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

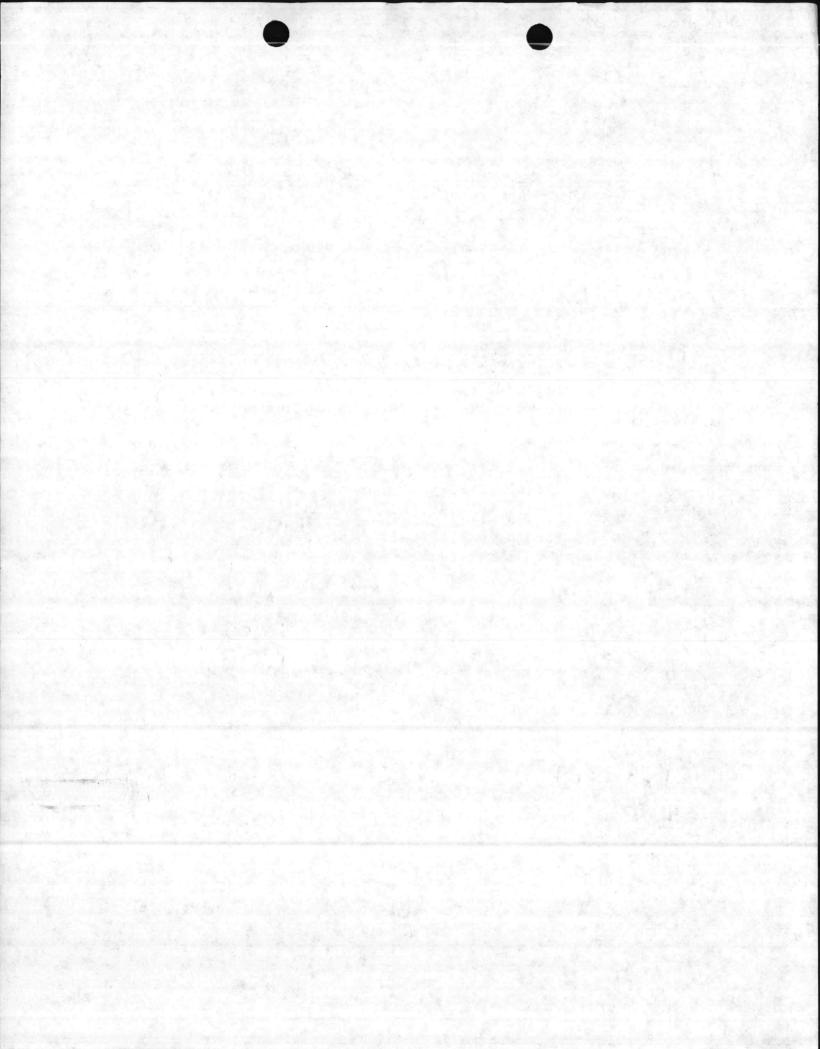
(c) Dir, NREAD ltr 6241/2 NREAD of 19 Oct 87

- 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

Blind copy: Lab



Commanding Gener Prom: Defense Routilis To: Logistics Agency

ie, Camp Lejeune Officer, Defense une, NC 28542-5001

WASTE OIL STORAG subj:

-64 and STT-65;

DISPOSAL OF

Raf:

(a) BO 6240.5

(b) BNO 1tr 6280 MAIN of 6 Nov 87

Encl:

(1) DD Form 1348-1, Contents of Tank STT-64

(2) DD Porm 1348-1, Contents of Tank STT-65 (3) DD Form 1348-1, Contents of Tank AS-419

(4) JTC Environmental Consultants, Inc. Rept. No. 87-441

(5) JTC Environmental Consultants, Inc. Rept. No. 87-444

- In accordance with reference (a), enclosures (1) through (3) are forwarded for your action. As requested in reference (b), NREAD has signed enclosures (1) through (3). Enclosure (4) contains the Total Organic Halogen (TOX), Flashpoint and Metals analysis of the contents in STT-64 and STT-65 as of 15 Sep 87, which showed the tanks to contain a hazardous waste. Base Maintenance has added oil to STT-64 and STT-65 since 15 Sep 87, however, the additional oil can not change the classification from hazardous waste. Enclosure (5) contains the TOX and Volatile Organic Chemical (VOC) analysis of AS-419 (Sample ID No 87-79 and 87-80) as of 15 Sep 87. The preliminary analysis showed the tank to contain a hazardous waste. On 6 Nov 87, AS-419, sealed by Bass Maintenance, was resampled for TOX, Flashpoint and Metals. The analysis will be forwarded when received.
- It is requested that the contents of the subject tanks be disposed of in the same time frame as BTT-61, STT-62, S-889 and 8-891. Please advise as soon as possible of the anticipated dates removal of the contents of the subject tanks is anticipated both to begin and to be completed. Point of contact with this matter is Mr. Danny Sharps, extensions 2083 or 2195.

JULIAN I. WOOTEN By direction

Blind copy to: BMO ECMS (2)

Total Communication of the Com

THE RESERVE OF THE RESERVE OF THE PARTY OF T

Prom: Commanding General, Marine Corps Base, Camp Lejeune To: Defense Reutilisation and Marketing Officer, Defense Logistics Agency, Lejeune, Camp Lejeune, NC 28542-5001

Subj: WASTE OIL STORAGE TANKS; AS-419, STT-64 and STT-65; DISPOSAL OF

Ref: (a) BO 6240.5

(b) BMO 1tr 6280 MAIN of 6 Nov 87

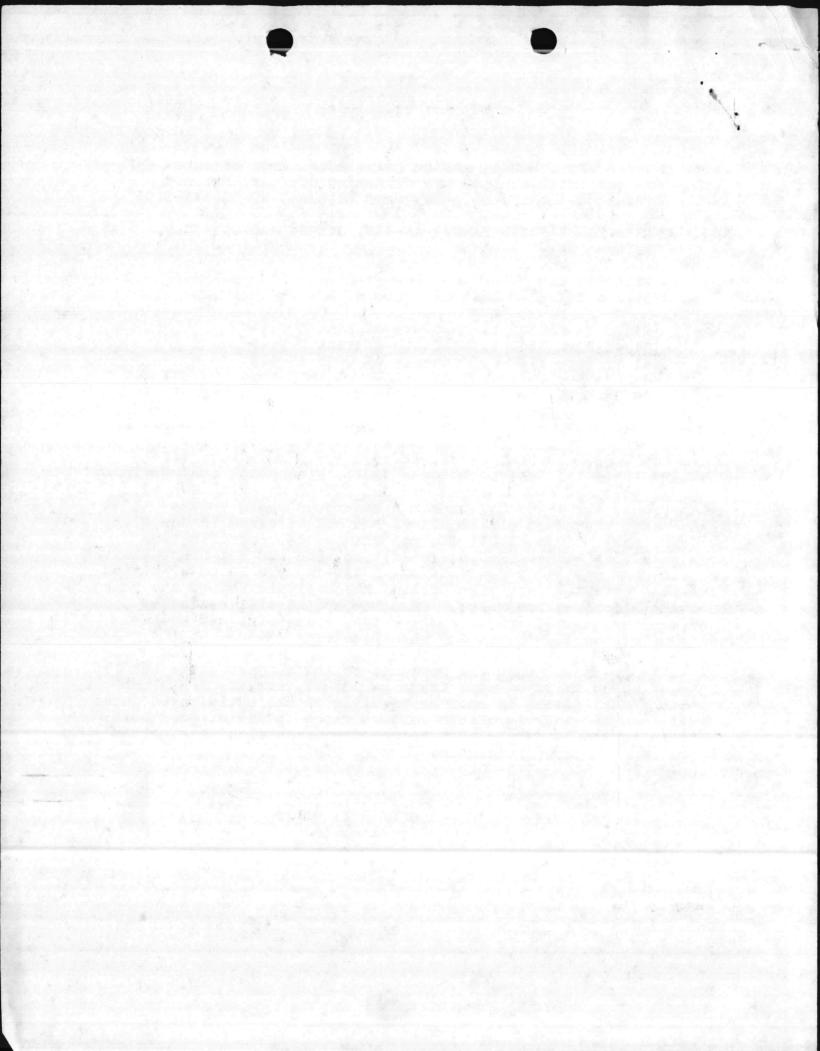
Encl: (1) DD Form 1348-1, Contents of Tank STT-64
(2) DD Form 1348-1, Contents of Tank STT-65
(3) DD Form 1348-1, Contents of Tank AS-419

(4) JTC Environmental Consultants, Inc. Rept. No. 87-441 (5) JTC Environmental Consultants, Inc. Rept. No. 87-444

- 1. In accordance with reference (a), enclosures (1) through (3) are forwarded for your action. As requested in reference (b), NREAD has signed enclosures (1) through (3). Enclosure (4) contains the Total Organic Halogen (TOX), Flashpoint and Metals analysis of the contents in STT-64 and STT-65 as of 15 Sep 87, which showed the tanks to contain a hazardous waste. Base Maintenance has added oil to STT-64 and STT-65 since 15 Sep 87, however, the additional oil can not change the classification from hazardous waste. Enclosure (5) contains the TOX and Volatile Organic Chemical (VOC) analysis of AS-419 (Sample ID No 87-79 and 87-80) as of 15 Sep 87. The preliminary analysis showed the tank to contain a hazardous waste. On 6 Nov 87, AS-419, sealed by Base Maintenance, was resampled for TOX, Flashpoint and Metals. The analysis will be forwarded when received.
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JULIAN I. WOOTEN By direction

Blind copy to: BMO ECMS (2)



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Camp Lejeune, No		* * * *								0						
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•		X WAS	CLATURE TE OII						Y							
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DD FORM 1348-1	1 MAR 74	EC	NTION OF 1	JAN 64 MAY BE USE	D		-		Total .		DC	D SINGL	E LINE IT	EM RELEAS	E/RECEIP	DOCUMENT

DD FORM 1348-1 S/N 0102-LF-013-1040

. U.S. GOVERNMENT PRINTING OFFICE:

EDITION OF 1 JAN 64 MAY BE USED UNTIL EXHAUSTED

UNIT PRICE

DOD SINGLE LINE ITEM RELEASE/RECEIPT DOCUMENT

ENCLOSURE

DD FORM 1348-1 S N 0102-LF-013-1040 1 MAR 74

EDITION OF 1 JAN 64 MAY BE USED

UNTIL EXHAUSTED

.S. GOVERNMENT PRINTING OFFICE: 1982-361-328/V-149

DC FORM 1348-1 1 MAR 74 S=N 0102-LF-013-1040 EDITION OF 1 JAN 64 MAY BE USED UNTIL EXHAUSTED

DOD SINGLE LINE ITEM RELEASE/RECEIPT DOCUMENT

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

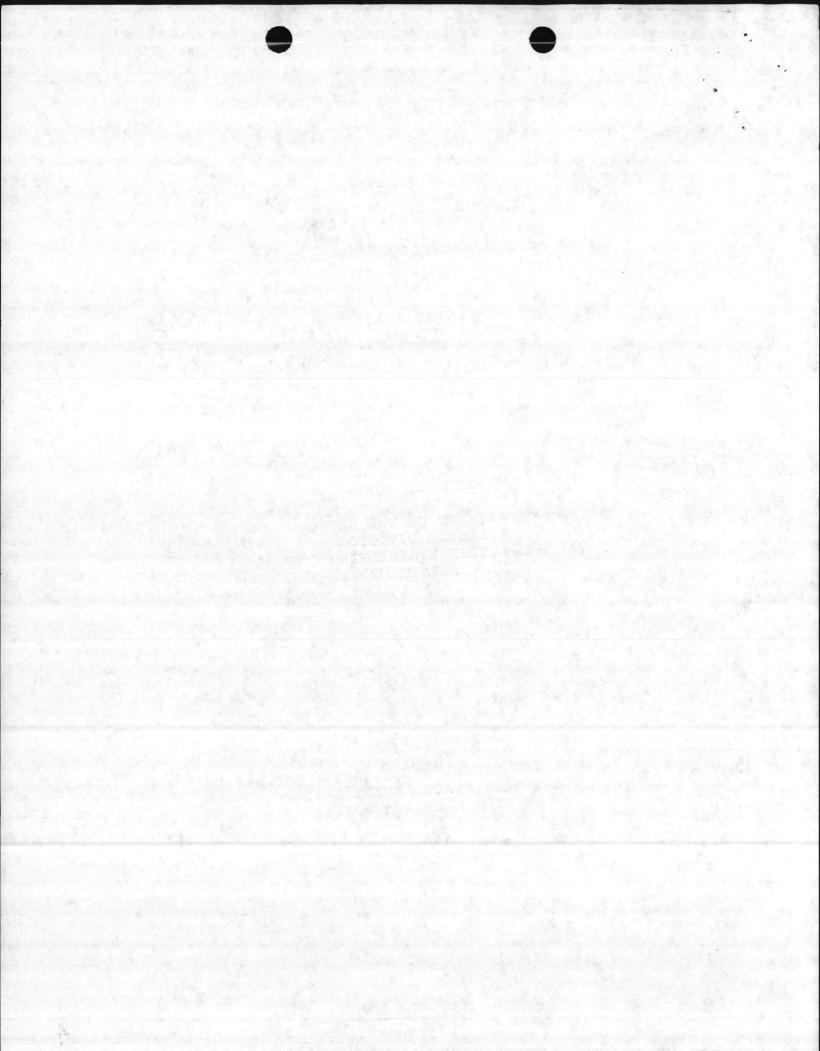
PREPARED BY:

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

OCTOBER 5, 1987

Ann E. Rosecrance
Laboratory Director

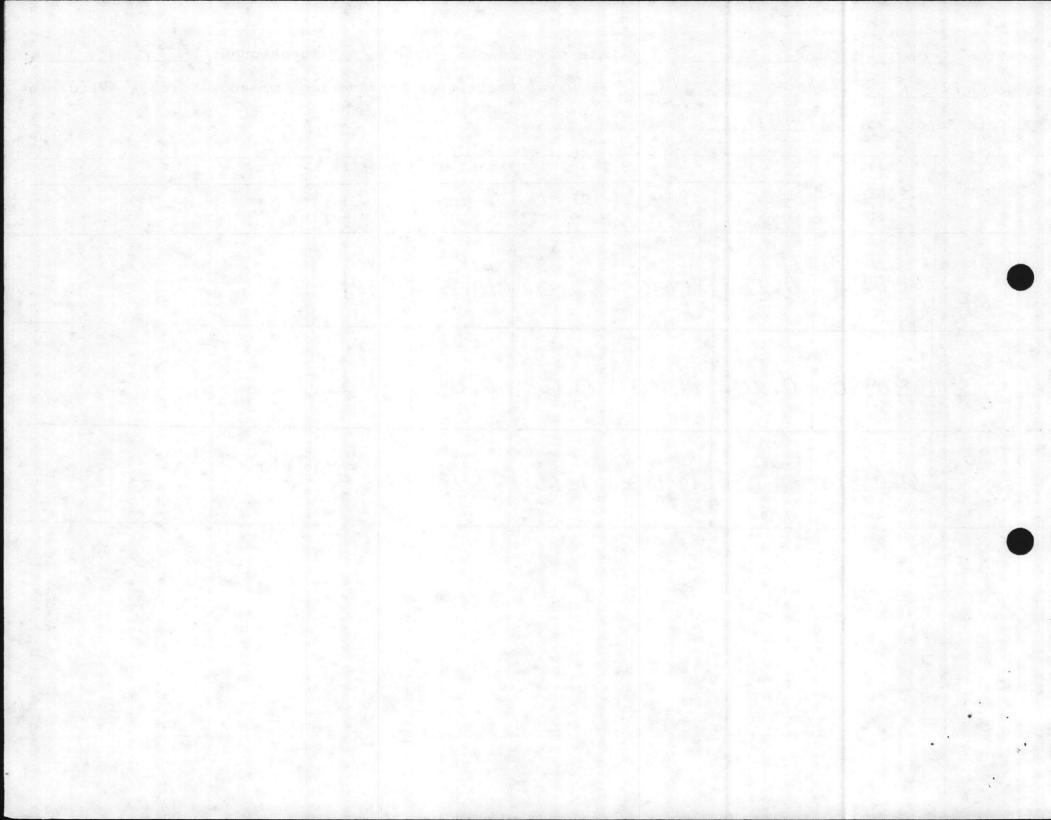
FINCLOSURE



Date: 10-12-87 Case No. 136 Add. to Naval Facilities Engineering Command, Norfolk, Virginia

JTC Data Report No. 87-44 Table 14

NAVY	JTC			U	ANALYSIS	PARAMETER		
SAMPLE ID	SAMPLE ID	Тох %	BTU per 1b.	B5+W.	% water			
87-81 STT-64	61-0979	0.23	17,000	22.0	10.3	41.4		
87-82 511-65	61-0980	0.20	19,100	0.6	0.05	37.2		
87-83 511-64	61-0981	<0.05	19,100	1.7	1.4	35.5		
		·						



Addendum

JTC DATA REPORT # 87-441

LABORATORY ANALYSIS ON NAVAL SAMPLES

CONTRACT #N62470-86-C-8754

CASE # 136

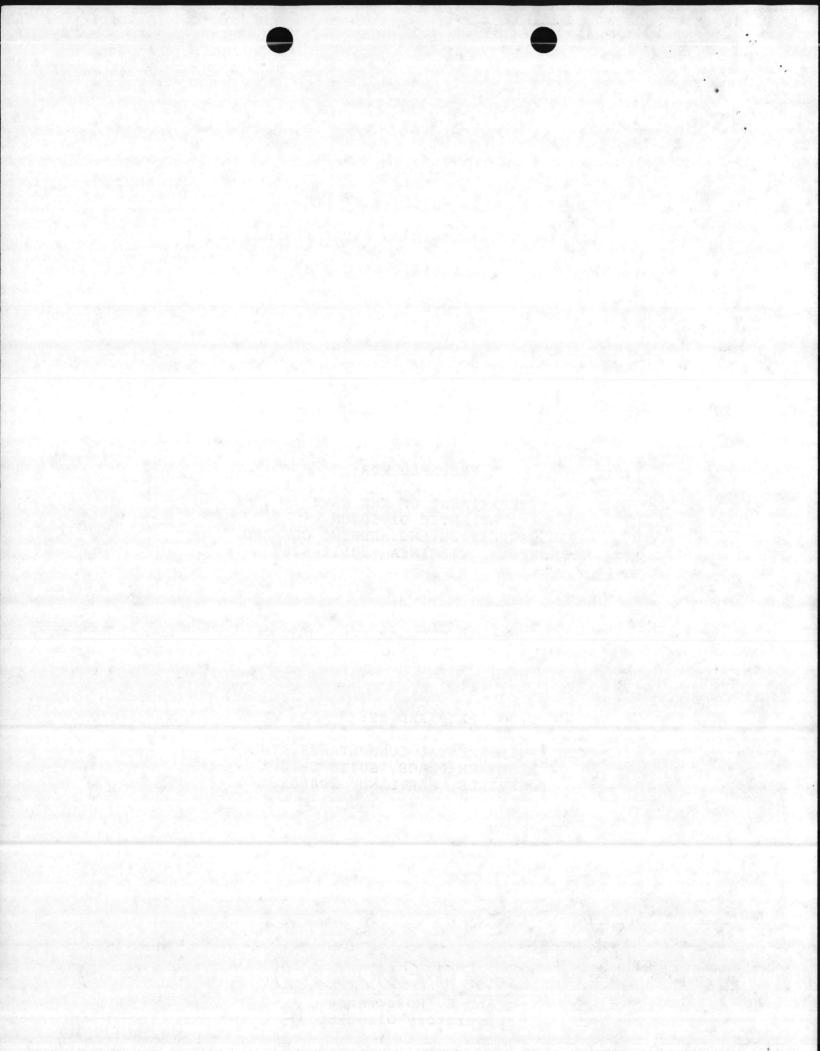
PREPARED FOR:

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

PREPARED BY:

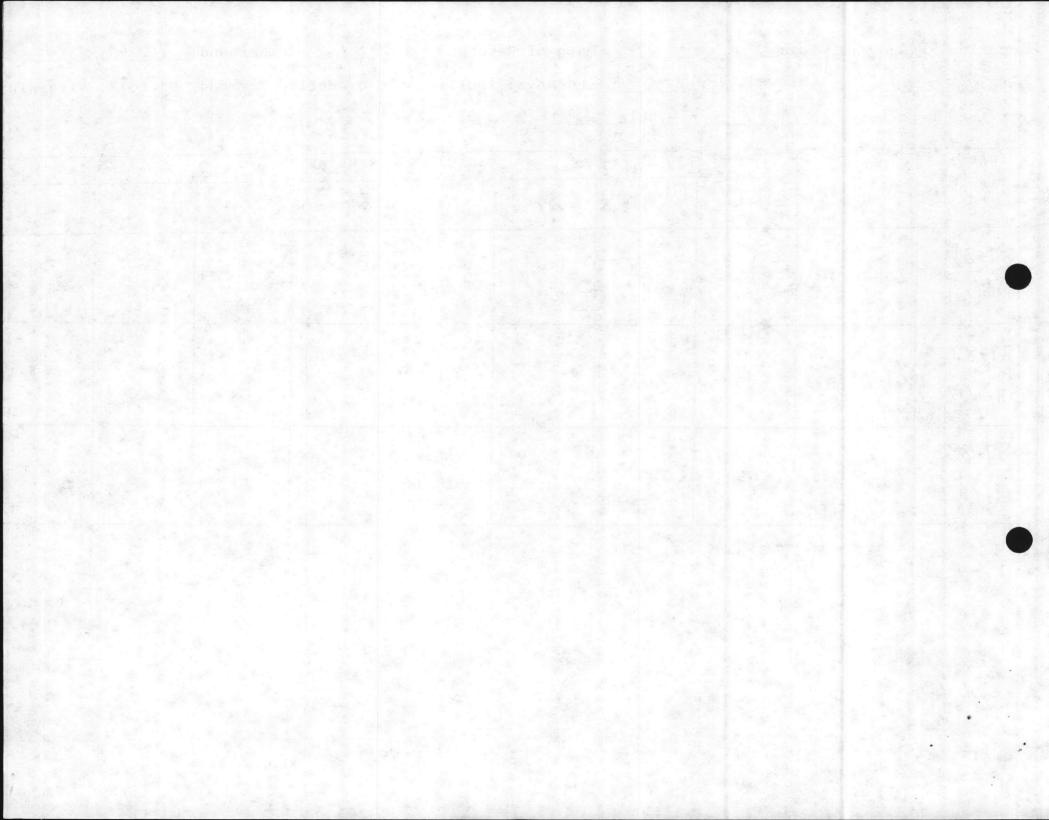
JTC ENVIRONMENTAL CONSULTANTS, INC. 4 RESEARCH PLACE, SUITE L-10 ROCKVILLE, MARYLAND 20850

OCTOBER 12, 1987



Location: Camp Lejeune	Date of Receipt: 9-21-87 Turnaround: 10 days
Date: 10.5.87. Case No. 136	to Naval Facilities Engineering Command, Norfolk, Virginia
JTC Data Report No. 87-441 T	able 1011

				0					
NAVY	JTC				ANALYSIS	PARAMETER			
SAMPLE ID	SAMPLE I D	PCB my/g	Mangait						
87-81 STT-64	61-0979	<i>45</i>	78						
87-82 511-65	61-0980	<5	35		•				
87-83 511-64	61-0981	< 5	30						
							2 20	•	



Addendum A

JTC DATA REPORT # 87-441

LABORATORY ANALYSIS ON NAVAL SAMPLES

CONTRACT #N62470-86-C-8754

CASE #136

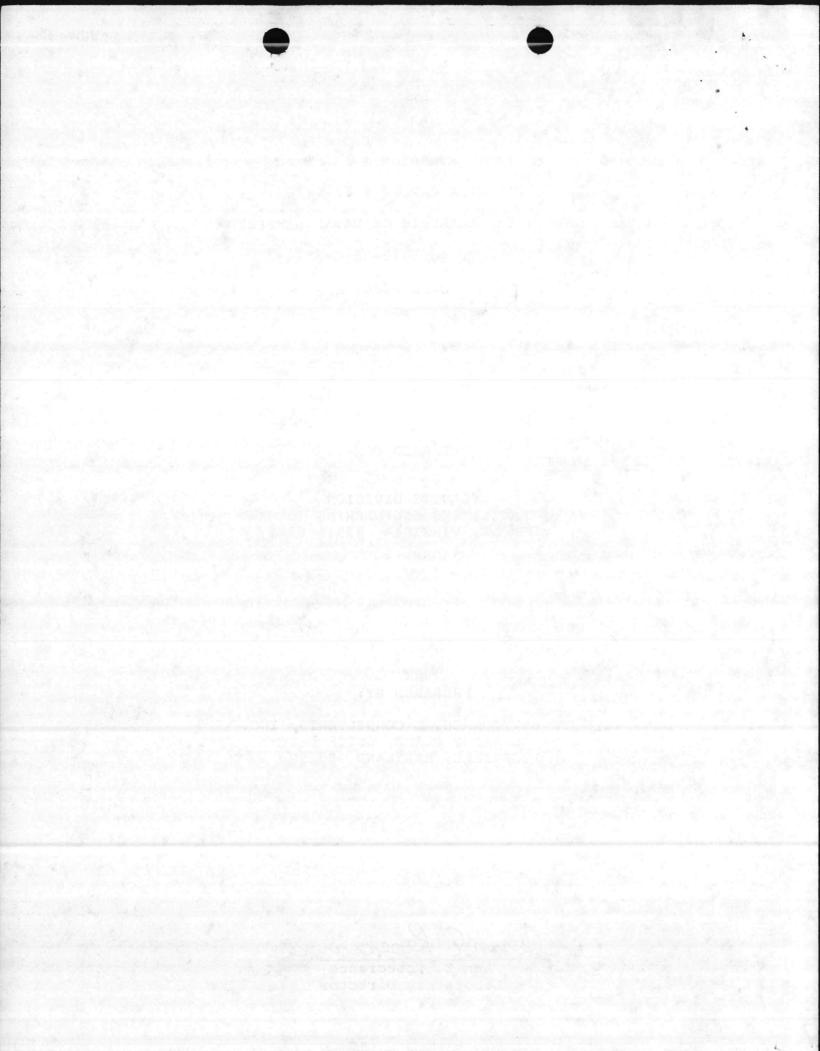
PREPARED FOR:

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 26, 1987



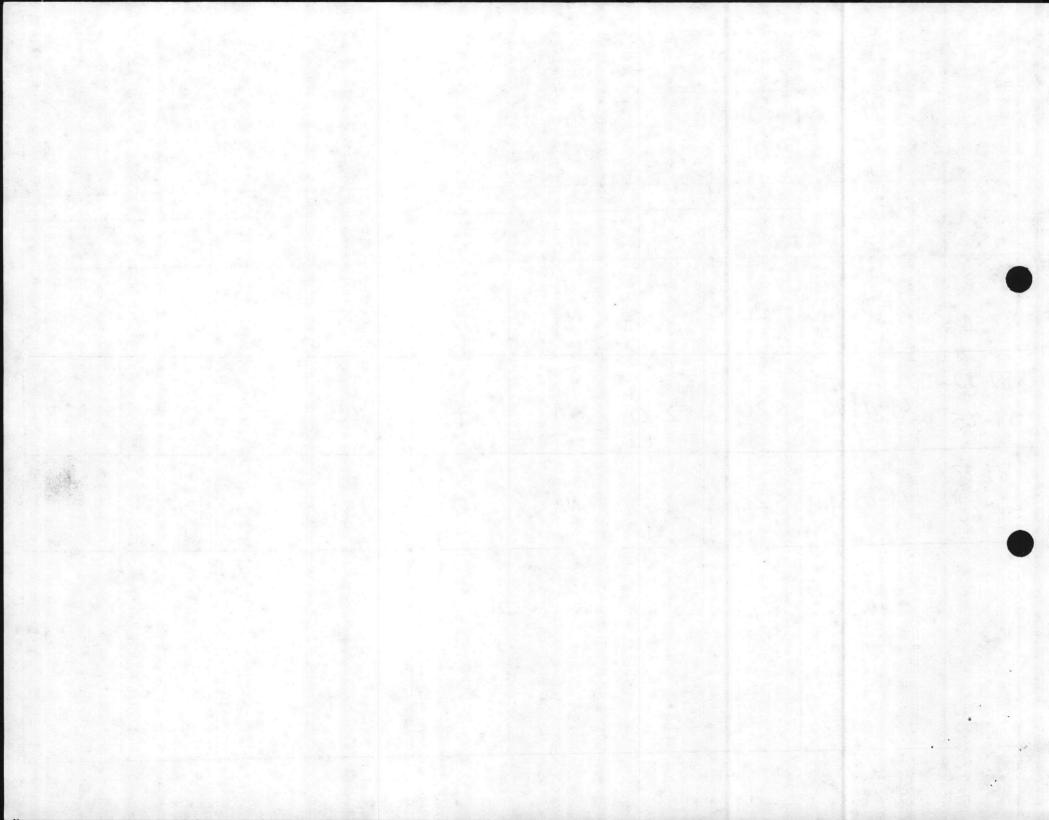
Date: 10-26-87 Case No. 136 Add A to Naval Facilities Engineering Command, Norfolk, Virginia

JTC Data Report No. 87-441 Table 10/1

NAVY	JTC	ANALYSIS PARAMETER									
SAMPLE	SAMPLE	As mg/kg	Cd mg/kg	Cr	Pb: mg/kg	Sp. Gravity					
€37-81 Sπ-64	61-0979	<20	<2.0	NA.	58	0.697					
87-82 511-65	61-0980	<20	<2.0	NA	54	0.605					
87-83 5π-64	61-0981	<20	<2.0	NA	50	0.731		-			

Note: Analyses run on top layer of sample

NA = not available, results will be provided in a separate report addendum



Addendum B

JTC DATA REPORT # 87-441

LABORATORY ANALYSIS ON NAVAL SAMPLES

CONTRACT #N62470-86-C-8754

CASE # 136

COmplete

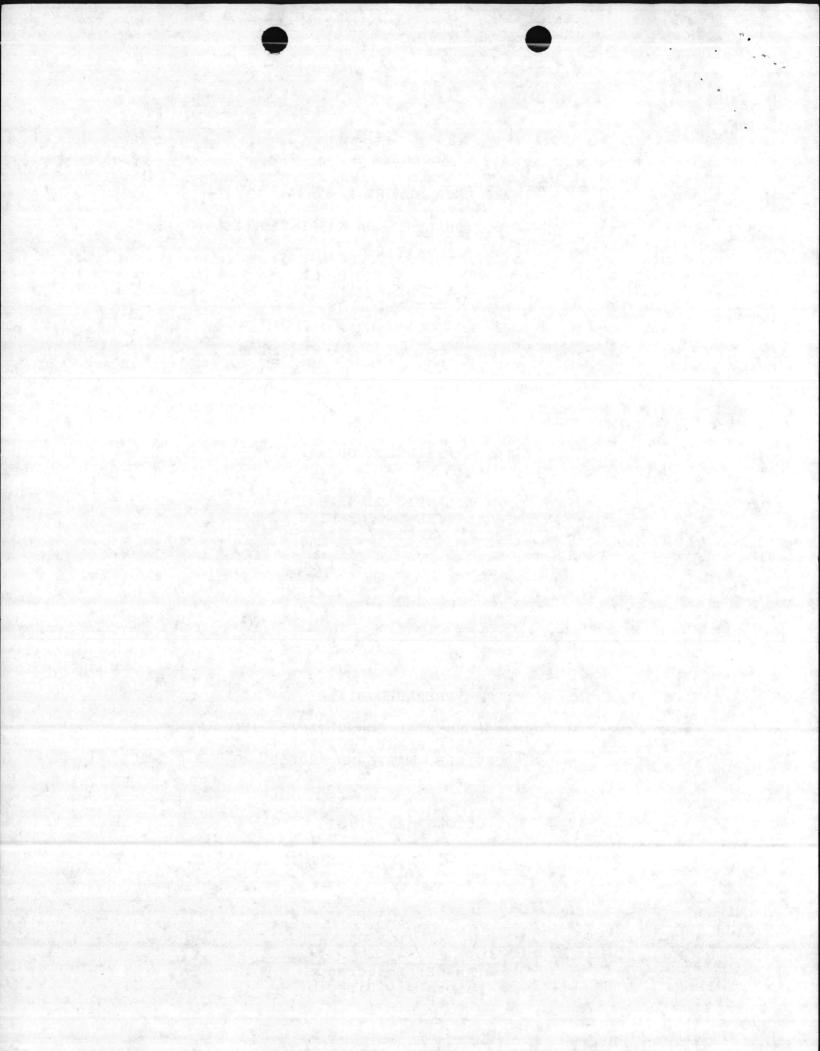
PREPARED FOR:

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 29, 1987

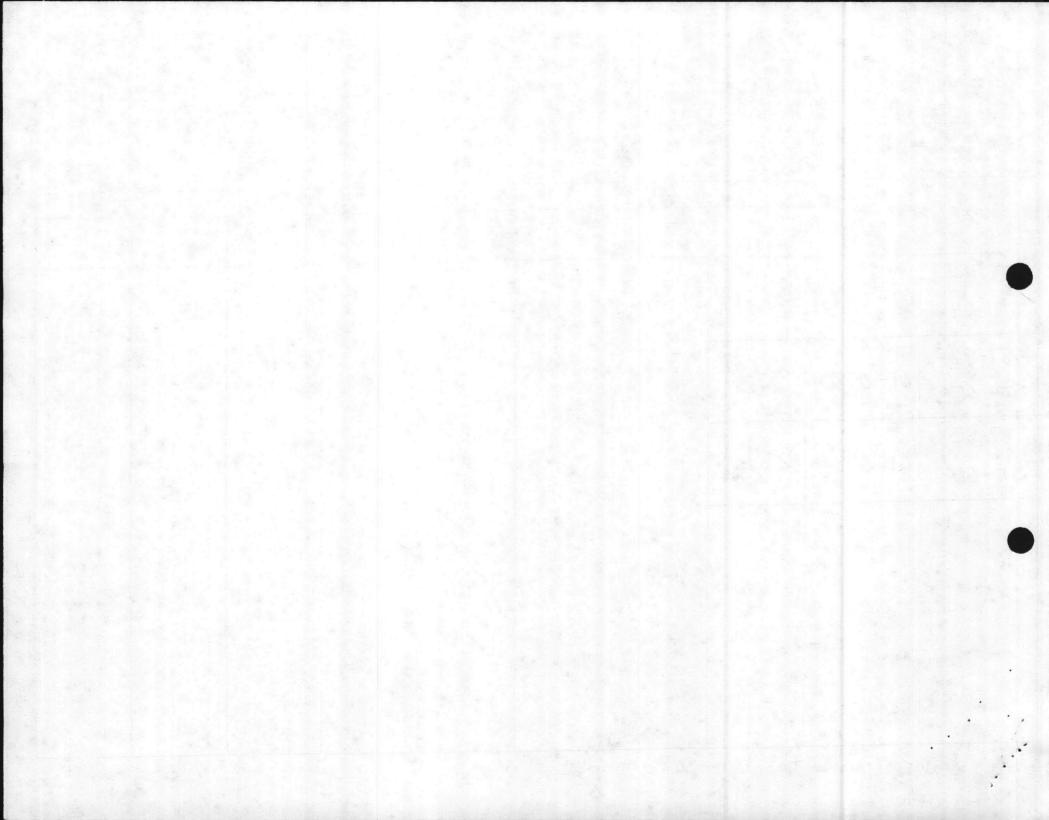


Date: 10-29-87: Case No. 136 Add. B to Naval Facilities Engineering Command, Norfolk, Virginia

JTC Data Report No. 87-441 Table 141

NAVY	JTC			ANALYSIS	PARAMETER			
SAMPLE, SAMPLE Cr ID ID mg/kg						781		
87-81 Sπ-64	61-0979	<1.5						
87-82- Sπ-45	61-0980	2.3				·		
87-83 511-66	61-0981	41,5						
•							-	

Note: Analysis run on top layer of sample



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

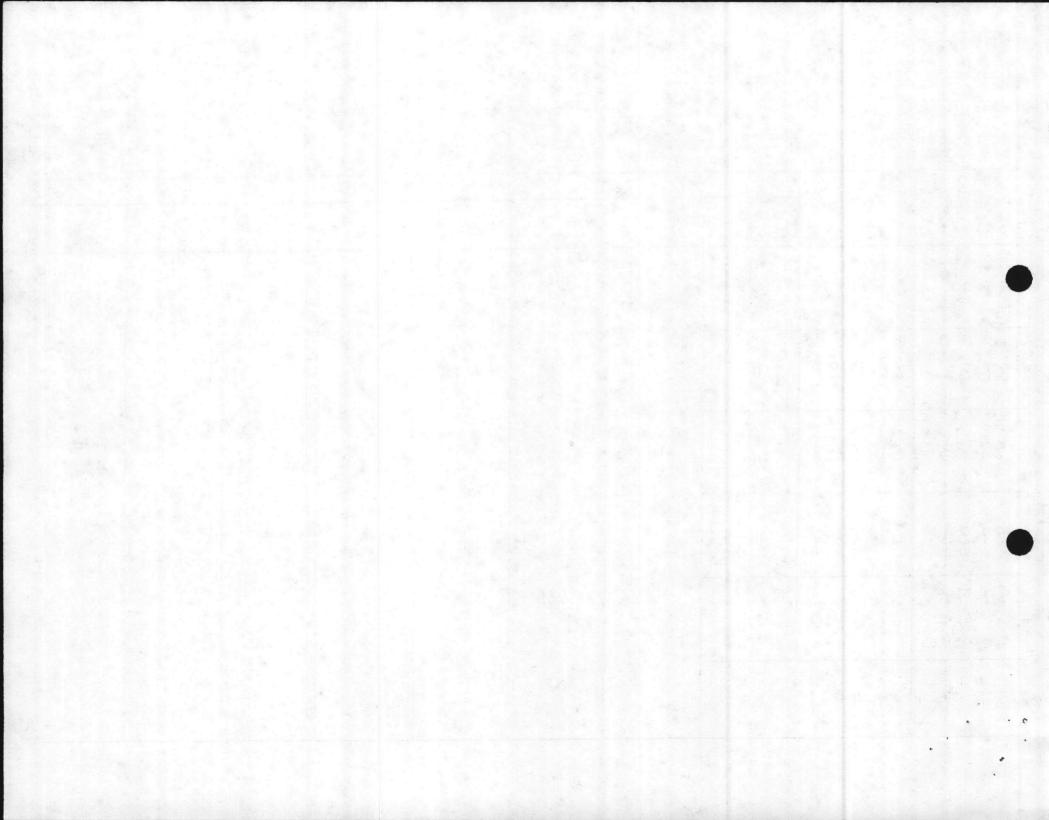
PREPARED BY:

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

OCTOBER 7, 1987

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	e <u>///</u>						

NAVY	JTC				ANALYSIS	PARAMETE	R		
SAMPLE.	SAMPLE ID	VOA + Freon							
87-31	41-0986	see attached Sheet						•	
87-32	61-0987	и,						·	
87-33	61-0988	n							
87-34	61-0989	11		2.					
87-79 oil layer composite	61-0990	11							
87-80	61-0991	h .							





T

C Environmental Consultants. Inc.

PRIORITY POLLUTANT ANALYSIS DATA SHEET

VOLATILE FRACTION

JTC SAMPLE # _	61-0990	COMPOSITE	PROJECT NO. NF-61 #138
CLIENT SAMPLE	1 87-79		DATE RECEIVED 9-23-87
METHOD NO.	624		DETECTION LIMIT 250 mg/L

PARAMETER	RESULT mg/L
acrolein	ND ND
acrylonitrile	ND
benzene 2007	F 38
carbon tetrachloride	ND
chlorobenzene	ND
1,2-dichloroethane	ND
1,1,1-trichloroethane /00	XXX
1,1-dichloroethane	ND.
1,1,2-trichloroethane	ND
1,1,2,2-tetrachloroethane	ND
chloroethane	ND
2-chloroethylvinylether	KD
chloroform	ND
1,1-dichloroethylene	ND
1,2-trans-dichloroethylene	ND
ACETONE	1400
4-METHYL-2-PENTANONE	330
2-HEXANONE	1100

PARAMETER	1,42,18	RESULT mq/L
1,2-dichloropropane		ND
1,3-dichloropropylene	and the second	ND
ethylbenzene	720) AB
methylene chloride		ND
methyl chloride	10.00	ND
methyl bromide		ND
bromoform		ND
dichlorobromomethane	A COLOR	ND
trichlorofluoromethane		ND
dichlorodifluoromethan	е .	ND
chlorodibromomethane		ND
tetrachloroethylene		ND
toluene	970	NO
trichloroethylene .	50 X	- HD
vinyl chloride		ND
xylenes	1500	NO
FREON		1600

ND = NOT DETECTED

^{* =} BELOW DETECTION LIMIT

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C Environmental Consultants. Inc.

PRIORITY POLLUTANT ANALYSIS DATA SHEET

VOLATILE FRACTION

JTC SAMPLE # 61-0991	PROJECT NO. NF-61 #138
CLIENT SAMPLE 1 87-80	DATE RECEIVED _ 9-23-87
METHOD NO624	DETECTION LIMIT 250 mg/L

PARAMETER	RESULT mg/L
acrolein	· ND
acrylonitrile	ND
benzene 200 X	- JHD
carbon tetrachloride	ND
chlorobenzene	ND
1,2-dichloroethane	ND
1,1,1-trichloroethane	ND
1,1-dichloroethane	ND
1,1,2-trichloroethane	ND
1,1,2,2-tetrachloroethane	ND
chloroethane	ND
2-chloroethylvinylether	KD
chloroform	ND
1,1-dichloroethylene	ND
1,2-trans-dichloroethylene	ND
1	2344

ACETONE 230	D
MUETONE	
4-METHYL-2-PENTANONE (MIBK) 50	
159)

PARAMETER	RESULT mq/L
1,2-dichloropropane	ND
1,3-dichloropropylene	ND
ethyl benzene 460	OK- C
methylene chloride	ND
methyl chloride	ND
methyl bromide	ND
bromoform	ND
dichlorobromomethane	ND
trichlorofluoromethane	ND
dichlorodifluoromethane	ND
chlorodibromomethane	ND
tetrachloroethylene	ND
toluene 1300	ND
trichloroethylene	ND
vinyl chloride	ND
xylenes 2100	.AB
FREON	600

ND = NOT DETECTED

* = BELOW DETECTION LIMIT

Addendum

JTC DATA REPORT # 87-444

LABORATORY ANALYSIS ON NAVAL SAMPLES

CONTRACT #N62470-86-C-8754

CASE # 138

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PREPARED FOR:

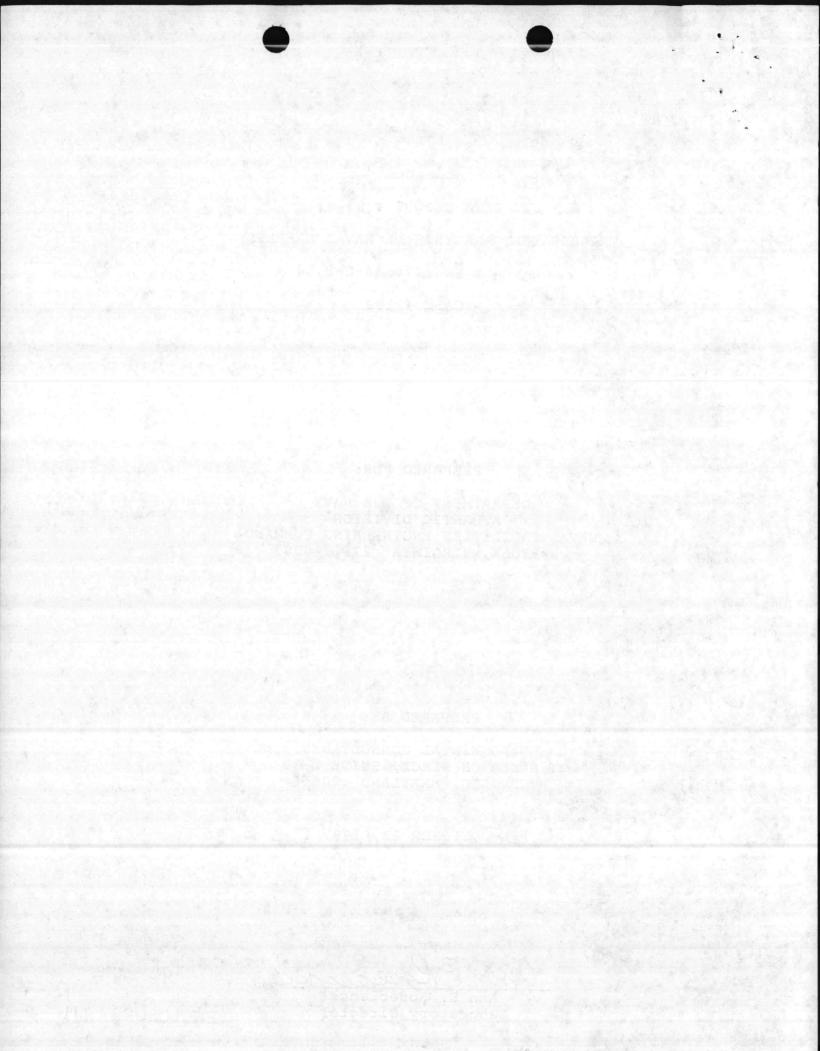
DEPARTMENT OF THE NAVY
ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511-6287

PREPARED BY:

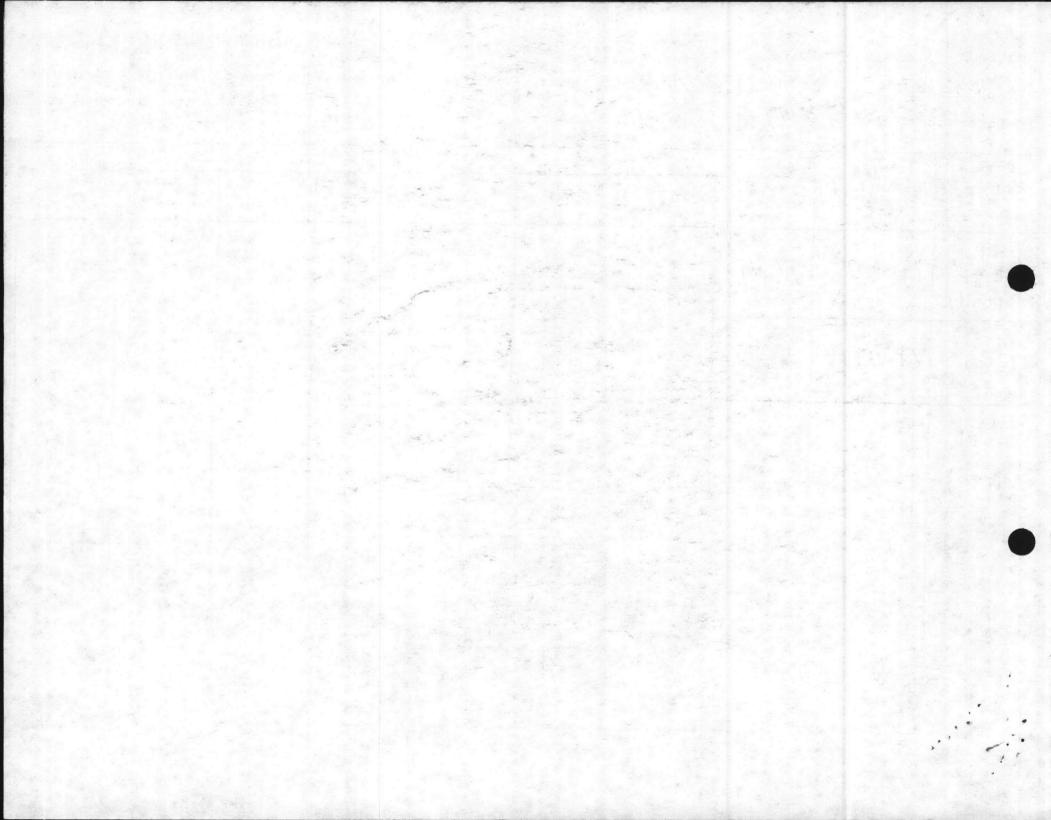
JTC ENVIRONMENTAL CONSULTANTS, INC. 4 RESEARCH PLACE, SUITE L-10 ROCKVILLE, MARYLAND 20850

OCTOBER 12, 1987

Ann E. Rosecrance Laboratory Director



TC Data Rep	port No. 81	- 774	_ Table_/0			
NAVY	JTC			ANALYSIS	S PARAMETER	
SAMPLE ID	SAMPLE ID	ToX %				
87-79 layer com posite	61-0990	0.09				
87-80	61-0991	0.15				
				1.		
			8. 2. 4.			
	ŀ					
		1				





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



6241/2 NREAD 14 Jul 87

From: Director, Natural Resources and Environmental Affairs

Division, Marine Corps Base, Camp Lejeune

To: Base Maintenance Officer, Marine Corps Base, Camp Lejeune

Subj: WASTE OIL STORAGE TANKS; ANALYSIS OF

Ref: (a) BO 6240.5

Encl: (1) JTC Environmental Consultants, Inc., Report #87-247

(2) JTC Environmental Consultants, Inc., Report #87-247

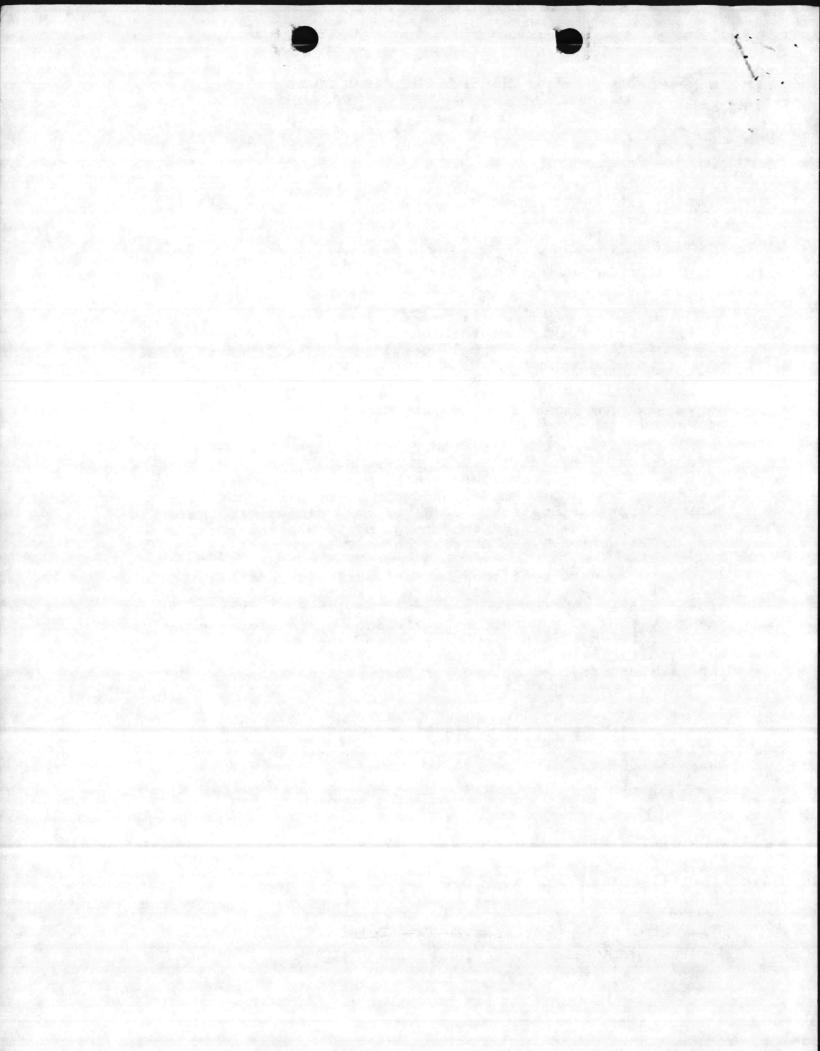
Addendum

- 1. On 28 May 1987, the four waste oil storage tanks at Holcomb Boulevard, two of the three tanks at Marine Corps Air Station, New River, and three of the six tanks at Tarawa Terrace, were sampled by NREAD. Sample numbers 87-49 through 87-52 are the Holcomb Boulevard tanks S-888, S-889, S-890, and S-891, respectively. Sample number 87-53 is the Marine Corps Air Station, New River tank in the middle and sample number 87-54 is the Marine Corps Air Station, New River tank closest to the crash crew. Sample numbers 87-55 through 87-57 are the tanks at Tarawa Terrace, STT-61, STT-62, and STT-63 respectively.
- 2. Based on data contained in enclosures (1) and (2), the contents of S-888, S-890 and STT-63 are specification used oil. The rest of the tanks, due to the levels of Total Organic Halogen (TOX), are regulated as a hazardous waste fuel by regulations outlined in the reference. The majority of the subject waste oil appears to be suitable for burning for recovery of energy based on information provided by Oldover Corporation, Aquadale, North Carolina.
- 3. It is recommended that the subject oil be turned in to DRMO for disposal. Point of contact is Danny Sharpe, extension 2083.

J. I. WOOTEN

Copy to: DRMO AC/S, FAC EC&MS (2)

FOR ENCLOSURES SEE HB TANKS
ATTACHED



Partial Results

JTC DATA REPORT # 87-247

LABORATORY ANALYSIS ON NAVAL SAMPLES

CONTRACT #N62470-86-C-8754

CASE # 42

PREPARED FOR:

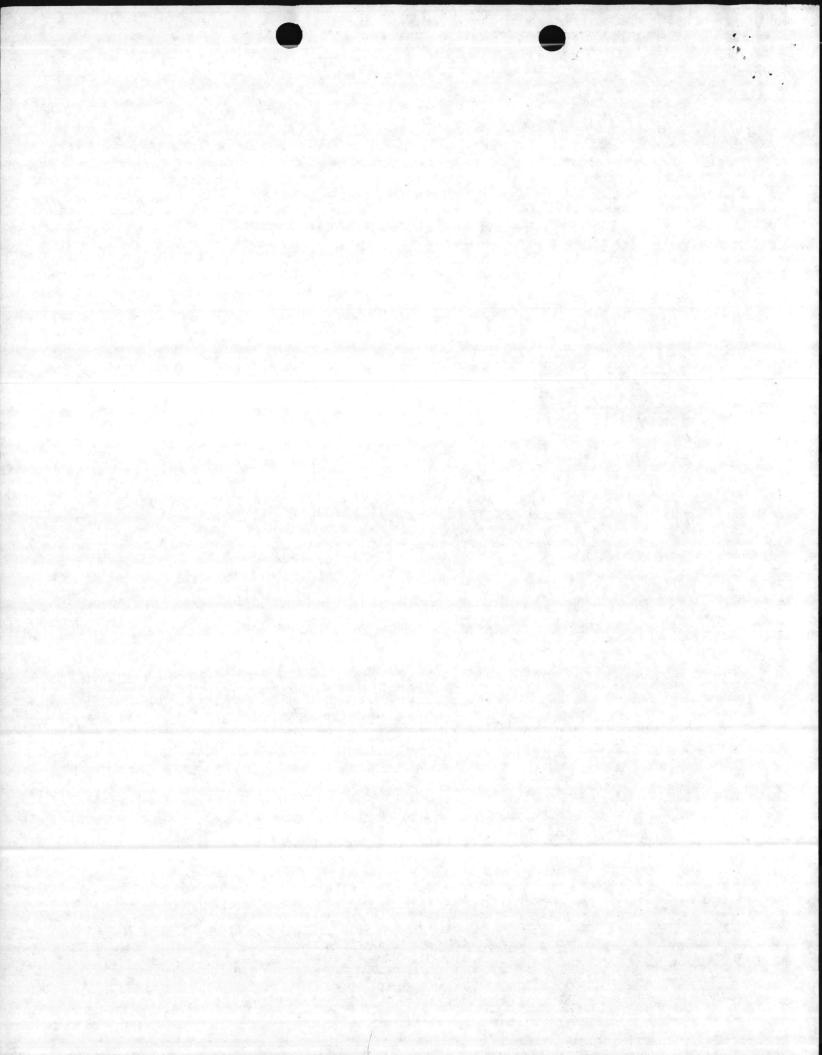
DEPARTMENT OF THE NAVY
ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511-6287

PREPARED BY:

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

JULY 6, 1987

Ann E. Rosecrance Laboratory Director



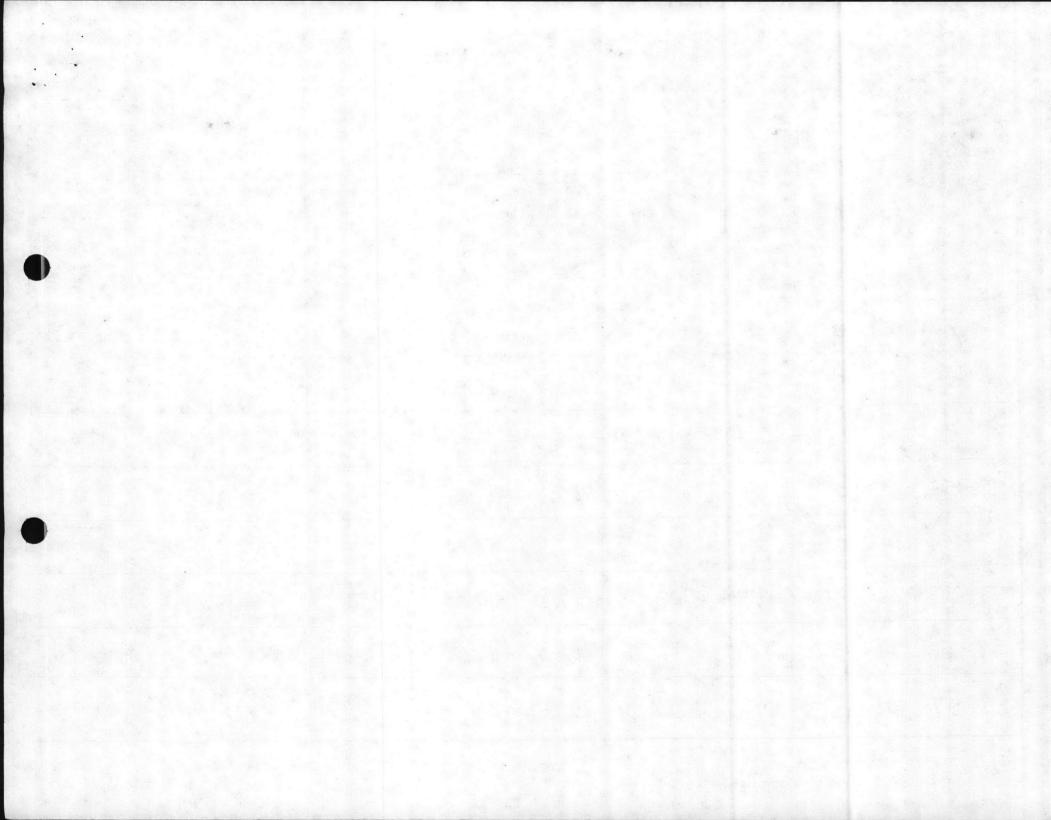
Date of Receipt: 6-5-87 Turnaround: routine Location: Camp Lejeune Case No. H) Date: 7-6-87 to Naval Facilities Engineering Command, Norfolk, Virginia

JTC Data Report No. 87-247 Table

Oil Phase

						011 1111	400		
NAVY	JTC				ANALYSIS	PARAMETER			
SAMPLE ID	SAMPLE ID	Water 70	85+W	Viscosity e100°F, sus	BTU per 1b.	Tox 20	Flashpoint	Sp. Gravity	Sp. Gravity b
87 - 49	61-0305	19.5	19.5	93.6	15,550	<0.05	N.O. boiled at 70°	0,73	0.92
87-50	61-0306	13.5	20.0	100.8	16,500	0.20	N.O. boiled at 50	0,77*	
87-51	61-0307	17.6	24.0	103.8	15,500	<0.05	N.O. boiled at 45°	0.72	0.96
87-52	61-0308	0.76	0.80	53,0	19,300	0.12	35	0.73	0.88
87-53	61-0309	8.4	13.5	100.8	17,500	0.16	40	0.73	0.93
87-54	61-0310	8.1	13.0	56.1	17,500	0,25	35	0.75	0.88
87-55	61-0311	18.4	23.0	97.0	15,000	0.13	N.O. boiled at 45°	0,76	0.98
SM-67 87-56	61-0312	12.0	17,5	104.6	16,650	0.22	40	0.73	0.89
87-57	61-0313	19.6	22.0	120.2	15,100	<0.05	N.O. boiled at 45°	0.76	0,98

N.O. = not observed a = top layer b = bottom layer * sample consisted of only one oil layer



Date: 7-6-87 Turnaround: routine

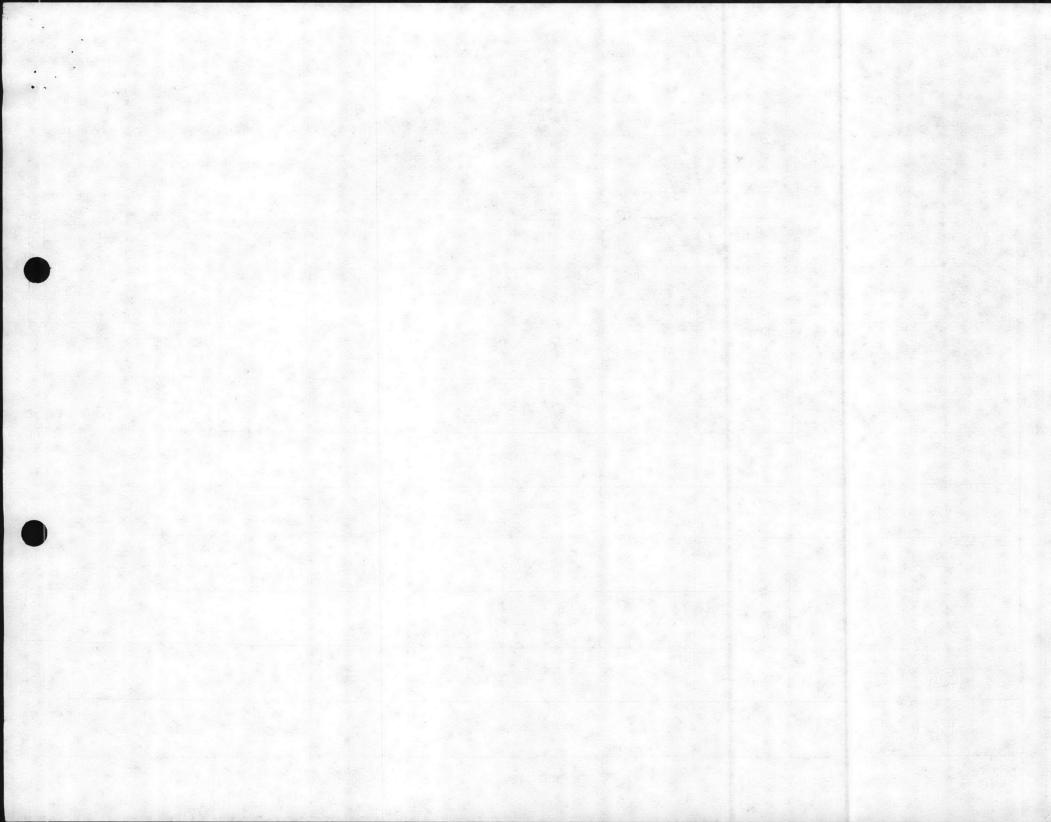
Date: 7-6-87 Turnaround: routine

To Naval Facilities Engineering Command, Norfolk, Virginia

JTC Data Report No. 87-247 Table 2

NAVY	JTC				ANALYSIS	PARAMETER		
SAMPLE	SAMPLE ID	PCB rugly	As mg 1 kg	Cd mg/kg	Cr mg/kg	Pb mg/kg		
87-49	61-0305	< 5	NA	NA	NA	NA		
87-50	61-0306	< 5	15	<1	<0.75	30		
87-51	61-0307	< 5	<5	1.1	2,2	59		
87-52	61-0308	< 5	45	<1	1.4	23		
87-53	61-0309	< 5	15	< 1	1.6	35		
87-54	61-0310	< 10	< 5	<1	2.6	26		
87-55	61-0311	<i><</i> 5	< 5	<1	1.3	26	•	
87-56	61-0312	< 5	<i><</i> 5	<1	<0.75	8.2		
87-57	61-0313	<5	<i><</i> 5	<1	<0.75	28	App.	

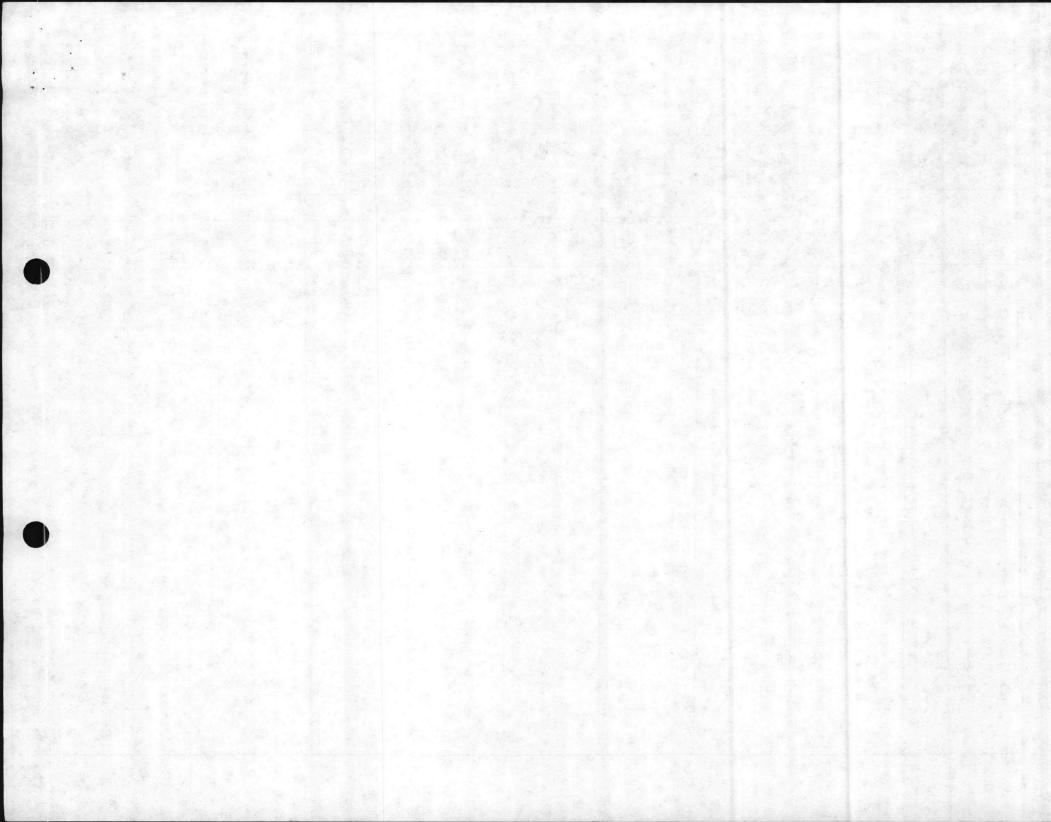
NA- not available, results will be reported in a report addendum



JTC Environmental Consultants, Inc.

Location: Camp	Lejeune	Date of Receipt: 6-5-87 Turnaround: routine	
Date: 7-6-87	Case No. 42	to Naval Facilities Engineering Command, Norfolk, Virgin	nia
JTC Data Report No.	87-247	Table 3	

NAVY	JTC	Water Phase Composite ANALYSIS PARAMETER							
SAMPLE	SAMPLE ID	TOX	Phenols mg/L	VoA ,	As ug/L	Cd -ug/L	Cr ug/L	Pb ug/L	
87-49/ 87-57 composite	61-0305/ 61-0313	814	6.8	see attached sheet	498	<20	72	155	





C Environmental Consultants, Inc.

PRIORITY POLLUTANT ANALYSIS DATA SHEET

VOLATILE FRACTION

/ - 0 - 05	sik NF-101#42	
JTC SAMPLE # 61-6305/0313 Compos	PROJECT NO.	
CLIENT SAMPLE # 87-49787-57	DATE RECEIVED	
CLIENT SAMPLE # 8 7-49 787-57 [METHOD NO. 624	DETECTION LIMIT 500 ug/L	
FILTHOU HO.		

PARAMETER	RESULT
	ug/L
acrolein	ND
acrylonitrile	ND
benzene	540 ND
carbon tetrachloride	ND
chlorobenzene	ND
1,2-dichloroethane	ND
1,1,1-trichloroethane	230*NB
1,1-dichloroethane	ND
1,1,2-trichloroethane	ND
1,1,2,2-tetrachloroetha	ne ND
chloroethane	ND
2-chloroethylvinylether	N,D
chloroform	ND
1,1-dichloroethylene	ND
1,2-trans-dichloroethy	lene ND
A CONTRACT OF STREET OF STREET OF STREET	

PARAMETER	RESULT
AKAMETEN	ug/L
1,2-dichloropropane	ND
1,3-dichloropropylene	ND
ethyl benzene	110* 40
methylene chloride	. ND
methyl chloride	ND
methyl bromide	ND
bromoform	ND.
dichlorobromomethane	ND
trichlorofluoromethane	ND
dichlorodifluoromethane	ND
chlorodibromomethane	ND
tetrachloroethylene	ND
toluene	990 - ND
trichloroethylene	ND
vinyl chloride	ND
xylenes	620 ND

Acetone 70,000 xy1

MEK (2-Butanone) 13,000

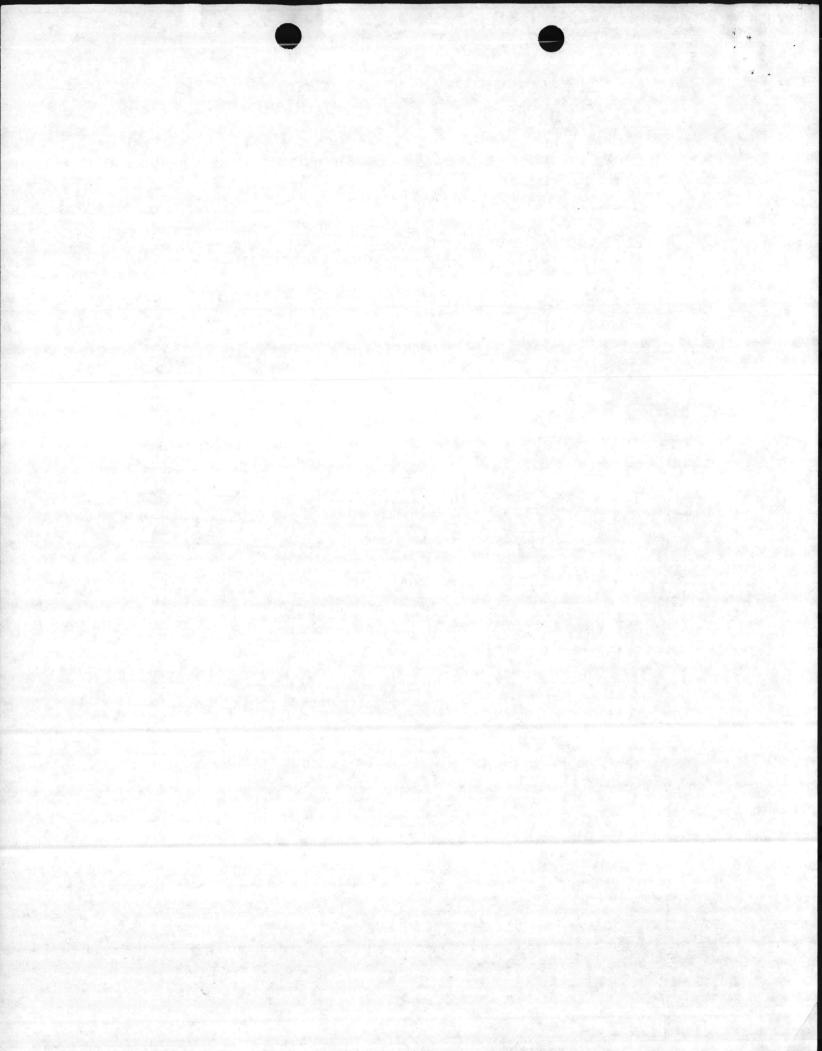
MIBK (4-methyl-2-pentanone) 1200

1,1,2-Trichlorotrifluoroethane

ND = NOT DETECTED (freen)

BELOW DETECTION LIMIT

present, concentration not availab



Addendum

JTC DATA REPORT # 87-247

LABORATORY ANALYSIS ON NAVAL SAMPLES

CONTRACT #N62470-86-C-8754

CASE # 42

PREPARED FOR:

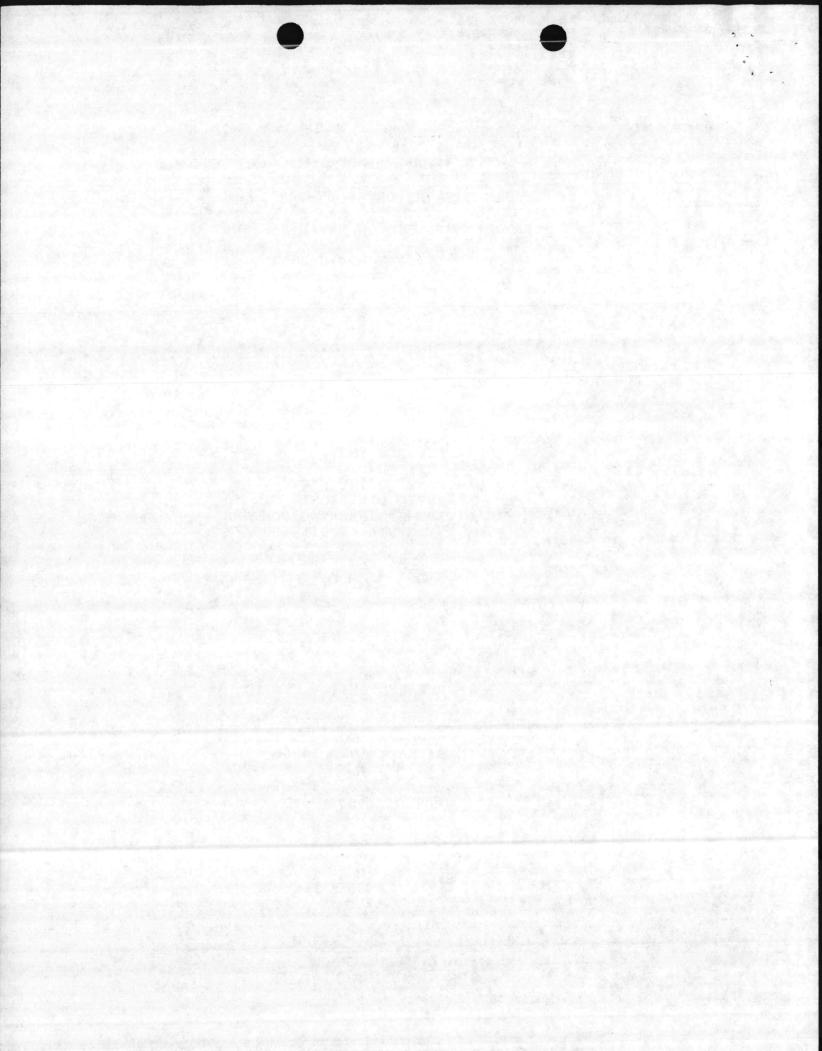
DEPARTMENT OF THE NAVY
ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511-6287

PREPARED BY:

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

JULY 8, 1987

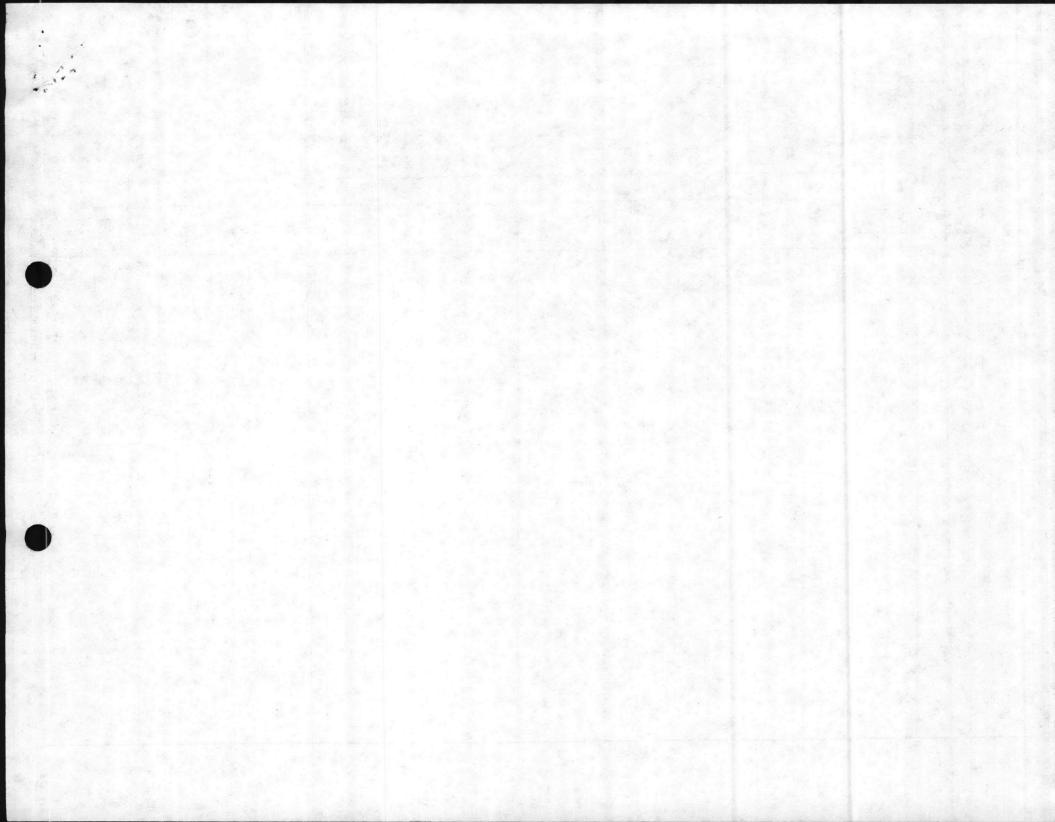
Ann E. Rosecrance Laboratory Director

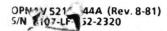


Date: 7-8-87 Case No. 42 Add to Naval Facilities Engineering Command, Norfolk, Virginia

JTC Data Report No. 87-247 Table |

NAVY	JTC	ANALYSIS PARAMETER							
SAMPLE ID	SAMPLE ID	As mg/kg	Cd mg/kg	Cr mg/kg	Pb mg/kg				
87-49	61-0305	\ 5	2,0	1,7	75				
				There are a second			4		
							, , , -		
						5 V 4 - 6 V 5 V			





Memorandum

DATE: 16 NOV 87

FROM: Supvy Chemist

TO: Supvy Ecologist

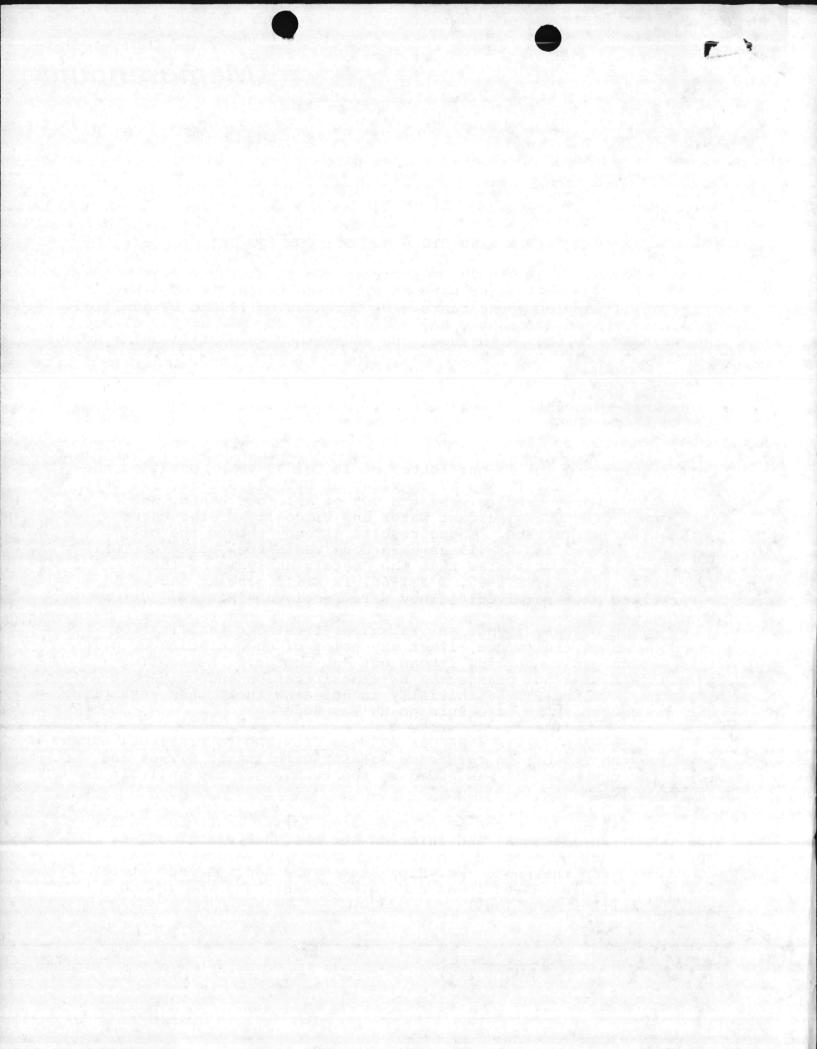
SUBJ: BASE MAINTENANCE LETTER 6280 DTD 6 NOV 87; COMMENT ON

1. Background: On 15 Sep 87, Tom Barbee and I sampled STT-64, STT-65 and STT-66. The full signs were on all three tanks. I told Pete Avant that I sampled those tanks. D. Gurganus on 19 Oct 87 admitted that they removed some water and added oil to STT-64 and STT-65 but they were now through with them. He added they were still using STT-66.

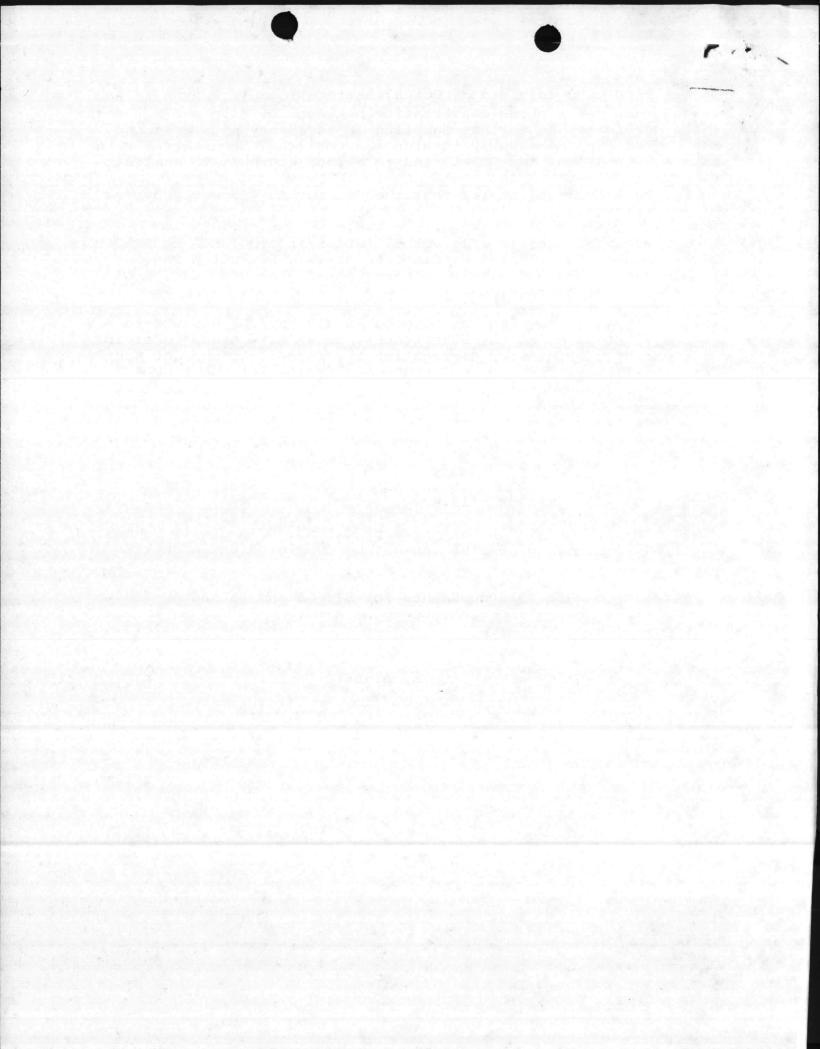
2. Discussion:

- a. Reference (a) is a 19 Oct 87 memo from Dave Bullock (HMDO, BMD) to Sammy Gwynn (HMDC, MCB) requesting analysis of tanks STT-64 and STT-65.
- b. Reference (b) is our letter of 19 Oct 87 that contained the first results of the 15 Sep 87 sampling of STT-64, STT-65, STT-66 and AS-419. These results were the TOX of all four tanks, and flashpoint, BTU, BS&W, percent water and viscosity of the three tanks at Tarawa Terrace. These results already showed the oil in STT-64, STT-65 and AS-419 as hazardous waste fuel based on TOX. Reference (b) further states that the "metals analysis of these three tanks (STT-64, STT-65, & STT-66) is still pending and will be forwarded when received." They were received 9 Nov 87.
- c. Camp Lejeune is not an authorized treatment facility for hazardous waste, therefore, if at any point of accumulation of oil it is determined to be a HW it can get "no better." Resampling and analysis will not change the HW classification and only cost more money. Since STT-66 initially is not a HW fuel, then resampling would be necessary to make sure no HW was added.
- d. Reference (c) is a 26 Oct 87 memo from BMO to Director, NREAD repeating the request in reference (a) for sampling of STT-64 and STT-65 because more oil was added to the tank after the analysis in reference (b).

(Personal Input: As a result of reference (c), I contacted Nadine Hipp (DRMO) on 27 Oct 87 and informed her the analysis of STT-64 and STT-65 showed it to be a hazardous waste and requested what more information did she need. Ms. Hipp stated she had not understood that the analysis showed it as a hazardous waste and she saw no need for further sampling.)



Reference (d) is a 30 Oct 87 letter from Dir, NREAD to BMO stating that per a phone conversation between Ms. Hipp and Ms. Betz it was determined no further sampling is necessary of STT-64 and ST-65. BMO then asks NREAD to sign the DD-1348-1 documents for the waste oil in STT-64 and STT-65 and to attach appropriate analysis. f. Reference (b) states that the TOX for AS-419 was provided for information. Reference (e) is a 16 Oct 87 letter from CG, MCB to DRMO. It recommended that AS-419 be disposed of as a HW fuel based on the VOC data contained within. It requested that DRMO advise of additional testing required. (Personal Input: The lab has sampled AS-419 for TOX and VOC to see how it compared to the other tanks, since AS-419 was receiving oil after MCAS-NR started segregating the freon. It was not sampled for disposal purposes. We knew BMD was still using the tank. But since it showed TOX and Freon high enough for HW classification, ultimately DRMO would have to dispose of it as a HW fuel. That is why it was stated in reference (e) that "[AS-419] tank be disposed of as a hazardous waste fuel." BMD request for analysis of AS-419 is dated 28 Oct 87.) h. BMO requests that either NREAD or Ground Safety Office sign the DD 1348-1 for AS-419. i. AS-419 and STT-66 were resampled 6 Nov 87 and will be mailed 16 Nov 87. Turn-in of STT-66 can not be completed until results are received. j. I recommend that documents for STT-64 and 65 and AS-419 be submitted showing the contents to be a HW. E. A. BETZ





UNITED STATES MARINE CORPS

BASE MAINTENANCE DIVISION
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA 28542-5000

IN REPLY REFER TO: 6280 MAIN

0 6 NOV 1987

From: Base Maintenance Officer

To: Director, Natural Resources and Environmental Affairs

Division

Subj: DISPOSAL OF HAZARDOUS WASTE/WASTE OIL

Ref: (a) BMain HMDO memo of 19 Oct 87

(b) Dir NREAD 1tr 6241/2 NREAD of 19 Oct 87

(c) BMO 1tr 6280 MAIN of 26 Oct 87

(d) Dir NREAD 1tr 6241/2 NREAD of 30 Oct 87

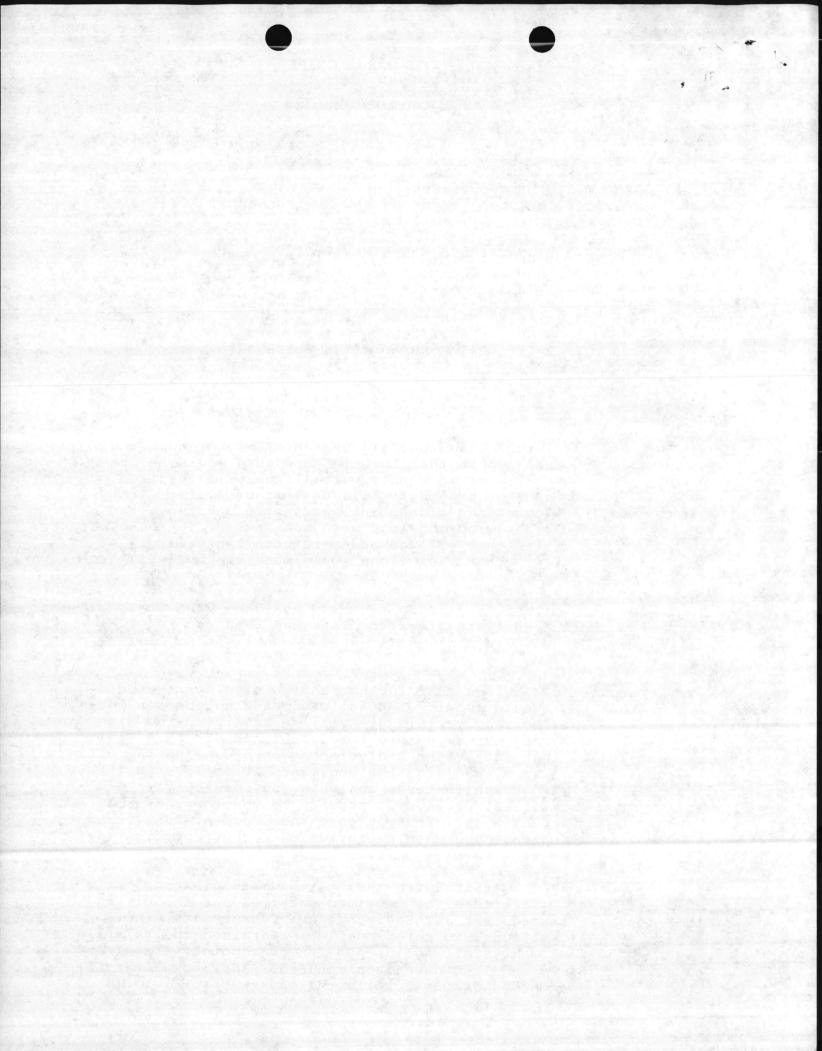
(e) CG MCB ltr 6241/2 NREAD of 16 Oct 87

Encl: (1) DD Form 1348-1, Contents of Tank STT-64

(2) DD Form 1348-1, Contents of Tank STT-65

(3) DD Form 1348-1, Contents of Tank AS-419

- 1. Reference (a) requested that oil in tanks STT-64 and STT-65 be sampled and analyzed so that turn-in documents could be prepared. Reference (b) provided only partial analysis required by RCRA and recommended by ENSAFE for disposal of used oil. Analysis for total halogens and flashpoint was provided but ppm for arsenic, cadmium, chromium and lead were not included. Moreover, reference (b) states that oil was added to both tanks after samples were taken. That fact alone would make the analysis provided to be suspect.
- 2. Reference (c), after discussing these analyses with DRMO, requested another analysis after the tank had been secured. We believe that request is still valid and the analysis still required.
- 3. Reference (d) advises that further analysis is not needed and states that BMO should submit disposal documents as soon as possible. In order to resolve this dilemma, we have prepared disposal documents for your signature for STT-64 and STT-65. If it is your belief that sufficient analysis has been done on the oil in these two tanks, please sign the documents at enclosures (1) and (2). You may attach whatever analysis you consider appropriate from your files, or we will provide to you the analyses that were forwarded to us. You may have the documents delivered to DRMO, in which case you should provide us a copy; or, you may return them to us and we will deliver them.
- 4. The same dilemma exists with the "third waste oil tank" at MCAS New River. Reference (b) provided only TOX for the oil in this tank and stated that JCT Environmental Consultants, Inc. Report #87-444, attached to reference (e), contained the volatile organic chemical analysis. Again, ppm for flashpoint, arsenic, cadmium, chromium and lead have been ignored. Additionally, reference (e) recommended disposal while the tank was still being



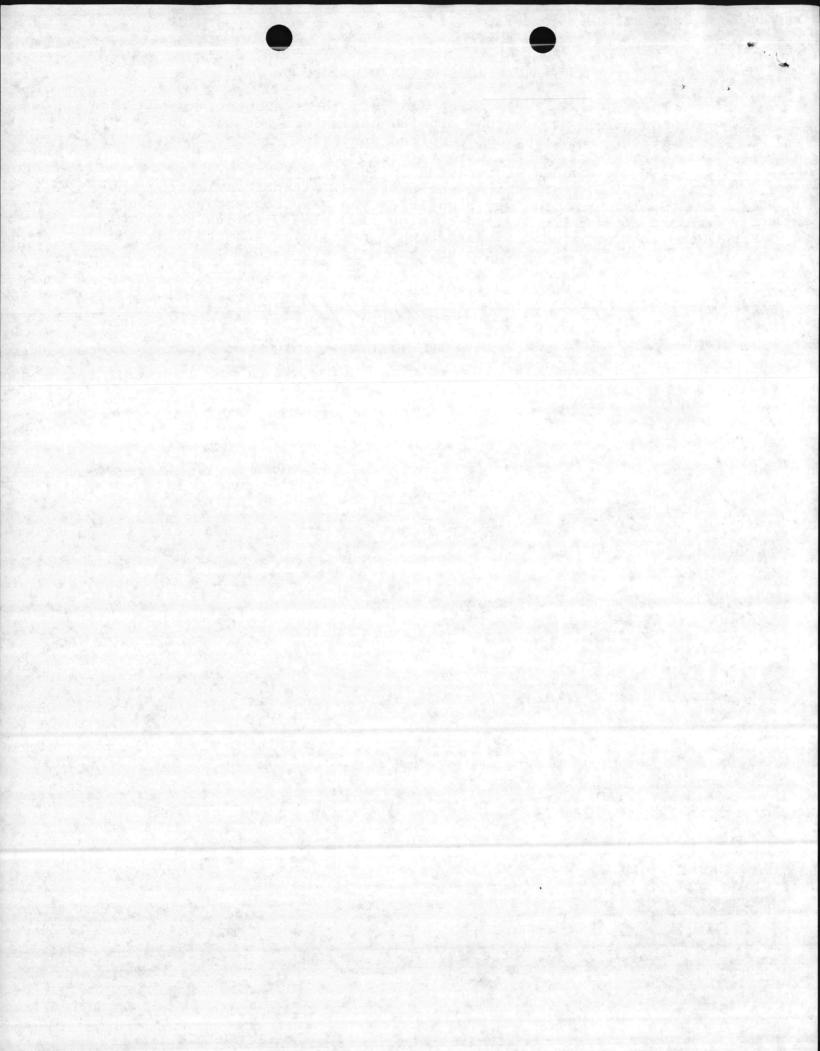
Subi: DISPOSAL OF HAZARDOUS WASTE/USED OIL

filled. Again, I believe the analysis to be suspect, in addition to being incomplete. They provide parameters for only one of six properties for which RCRA requires analysis.

- 5. We are, however, interested in resolving this problem. To this end, we have prepared enclosure (3) without indicating who should sign it. You may sign it or you many request your counterpart at the Air Station to sign it. Please follow the same guidelines mentioned in paragraph 3 pertaining to attaching analysis, providing copies to us, and delivery to DRMO.
- 6. Your cooperation in resolving this matter is appreciated.

M. G. LILLEY

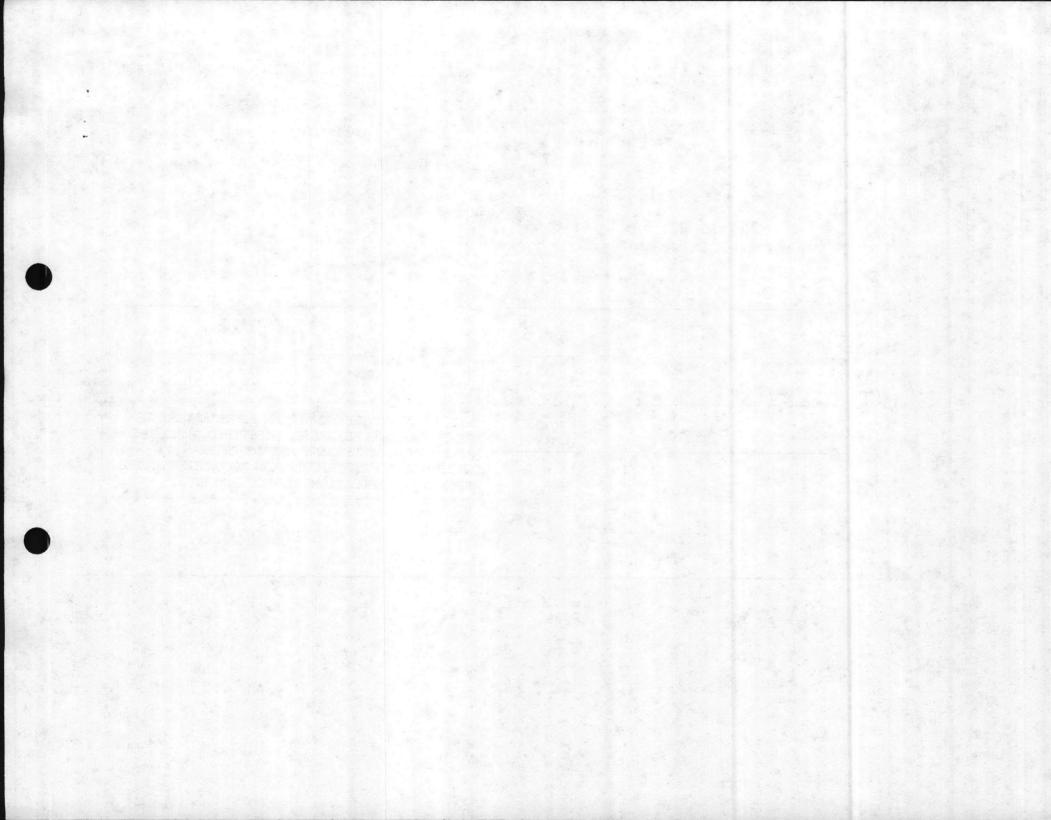
Copy to: DRMO



50 * Enal (1).

B7J 9150 W.	OCK NUMBER	GL 12500	29 30 31 32 33 34 35 36 37 DOCUMENT N REQUISITIONER D T19 3182 73	38 39 40 41 42 43 44 45 46 47 4 NUMBER	ENTARY James FUND DIS'	IRI- PROJ. ISE BEO'D DEL DATE 14 NA		UNIT PRICE DOLLARS CT
SHIPPED FROM	orac .	SHIP TO			MARK FOR	ROJECT		DOLLARS CT
NATURAL RESOUR	CES		, MCB		HW		1 1 5	
MCB, CLNC		CLINC			C			
WAREHOUSE LOCATION	TYPE OF CARGO PACK		UNIT UFC	N M F C FREIGH	IT RATE D	OCUMENT MAT. QUANTITY DATE COND	D	
F SUBSTITUTE DATA (ITEM ORIGINALLY	REQUESTED) FRE	IGHT CLASSIFICATION I	NOMENCLATURE	, M	I I) IF IQ	jn j	
Т	U				CON	VIENTS OF TAN	K # STT 6	4 -
	ITE	NOMENCLATURE						
w	x	WASTE OI	TOTAL WEIGHT	RECEIVED BY A	!Y	INSPECTED BY	Y AND DATE	
S SELECTED BY AND DATE		tre or contrainen(o)	3	R E C U S 7		8		
PACKED BY AND DATE		O. OF CONTAINERS	TOTAL CUBE	WAREHOUSED E	BY AND DATE	WAREHOUSE	LOCATION	
AA	l l l BB	cc	[6	ARE PROP	ERLY CLAS	THAT THE ASSIFTED, DISC	RIBED, PA	RIALS CKAGED
FIRST DESTINATION ADDRESS		12	SHIPPED	CONDITIO APPLICAB	N FOR TRA	ANSPORTATION ATIONS OF DOI	ACCORDING	TO THE
13 TRANSPORTATION CHARGEABLE	TO .	14 B	LADING, AWB, OR RECEIVE	ER'S SIGNATURE (AND DATE)	15 RE	CEIVER'S DOCUMENT NUMBER	J. I. WC	OTEN
DD FORM 1348-1 1 MAR S/N 0102-LF-013-1040	74	EDITION OF 1 JAN UNTIL EXHAUSTE	64 MAY BE USED			DOD SINGLE LIN	NE ITEM RELEASE/RI	ECEIPT DOCUME

1



S/N 0102-LF-013-1040

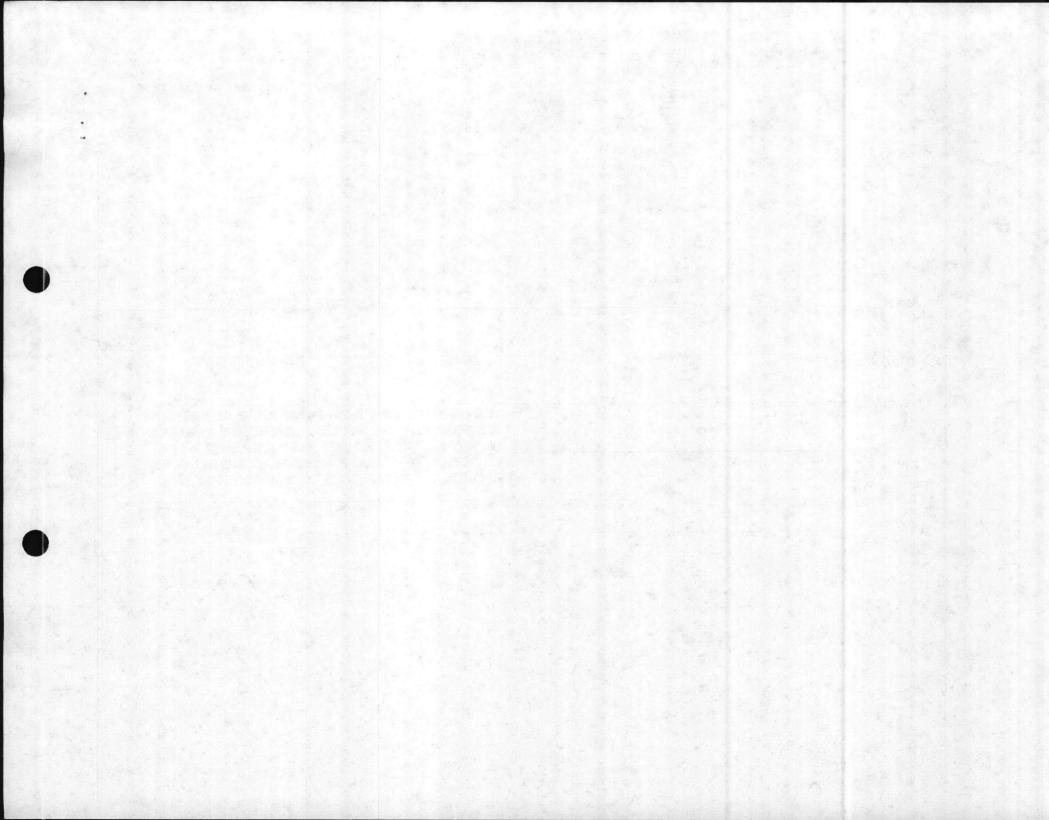
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13 TRANSPORTATION CI	HARGEABLE TO	
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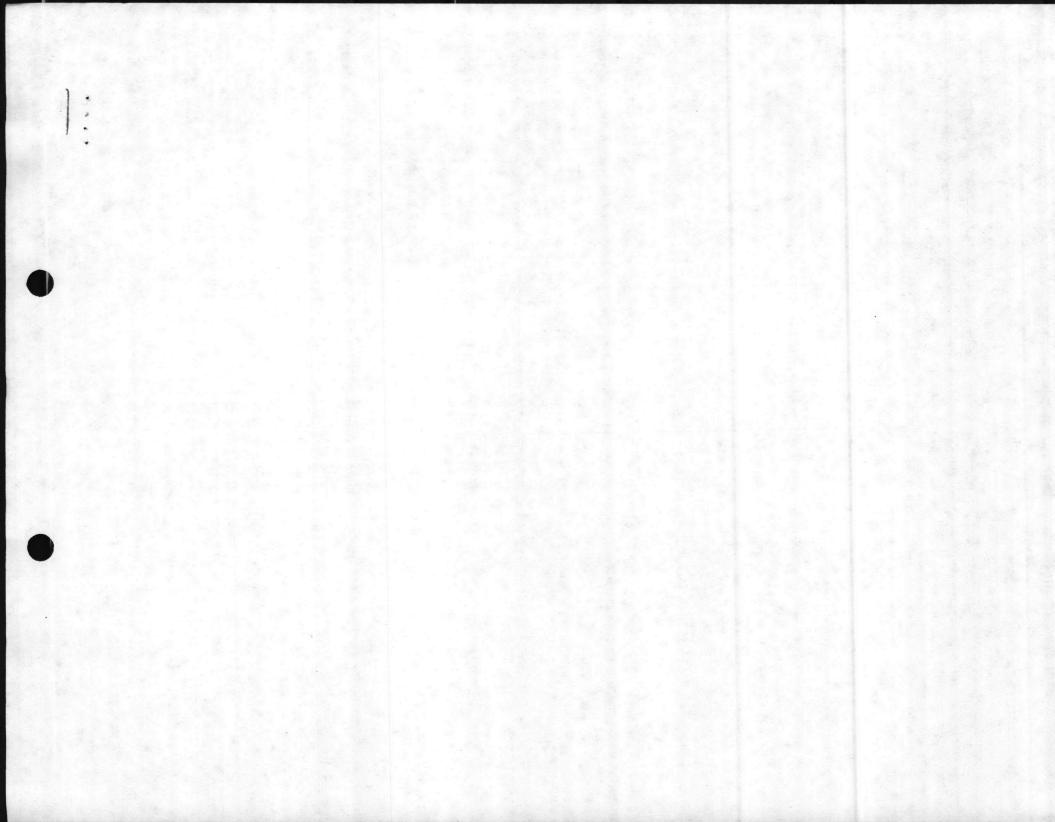
EDITION OF 1 JAN 64 MAY BE USED UNTIL EXHAUSTED DOD SINGLE LINE ITEM RELEASE/RECEIPT DOCUMENT

1 9150 WASTE OIL GL 12500 M 931827307 0003 1141 NA MARK FOR NATURAL RESOURCES DRMO, MCB HW MCB, CLNC CINC WAREHOUSE LOCATION TYPE OF UNIT UNIT WEIGHT FREIGHT RATE UNIT UFC NMFC DOCUMENT MAT. QUANTITY SUBSTITUTE DATA (ITEM ORIGINALLY REQUESTED) FREIGHT CLASSIFICATION NOMENCLATURE ITEM NOMENCLATURE WASTE OIL CONTENTS OF TANK # STT 65 SELECTED BY AND DATE TYPE OF CONTAINER(S) TOTAL WEIGHT RECEIVED BY AND DATE P S PACKED BY AND DATE NO. OF CONTAINERS TOTAL CUBE WAREHOUSED BY AND DATE WAREHOUSE LOCATION REMARKS THIS IS TO CERTIFY THAT THE ABOVE MATERIALS ARE PROPERLY CLASSIFIED, DISCRIBED, PACKAGED MARKED AND LABELED AND ARE IN PROPER FIRST DESTINATION ADDRESS DATE SHIPPED CONDITION FOR TRANSPORTATION ACCORDING TO THE APPLICABLE REGULATIONS OF DOT AND EPA. 14 B/LADING, AWB, OR RECEIVER'S SIGNATURE (AND DATE) 15 RECEIVER'S DOCUMENT NUMBER J. I. WOOTEN



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 58 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 RI M FROM & SUPPLEMENTARY J FUND DISTRIBUTION REO'D DEL DATE 9150 WASTE OIL GL 30000 M 931827307 0004 14 NA MARK FOR MARINE CORPS AIR STATION DRMO, MCB NEW RIVER CLNC HW WAREHOUSE LOCATION TYPE OF UNIT UNIT WEIGHT UNIT UFC NMFC FREIGHT RATE DOCUMENT MAT. QUANTITY SUBSTITUTE DATA (ITEM ORIGINALLY REQUESTED) FREIGHT CLASSIFICATION NOMENCLATURE U WASTE OIL PRINTING WASTE OIL CONTENTS OF TANK # AS 419 SELECTED BY AND DATE TYPE OF CONTAINER(S) TOTAL WEIGHT RECEIVED BY AND DATE INSPECTED BY AND DATE GOVERNMENT PACKED BY AND DATE NO. OF CONTAINERS TOTAL CUBE WAREHOUSED BY AND DATE WAREHOUSE LOCATION U.S. REMARKS THIS IS TO CERTIFY THAT THE ABOVE MATERALLS Encl ARE PROPERLY CLASSIFIED, DISCRIBED, PACKAGED PARKED-AND-LABELED-AND-AFE-IN--PROPER--FIRST DESTINATION ADDRESS DATE SHIPPED CONDITION FOR TRANSPORTATION ACCORDING TO THE APPLICABLE REGULATIONS OF DOT AND EPA. 13 TRANSPORTATION CHARGEABLE TO 14 B/LADING, AWB, OR RECEIVER'S SIGNATURE (AND DATE) 15 RECEIVER'S DOCUMENT NUMBER **DD FORM 1348-1** 1 MAR 74 EDITION OF 1 JAN 64 MAY BE USED S/N 0102-LF-013-1040 DOD SINGLE LINE ITEM RELEASE/RECEIPT DOCUMENT

1





Memorandum

DATE: 16 NOV 87

FROM: Supvy Chemist

TO: Supvy Ecologist

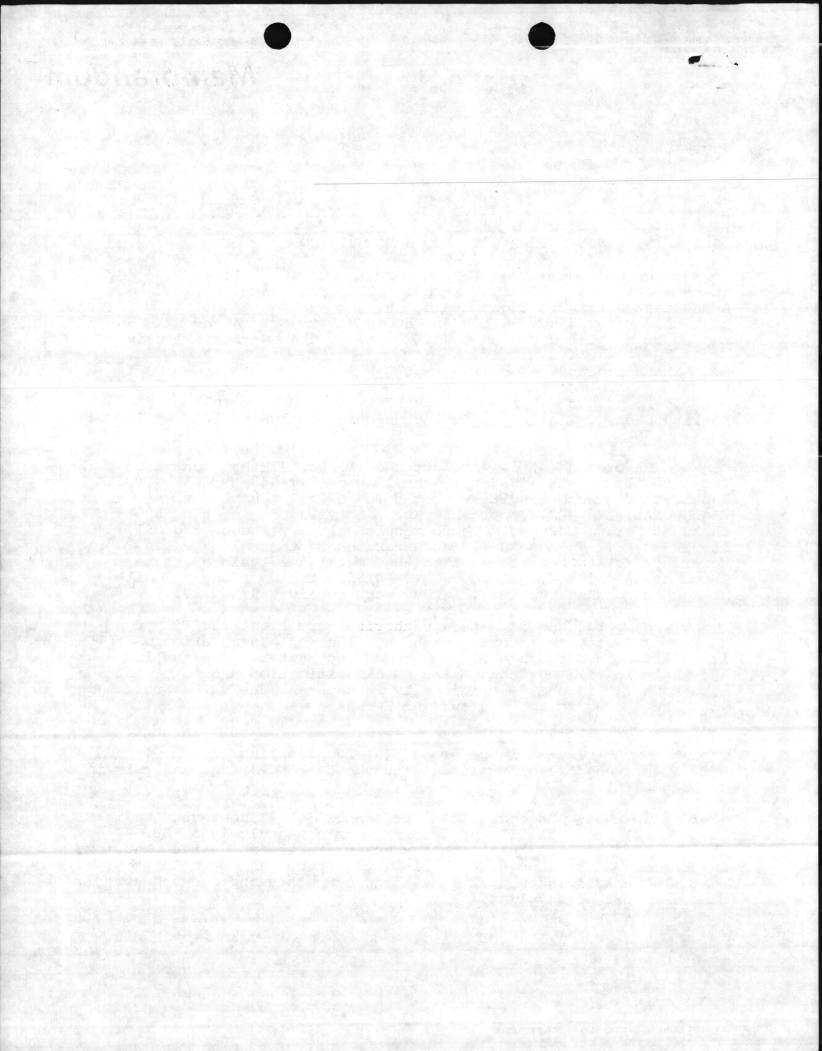
SUBJ: BASE MAINTENANCE LETTER 6280 DTD 6 NOV 87; COMMENT ON

1. Background: On 15 Sep 87, Tom Barbee and I sampled STT-64, STT-65 and STT-66. The full signs were on all three tanks. I told Peter Avant that I sampled those tanks. D. Gurganus on 19 Oct 87 admitted that they removed some water and added oil to STT-64 and STT-65 but they were now through with them. He added they were still using STT-66.

2. Discussion:

- a. Reference (a) is a 19 Oct 87 memo from Dave Bullock (HMDO, BMD) to Sammy Gwynn (HMDC, MCB) requesting analysis of tanks STT-64 and STT-65.
- b. Reference (b) is our letter of 19 Oct 87 that contained the first results of the 15 Sep 87 sampling of STT-64, STT-65, STT-66 and AS-419. These results were the TOX of all four tanks, and flashpoint, BTU, BS&W, percent water and viscosity of the three tanks at Tarawa Terrace. These results already showed the oil in STT-64, STT-65 and AS-419 as hazardous waste fuel based on TOX. Reference (b) further states that the "metals analysis of these three tanks (STT-64, STT-65, & STT-66) is still pending and will be forwarded when received." They were received 9 Nov 87.
- c. Camp Lejeune is not an authorized treatment facility for hazardous waste, therefore, if at any point of accumulation of oil it is determined to be a HW it can get "no better." Resampling and analysis will not change the HW classification and only cost more money. Since STT-66 initially is not a HW fuel, then resampling would be necessary to make sure no HW was added.
- d. Reference (c) is a 26 Oct 87 memo from BMO to Director, NREAD repeating the request in reference (a) for sampling of STT-64 and STT-65 because more oil was added to the tank after the analysis in reference (b).

(Personal Input: As a result of reference (c), I contacted Nadine Hipp (DRMO) on 27 Oct 87 and informed her the analysis of STT-64 and STT-65 showed it to be a hazardous waste and requested what more information did she need. Ms. Hipp stated she had not understood that the analysis showed it as a hazardous waste and she saw no need for further sampling.)

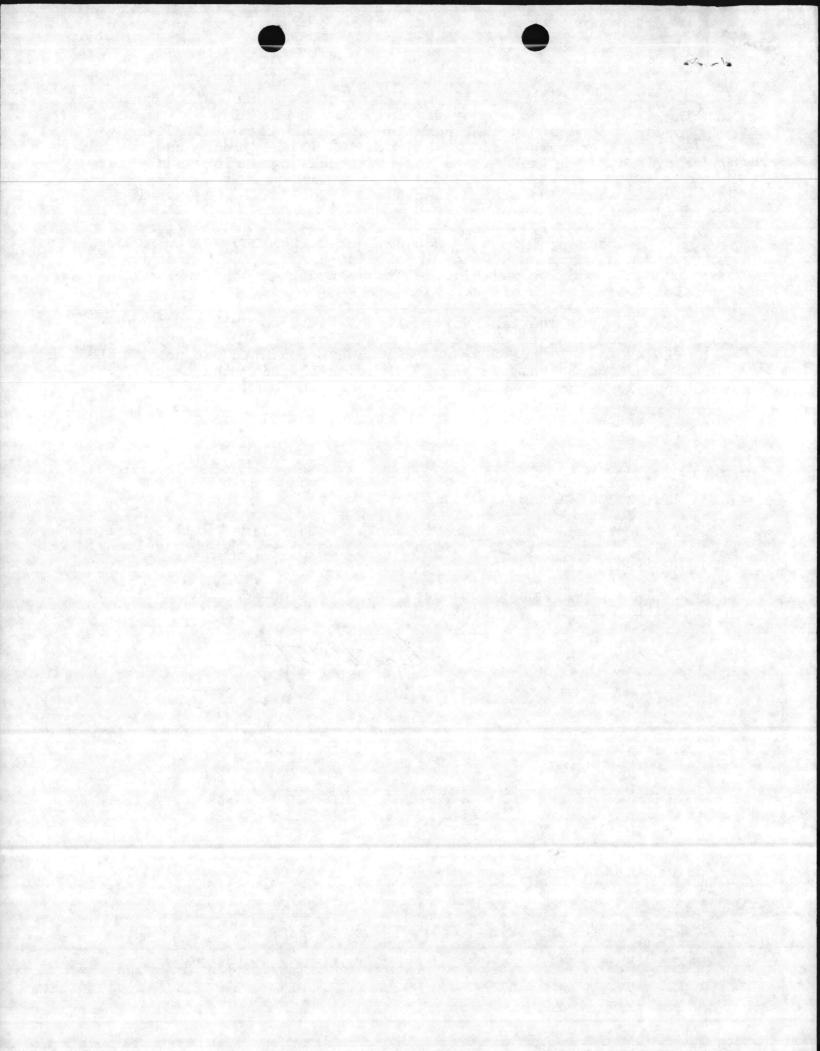


- e. Reference (d) is a 30 Oct 87 letter from Dir, NREAD to BMO stating that per a phone conversation between Ms. Hipp and Ms. Betz it was determined no further sampling is necessary of STT-64 and ST-65. BMO then asks NREAD to sign the DD-1348-1 documents for the waste oil in STT-64 and STT-65 and to attach appropriate analysis.
- f. Reference (b) states that the TOX for AS-419 was provided for information.
- g. Reference (e) is a 16 Oct 87 letter from CG, MCB to DRMO. It recommended that AS-419 be disposed of as a HW fuel based on the VOC data contained within. It requested that DRMO advise of additional testing required.

(Personal Input: The lab has sampled AS-419 for TOX and VOC to see how it compared to the other tanks, since AS-419 was receiving oil after MCAS-NR started segregating the freon. It was not sampled for disposal purposes. We knew BMD was still using the tank. But since it showed TOX and Freon high enough for HW classification, ultimately DRMO would have to dispose of it as a HW fuel. That is why it was stated in reference (e) that "[AS-419] tank be disposed of as a hazardous waste fuel." BMD request for analysis of AS-419 is dated 28 Oct 87.)

- h. BMO requests that either NREAD or Ground Safety Office sign the DD 1348-1 for AS-419.
- i. AS-419 and STT-66 were resampled 6 Nov 87 and will be mailed 16 Nov 87. Turn-in of STT-66 can not be completed until results are received.
- j. I recommend that documents for STT-64 and 65 and AS-419 be submitted showing the contents to be a HW.

Martella B. A. BETZ



6241/2 NREAD(L)

Date: 27 October 1987

rom: Supervisory Chemist, Environmental Chemistry and Microbiology Section, Environmental Branch, NREAD

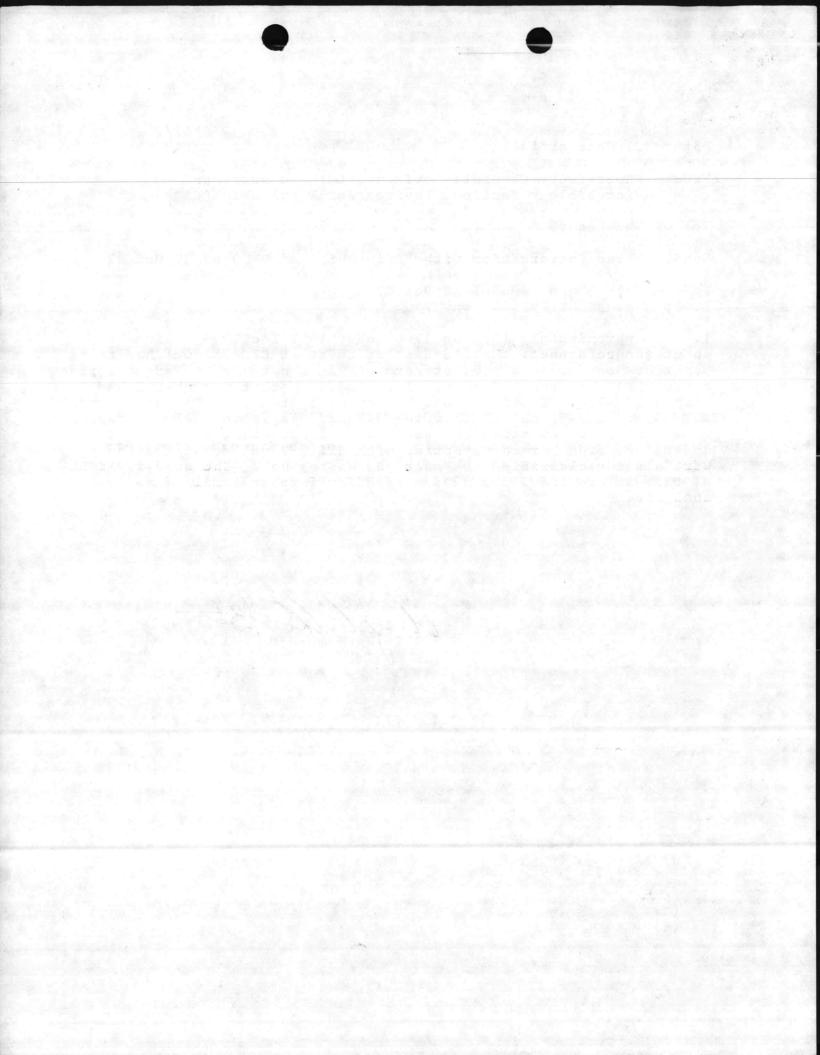
To: The Record

Subj: Phone Conversation with Nadine Hipp of DRMO on 27 Oct 87

Ref: (a) BMain Memo of 26 Oct 87

1. At approximately 1430 on 27 October 1987 I called Nadine Hipp about the reference. Nadine Hipp stated that Cliff Powel had told her that Don Gurganus had put more oil in the tanks at Tarawa Terrace after NREAD had sampled them. I stated that that was what I had been told also. I pointed out, however, that the analysis of tanks STT-64 and STT-65 showed them to be Hazardous Waste Fuel. I asked what further information she needed. She said that she had not understood from her conversation with Cliff Powell that the tanks were already classified as Hazardous Waste Fuel. She said in light of this information, she saw no need for further sampling and analysis.

Elizabeth A. Betz



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 1tr 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)

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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

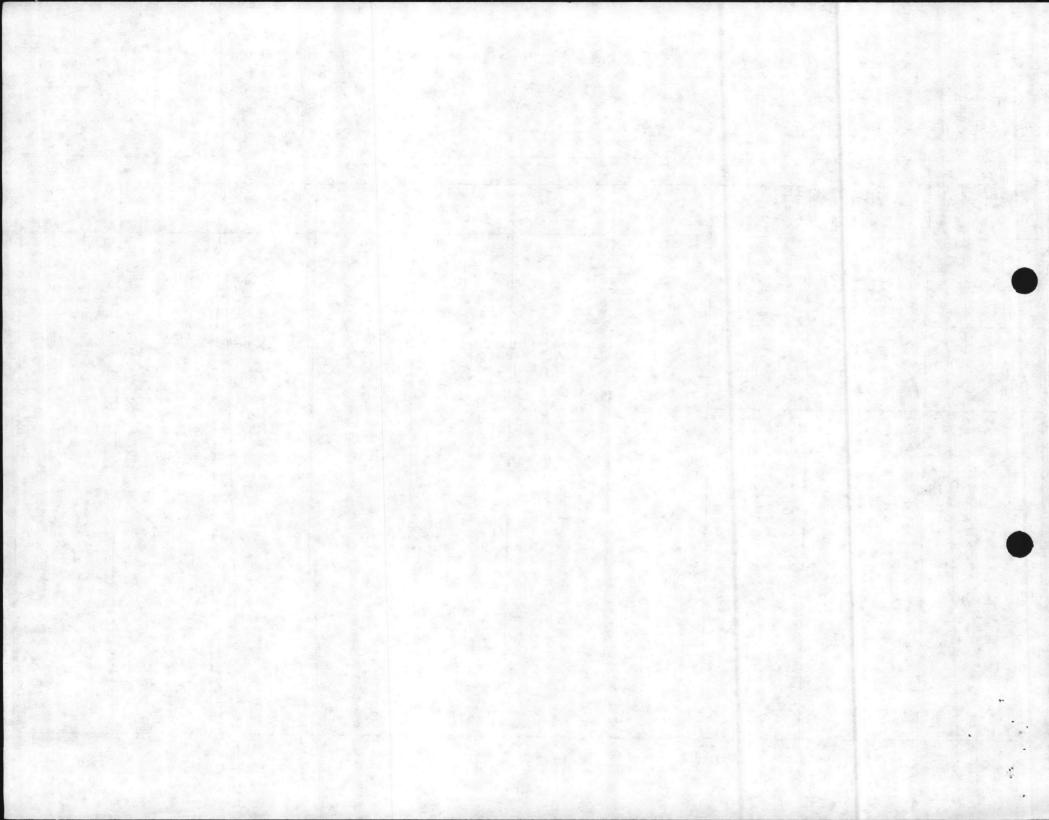
OCTOBER 12, 1987

Ann E. Rosecrance Laboratory Director

ENCLOSURE

Location:	Camp	Lejeune.		Date of Re	eceipt:	9-23-87	urnaround:	15 dai	15
Date: 10-12	-87	Case No.	38 Add	_ to Naval	Faciliti	es Engineerin	ng Command,	Norfolk,	<i>V</i> irginia
JTC Data Re	eport No.	87-444	Table_	10/1					

NAVY	JTC			ANALYSIS P	ARAMETER		
SAMPLE ID	SAMPLE ID	TOX %					
87-79 layer composite	61-0990	0.09					
87-80	61-0991	0.15					





DATE: 19 OCT 87

FROM: HMDO, BASE MAINTENANCE DIVISION

HMC, NATURAL RESOURCES

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

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

19 October, 1987

Transportation General Foreman

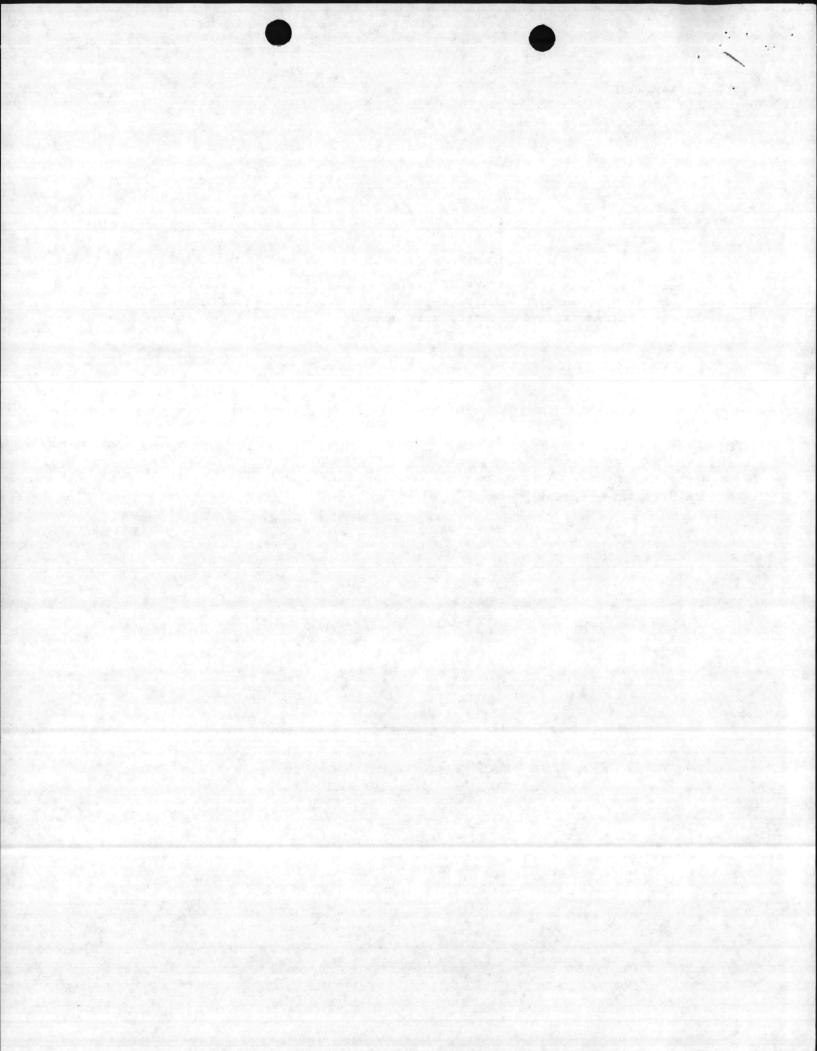
Property Management Section

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



Partial Results

JTC DATA REPORT # 87-441 LABORATORY ANALYSIS ON NAVAL SAMPLES CONTRACT #N62470-86-C-8754 CASE # 136

PREPARED FOR:

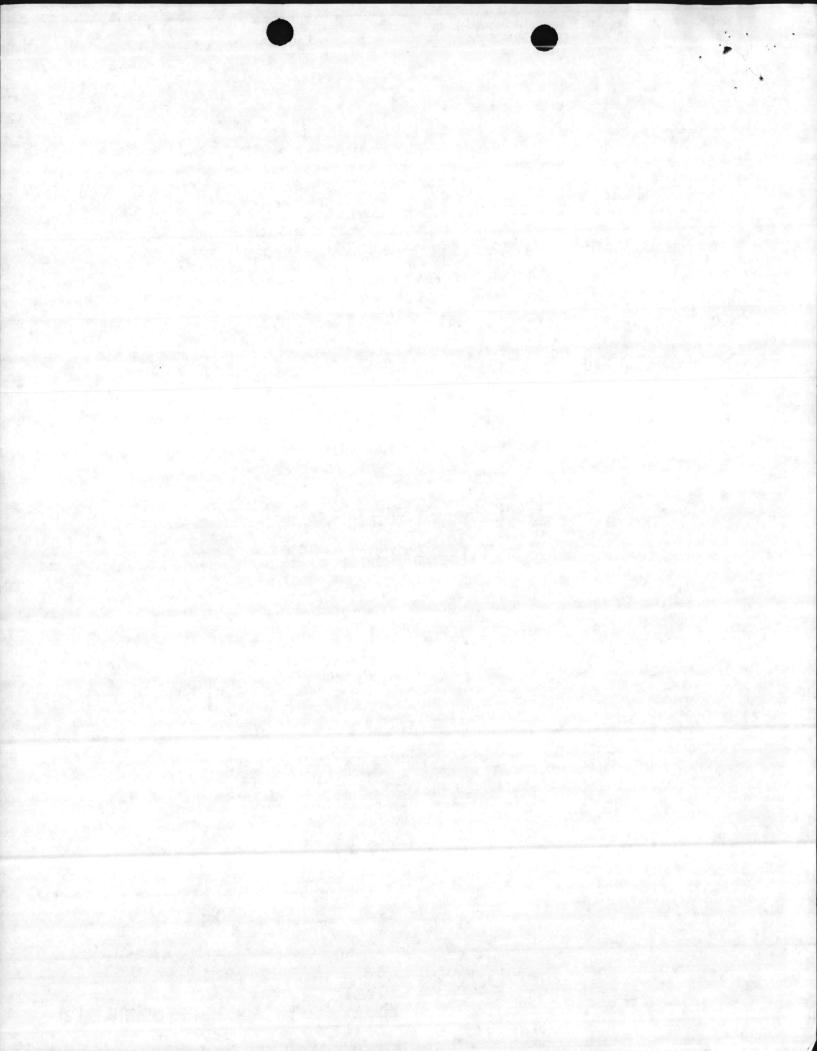
DEPARTMENT OF THE NAVY ATLANTIC DIVISION NAVAL FACILITIES ENGINEERING COMMAND NORFOLK, VIRGINIA _ 23511-6287

PREPARED BY:

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

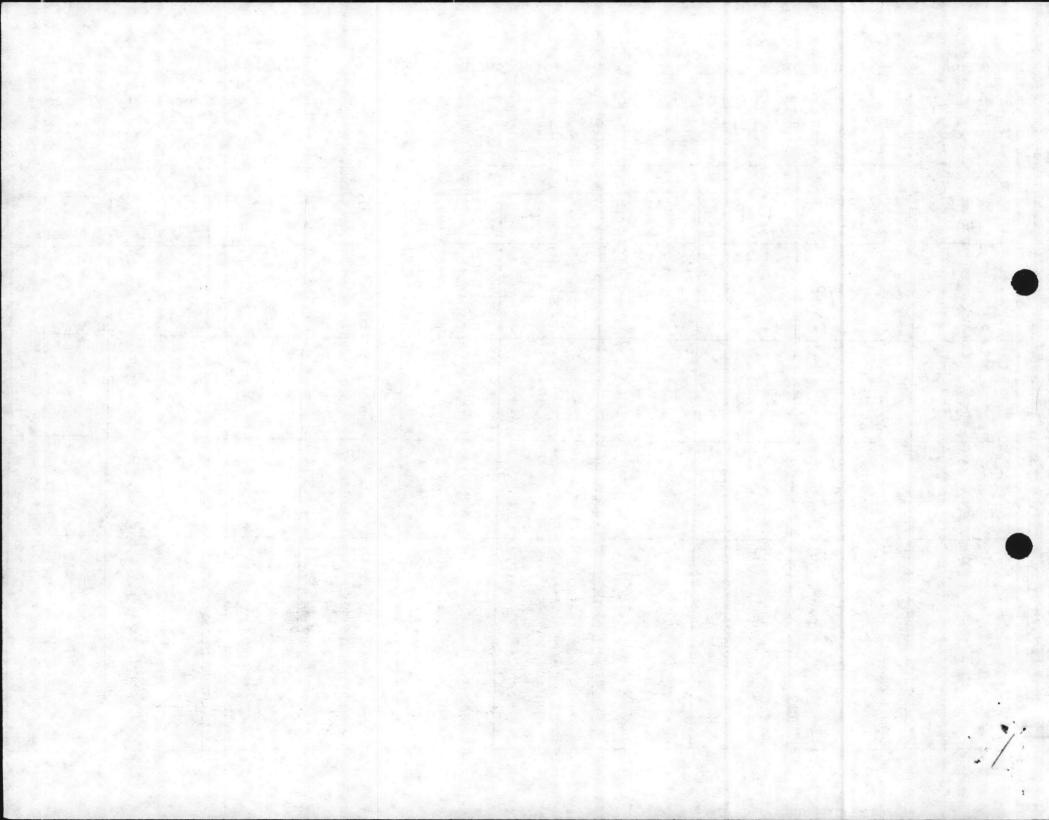
OCTOBER 5, 1987

Laboratory Director



Location: Camp Lejeune	Date of Receipt: 9-21-87 Turnaround: 10 days
Date: 10.5.87 . Case No. 136	to Naval Facilities Engineering Command, Norfolk, Virginia
JTC Data Report No. 87-441 Table	10/1

NAVY	JTC				ANALYSIS P	ARAMETER		
SAMPLE ID	SAMPLE ID	PCB	Hashpont	7.7.				
87-81 STT-64	61-0979	<5	28					
87-82 STT-65	61-0980	<5	35					
87-83 511-66	61-0981	<5	30					



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:

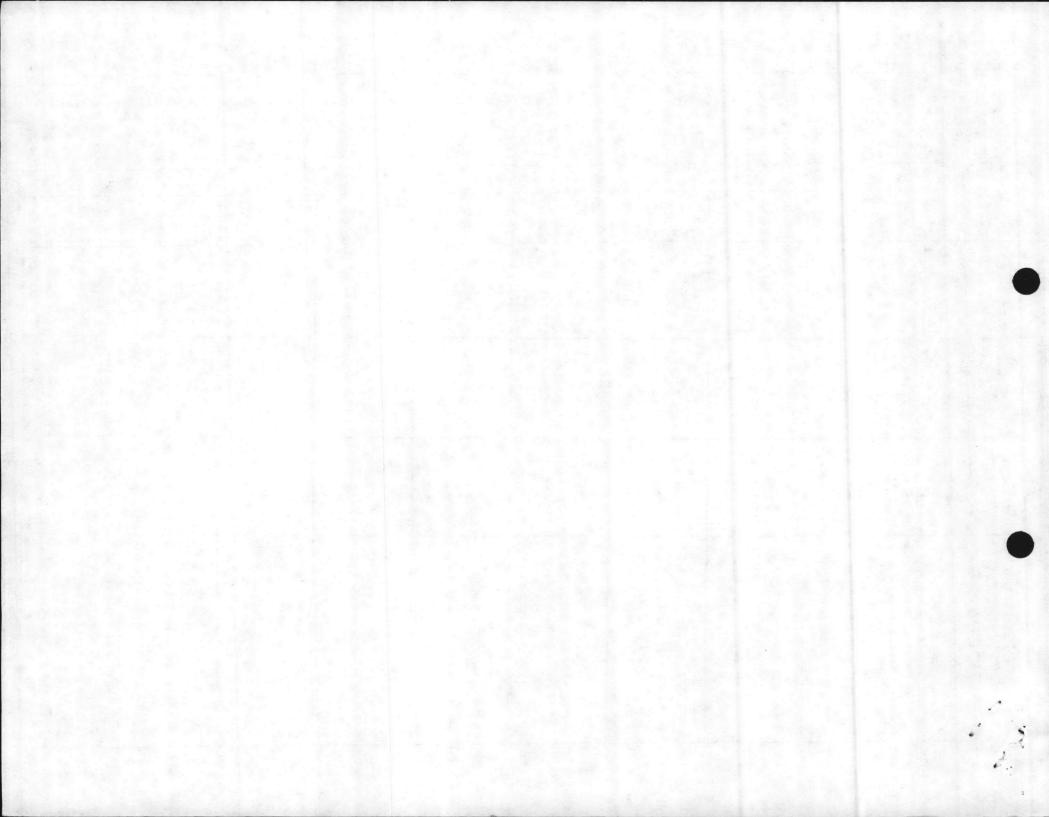
JTC ENVIRONMENTAL CONSULTANTS, INC. 4 RESEARCH PLACE, SUITE L-10 ROCKVILLE, MARYLAND 20850

OCTOBER 12, 1987

Ann E. Rosecrance Laboratory Director Date: 10-12-87 Case No. 136 Add to Naval Facilities Engineering Command, Norfolk, Virginia

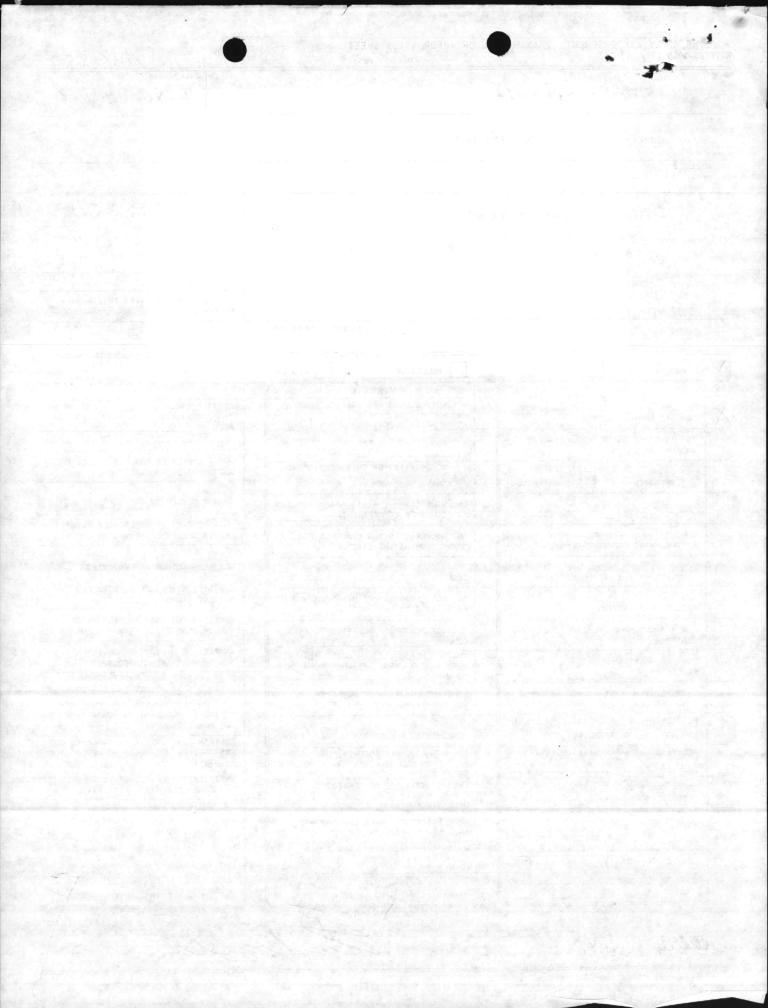
JTC Data Report No. 87-44 Table 104

NAVY	JTC				ANALYSIS	PARAMETER		
SAMPLE ID	SAMPLE ID	Tox %	BTU per 1b.	85+W.	% water	Viscosity 620° FJ 505		
87-81 STT-64	61-0979	0.23	17,000	22.0	10.3	41.4		
87-82 STI-65	61-0980	0,20	19,100	0.6	0.05	37.2		
87-83 511-64	61-0981	<0.05	19,100	1.7	1.4	35.5		
		# 1 m						



FROM						FILE NUMB	FP		
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X	FORWARDED MESSA	GE I	X		x T		MESSAGE	L	SUBMIT
X	FOR APPROPRIATE ACTI	ON	^	SUBJECT DOCUMENT(S) WAS/WERE FOR- WARDED TO YOUR OFFICE AS A MATTER UNDER YOUR JURISDICTION.	^	CERTIFY ENCLOS AND ACCEPTANCE WARD TO	URE		
	FOR INFORMATION OR C	CERTIFICATION		SUBJECT DOCUMENTS WAS/WERE APPROVED AND FORWARDED TO YOU.	1				
	APPROVED [DISAPPROVED		COPY(IES) OF THIS CORRESPOND-		AMENDMENT OR MC			ORDER
	APPROVAL IS I	S NOT RECOMMENDED		ENCLOSURE(S) IS/ARE FORWARDED AS REQUESTED BY REFERENCE		CHANGE NOTICE			9 (Dec.)
	CONCURRING IN RECOMMENT OF THE BASIC CORRESPONDED			ENCLOSURE(S) IS/ARE RETURNED FOR CORRECTION AS INDICATED.		AND/OR SPECIFIC		LE PL	WS
	COMMENTS AND/OR RECO	MMENDATIONS.		CORRECTED ENCLOSURE(S) AS REQUESTED		FOR PLAN ACTION	AS INDIC	ATED	and the
1	MAILING LIST ACTION		-40	SUBJECT PERSON'S ATTENTION SHOULD BE INVITED TO THIS MATTER	100	CLASSIFICATIONS SUBJECT ITEMS	OF DEFEC	TS FOI	1
	FOR ASSIGNMENT OF BU BER(S)	REAU FILE NUM-		SUBJECT PERSON(S) REPORTED TO THIS	120	CONFIRMATION TH SOURCE INSPECT			
	ON A LOAN BASIS RETURN BY			SUBJECT PERSON(S) COMPLETED HIS/THEIR DUTY AND WAS/WERE DETACHED FROM THIS		INSPECTION UNDI	NOT REQUI	RED	
	SIGN ORIGINAL RECEIP	T AND RETURN TO		NAME AND LOCATION OF SUPPLIER OF SUBJECT ITEMS.		COPIES OF DOCUMENT. IF SO PROGRESSING IS	URCE INSP	ECTIO	
	SUBJECT FILES, WHICH			a contract the contract of the		STATUS OF MATER PURCHASE DOCUME		BJECT	
	REPLY TO THE ABOVE R			SUBCONTRACT NUMBER FOR SUBJECT ITEM SUBJECT PURCHASE DOCUMENT HAS BEEN REQUESTED AND WILL BE FORWARDED WHEN		CLEARANCE AS IN RESPONDENCE VER NEGATIVE.			
	COPY(IES) OF R		Š.	RECEIVED. ENDORSEMENT OF SUBJECT SUBCON- TRACT IS BEING DELAYED PENDING RECEIPT OF BASIC BURGLASE POLIMENT.		VERIFICATION OF PERSONNEL CLEAR			
8.40° N	SUBJECT DOCUMENT(S) WARDED TO	WAS/WERE FOR-		OF BASIC PURCHASE DOCUMENT. APPROPRIATION SYMBOL SUBHEAD AND CHARGEABLE ACTIVITY					
	SUBJECT DOCUMENT(S) RETURNED FOR	IS/ARE WAS/WERE	en li	WHETHER SUBJECT ITEMS ARE TO BE COMMERCIALLY SHIPPED OR AT GOVERN- MENT EXPENSE				To Person	
				A CERTIFICATE IN LIEU OF SUBJECT BILL OF LADING WHICH HAS BEEN LOST.		SEE REMARK'S ON	THE REVER	SE SI	DE.

1000, 114, 114\$



LANTON COOR 1142

FILE NUMBER
6280 11420PG

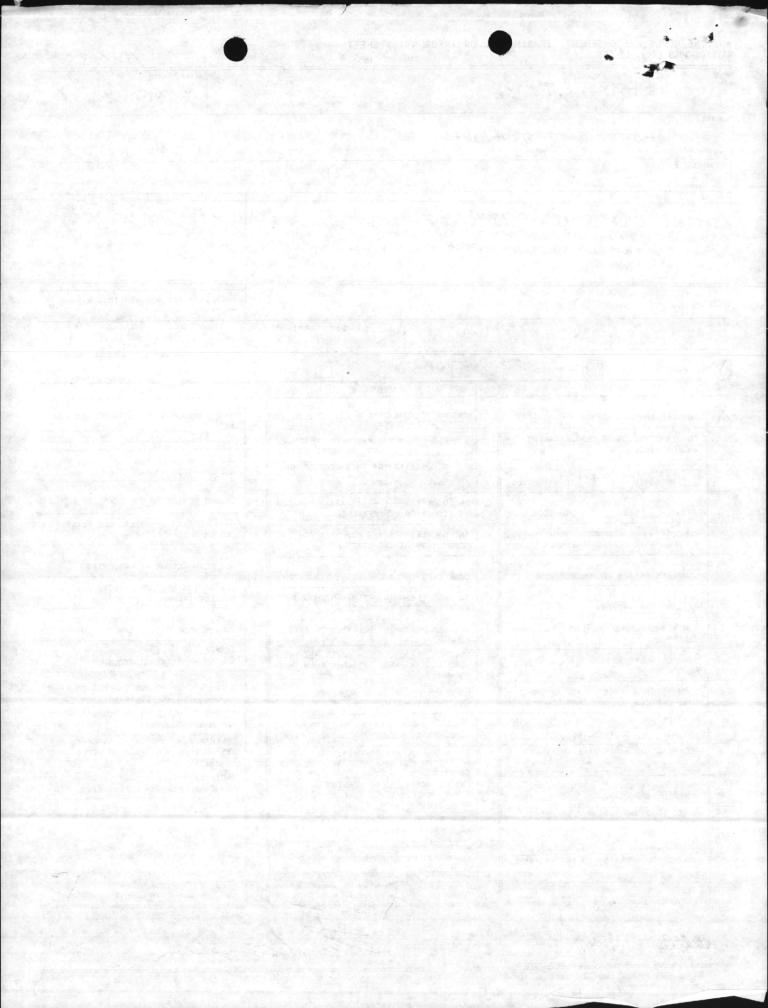
SUBJECT

WASTE UN TEST RESULTS

REFER	ENCE		
4	TO: BASE MENTEN BY BOWNE ON HENDER I	THE TOWNSION	ENCLOSURE (1) TTC RESORT #83
			This form may be used in a window
VIA		Endorsement on	envelope.
		Endorsement on	
X	FORWARDED RETURNED	FOLLOW-UP REQUEST	ADVISE SUBMIT
X	MESSAGE	X MESSAGE X	MESSAGE
X	FOR APPROPRIATE ACTION	SUBJECT DOCUMENT(S) WAS/WERE FOR- WARDED TO YOUR OFFICE AS A MATTER UNDER YOUR JURISDICTION.	CERTIFY ENCLOSURE AS TO RECEIP AND ACCEPTANCE OF MATERIAL AND FOR- WARD TO
	FOR INFORMATION OR CERTIFICATION AND/OR FILE.	SUBJECT DOCUMENTS WAS/WERE APPROVED AND FORWARDED TO YOU.	
	APPROVED DISAPPROVED	COPY(IES) OF THIS CORRESPOND-	COPIES OF SUBJECT CHANGE ORDER AMENDMENT OR MODIFICATION
	APPROVAL IS IS NOT RECOMMENDED	ENCLOSURE(S) IS/ARE FORWARDED AS REQUESTED BY REFERENCE	CHANGE NOTICE TO THE SUPPLIER
	CONCURRING IN RECOMMENDATIONS MADE IN THE BASIC CORRESPONDENCE.	ENCLOSURE(S) IS/ARE RETURNED FOR CORRECTION AS INDICATED.	———— COPIES OF APPLICABLE PLANS AND/OR SPECIFICATIONS.
	COMMENTS AND/OR RECOMMENDATIONS.	CORRECTED ENCLOSURE(S) AS REQUESTED	FOR PLAN ACTION AS INDICATED
	MAILING LIST ACTION	SUBJECT PERSON'S ATTENTION SHOULD BE INVITED TO THIS MATTER	CLASSIFICATIONS OF DEFECTS FOR SUBJECT ITEMS
- 1	FOR ASSIGNMENT OF BUREAU FILE NUM- BER(S)	SUBJECT PERSON(S) REPORTED TO THIS COMMAND	CONFIRMATION THAT INSPECTION OR SOURCE INSPECTION IS NOT REQUIRED
	ON A LOAN BASIS RETURN BY	SUBJECT PERSON(S) COMPLETED HIS/THEIR DUTY AND WAS/WERE DETACHED FROM THIS	INSPECTION UNDER THE SUBJECT SUBCONTRACT IS NOT REQUIRED
	SIGN ORIGINAL RECEIPT AND RETURN TO THIS OFFICE.	NAME AND LOCATION OF SUPPLIER OF	COPIES OF SUBJECT PURCHASE DOCUMENT, IF SOURCE INSPECTION OR PROGRESSING IS REQUIRED
	SUBJECT FILES, WHICH ARE LOCATED IN	SUBJECT ITEMS.	STATUS OF MATERIAL ON SUBJECT PURCHASE DOCUMENT
	BOX NOSHIPMENT NO REPLY TO THE ABOVE REFERENCE(S) BY	SUBJECT PURCHASE DOCUMENT HAS BEEN REQUESTED AND WILL BE FORWARDED WHEN	CLEARANCE AS INDICATED IN BASIC COR- RESPONDENCE VERIFIED. NO REPLY UNLESS NEGATIVE.
	COPY(IES) OF REFERENCE DE- SCRIBED ABOVE WAS/WERE NOT RECEIVED.	RECEIVED. ENDORSEMENT OF SUBJECT SUBCONTRACT IS BEING DELAYED PENDING RECEIPT OF BASIC PURCHASE DOCUMENT.	VERIFICATION OF NEED-TO-KNOW FOR VISITED.
	SUBJECT DOCUMENT(S) WAS/WERE FOR- WARDED TO	APPROPRIATION SYMBOL SUBHEAD AND CHARGEABLE ACTIVITY	
	SUBJECT DOCUMENT(S) IS/ARE WAS/WERE RETURNED FOR	WHETHER SUBJECT ITEMS ARE TO BE COMMERCIALLY SHIPPED OR AT GOVERN- MENT EXPENSE	
A		A CERTIFICATE IN LIEU OF SUBJECT BILL OF LADING WHICH HAS BEEN LOST.	SEE REMARKS ON THE REVERSE SIDE.

1000000 114, 1148

Tail Boolen



REPORT #83

LABORATORY ANALYSIS ON

NAVAL SAMPLES

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

JTC REPORT #85-309

PREPARED FOR:

DEPARTMENT OF THE NAVY

ATLANTIC DIVISION

NAVAL FACILITIES ENGINEERING COMMAND

NORFOLK, VA 23511

PREPARED BY:

JTC ENVIRONMENTAL CONSULTANTS, INC.

4 RESEARCH PLACE, SUITE L-10

ROCKVILLE, MARYLAND 20850

JULY 31, 1985

Ann E. Rosecrance Laboratory Director Sum E. Karlonaux

JTC Environmental Consultants, Inc.

Date 7-31-85 Report No. 83 to Naval Facilities Engineering Command, Norfolk, Virginia

JTC Data Report No. 85-309 Table | Date of Sample Receipt 6-18-85

NAVY	JTC	ANALYSIS PARAMETER										
SAMPLE ID	SAMPLE	Flashpoint	CN mg Ikg	Sulfide mg/kg	Corrosivity CPH)	BTU per 1b.	% Sulfur	Phenols mg 1 Kg	% water/sedimen			
#58	12-0959	105	<0.8	93.7	8.0-9.0	15,000	0.47	30	16.8			
#59	12-0960	123	<0.8	19.8	7.0-8.0	16,000	0.29	< 30	15.0			
#60	12-0961	165	<0.8	6.2	8.0-9.0	9,500	0,25	< 30	49,5			
#61	12-0962	130	<0.8	38.2	9.0-10.0	15,000	0,32	< 30	15.0			
#62	12-0963	127	<0.8	22.5	7.0-8.0	15,000	0.25	< 30	10.0			

Pos -28

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JTC Environmental Consultants, Inc.

Date 73185 Report No. 83 to Naval Facilities Engineering Command, Norfolk, Virginia

JTC Data Report No. 85-309 Table 2 Date of Sample Receipt 6-18-85

NAVY	JTC	ANALYSIS PARAMETER									
SAMPLE	SAMPLE	As mg/kg	Ba mg/kg	Cd mg/kg	Cr mg/kg	Pb mg/kg	Hg mg/kg	Se mg/kg	Ag mg/kg		
#58	12-0959	<1.0	22.8	2.0	6.4	49	<0.1	<0.4	1.0		
#59	12-0960	<1.0	28.0	1.8	2.7	30	<0.1	<0.4	1.4		
#60	12-0961	41.0	<20	1.9	5,4	18	<0.1	<0.4	<1.0		
#61	12-0962	<1.0	25.2	1.9	3.6	59	<0.1	<0.4	1.3		
#62	12-0963	<1.0	25,3	1.1	2.7	12	<0.1	<0.4	<1.0		
			Fa. 1	2 (See See	a with proof.						

JTC Environmental Consultants, Inc.

Date 7 31 85 Report No. 83 to Naval Facilities Engineering Command, Norfolk, Virginia

JTC Data Report No. 85-309 Table 3 Date of Sample Receipt 6-18-85

NAVY	JTC			AN.	ALYSIS PARA	METER	
SAMPLE	SAMPLE ID	PCB Mg/g	VoA				
#58	12-0959	</td <td>see + attached Sheet</td> <td></td> <td></td> <td></td> <td></td>	see + attached Sheet				
#59	12-0960	< /	11				
#60	12-0961	</td <td>+</td> <td></td> <td></td> <td></td> <td></td>	+				
#61	12-0962	</td <td>+</td> <td></td> <td></td> <td></td> <td></td>	+				
#62	12-0963	</td <td>11</td> <td></td> <td></td> <td></td> <td></td>	11				

⁺ Tentatively Identified Compounds report sheet also attached

7/31/85 PoE-309



JTC ENVIRONMENTAL CONSULTANTS, INC. PRIORITY POLLUTANT ANALYSIS DATA SHEET

VOLATILE FRACTION

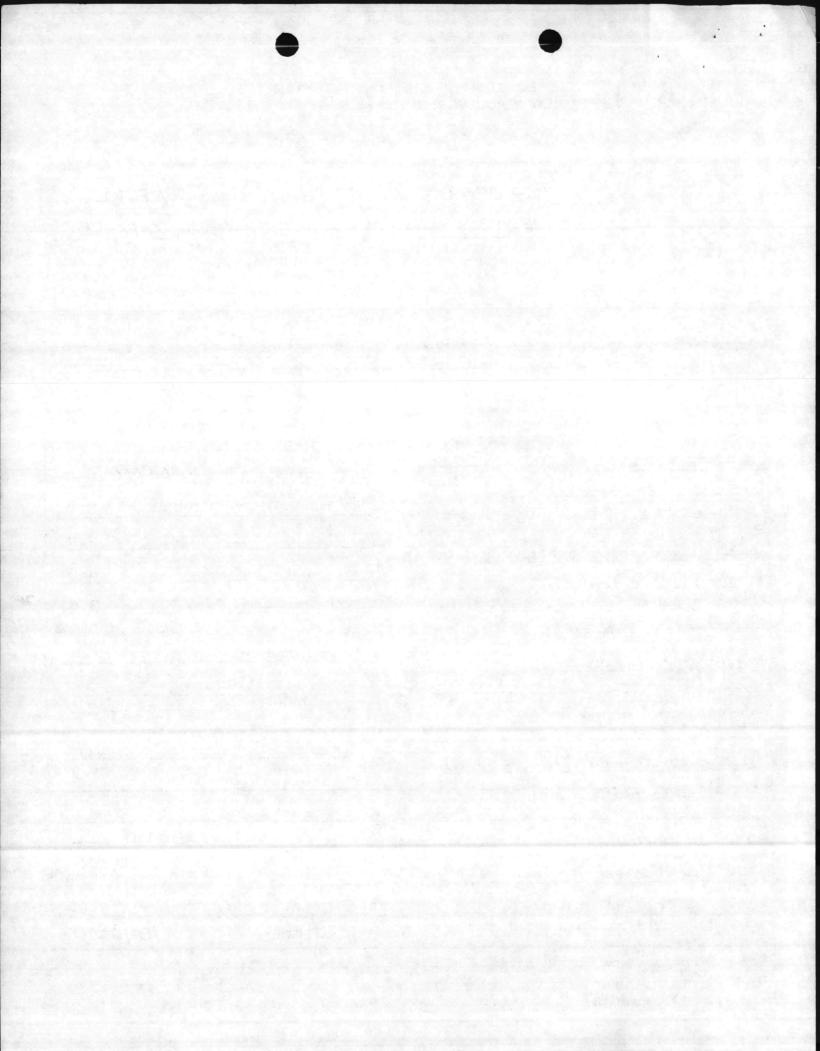
			Yeste Assess	
JTC SAMPLE #	12-	- 0959	PROJECT NO.	NF-12
CLIENT SAMPLE	ID_#	58	DATE RECEIVED	6-18-85
METHOD NO	624	DETECTION LIMIT	50,000 ug/lit	

PAF	RAMETER	RESULT ug/lit	PARAMETER	RESULT ug/lit
2V	acrolein	N.D.	32V 1,2-dichloropropane	N.D.
<u>3v</u>	acrylonitrile	N.D.	33V 1,3-dichloropro-	
4V .	benzene	53,000 N.D.	pylene	N.D.
6V	carbon tetrachloride		38V ethylbenzene 263,00	O N.D.
7V	chlorobenzene	N.D.	44V methylene chloride	N.D.
	1,2-dichloroethane	N.D.	45V methyl chloride	N.D.
	1,1,1-trichloro-	N.D.	46V methyl bromide	N.D.
	ethane	N.D.	47V bromoform	N.D.
13V	1,1-dichloroethane	N.D.	48V dichlorobromo-	
	l,1,2-trichloro- ethane	N.D.	methane 49V trichlorofluoro-	N.D.
	L,1,2,2-tetra- chloroethane	N D	methane 50V dichlorodifluoro-	N.D.
	The second secon	N.D.	methane	N.D.
A.	chloroethane	N.D.	51V chlorodibromomethane	N.D.
9V 2	-chloroethylvinyl ther	N.D.	85V tetrachloroethylene	N.D.
3V c	hloroform	N.D.	86V toluene 1,250,000	N.D.
9v 1	,l-dichloroethylene	N.D.	87V trichloroethylene	5,000
0V 1,	,2-trans-dichloro- thylene	N.D.	88V vinyl chloride Xylenes 104	N.D.

N.D. = NOT DETECTED

N.A. " NOT APPLICABLE/ANALYZED

^{*}Below method detection limit



Client Report No	83	
JTC Report No.	85-309	4 64

Laboratory Sample ID		ID 12-0959	12-0959 Client	Sample ID_	58	
		COMPOUND		ESTIM	ATED CONCENTRATION	

COMPOUND	ESTIMATED CONCENTRATION
Trichlorotrifluoroethane	1800000 mg/J
Pentene	40,000 mg/1
Hydrocarbon (C5 H12)	365,000 kg/l
Herene	35,000 agll
Hydrocarbon (C. Hz)	235,000 mg/l
Dimethyl butane	135,000 pg 1-1
Methylpentano	990,000 ng 11
Hexane	400,000 mg 1
Himsthylpentane	115,000 Ng 11
Methylhisane	720,000 Jug 11
Dinettylheptane	365,000 Jugh
Propylbohzene	85,000 µd/1
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	the state of the s

Hydronia (CH2) Consx SH 35 Occ Hald by discourse (100Hz) 13,000 121 Directly but and Mithylogensage LEDWOODER-HELLOWING Kimethyll, advise is MEGET My KI Answer Albert & M Charle of Dy Denta Repylbyning



JTC ENVIRONMENTAL CONSULTANTS, INC. PRIORITY POLLUTANT ANALYSIS DATA SHEET

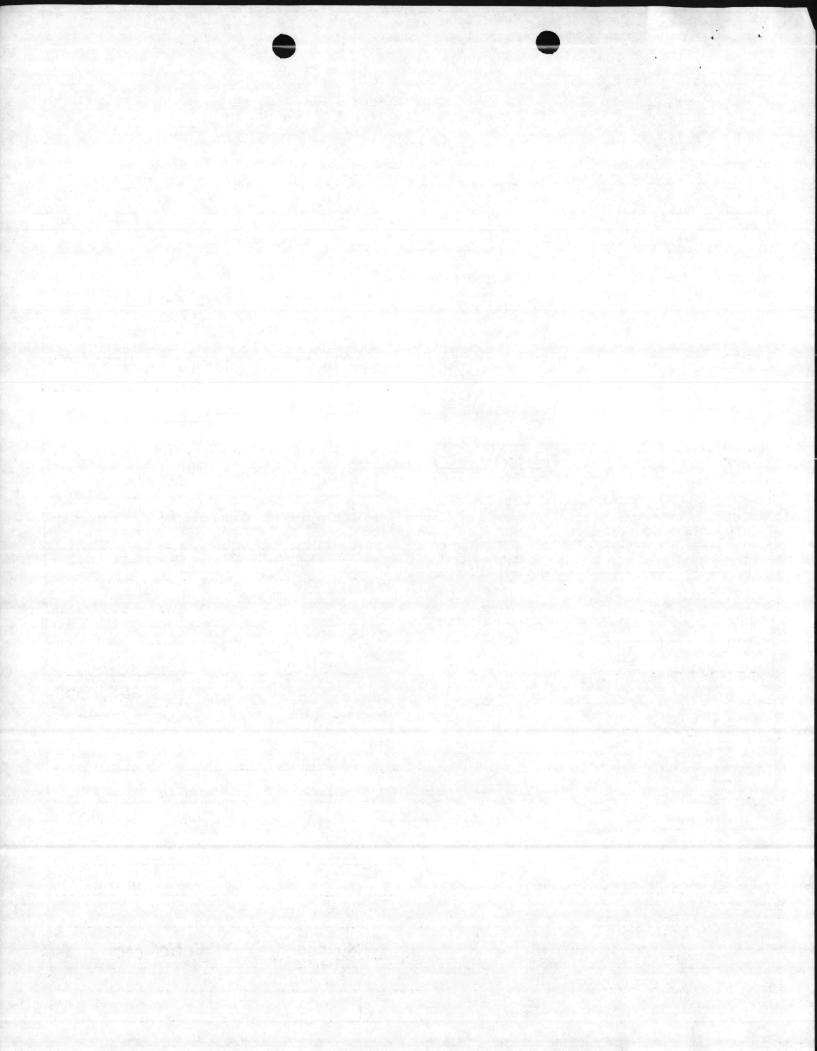
VOLATILE FRACTION

JTC SAMPLE #	12-	0960	PROJECT NO. NF-12	
CLIENT SAMPLE	ID_#	59	DATE RECEIVED 6-18-85	*
METHOD NO.	624	DETECTION LIMIT	50,000 ug/lit	

PARAMETER	RESULT ug/lit	PARAMETER	RESULT ug/lit
2V acrolein	N.D.	32V 1,2-dichloropropane	N.D.
3V acrylonitrile 4V benzene 78,70	N.D.	33V 1,3-dichloropro- pylene	N.D.
6V carbon tetrachlorid		38V ethylbenzene /33,00	0 N.D.
7V chlorobenzene	N.D.	44V methylene chloride	N.D.
10V 1,2-dichloroethane	N.D.	45V methyl chloride	N.D.
llv 1,1,1-trichloro- ethane	N.D.	46V methyl bromide 47V bromoform	N.D.
13V 1,1-dichloroethane	N.D.	48V dichlorobromo- methane	N.D.
14V 1,1,2-trichloro- ethane	N.D.	49V trichlorofluoro-	66,000
15V 1,1,2,2-tetra- chloroethane	N.D.	50V dichlorodifluoro-	N.D.
16V chloroethane	N.D.	methane	N.D.
19V 2-chloroethylvinyl ether	N.D.	51V chlorodibromomethane 85V tetrachloroethylene	N.D.
23V chloroform	N.D.	86V toluene 501,000	N.D.
9V 1,1-dichloroethylene	N.D.	87V trichloroethylene	N.D.
0V 1,2-trans-dichloro- ethylene	N.D.	88V vinyl chloride ×ylenes 506,0	N.D.

N.D. = NOT DETECTED

N.A. WOT APPLICABLE/ANALYZED



Client Report No	83
JTC Report No.	85-309

Laboratory Sample ID 12-0960 Client Sample ID 59

COMPOUND	ESTIMATED CONCENTRATION
Trichlorotrifluoroethane	15253,400 mg/J
Hexene	32,000 mg 19
Hydrocarbon (C, H12)	445600 Wald
Hexane	81,300 mall
Metholherane	191,000 kg ld
Dinethylheptane	57.500 kg 1
Propylberzene	67.000 Mall

* Below Detection Limit

Hydroconium (Conta) Wine - Nethyllex care - Windthylligh Cons. We pythorizene

between the standard of the



JTC ENVIRONMENTAL CONSULTANTS, INC. PRIORITY POLLUTANT ANALYSIS DATA SHEET

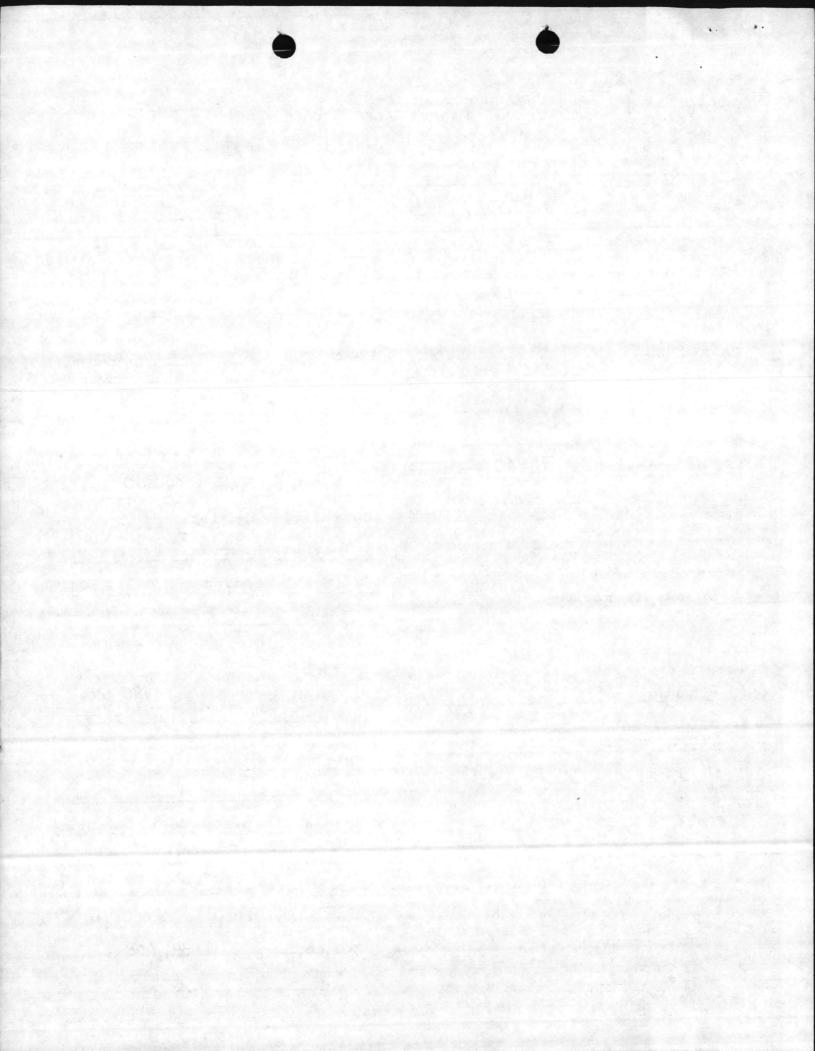
VOLATILE FRACTION

JTC SAMPLE #	/	2-0961	PROJECT NO.	NF-12
CLIENT SAMPLE	ID	# 60	DATE RECEIVED	6-18-85
METHOD NO.	624	DETECTION LIMIT	50,000 ug/lit	

PARAMETER	RESULT ug/lit	PARAMETER	RESULT ug/lit
2V acrolein	N.D.	32V 1,2-dichloropropane	N.D.
3V acrylonitrile	N.D.	33V 1,3-dichloropro- pylene	N.D.
	0 N.D.	38V ethylbenzene 83,800	
6V carbon tetrachloride 7V chlorobenzene	N.D.	44V methylene chloride	N.D.
10V 1,2-dichloroethane	N.D.	45V methyl chloride	N.D.
llv 1,1,1-trichloro- ethane	N.D.	46V methyl bromide 47V bromoform	N.D.
13V 1,1-dichloroethane	N.D.	48V dichlorobromo- methane	N.D.
14V 1,1,2-trichloro- ethane	N.D.	49V trichlorofluoro- /9	5,000 N.D.
15V 1,1,2,2-tetra- chloroethane	N.D.	50V dichlorodifluoro-	
16V chloroethane	N.D.	methane	N.D.
19V 2-chloroethylvinyl ether	N.D.	51V chlorodibromomethane 85V tetrachloroethylene	N.D.
23V chloroform	N.D.	86V toluene 321,000	N.D.
9V 1,1-dichloroethylene	N.D.	87V trichloroethylene	N.D.
0V 1,2-trans-dichloro- cthylene	N.D.	88V vinyl chloride	N.D.
		xylenes 391,000	9

N.D. = NOT DETECTED
N.A. :: NOT APPLICABLE/ANALYZED

^{*}Below method detection limit



Client Report No	83
JTC Report No.	85-309

COMPOUND	ESTIMATED CONCENTRATION
Mchlorotri Pluoroethane	780,000 mg/S
Hexane	36700 mg/l
Methylhexane	94000 mg/l
Hydroranbon (Cg Hig)	47000 Jall
drocarbon (Cattis)	41000 pg/
	· U

* Below Detection Limit

Trake distance there Herance Methyllisand Carty) Hedrocaulino (CC , His) F-144212016

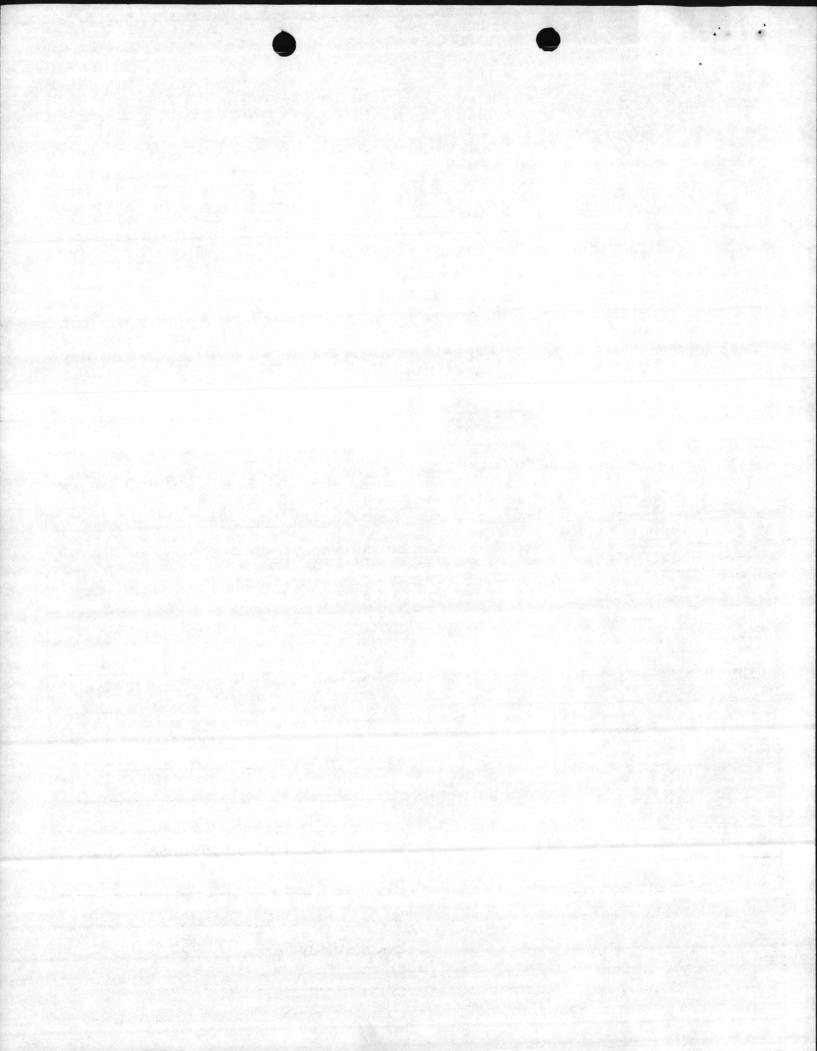


JTC ENVIRONMENTAL CONSULTANTS, INC. PRIORITY POLLUTANT ANALYSIS DATA SHEET

VOLATILE FRACTION

JTC SAMPLE #	12-0962	PROJECT NO. NF-12
CLIENT SAMPLE	ID_ # 6/	DATE RECEIVED 6-18-85
METHOD NO.	624 DETECTION LIMIT 50	,000 ug/lit

PARAMETER	RESULT ug/lit	PARAMETER	RESULT ug/lit	
2V acrolein	N.D.	32V 1,2-dichloropropane	N.D.	
3V acrylonitrile	N.D.	33V 1,3-dichloropro- pylene	N.D.	
4V benzene 65,80 6V carbon tetrachlorid	N.D.	38V ethylbenzene 39,900		
7V chlorobenzene	e N.D.	44V methylene chloride	N.D.	
10V 1,2-dichloroethane	N.D.	45V methyl chloride	N.D.	
llv 1,1,1-trichloro-	N.D.	46V methyl bromide	N.D.	
ethane	N.D.	47V bromoform	N.D.	
13V 1,1-dichloroethane	N.D.	48V dichlorobromo- methane	N.D.	
14V 1,1,2-trichloro- ethane	N.D.	49V trichlorofluoro-	3,500	
15V 1,1,2,2-tetra- chloroethane	N.D.	50V dichlorodifluoro-	·N.D.	
16V chloroethane	N.D.	methane	N.D.	
19V 2-chloroethylvinyl ether	N.D.	51V chlorodibromomethane 85V tetrachloroethylene	N.D.	
23V chloroform	N.D.	86V toluene 205,000	N.D.	
9V 1,1-dichloroethylene	N.D.	87V trichloroethylene	N.D.	
00V 1,2-trans-dichloro- cthylene	N.D.	88V vinyl chloride ×ylenes 155,000	N.D.	



Client Report No	83
JTC Report No.	85-309

COMPOUND	ESTIMATED CONCENTRATIO
Butane	27000 pegl
To Chloro trof Lucroethano	1,755,000 mg/
Pentano	100,700 mg1-10
Amethyleyclopropano	64,700 py 1
Method pentanio (cyclo)	80,000 Ng 11
Afnothyl butane	41,700 per 11
Methylpentane	459,000 kg 1 d
Methylhexane	151600 mg/1
	235600 Jug 1
Aydrokarbon (C& H18)	151,000 mg/
	V V
	and the second second

* Below Detection Limi +

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JTC ENVIRONMENTAL CONSULTANTS, INC. PRIORITY POLLUTANT ANALYSIS DATA SHEET

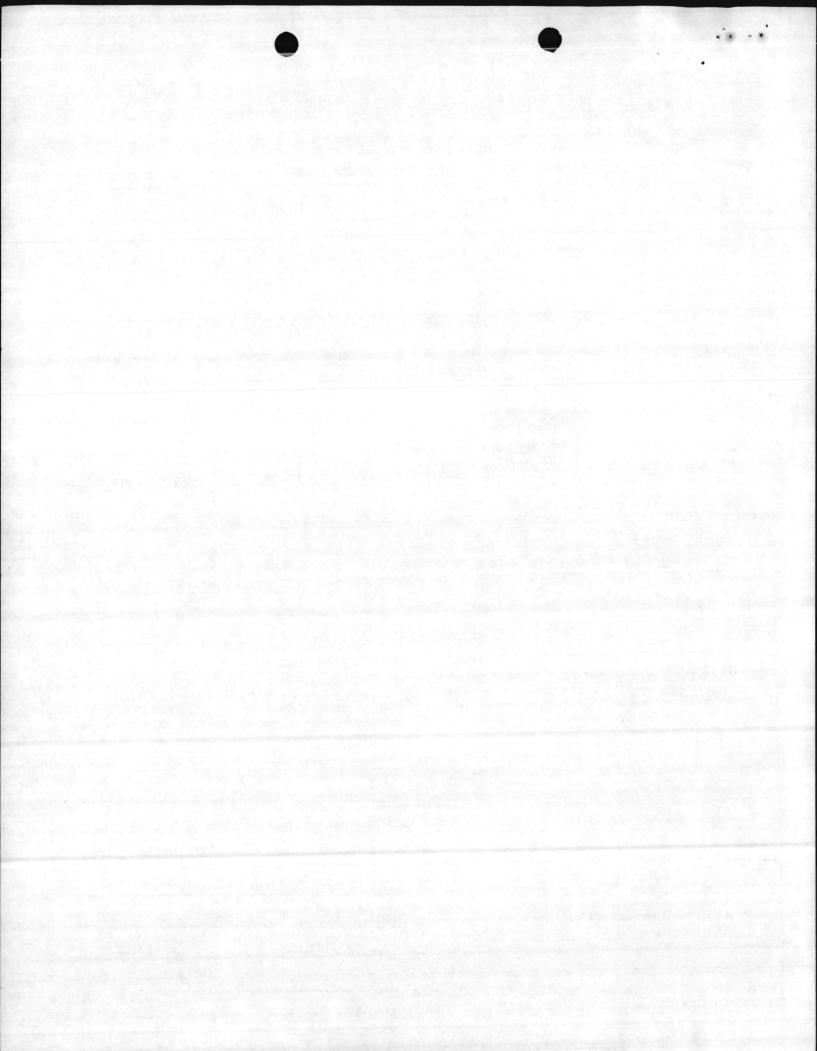
VOLATILE FRACTION

				AND THE RESERVE OF THE PERSON
JTC SAMPLE #	12	- 0963	PROJECT NO.	NF-12
CLIENT SAMPLE	ID_#	162	DATE RECEIVED	6-18-85
METHOD NO	624	DETECTION LIMIT	50,000 ug/lit	

PARAMETER	PARAMETER RESULT PARAM ug/lit		RESULT ug/lit	
2V acrolein	N.D.	32V 1,2-dichloropropane	N.D.	
3V acrylonitrile	N.D.	33V 1,3-dichloropro- pylene	N D	
4V benzene /14,000	N.D.	38V ethylbenzene 129,00	N.D.	
6V carbon tetrachloride	N.D.	44V methylene chloride	var kladel	
7V chlorobenzene	N.D.	45V methyl chloride	N.D.	
10V 1,2-dichloroethane	N.D.	46V methyl bromide	N.D.	
llv 1,1,1-trichloro- ethane	N.D.	47V bromoform	N.D.	
13V 1,1-dichloroethane	N.D.	48V dichlorobromo- methane	N.D.	
14V 1,1,2-trichloro- ethane	N.D.	49V trichlorofluoro-		
15V 1,1,2,2-tetra- chloroethane	N.D.	methane 50V dichlorodifluoro-	N.D.	
16V chloroethane	N.D.	methane	N.D.	
19V 2-chloroethylvinyl ether	1.D.	51V chlorodibromomethane 85V tetrachloroethylene	N.D.	
	1.D.	86V toluene 397,000	N.D.	
9V 1,1-dichloroethylene N	.D.	87V trichloroethylene	N.D.	
10V 1,2-trans-dichloro- cthylene N	.D.	88V vinyl chloride	N.D.	

N.D. = NOT DETECTED

N.A. R NOT APPLICABLE/ANALYZED



Client	Report No	83	
JTC Ren	port No.	85-309	

COMPOUND	ESTIMATED CONCENTRATION
Tolchorotofluoroethane	8,000,000 pg 11
Rentanu	127000 mg/l
Indrocarbon (C6H12)	90000 mall
Amethyl butane	49000 dall
Methylantane	560000mg/l
Jerane	200000
Methylherane	300,000,000

A cocsoco ha 1-1 Telephonophillumonthane Lintania . 12 machile Hydrocarbon (Cette) good ends Dwethyl hidom : 11/4000011 Mestylphonsone 2 1 6000 opid 16 = 3 Hexdres Methylberane zececephia = 1 Bococopyeld

		#58	#59	#	#61	#62	
	FLASH BINT	105	123	165	130	127	
	REACTIVITY		And the second				
	CN mg/kg	<0.8	<0.8	<0.8	<0.8	<0.8	
	SULFIDE mg/K	93.7	19.8	6.2	38.2	22.5	
	CORROSIVITY		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
	pН	8.0-9.0	7.0-8.0	8.0-9.0	9.0-10.0	7.0-8.0	
	% SULFUR	0.47	0.29	0.25	0.32	0.25	-
	PHENOUS	30	<30	<30	~30	, <30	
	%WATER/SEDIMENT	16.8	15.0	49.5	15.0	10.0	
16	METALS mg/Kg		280	10 10 10 10 10 10 10 10 10 10 10 10 10 1			-
	As Sppm	<1.0	.0</td <td>4.0</td> <td><1.0</td> <td><!--.0</td--><td>-</td></td>	4.0	<1.0	.0</td <td>-</td>	-
	BA 1009pm	22.8	28.0	< 20	25,2	25,3	
	Cd 1 ppm	(2.0)	(1.8)	(1.9)	(1.9)	(1.1)	
	Ce Sppm	6.4	2.7	5,4	3,6	2,7	-
	96 5ppn	(49)	30	(18)	59)	(12)	
	Hy O.Zppm	<0,1	<0,1	-0.1	<0.1	<0.1	
	S€ 1.0ppm	<0,4	<0.4	<0.4	<0,4	<0,4	-
195	Ag 5ppm	1.0	1.4	<1.0	1.3	.0</td <td></td>	
	449						-
	PCB	</td <td><!--</td--><td>4</td><td><!--</td--><td><!--</td--><td></td></td></td></td>	</td <td>4</td> <td><!--</td--><td><!--</td--><td></td></td></td>	4	</td <td><!--</td--><td></td></td>	</td <td></td>	
	VOAs (ppb)					A 10 10 10 10 10 10 10 10 10 10 10 10 10	1
	BENZENE	253,000	18,700	71,900	65,8000	114,000	1
	ETHYLBEN BENE	263,000	133,000	83,800	39,900	129,000	-
	TOLUENE	1,250,000	501,000	, 321,000	205,000	397,000	-
orch	TRICHLORDETHYENE	115,000	ND	ND	ND	ND	-
	XYLENES	1,040,000	506,000	391,000	155,000	550,000	
	FREON TEICH WORDFLUORD	1,800,000	1,253,400	780,000	1,755,000	2,000,000	-
	METHANE	ND	666,000	195,000	13,500	ND	1
	PENTANE				100,700	127,000 49,000 90,00	1
	DIMETHYLBUTANE METHYL	135,000			41,700*	90,00	1
	PENTANS	990,000	191,000		459,000	560,000	-
1	HEXANE	400,000	32,000 *	36,700*	151,600	200,000	-
		720,000	1	94,000	235,600	300,000	1

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		#58	#59	#6	#61	#62	
	(LUHIZ)	235,000	44,600*			90,000	
	(C8418)			47,000 *	151,000		
	METHYL PENTANE (CGCLO)				80,000		
	DIMETHYLCYCLO PROPANE				64,700		
	BUTANE				27,000 *		
	HYDEOCARBONS (C9 H18)			41,000	27,000		
	The second secon	25 × *	32,000*	11,000			
29 E	HEXENE DIMETHYL	35,000 *	A CONTRACTOR OF	. Phila			
	HEPTANE PROPYL	365,000	57,500				
A STATE OF THE STA	BENZENE	85,000	67,000				
	PENTENE HYDROCARBON	40,000*				Note that is	
	(C5H1Z) DIMETHYZ	365,000				60.96	
	PENTANE	115,000					
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6241/2 NREAD 13 August 1985

From: Supervisory Chemist, Water Quality Control Lab, Environmental

Branch

To: Director, Natural Resources and Environmental Affairs

Division

Via: Supervisory Ecologist, Environmental Branch

Subj: WASTE OIL ANALYSIS

Ref: (a) BMO ltr 5000 MAIN of 31 May 1985

Encl: (1) JTC Environmental Consultants, Inc. Report No. 83 Dated 31 July 1985

1. The enclosure provides data requested by the reference for five of the six waste oil storage tanks at Tarawa Terrace. Navy sample ID #58 corresponds to tank S-TT-61, #59 to tank S-TT-62, #60 to tank S-TT-63, #61 to tank S-TT-64 and #62 to tank S-TT-65. On 6 June 1985 when the tanks were sampled, tank S-TT-66 was not completely full so it was not sent off for analysis.

ELIZABETH A. BETZ

NREAD 14 Aug 1985

FIRST ENDORSEMENT

Prom: Director, Natural Resources and Environmental Affairs Division To: Base Maintenance Officer

1. Readdressed and forwarded for your information.

J. I. WOOTEN

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From: Supervisory Chemist, Water Quality Control Lab, Environmental

Branch

To: Director, Natural Resources and Environmental Affairs

Division

Via: Supervisory Ecologist, Environmental Branch

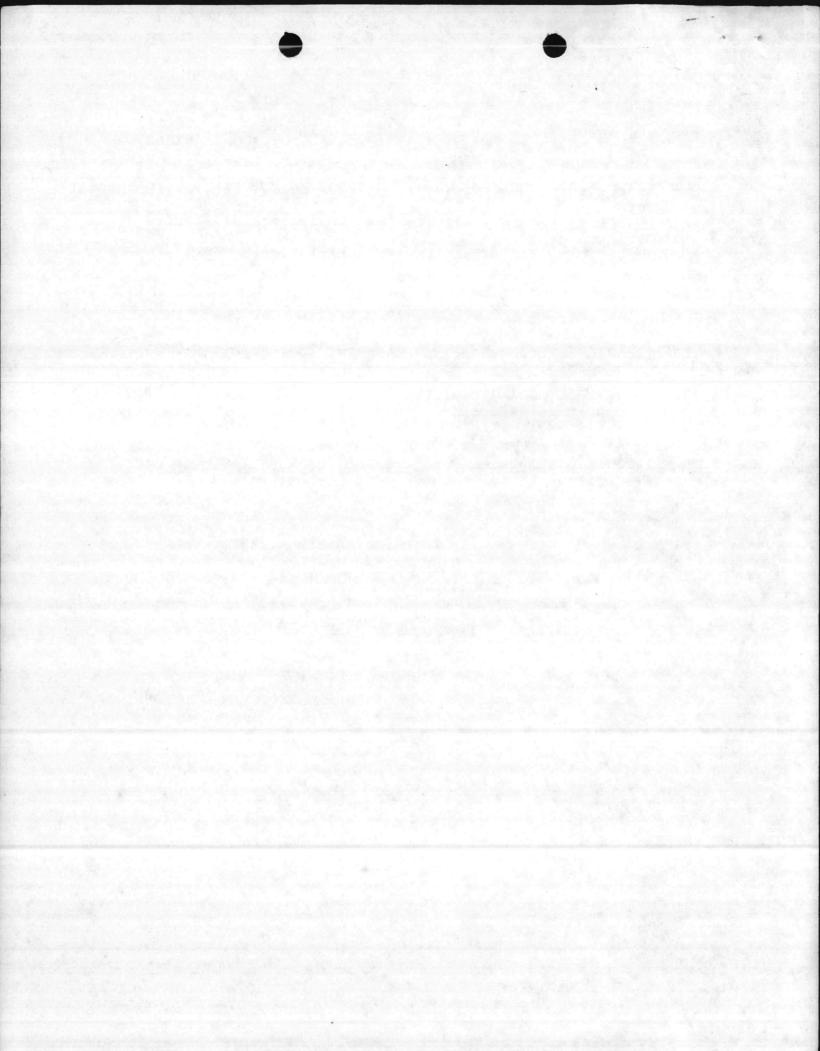
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RLIZABETH A. BETZ



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

> 5 June 85 (Date)

From: Supervisory Ecologist

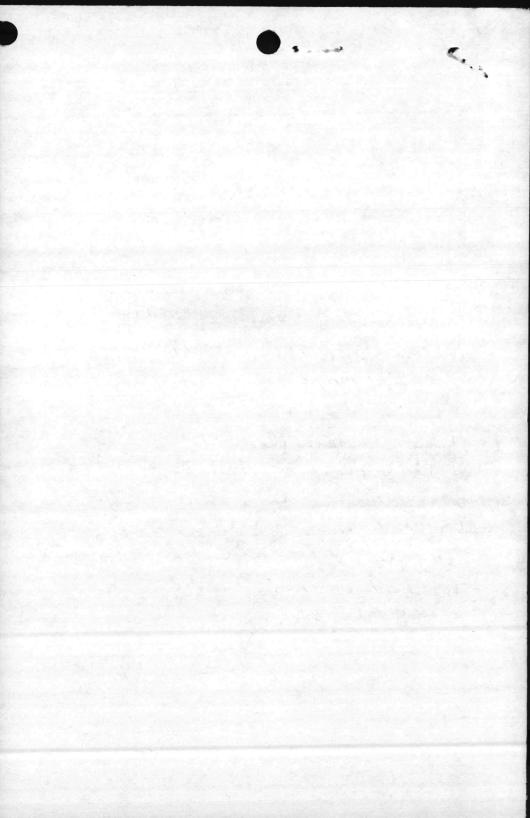
To: Supernsony Chemol

Subj: waste oil Onaliges of 5-TT61-66. End (1) Trans. Genforeroon, BmD L+1 SODO/MAIN/ of 31 MAY 85

1. Please camplete the work requested in the enclosure N.L.T. June 7, 1985.

Be sure filling has been completed in each tank before shipping somples. I have requested L. D. Stepand to Check on this. Call him & 5158, 2636.

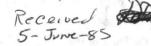
Dany Haye



JUD Dans deter



Base Maintenance Division
Marine Corps Base
Camp Lejeune, North Carolina 28542



IN REPLY REFER TO 5000 MAIN

MAIN 31 May 85

From: Transportation General Foreman

To: Director, Natural Resources and Environmental Affairs Division

Via: (1) Ground Structures General Foreman XVA

(2) Director, Maintenance and Repair Branch

(3) Base Maintenance Officer

Subj: WASTE OIL ANALYSIS

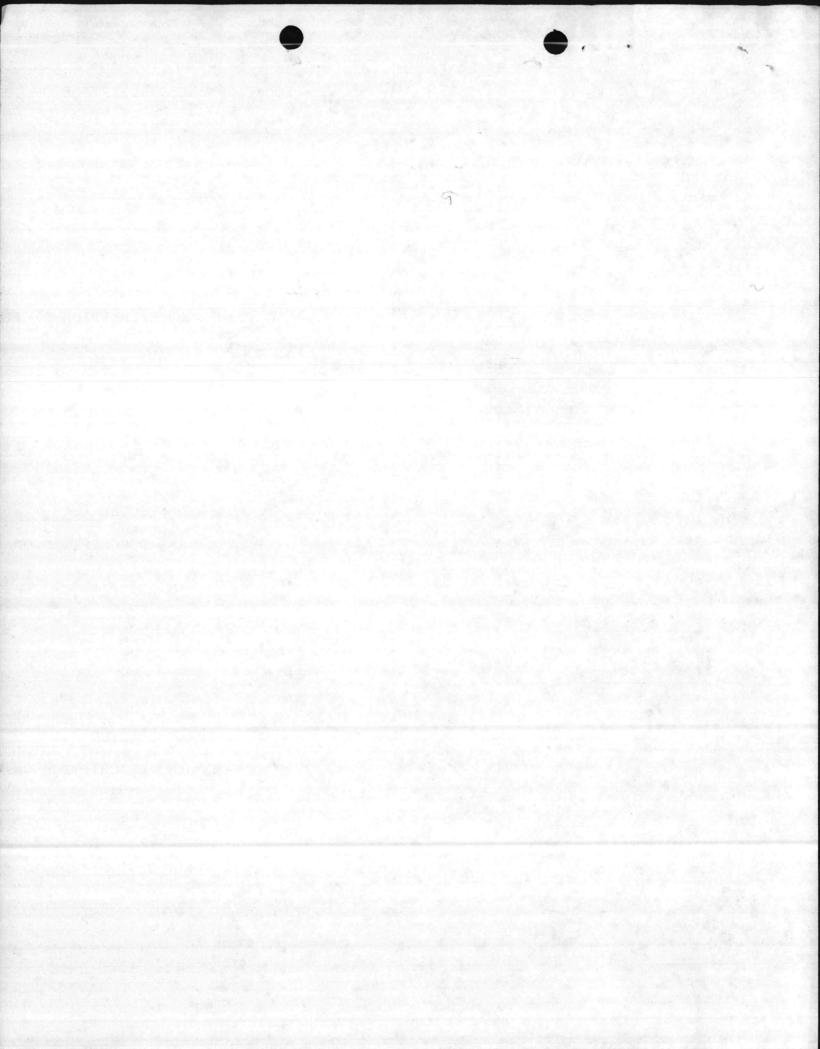
1. It is requested that tanks S-TT-66, S-TT-65, S-TT-64, S-TT-63, S-TT-62, S-TT-61 be analyzed for immediate sale.

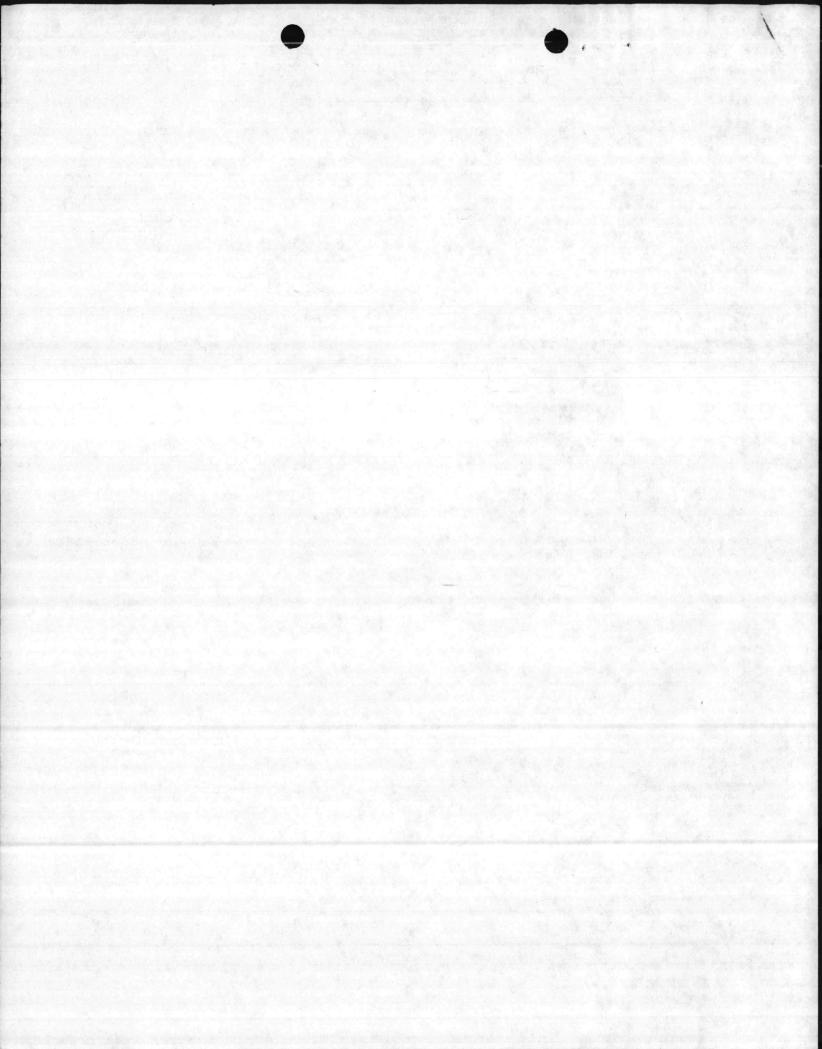
DONALD GURGANUS

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			SHEET #	
SAMPLE #_58	DATE COLLECTED	6/6/85 TIME	COLLECTED	
NAME OF COLLECTOR				
SAMPLED 77 Cont	/			
COMMENTS:				
. SAMPLE # 59				
NAME OF COLLECTOR		LOCATION AND	DESCRIPTION O	F ITI
COMMENTS				
SAMPLE # 60	DATE COLLECTED	6/6/85 TIME (COLLECTED	
NAME OF COLLECTOR C		LOCATION A		
SAMPLED Cond	#3			
COMMENTS				
SAMPLE #	DATE COLLECTED	5/6/88 TIME	COLLECTED	
NAME OF COLLECTOR	184		AND DESCRIPTION	OF I
SAMPLED				
COMMENTS				
O OMANDA TO				





5200 NREAD 10 June 1985

From: Director, Natural Resources and Environmental Affairs

Division, Marine Corps Base, Camp Lejeune

To: Traffic Management Officer, Marine Corps Base, Camp Lejeune

Subj: TRANSPORTATION OF LABORATORY SAMPLES; REQUEST FOR

1. Request shipment of five samples to JTC Environmental Consultants, Incorporated, Suite L-10, 4 Research Place, Rockville, Maryland 20850, Attn: Navy Contractor (phone 301/921/9790).

J. I. WOOTEN

Blind copy to: > SupvChem

Writer: E. Betz, NREAD 5977 Typist: J. Cross 10Jun85 ATT ATT TO SELECT THE SELECT THE

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