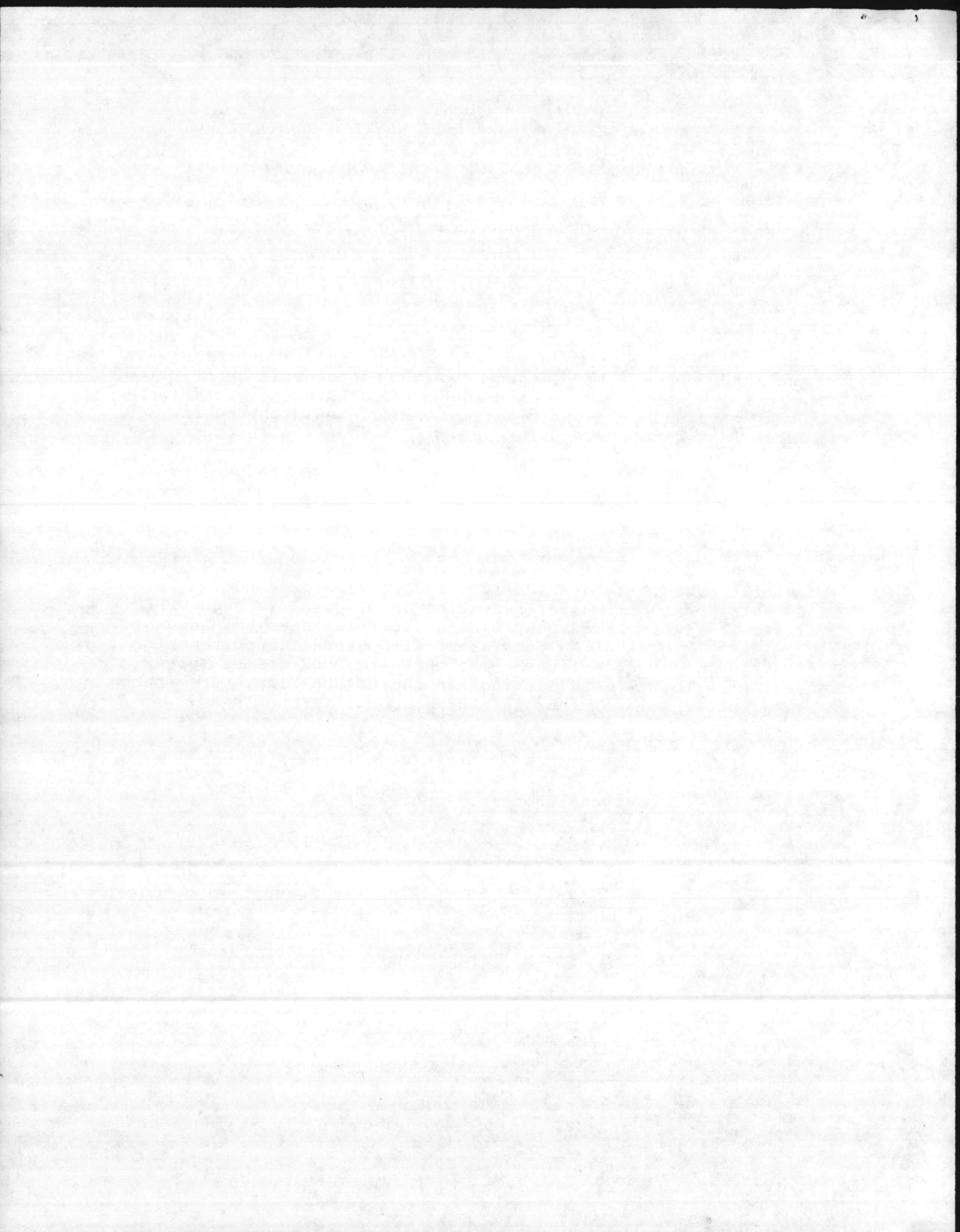
Section - page 3, para. 4b. "...by Transporter authorized by UOA.." vice "...by permitted transporter."

Section - page 3, para. 4f. "Environmental Engineer" vice "Natural Resources"

Section - page 3, para. 5. Should be revised to address present status

Section - page 3, para. 7. Recommend "NREAD" vice "Environmental Engineer"

Section - page 4, para. 8. Antifreeze is currently disposed of through Sanitary Sewer.





Section - page 4, para. 11. Would DRMO not be required to arrange contract?

Section - page 5; para. 4. No conflict with change recommended for page 3, para. 7.

Section - page 7, para. 1.3. Authority needs to be specifically referenced to written Marine Corps instruction.

Section - page 7, para. 1.4. Recommend attaching Appendix which provides correct definitions.

Section - page 8, para. 1.8. "Volume 1, Section 2.3.2" does not exist.

Section - page 9, para. 2.0. "Oil from storm water storage tanks and oil water separators" vice "oil from storm water separators."

Section - page 10, para. 3.1, para. 3.2.1. Unresolved issue, i.e., who is AC/S Facilities going to designate as used oil administrator. Key decision required before plan can be published.

Section - page 11, para. 3.2.1. "Navy on-scene-commander" vice "Emergency Coordinator." Note, Fire Chief provides this coordination and notifies responsible officials.

Section - page 11, para. 3.2.2.d. Servicing of tanks should be a routine schedule, not on call by work center (except in an emergency)

Section - page 11, para. 3,2,3a. Recommend wording as follows: "Ensure segregation and proper containerization and identification of used oil generated at work centers within HMDO's cognizance.

Section - page 11, para. 3.2.3b. Notify cognizant Hazardous Material Disposal Coordinator if a used oil cannot be adequately identified.

Section - page 11, para. 3.2.3d. "ensure maintenance of" ...vice "maintain compliance..."

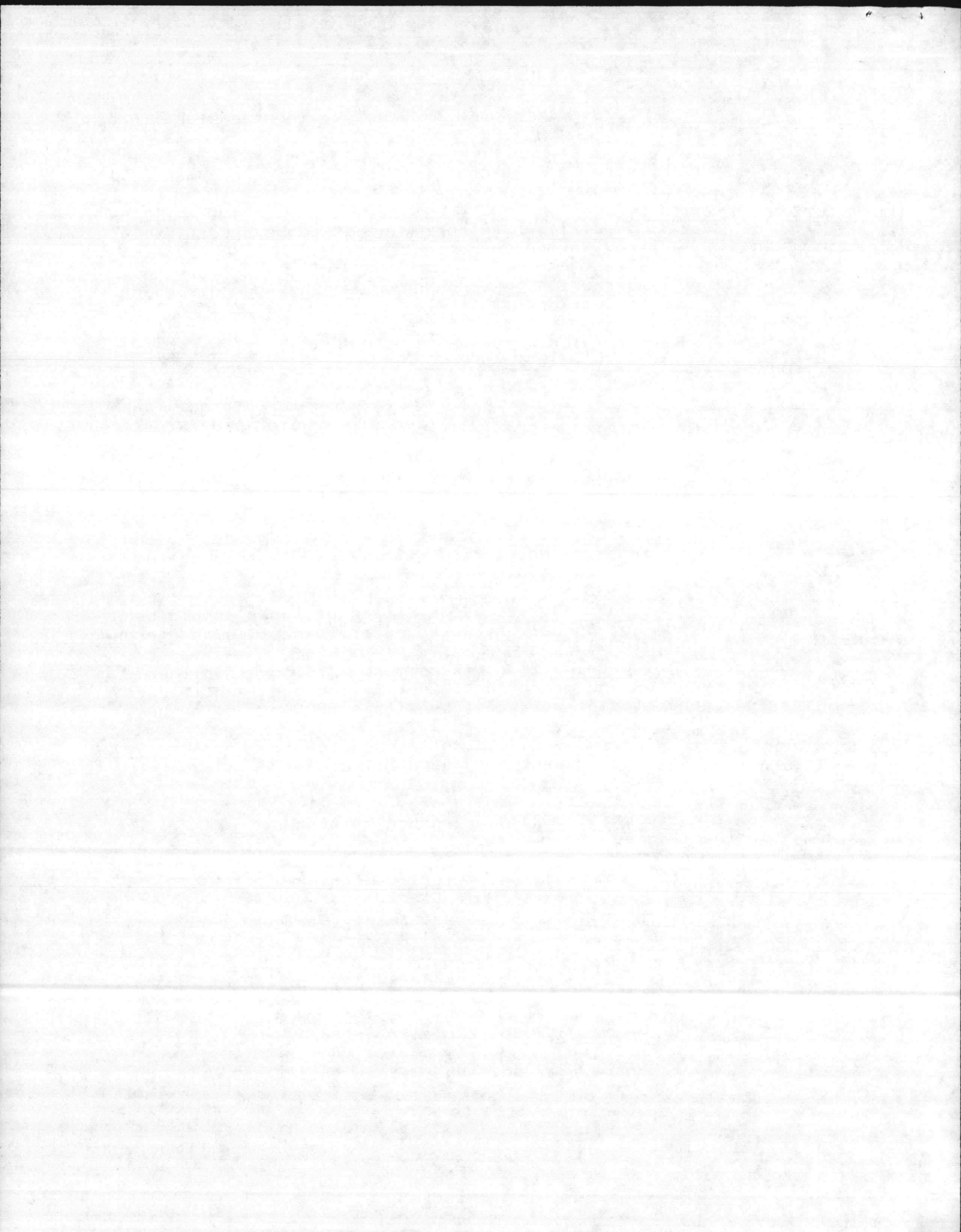
Section - page 12, para. 3.2.6b. Clarify meaning

Section - page 12, para. 3.2.8. "Base Safety Officer" vice "Safety Department"

Section - page 12, para. 3.2.9b. Reassign "Rent-a-Solvent" to NREAD

Section - page 12, para. 3.2.9b. Update antifreeze

Section - page 13, para. 3,2,9c. What does this mean?

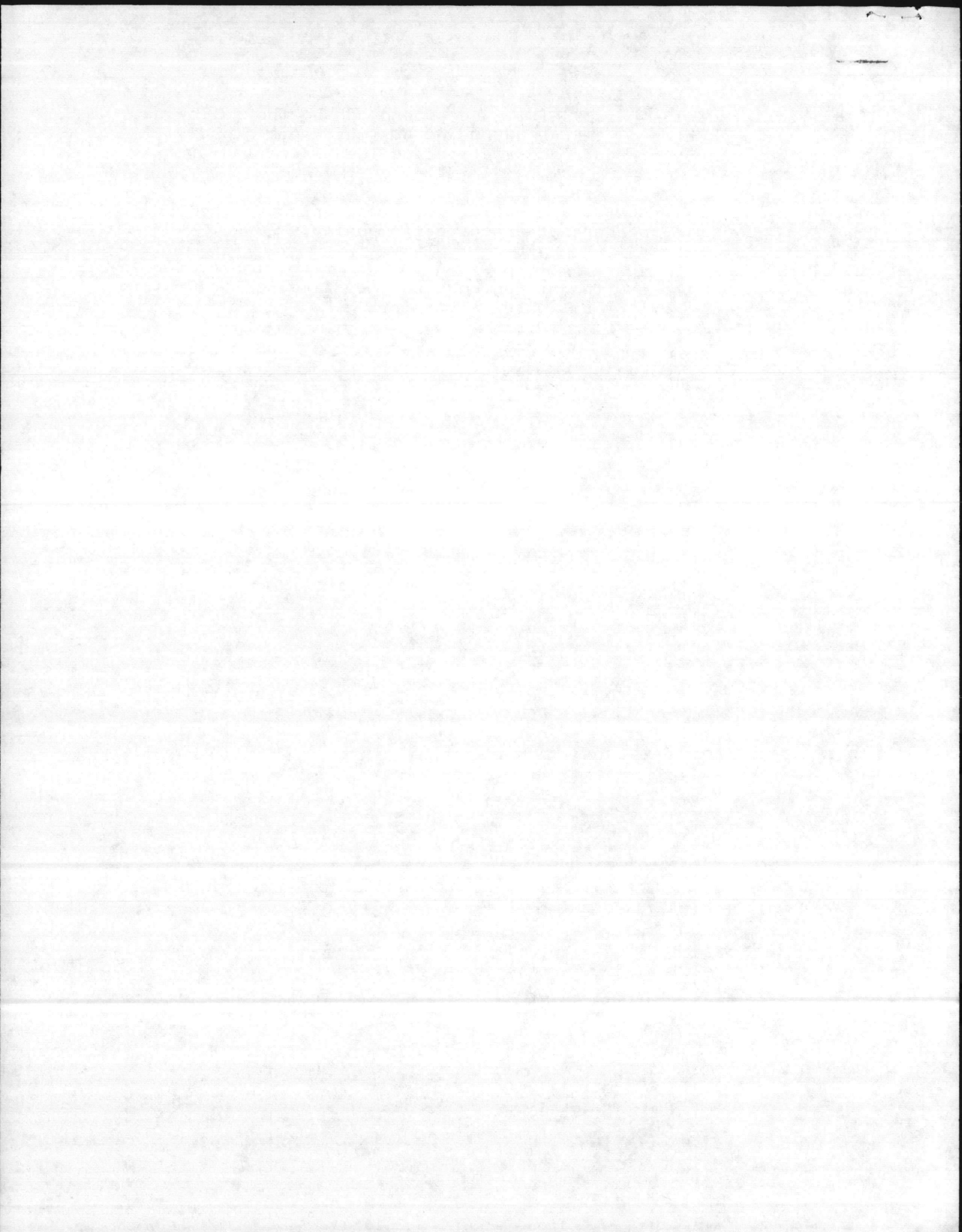


Section - page 13, para. 4.1.1. Recommend adding the following after first sentence, "NREAD, HMDO and UOA must work closely together to ensure proper segregation and identification of oily wastes."

Section - page 17, para. 6. Antifreeze write-up should be updated to show present procedure of discharge to sanitary sewer.

Section - page 23, para. 6.1, para. 6.3. Needs to clarify the problems associated with not segregating the skimmings from storm waste storage tanks or oil water separators.





Danny <sup>DPS</sup>  
Glence <sup>Glence</sup>

6280/2  
FAC  
MAR 03 1987

From: Commanding General, Marine Corps Base, Camp Lejeune, North Carolina

To: Commander, Atlantic Division, Naval Facilities Engineering Command, Norfolk, Virginia 23511-6287 (Code 114)

Subj: DRAFT HAZARDOUS MATERIAL/WASTE MANAGEMENT PLAN

Encl: (1) Camp Lejeune Review Comments

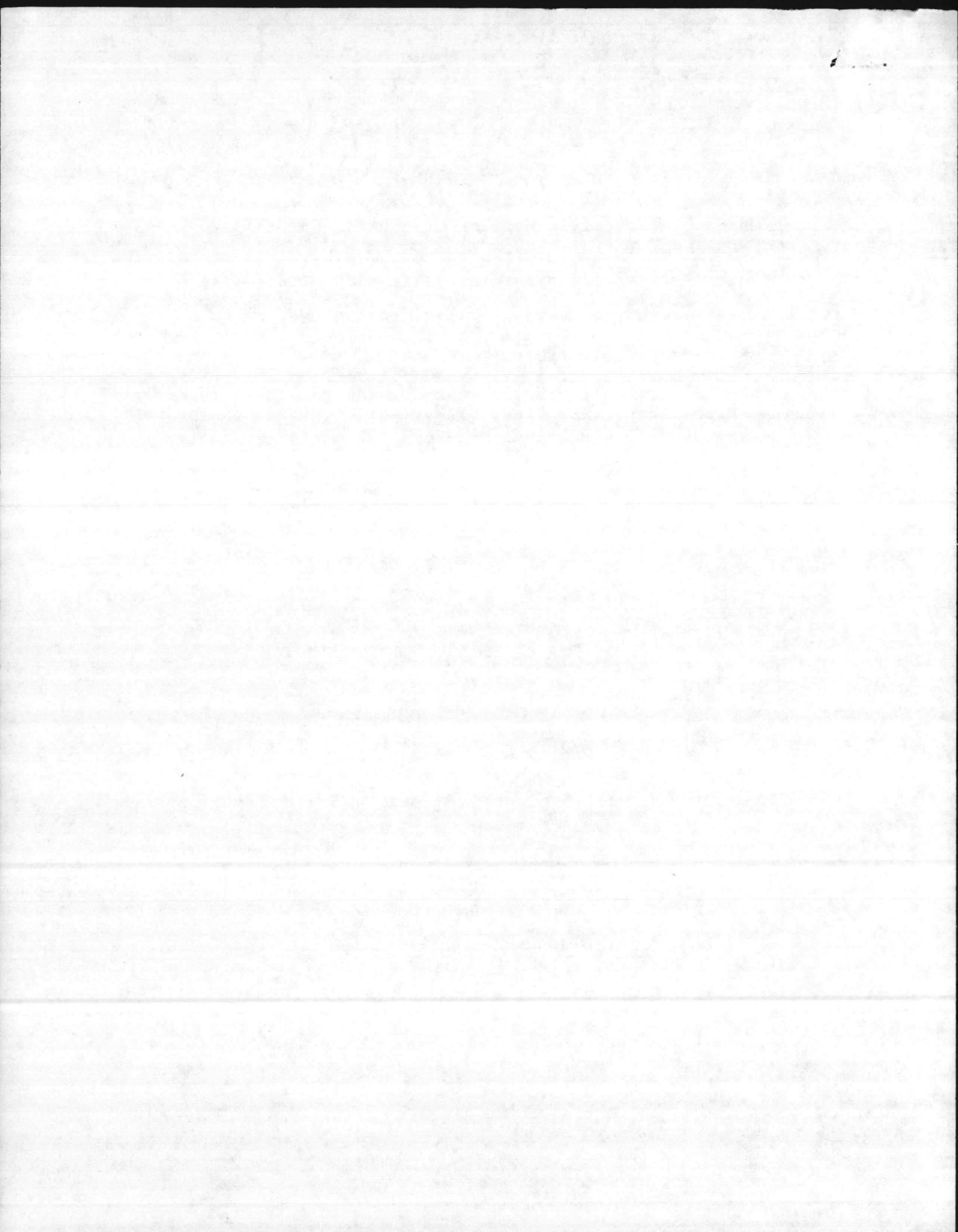
1. We are forwarding review comments at the enclosure to assist you in preparation of the final HM/W Plan. Comments on the Used Oil Management Plan are being forwarded separately.
2. For further information on these comments, please contact Mr. Danny Sharpe, AV 484-5003.

T. J. DALZELL  
By direction

Copy to:  
CMC (LFL)



Blind copy to:  
NREAD  
BMO  
PWO  
EnvEngr





MARINE CORPS BASE, CAMP LEJEUNE

COMMENTS ON HAZARDOUS MATERIAL/HAZARDOUS WASTE  
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PREPARED BY ENVIRONMENTAL AND SAFETY DESIGNS, INC.  
FOR ATLANTIC DIVISION, NAVFACENCOM, CONTRACT NO: N62470-85-B-7979

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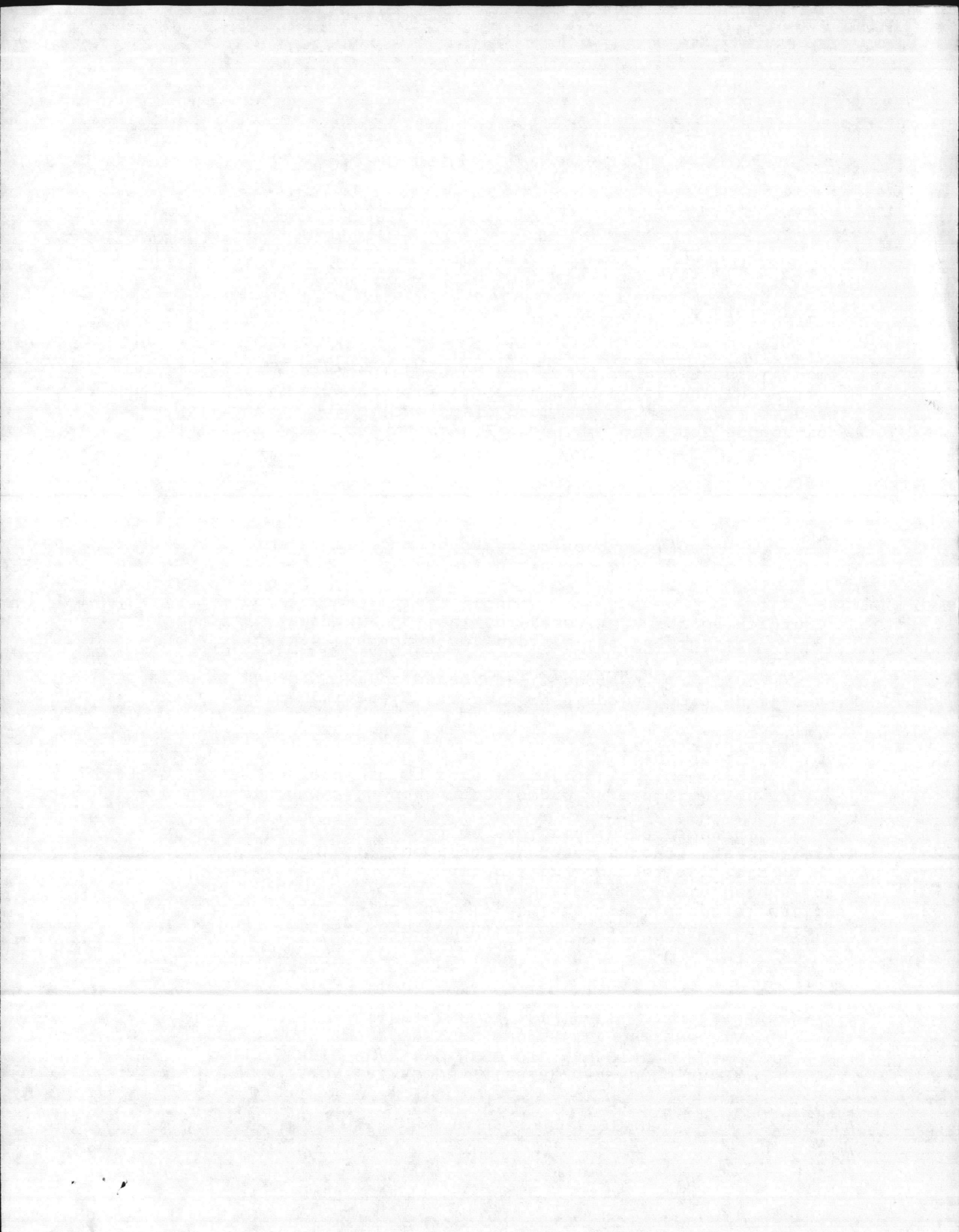
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- 2 -

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