DOC. NO. . CLEY-00301-2.04-09/10/81 But meine

BASE MAINTENANCE DIVISION

Marine Corps Base

Camp Lejeune, North Carolina 23542

MAIN/FHM/rn 11330 10 Sep 1981

MEMORANDUM FOR THE COMMANDING GENERAL

From: Base Maintenance Officer

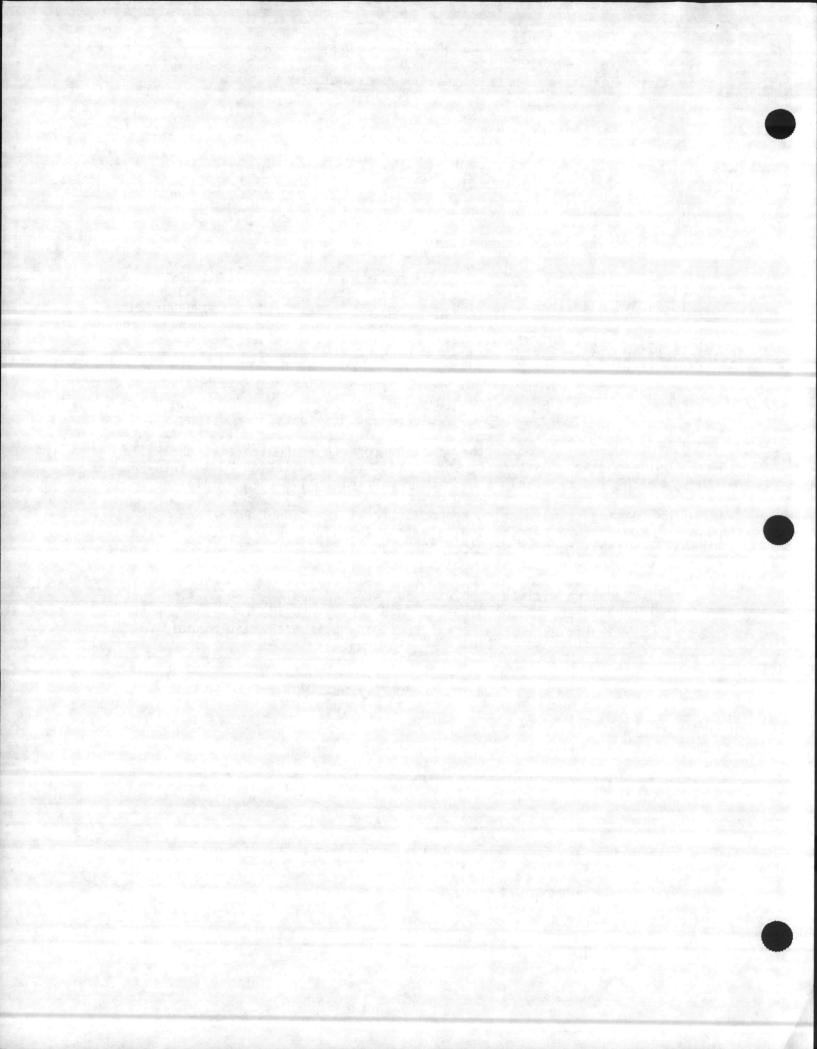
Subj: Monitoring of Drinking Water

- 1. Weekly testing for bacteria at the Rifle Range has presented no problems.
- 2. Total Trihalomethanes testing was reestablished at the Rifle Range in July and will continue until December. The standard for total trihalomethanes (TTHM) is 100 ppb, and we must be in compliance by November 1983. Test results are as follows at the Rifle Range:

Apr - 17 ppb May - 94 ppb Jul - 35 ppb (Results by FONECON)

- 3. LANTDIV recommends no further testing for other chemicals at the Rifle Range until the Navy Assessment and Control of Installation Pollutants Program Study, which is tentatively scheduled for November 1981, is completed.
- 4. TTHM testing is also being accomplished at the Hadnot Point and MCAS water plants. Preliminary results indicate that the Hadnot Point water is within standards established for November 1983 compliance, but MCAS water has exceeded standards in three of the six months tested.
- 5. LANTDIV testing will be completed in December 1981, at which time further action will be taken through planned field surveys to identify sources of organic precursors and/or modification within water treatment plants if conditions warrant those actions.

The MOUNT



REPORT # 60

LABORATORY ANALYSIS ON

NAVAL SAMPLES

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

JTC REPORT # 85-179

PREPARED FOR:

DEPARTMENT OF THE NAVY

ATLANTIC DIVISION

NAVAL FACILITIES ENGINEERING COMMAND

NORFOLK, VA 23511

PREPARED BY:

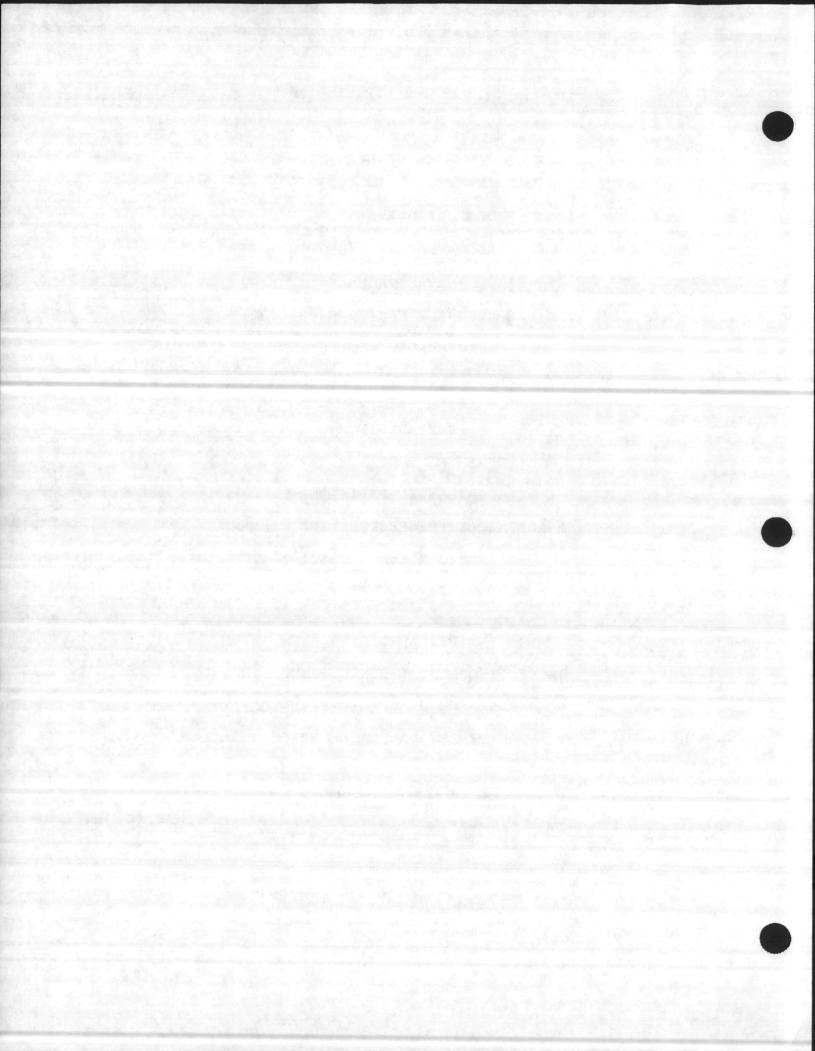
JTC ENVIRONMENTAL CONSULTANTS, INC.

4 RESEARCH PLACE, SUITE L-10

ROCKVILLE, MARYLAND 20850

May 15, 1985

Ann E. Rosecrance Laboratory Director



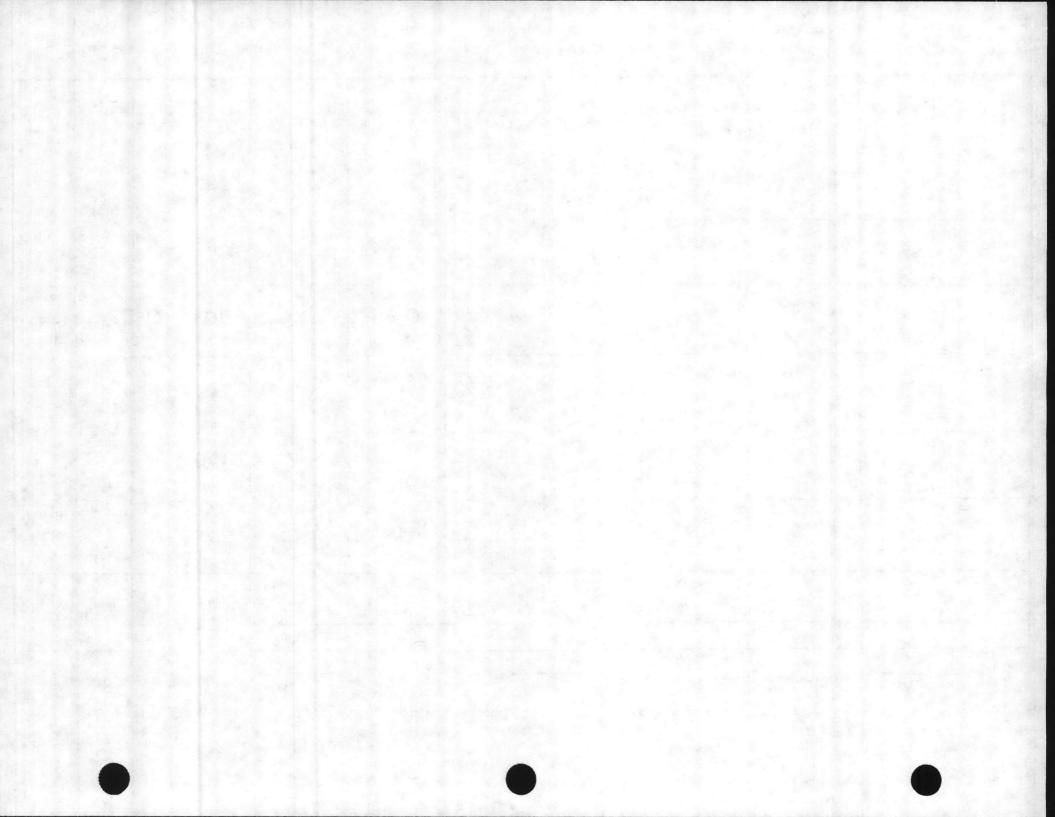
JTC Environmental Consultants, Inc.

Date 5/15/85 Report No. 60 to Naval Facilities Engineering Command, Norfolk, Virginia

JTC Data Report No. 85-179 Table Date of Sample Receipt 4-15-85

NAVY	JTC				ANALYSIS PARAMETER						
SAMPLE ID	SAMPLE ID	Ca mg/g	PCB ug/g	Chloride mg/g	Oil & Grease mg/g	. Iodine ppm	15*				
white powder in glass ampules	12-0803	173	×	374	X	X					
n	12-0804	227	×	419	×	X			000		
И	12-0805	328	×	214	X	X					
clear oil in small flat sided jar	12-0806	X	<50	×	842	X					
tablet * amber jar	12-0807	X	×	X	X	<0.1			113		

<sup>\*</sup> Sample did not dissolve in water. A cloudy suspension was formed by placing the tablet in water and stirring for 24 hours. I odine was not detected in the sample



6280/1 NREAD 24 Jan 1986

Director; Natural Resources and Environmental Affairs Division

Marine Corps Base, Camp Lejeune

Environmental Engineer, Facilities Department, Marine Corps

Base, Camp Lejeune

Base Maintenance Officer, Marine Corps Base, Camp Lejeune

ANALYSIS OF DRINKING WATER SYSTEMS ABOARD CAMP LEJEUNE/MCAS, Suh!: NEW RIVER

(1) Chemical Analysis Results of Hadnot Point Finished Water Freel: " Tarawa Terrace . (2)

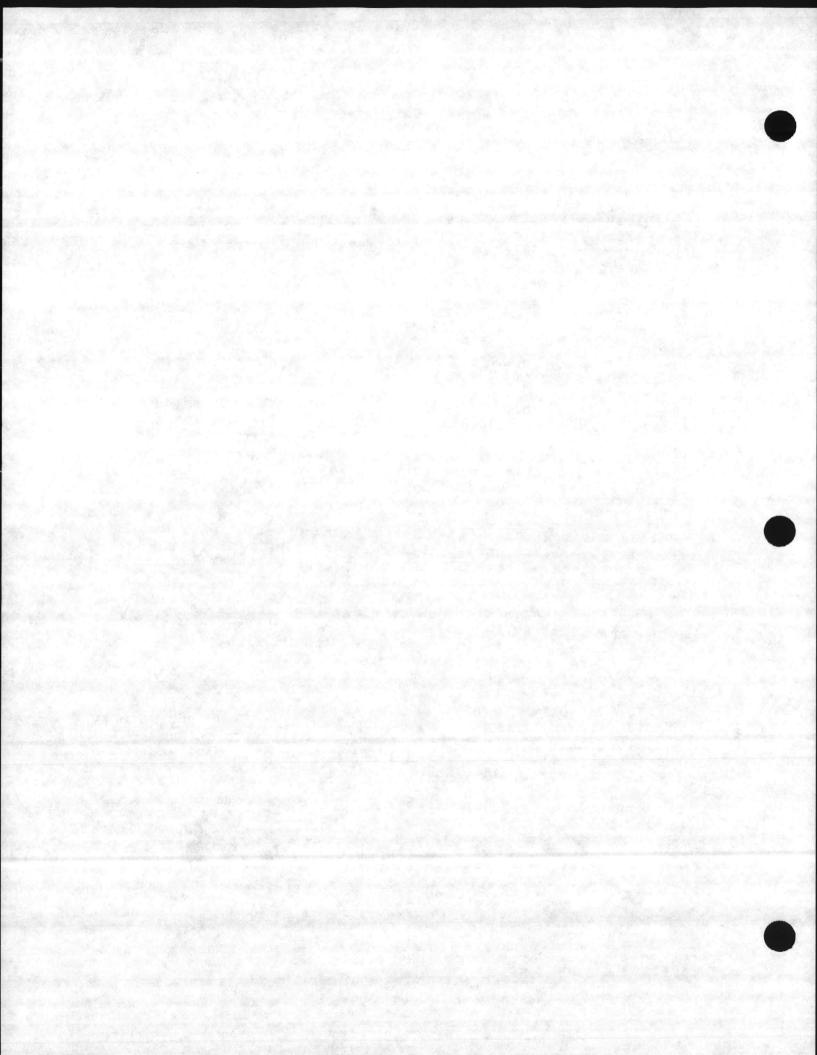
- Enclosures (1) and (2) indicate no immediate concern over the quality of water in the two systems at Tarawa Terrace and Hadnot Point. While the periodic reading for Benzene are felt to be a quality control problem in sampling and/or laboratory analysis, samples of each active raw water well for Hadnot Point was taken by NREAD and BMO last week. Results are anticipated in early February.
- 2. Unless advised otherwise, Tarawa Terrace wells are scheduled for February. Please note that due to previously discussed personnel shortages in the NREAD Laboratory, local capability to generate certified data is not anticipated in the immediate future.
- The cost of analysis of the sampling shown in enclosures (1) and (2) was approximately \$20,000.00. Funding by Atlantic Division, aval Facilities Engineering Command of this analysis is anticipated to end not later than the end of this fiscal year. NRFAD has enred \$120,000 in the 1988 POM to reflect the overall loss of funding for laboratory analysis.
- It is apparent that careful planning will be required to absorb this additional cost and to hold actual sampling to the essential minimum which protects public health and provides compliance with applicable standards, laws and regulations.
- The second of th 5. Accordingly, the Environmental Engineer is requested to obtain

TENNER OF THE CONTROL OF THE PROPERTY OF THE P This will require coordination with CO, MCAS, New River and Naval Hospital. Please advise.

J. I. WOOTEN

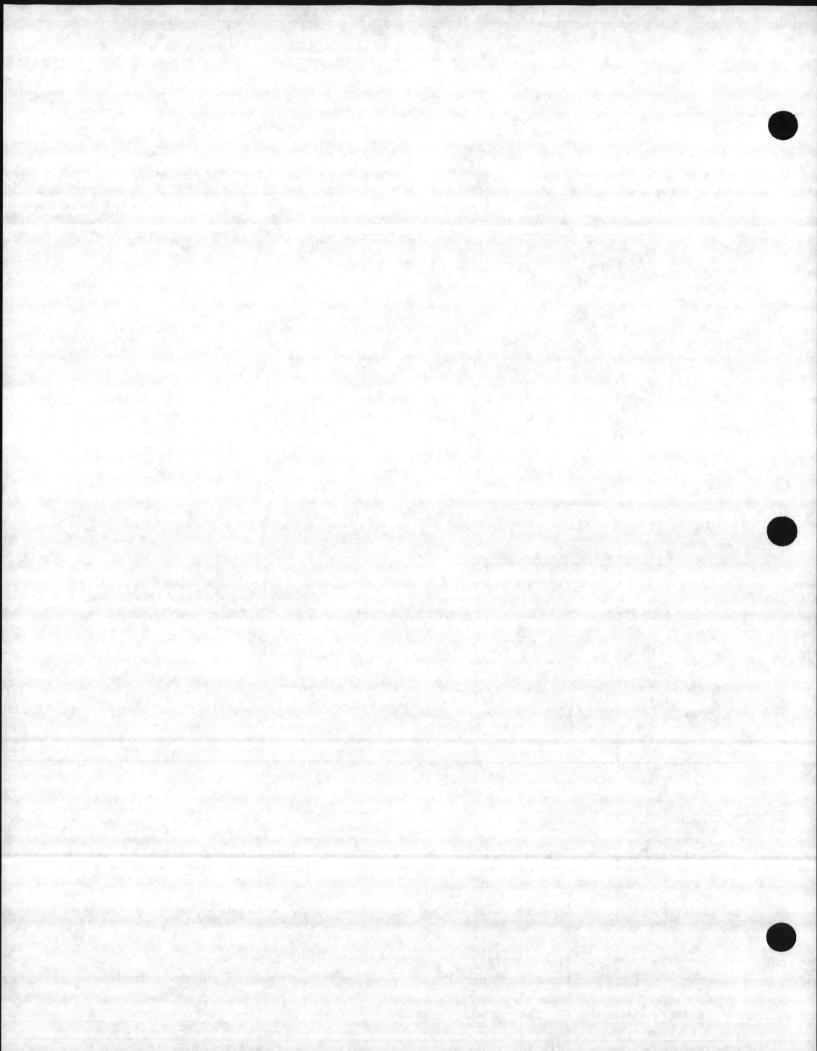
Writer: D. D. Sharpe, NREAD 5003

Typist: J. Cross 23Jan86



SYSTEM: HADNOT BINT

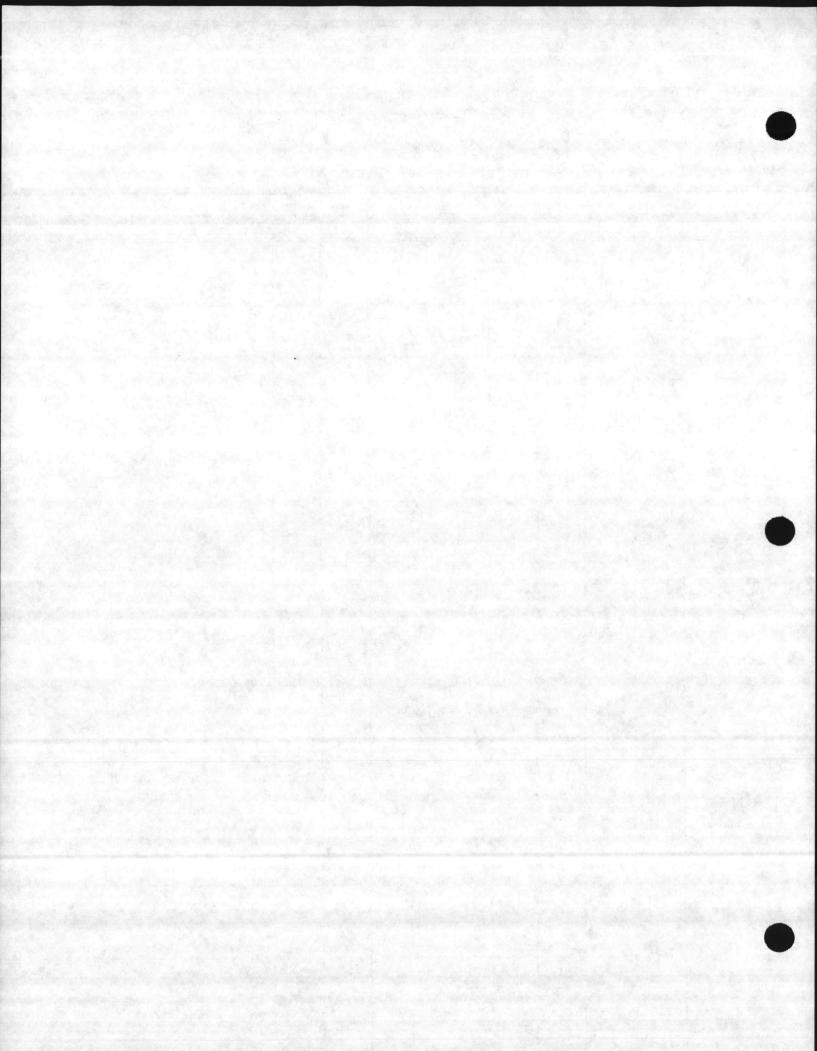
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SYSTEM: TARAWA TERRACE

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ENCLOSURE



DOC. NO. CLEJ- 00297- 2.04-03/11/CL- 2.04



## UNITED STATES MARINE CORPS

Marine Corps Base Camp Lejeune, North Carolina 28542-5001

IN REPLY REFER TO

6280/9 FAC

11 MAR 1986

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

Commander, Atlantic Division, Naval Facilities Engineering

Command, Norfolk, VA 23511-6287 (Code 114)

Subj: GROUNDWATER QUALITY DATA

Ref: (a) U.S.E.P.A., Region IV ltr 4WD-ER dtd 3 Feb 86

(b) Phonecon btwn Mrs. Barnette, LANTDIV and Mr. Alexander, MCB-FAC of 24 Feb 86

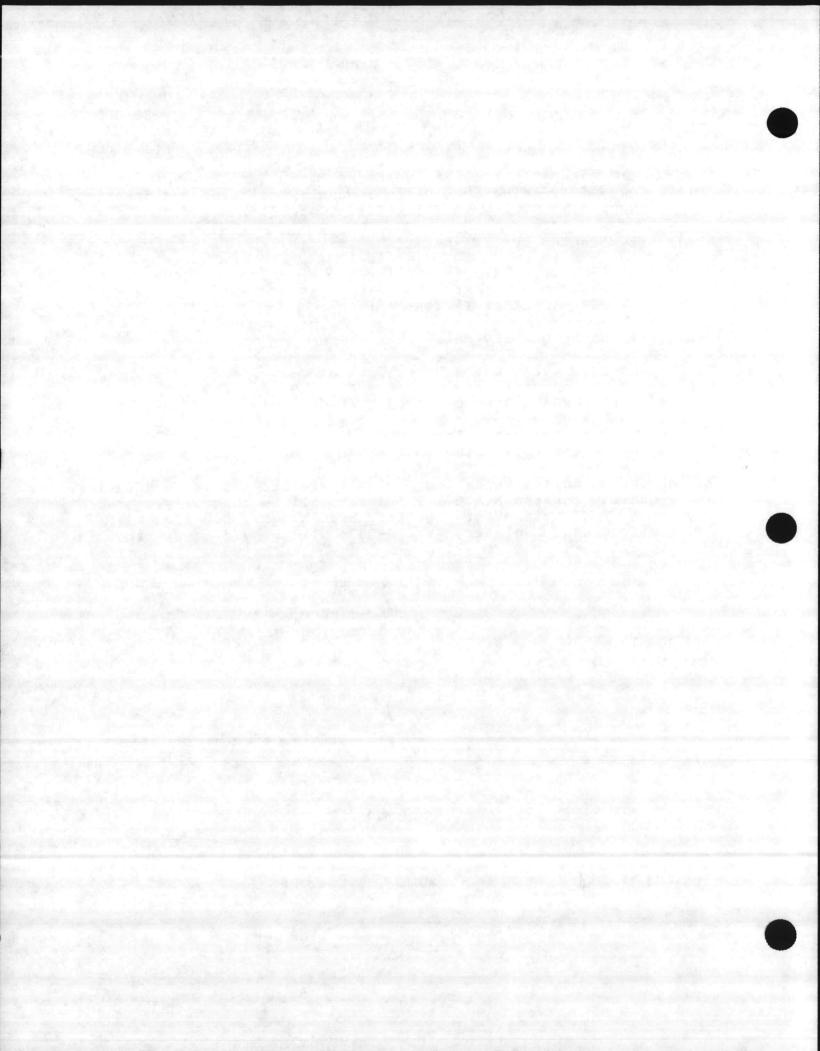
Encl: (1) Water Quality Data

1. We are forwarding the subject data as requested by the references in conjunction with the N.A.C.I.P. program. The enclosure represents data provided by N.C. Divisions of Health Services and Environmental Management, Raleigh, N.C. Data obtained by Navy contract laboratories should be combined with the enclosure for forwarding to EPA per reference (a) request.

As agreed during reference (b), all available data on drinking water quality for the N.A.C.I.P. program will be centrally stored in the LANTDIV Environmental Quality Branch. Mr. Bob Alexander, MCB Environmental Engineer, AV 484-3034 will provide assistance in this regard.

By direction

Copy to: CMC (LFL)



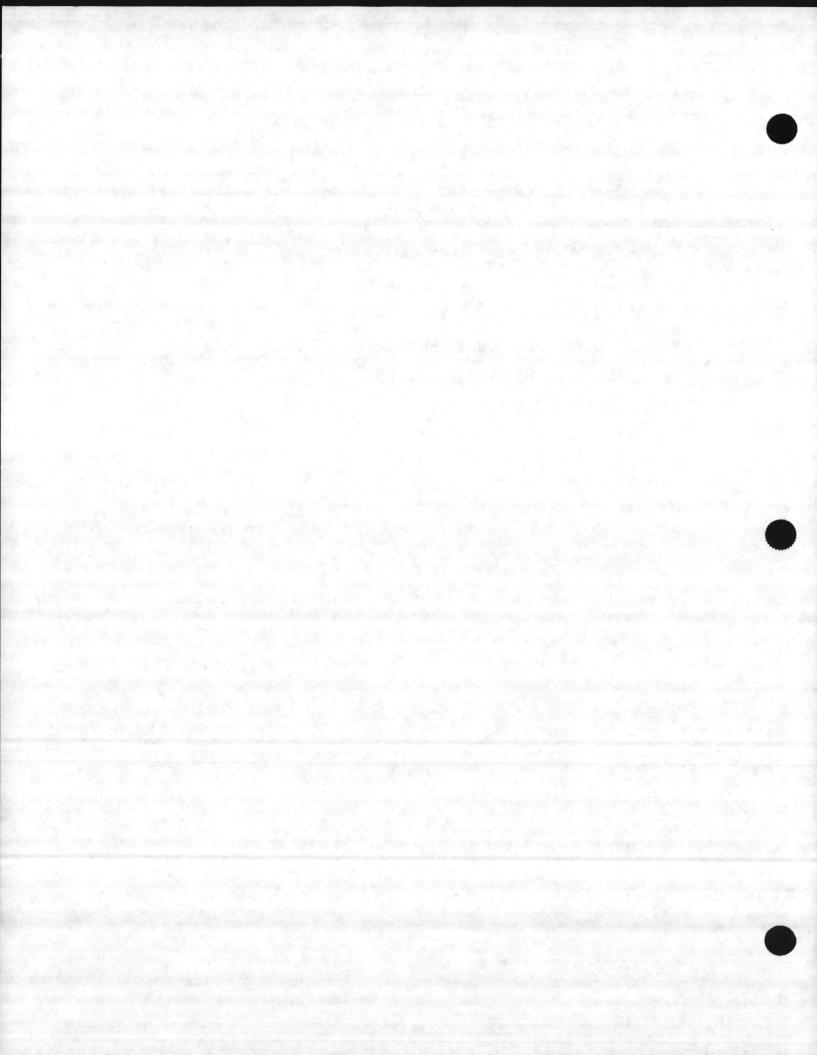
#### CONTENTS

# DRINKING WATER QUALITY DATA

#### obtained for the

NAVY ASSESSMENT AND CONTROL OF INSTALLATION POLLUTANTS PROGRAM Camp Lejeune, North Carolina

- NCDEM ltr w/lab report dtd 21 June 85
- NCDHS lab reports dtd 22 Feb 85 (two reports)
- NCDHS lab reports dtd 8 Feb 85
- NCDHS lab reports dtd 4 Feb 85
- NCDHS lab reports dtd 31 Jan 85
- Summary of Tarawa Terrace Water Quality Data, dtd 19 Mar 85 indicating data reported telephonically by NCDHS for 11 March 85 samples.



Dac. No: CLEJ-00297-2.04-08/11/86.



# State of North Carolina Department of Natural Resources and Community Development Wilmington Regional Office

James G. Martin, Governor

S. Thomas Rhodes, Secretary

DIVISION OF ENVIRONMENTAL MANAGEMENT

June 21, 1985

Colonel R.A. Tiebout Assistant Chief of Staff, Facilities United States Marine Corps Marine Corps Base Camp Lejeune, NC 28542-5001

SUBJECT: Transmittal of Analytical Results

Three Community Water Supply Wells

Tarawa Terrace I Camp Lejeune MCB Onslow County

Dear Colonel Tiebout:

Attached please find copies of the analytical results completed on samples that I collected on 9 April 1985 from wells TT-25, TT-26, and new TT.

Your staff's cooperation in helping me collect these samples was greatly appreciated.

Sincerely,

Rick Shiver

Regional Hydrologist

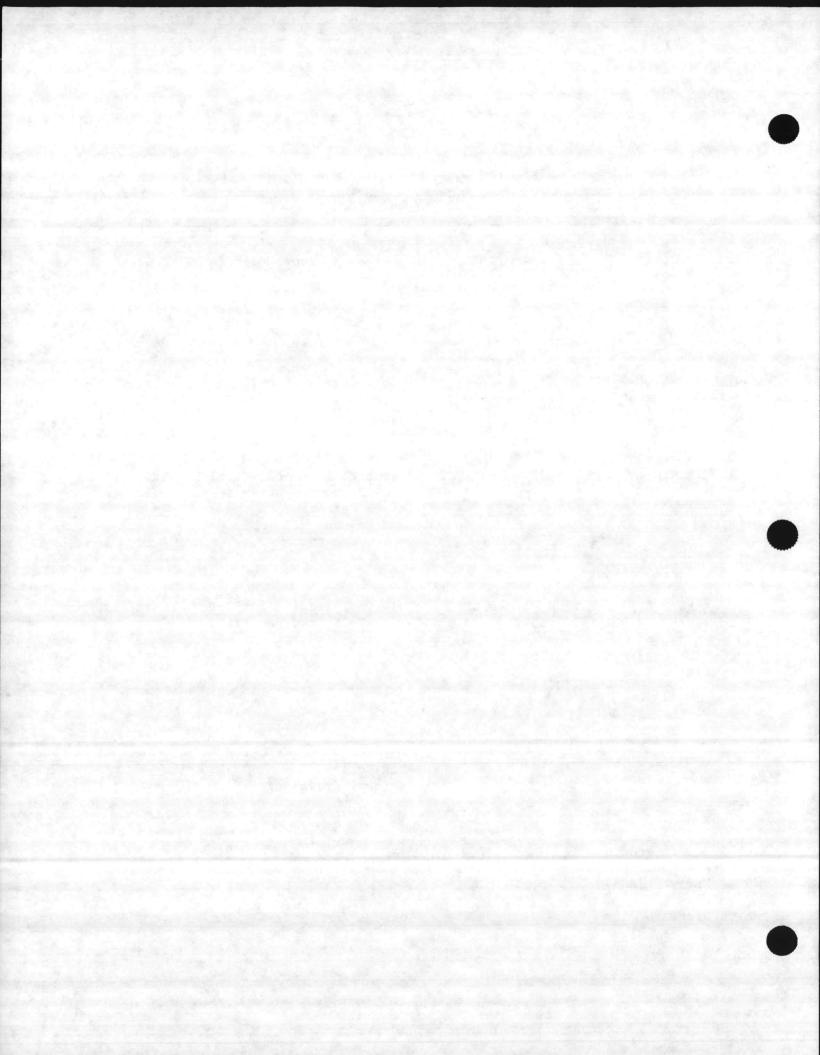
RS/sbm

cc: Julien Wooten

Mike Bell Perry Nelson

DE My simo como o sete

Attachments

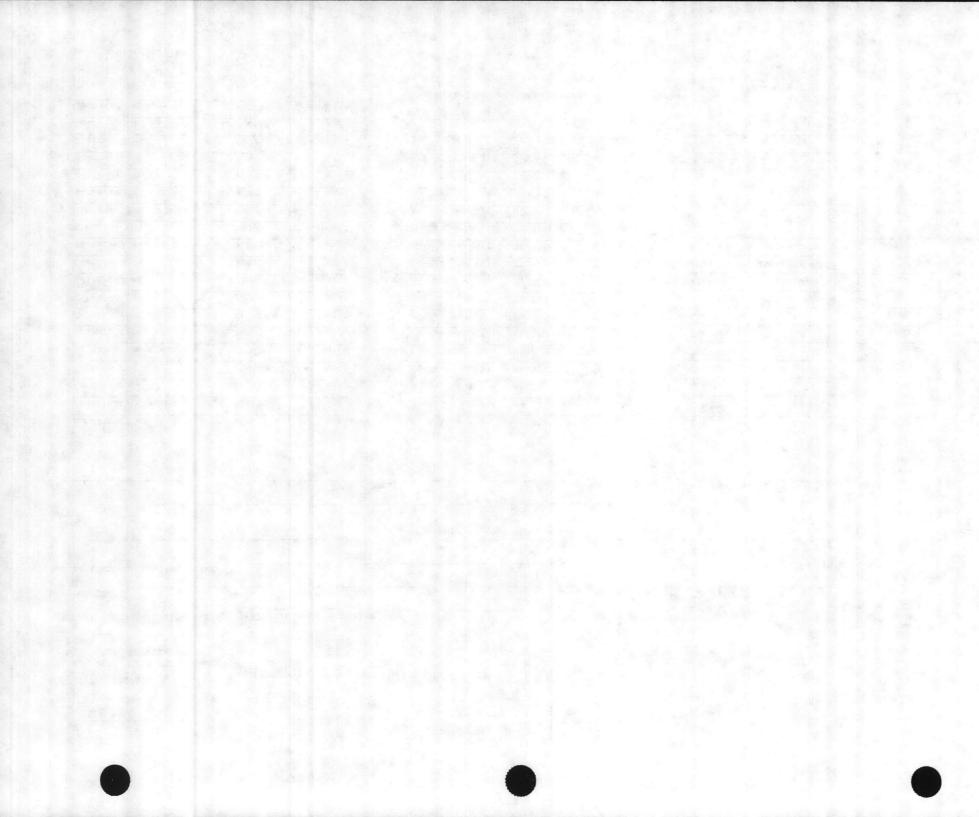


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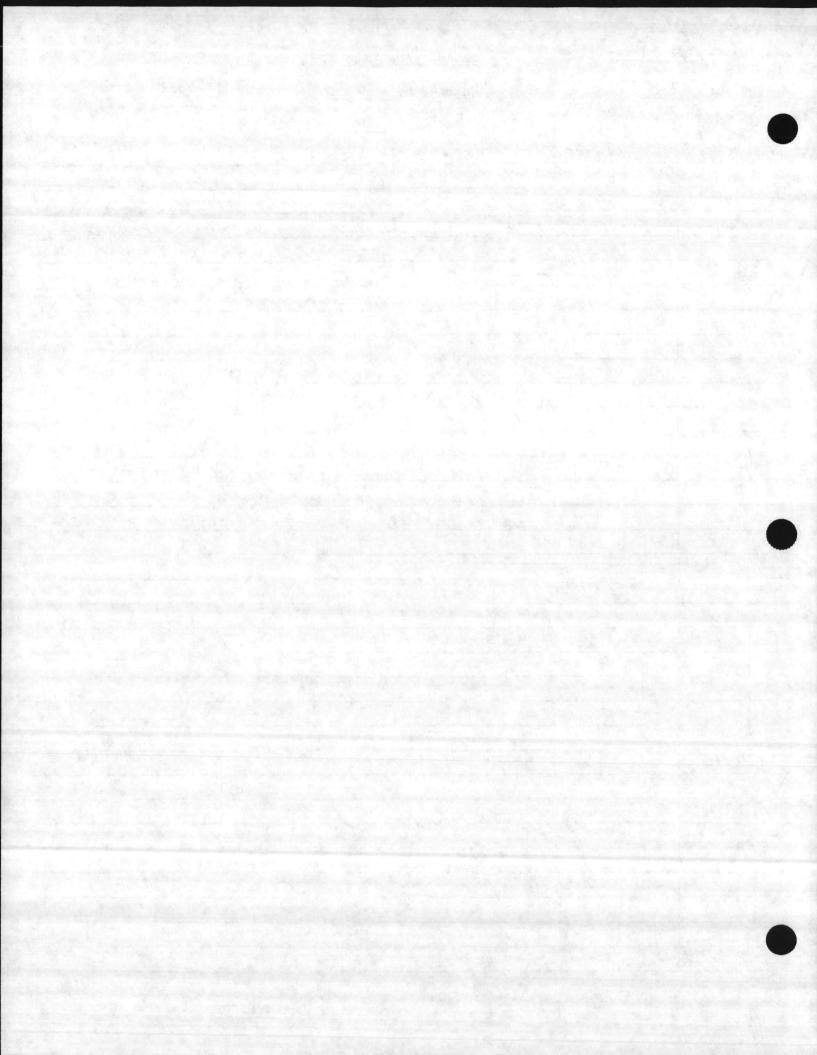
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QUAD NO. X SERIAL EPORT TO: (circle one)  ARO, WSRO, MRO, FRO, WARO,	MOJUN_ 6 WILMINGTON REGIO	1985 & COMMUNIT		CETTED DATE REC'D 4  REC'D BY	11/200
WIRO, RRO, Ahoskie FO, OTHER	DEM		J	JN 4 1985 DATA ENTRY BY	1 CR
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ATE COLLECTED OL 11	Or: Time (1)	15 By 1016.16		BIGHT-NZC	
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lemarks		(pumping time, a	ir temp, etc.)		<del></del>
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ab Analysis					
VAlkalinity to pH 4.5	P00410 /8/1 mg/1	✓ Ag-Silver (D)	P01075 < 50 ug/1	BOD .	P00310 ==/
Alkalinity, Hydroxide	P71830 / mg/1	Al-Aluminum (D)		COD	P00310 mg/
V Carbonate	P00445 -/ mg/1	✓ Ba-Barium (D)	101005 - 1000 ug/1	Coliform (Fecal MF)	P31616 /100m
Y			GA .		
/ Bicarbonate	P00440 22 () mg/1	(D) Ca-Calcium	P00915 X/) mg/1	Coliform (total MF)	P31505 /100m
√ Bicarbonate  ✓ pH value (when analyzed)	P00440 22 () mg/1 P00400 8.2 units	∨ Ca-Calcium (D)  Cd-Cadmium (D)		Coliform (total MF)	<b>建筑是是中国经济,在14年</b> 80年度
√ pH value (wmen analyzed)	Pd0400 8, 2 units	Cd-Cadmium (D)	P01025 < 2() ug/1		P00680 - 5 mg/
	PÓ1000 // ug/1		P01025 < 2() ug/1 P01030 < 5() ug/1	√ TOC	P00680 4 mg/1
y pH value (when analyzed)  Arsenic (D)	PÓ1000 // ug/1	Cr-Chromium (D)	P01025 < 2() ug/1 P01030 < 5() ug/1 P01040 < 2() ug/1	✓ TOC Turbidity	P00680 - mg/ P82079 NTU P00612 . () 2 mg/
y pH value (when analyzed)  Arsenic (D)  Carbon dioxide	Pd0400         8, 2 units           Pd1000         -// ug/1           P00405         mg/1	Cd-Cadmium (D) Cr-Chromium (D) Cu-Copper (D)	P01025 < 2() ug/1 P01030 < 5() ug/1 P01040 < 2() ug/1 P01046 / 2() Ug/1	✓ TOC  Turbidity  ✓ Ammonia (as Nitorgen) (D)	P00680 mg/ P82079 NTU P00612 .() mg/ P00623 < O./ mg/
pH value (when analyzed)  Arsenic (D)  Carbon dioxide  Chloride (D)	P00400 & Junits P01000 - / / ug/1 P00405 mg/1 P00940 7 mg/1	Cd-Cadmium (D) Cr-Chromium (D) Cu-Copper (D) Fe-Iron (D)	P01025 < 2() ug/1 P01030 < 5() ug/1 P01040 < 2() ug/1 P01046 / 2() Ug/1	✓ TOC  Turbidity  ✓ Ammonia (as Nitorgen) (D)  ✓ Kjeldahl (as Nitrogen) (D)	P00680 mg/1 P82079 NTU P00612 .() mg/1 P00623 < O . / mg/1 (D) P00631 () lmg/1
pH value (when analyzed)  Arsenic (D)  Carbon dioxide  Chloride (D)  Color (True)	Pd0400         X         Z units           P01000         - / () ug/1           P00405         mg/1           P00940         7         mg/1           P00080         2         units           P00720         mg/1	Cd-Cadmium (D) Cr-Chromium (D) Cu-Copper (D) Fe-Iron (D) Hg-Mercury	P01025 < 2() ug/1 P01030 < 5() ug/1 P01040 < 2() ug/1 P01046   2() ug/1 P71900 < () 2 ug/1 P01130 < 5() ug/1	V TOC Turbidity  V Ammonia (as Nitorgen) (D)  V Kjeldahl (as Nitrogen) (D)  V Nitrate + Nitrite (as Nitrogen)	P00680 mg/1 P82079 NTU P00612 () mg/1 P00623 C () mg/1 (D) P00631 () mg/1 P00666 mg/1
pH value (when analyzed)  Arsenic (D)  Carbon dioxide  Chloride (D)  Color (True)  Cyanide  Dissolved solids (D)	P60400         X, 2 units           P61000         -// ug/l           P00405         mg/l           P00940         7 mg/l           P00080         24 units           P00720         mg/l           P70301         230 mg/l	Cd-Cadmium (D) Cr-Chromium (D) Cu-Copper (D) Fe-Iron (D) Hg-Mercury Li-Lithium (D)	P01025 < 2() ug/1 P01030 < 5() ug/1 P01040 < 2() ug/1 P01046   2() ug/1 P71900 < (), 2 ug/1 P01130 < 5() ug/1 P01925 2, 0 mg/1	V TOC Turbidity  V Ammonia (as Nitorgen) (D)  V Kjeldahl (as Nitrogen) (D)  V Nitrate + Nitrite (as Nitrogen)  V Phosphorus, total as P (D)  Dissolved Solids - tond. meter	P00680 mg/1 P82079 NTU P00612 // mg/ P00623 < O / mg/ (D) P00631 < O / mg/
pH value (when analyzed)  Arsenic (D)  Carbon dioxide  Chloride (D)  Color (True)  Cyanide  Dissolved solids (D)  Fluoride (D)	Pd0400         X, 2 units           P01000         -// ug/l           P00405         mg/l           P00940         7 mg/l           P00080         24 units           P00720         mg/l           P70301         230 mg/l           P00951         1 2 mg/l	Cd-Cadmium (D) Cr-Chromium (D) Cu-Copper (D) Fe-Iron (D) Hg-Mercury Li-Lithium (D) Mg-Magnesium (I	P01025 < 2() ug/1 P01030 < 5() ug/1 P01040 < 2() ug/1 P01046 / 2() ug/1 P71900 < [] 2 0() ug/1 P01130 < 5() ug/1 P01925	V TOC Turbidity  V Ammonia (as Nitorgen) (D)  V Kjeldahl (as Nitrogen) (D)  V Nitrate + Nitrite (as Nitrogen)  V Phosphorus, total as P (D)  Dissolved Solids - tond. meter  Other Analyses:	P00680 mg/ P82079 NTU P00612 () mg/ P00623 C () mg/ (D) P00631 () mg/ P00666 mg/
pH value (when analyzed)  Arsenic (D)  Carbon dioxide  Chloride (D)  Color (True)  Cyanide  Dissolved solids (D)  Fluoride (D)  Wardness (as CaCO <sub>3</sub> ) (D)	Pd0400         %, 2 units           P01000         - / () ug/1           P00405         mg/1           P00940         7 mg/1           P00080         2 4 units           P00720         mg/1           P70301         2 3 mg/1           P00951         / 2 mg/1           P00900         / - / () mg/1	Cd-Cadmium (D) Cr-Chromium (D) Cu-Copper (D) Fe-Iron (D) Hg-Mercury Li-Lithium (D) Mg-Magnesium (I) Mn-Manganese (I)	P01025 < 2() ug/1 P01030 < 5() ug/1 P01040 < 2() ug/1 P01046   2() ug/1 P71900 < () 2 ug/1 P71900 < () 2 ug/1 P01130 < 5() ug/1 P0 P00925	V TOC Turbidity  V Ammonia (as Nitorgen) (D)  V Kjeldahl (as Nitrogen) (D)  V Nitrate + Nitrite (as Nitrogen)  V Phosphorus, total as P (D)  Dissolved Solids - tond. meter	P00680 mg/1 P82079 NTU P00612 () mg/1 P00623 C () mg/1 (D) P00631 () mg/1 P00666 mg/1
pH value (when analyzed)  Arsenic (D)  Carbon dioxide  Chloride (D)  Color (True)  Cyanide  Dissolved solids (D)  Fluoride (D)	Pd0400         & Junita           P01000         - / () ug/l           P00405         mg/l           P00940         7 mg/l           P00720         mg/l           P70301         2 3 / mg/l           P00951         / 2 mg/l           P00900         / 3 () mg/l           D) P00902         / () mg/l	Cd-Cadmium (D) Cr-Chromium (D) Cu-Copper (D) Fe-Iron (D) Hg-Mercury Li-Lithium (D) Mg-Magnesium (I) Mn-Nanganese (I) Na-Sodium (D) V Pb-Lead (D)	P01025 < 2() ug/1 P01030 < 5() ug/1 P01040 < 2() ug/1 P01046   2() ug/1 P71900 < () 2 ug/1 P01130 < 5() ug/1 P01130 < 5() ug/1 P0 P00925	V TOC Turbidity  V Ammonia (as Nitorgen) (D)  V Kjeldahl (as Nitrogen) (D)  Nitrate + Nitrite (as Nitrogen)  V Phosphorus, total as P (D)  Dissolved Solids - tond. meter  Other Analyses:	P00680 mg/1 P82079 NTU P00612 .() mg/1 P00623 C () mg/1 P00631 () mg/1 P00666 mg/1 P70304 mg/1
pH value (when analyzed)  Arsenic (D)  Carbon dioxide  Chloride (D)  Color (True)  Cyanide  Dissolved solids (D)  Fluoride (D)  Wardness (as CaCO <sub>3</sub> ) (D)  Hardness (non-carbonate) (D)	P60400       X, 2 units         P61000       -// ug/l         P00405       mg/l         P00940       7 mg/l         P00980       24 units         P00720       mg/l         P70301       23/ mg/l         P00951       2 mg/l         P00900       -// mg/l         P09902       // mg/l         P38260       mg/l	Cd-Cadmium (D)  Cr-Chromium (D)  Cu-Copper (D)  Fe-Iron (D)  Hg-Mercury  Li-Lithium (D)  Mg-Magnesium (I)  Mn-Manganese (I)  Na-Sodium (D)  Pb-Lead (D)  Zn-Zinc (D)	P01025 < 2() ug/1 P01030 < 5() ug/1 P01040 < 2() ug/1 P01046   2() ug/1 P71900 < [] 2 0[] ug/1 P01130 < 5() ug/1 P01130 < 5() ug/1 P01925	V TOC Turbidity  V Ammonia (as Nitorgen) (D)  V Kjeldahl (as Nitrogen) (D)  V Nitrate + Nitrite (as Nitrogen)  V Phosphorus, total as P (D)  Dissolved Solids - tond. meter  Other Analyses:	P00680 mg/1 P82079 NTU P00612 .() mg/1 P00623 C () mg/1 P00631 () mg/1 P00666 mg/1 P70304 mg/1
pH value (when analyzed)  Arsenic (D)  Carbon dioxide  Chloride (D)  Color (True)  Cyanide  Dissolved solids (D)  Fluoride (D)  Hardness (as CaCO <sub>3</sub> ) (D)  Hardness (non-carbonate) (D  MBAS (D)  Phenol (D)	Pd0400         X, J units           P01000         - / / / ug/1           P00405         mg/1           P00940         7 mg/1           P00980         24 units           P00720         mg/1           P70301         23/2 mg/1           P00951         2 mg/1           P00900         / / / / mg/1           D) P00902         / / / mg/1           P38260         mg/1           P34466         / ug/1	Cd-Cadmium (D) Cr-Chromium (D) Cu-Copper (D) Fe-Iron (D) Hg-Mercury Li-Lithium (D) Mg-Magnesium (D) Mn-Hanganese (D) Ma-Sodium (D) Pb-Lead (D) Cn-Zinc (D) K-Potassium (D)	P01025 < 2() ug/1 P01030 < 5() ug/1 P01040 < 2() ug/1 P01046   2() ug/1 P71900 < [] 2 0[] 2 0[] P01130 < 5() ug/1 P01130 < 5() ug/1 P01925	V TOC Turbidity  V Ammonia (as Nitorgen) (D)  V Kjeldahl (as Nitrogen) (D)  V Nitrate + Nitrite (as Nitrogen)  V Phosphorus, total as P (D)  Dissolved Solids - tond. meter  Other Analyses:	P00680 mg/1 P82079 NTU P00612 .() mg/1 P00623 C () mg/1 P00631 () mg/1 P00666 mg/1 P70304 mg/1
pH value (when analyzed)  Arsenic (D)  Carbon dioxide  Chloride (D)  Color (True)  Cyanide  Dissolved solids (D)  Fluoride (D)  Wardness (as CaCO <sub>3</sub> ) (D)  Hardness (non-carbonate) (D)	Pd0400         X, J units           P01000         - / / / ug/1           P00405         mg/1           P00940         7 mg/1           P00980         24 units           P00720         mg/1           P70301         23/2 mg/1           P00951         2 mg/1           P00900         / / / / mg/1           D) P00902         / / / mg/1           P38260         mg/1           P34466         / ug/1	Cd-Cadmium (D)  Cr-Chromium (D)  Cu-Copper (D)  Fe-Iron (D)  Hg-Mercury  Li-Lithium (D)  Mg-Magnesium (I)  Mn-Manganese (I)  Na-Sodium (D)  Pb-Lead (D)  Zn-Zinc (D)	P01025 < 2() ug/1 P01030 < 5() ug/1 P01040 < 2() ug/1 P01046   2() ug/1 P71900 < (), 2 ug/1 P71900 < (), 2 ug/1 P01130 < 5() ug/1 P01925 2, 0 mg/1 P00929 5, 4 mg/1 P01049 < (()) ug/1 P01090 < 2() ug/1 P01090 < 2() ug/1 P01090 < 2() ug/1	V TOC Turbidity  V Ammonia (as Nitorgen) (D)  V Kjeldahl (as Nitrogen) (D)  V Nitrate + Nitrite (as Nitrogen)  V Phosphorus, total as P (D)  Dissolved Solids - tond. meter  Other Analyses:	P00680 mg/1 P82079 NTU P00612 .() mg/1 P00623 < O . / mg/1 P00631 () lmg/1 P00666 mg/1 P70304 mg/1

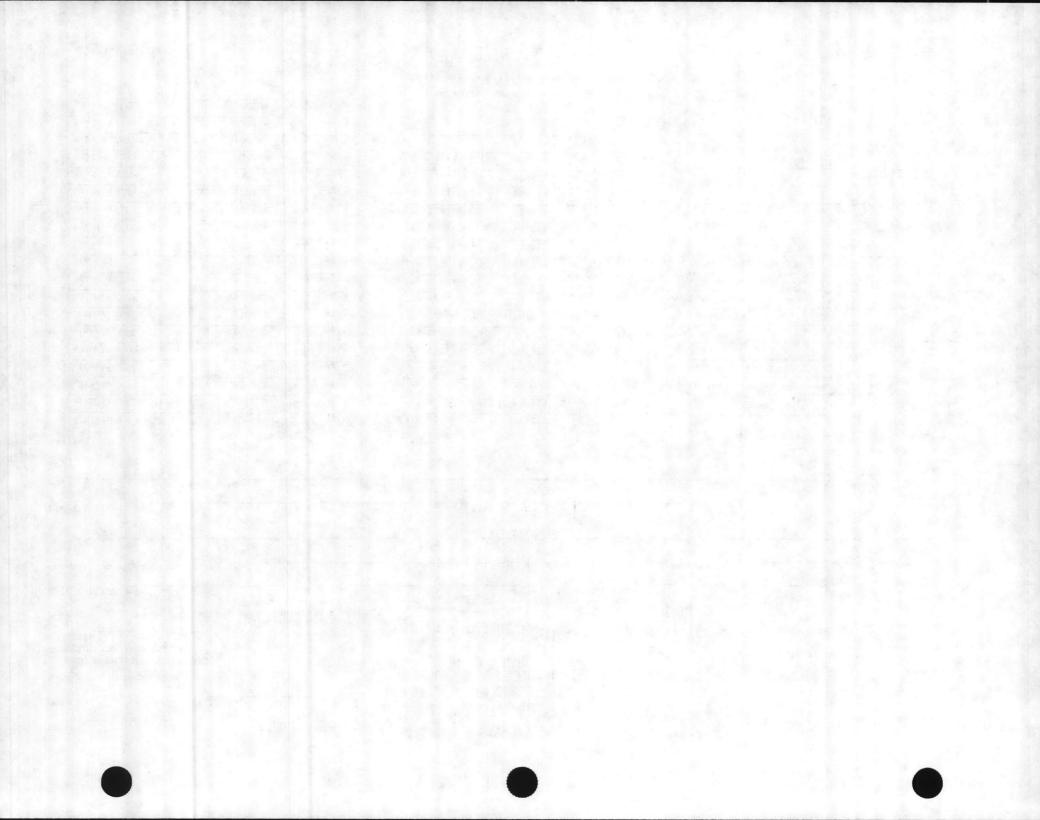


Reported by	19. [4] [4] [4] [4] [4] [4] [4] [4] [4] [4]
Checked by A	
	Checked by
Lab No.	/ WATER Analytical Results
G-182	THE FOLICIONS WERE IDENTIFIED
	BY MATCHING TO MBRARY MASS SPECTER.
	THEY WERE NOT MATCHED TO STANDARDS.
	CONCENTRATIONS () WERE ESTIMATED AS A
	RATIO TO A KNOWN INTERNAL STANDARD.
	BY GC/HS/PT:
	DICHLORO FTHENE (1.4 40 /1)
	TRICHLORO ETHENE (636/4/1)
	ONE UNIDENTIFIED PEAK DETECTED BY GC/45/P



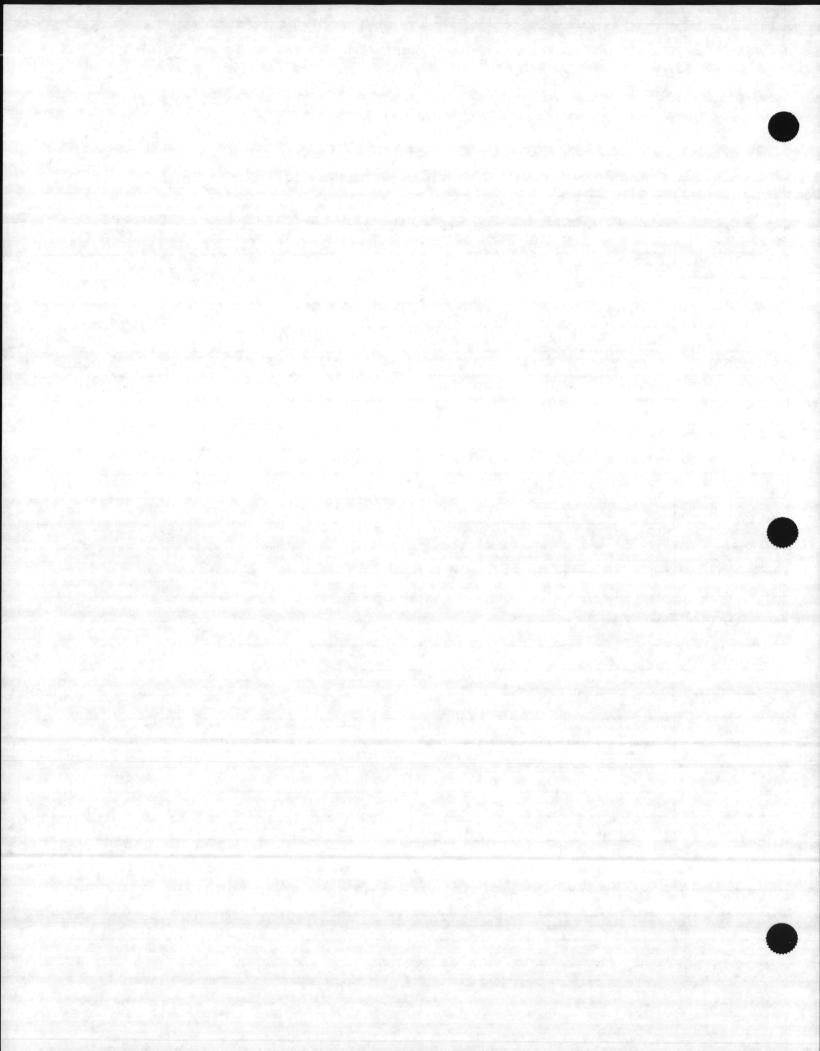
D NO SERIAL NO			EM W		DATE REC'D 4	-10 15
ARO, WSRO, MRO, FRO, WARO,		GROUNDWATER F	1985 LAB FO	)RM MV	AY 31 1985 REC'D BY DATA ENTRY BY	3000
WIRO, RRO, Ahoskie PO,			OFFICE	CDOWNS		= 200 6
POSE: (circle one) baseline, poliuti	on monitor other	MILMINGTON REGION	(AL UTTO		NYATER SECTICII DATA REPORTED	6-24-3-
E COLLECTED	Time (1)	DEM.	Local Local	ation or site_	DILLIT	
cription of sampling point		L :AID.	111CM	BUMB	Sampled interval YORKIO	In Account
arks 1		11	1		1 ·	
		(pumping time, air	temp, etc.)			
Id Analysis By:	Lat. : 4.4	ALD Long.	בורר	or w		
Spec. Cond.	Temp	. ,	°c	Olor 3	Appearance Tas	ite .
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					所以在18世界的原则,1992年中的1992年的1992年	
Analysis			<b>ル</b>			
Alkalinity to pH 4.5 P00410	180 mg/1	VAg-Silver (D)	P01075	< 5 Cas/1	BOD	P00310
Alkalinity, Hydroxide P71830	/ mg/1	A1-Aluminum (D)	P01106	1.00 Dug/1	COD s	P00341
Carbonate P00445	< / mg/1	Ma-Barium (D)	P01005 </td <td>10001</td> <td>Coliform (Fecal MF)</td> <td>P31616 /10</td>	10001	Coliform (Fecal MF)	P31616 /10
Bicarbonate P00440	22 (MB/1	Ca-Calcium (D)	P00915	77 mg/1	Coliforn (total MF)	P31505 /10
all water and bear and and an and	7. Hunite	VCd-Cadmium (D)	P01025	< 2 Oug/1	√ TOC	P00680 -5
pH value (when analyzed) P00400		\/C=-Chromium (D)	P01030 <	(50 ug/1	Turbidity	P82079
	< 1/)ug/1	. VCr-Chromium (D)				
	//)ug/1 mg/1	/Cu-Copper (D)		= 2 Cus/1	V Ammonia (as Nitorgen) (D)	10.1
Arsenic (D) P01000 Carbon dioxide P00405	mg/1		P01040 <	00 Que/1	Ammonia (as Nitorgen) (D)  Kjeldahl (as Nitrogen) (D)	P00612, 04
Arsenic (D) P01000  Carbon dioxide P00405  Chloride (D) P00940		√Cu-Copper (D) √Fe-Iron (D)	P01040 <			P00612 , 04 P00623 (7. /
Arsenic (D)         P01000           Carbon dioxide         P00405           (Chloride (D)         P00940           (Color (True)         P00080	mg/1 /5 mg/1	√Cu-Copper (D)	P01040 < P01046 / P71900 <	00 Qua/1	Kjeldahl (as Nitrogen) (D)	P00612 , 04 P00623 (2) / P00631 (3) P00631
Arsenic (D) P01000 Carbon dioxide P00405 (Chloride (D) P00940 (Color (True) P00080	mg/1 / 5 mg/1 / units mg/1	VCu-Copper (D) VFe-Iron (D) VHg-Mercury VLi-Lithium (D)	P01040 < P01046 / P71900 <	000 us/1	Kjeldahl (as Nitrogen) (D)	P00612 , 04   P00623 (7) / P00666   O   P00666
Arsenic (D) P01000  Carbon dioxide P00405  (Chloride (D) P00940  (Color (True) P00080  Cyanide P00720  Dissolved solids (D) P70301	mg/1 /5 mg/1 /5 mg/1 /5 mg/1	VCu-Copper (D) VFe-Iron (D) VHg-Mercury VLi-Lithium (D) VHg-Magnesium (D)	P01040  P01046 // P71900  P01130  P00925	000 us/1 -0.2 us/1 <50 us/1	Kjeldahl (as Nitrogen) (D)  Nitrate +-Nitrite (as Nitrogen)  Phosphorus, total as P (D)  Dissolved Solids - cond. meter	P00612 , 04 P00623 (2) / P00631 (3) P00631
Arsenic (D) P01000  Carbon dioxide P00405  Chloride (D) P00940  Color (True) P00080  Cyanide P00720  Dissolved solids (D) P70301  Fluoride (D) P00951	mg/1 /5 mg/1 2 / units mg/1 /5 / mg/1 / 3 mg/1	VCu-Copper (D) VFe-Iron (D) VHg-Mercury VLi-Lithium (D) VHg-Magnesium (D) VHn-Manganese (D)	P01040  P01046 // P71900  P01130  P00925	00 Qug/1 00 Qug/1 05 Qug/1 05 Qug/1 05 Qug/1	Kjeldahl (as Nitrogen) (D)  Nitrate +-Nitrite (as Nitrogen)  Phosphorus, total as P (D)  Dissolved Solids - cond. meter  Other Analyses:	P00612 , Ú4   P00623 () . / P00631   O / P00666   P70304   P70304
Arsenic (D) P01000  Carbon dioxide P00405  Chloride (D) P00940  Color (True) P00080  Cyanide P00720  Dissolved solids (D) P70301  Fluoride (D) P00951  Alardness (as CaCO <sub>3</sub> ) (D) P00900	mg/1 /5 mg/1 3 / units mg/1 /5 / mg/1 /5 / mg/1 /5 / mg/1	VCu-Copper (D) VFe-Iron (D) VHg-Mercury VLi-Lithium (D) VHg-Magnesium (D) VMn-Manganese (D) Nar-Sodium (D)	P01040  P01046 // P01046 // P01130  P01130  P00925 // P01056  P00929	00 Qug/1	Kjeldahl (as Nitrogen) (D)  Nitrate +-Nitrite (as Nitrogen)  Phosphorus, total as P (D)  Dissolved Solids - cond. meter	P00612 , 04   P00623 (7) / P00666   O   P00666
Arsenic (D) P01000  Carbon dioxide P00405  Chloride (D) P00940  Color (True) P00080  Cyanide P00720  Dissolved solids (D) P70301  Fluoride (D) P00951  Hardness (as CaCO <sub>3</sub> ) (D) P00900  Hardness (pon-carbonate) (D) P00902	mg/1 / 5 mg/1 / 1 units mg/1 / 3 mg/1 / 3 mg/1 / 4 mg/1 / 5 mg/1	VCu-Copper (D) VFe-Iron (D) VHg-Mercury VLi-Lithium (D) VHg-Magnesium (D) VMn-Manganese (D) VMa-Sodium (D) VPb-Lead (D)	P01040  P01046 // P01046 // P01040    P01130  P00925 // P01056 // P00929    P01049	00 Qug/1  00 Qug/1  00 Qug/1  00 Qug/1  00 Qug/1  00 Qug/1	Kjeldahl (as Nitrogen) (D)  V Nitrate +-Nitrite (as Nitrogen)  Phosphorus, total as P (D)  Dissolved Solids - cond. meter  Other Analyses:	P00612 , U4   P00623 (7) / P00623 (7) / P00666   P00666   P70304
Arsenic (D) P01000 Carbon dioxide P00405 Chloride (D) P00940 Color (True) P00080 Cyanide P00720 Dissolved solids (D) P70301 Fluoride (D) P00951 Hardness (as CaCO <sub>3</sub> ) (D) P00900 Hardness (non-carbonate) (D) P00902 MBAS (D) P38260	mg/1 / mg/1 / units mg/1 / 3 mg/1 / 3 mg/1 / 3 mg/1 / mg/1 / mg/1	VCu-Copper (D) VFe-Iron (D) VHg-Mercury VLi-Lithium (D) VMg-Magnesium (D) VMn-Manganese (D) VAn-Sodium (D) VPb-Lead (D) V2n-Zinc (D)	P01040  P01046 // P71900  P01130  P01130  P01056  P00925  P01056  P00929  P01049  P01090	00 Qug/1  00 Qug/1  00 Qug/1  00 ug/1  00 ug/1  10 ug/1  35()ug/1	Kjeldahl (as Nitrogen) (D)  V Nitrate +-Nitrite (as Nitrogen)  Phosphorus, total as P (D)  Dissolved Solids - cond. meter  Other Analyses:  V 1 1 1 1 1 5 < 01	P00612 , U4   P00623 (7) / P00623 (7) / P00666   P00666   P70304
Arsenic (D) P01000  Carbon dioxide P00405  Chloride (D) P00940  Color (True) P00080  Cyanide P00720  Dissolved golids (D) P70301  Fluoride (D) P00951  Hardness (as CaCO <sub>3</sub> ) (D) P00900  Hardness (non-carbonate) (D) P00902  MBAS (D) P38260  Phenol (D) P34466	mg/1 /5 mg/1 2 / units mg/1 /5 / ug/1	VCu-Copper (D) VFe-Iron (D) VHg-Mercury VLi-Lithium (D) VHg-Magnesium (D) VMn-Manganese (D) VMa-Sodium (D) VPb-Lead (D)	P01040  P01046 // P71900  P01130  P01130  P01035 // P01056  P00929  P01049  P01090  P00935  P00	00 Qug/1  00 Qug/1  00 Qug/1  00 ug/1  00 ug/1  10 ug/1  10 ug/1  4,3 mg/1	Kjeldahl (as Nitrogen) (D)  V Nitrate +-Nitrite (as Nitrogen)  Phosphorus, total as P (D)  Dissolved Solids - cond. meter  Other Analyses:	P00612 , U4   P00623 (7) / P00623 (7) / P00666   P00666   P70304
Arsenic (D) P01000  Carbon dioxide P00405  Chloride (D) P00940  Color (True) P00080  Cyanide P00720  Dissolved solids (D) P70301  Fluoride (D) P00951  Hardness (as CaCO <sub>3</sub> ) (D) P00900  Hardness (non-carbonate) (D) P00902  MBAS (D) P38260	mg/1 / mg/1 / units mg/1 / 3 mg/1 / 3 mg/1 / 3 mg/1 / mg/1 / mg/1	VCu-Copper (D) VFe-Iron (D) VHg-Mercury VLi-Lithium (D) VMg-Magnesium (D) VMn-Manganese (D) VAn-Sodium (D) VPb-Lead (D) V2n-Zinc (D)	P01040  P01046 // P71900  P01130  P01130  P01035 // P01056  P00929  P01049  P01090  P00935  P00	00 Qug/1  00 Qug/1  00 Qug/1  00 ug/1  00 ug/1  10 ug/1  35()ug/1	Kjeldahl (as Nitrogen) (D)  Nitrate +-Nitrite (as Nitrogen)  Phosphorus, total as P (D)  Dissolved Solids - cond. meter  Other Analyses:	P00612 , 04   P00623 () / P00623 () / P00631   0 / P00666   22   P70304   P

CW-54 Revised 1/12/82



Reported by	m's	TT New	Date 1-1-23 15
hecked by	ns.	ORGANIC ANALYSIS	Dec. No.: CLEJ -
upervisor _	PSK	Entered by	00 297 - 2.04-
dheraraor 7	101		03/11/86
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Lab No.	LOCOL		
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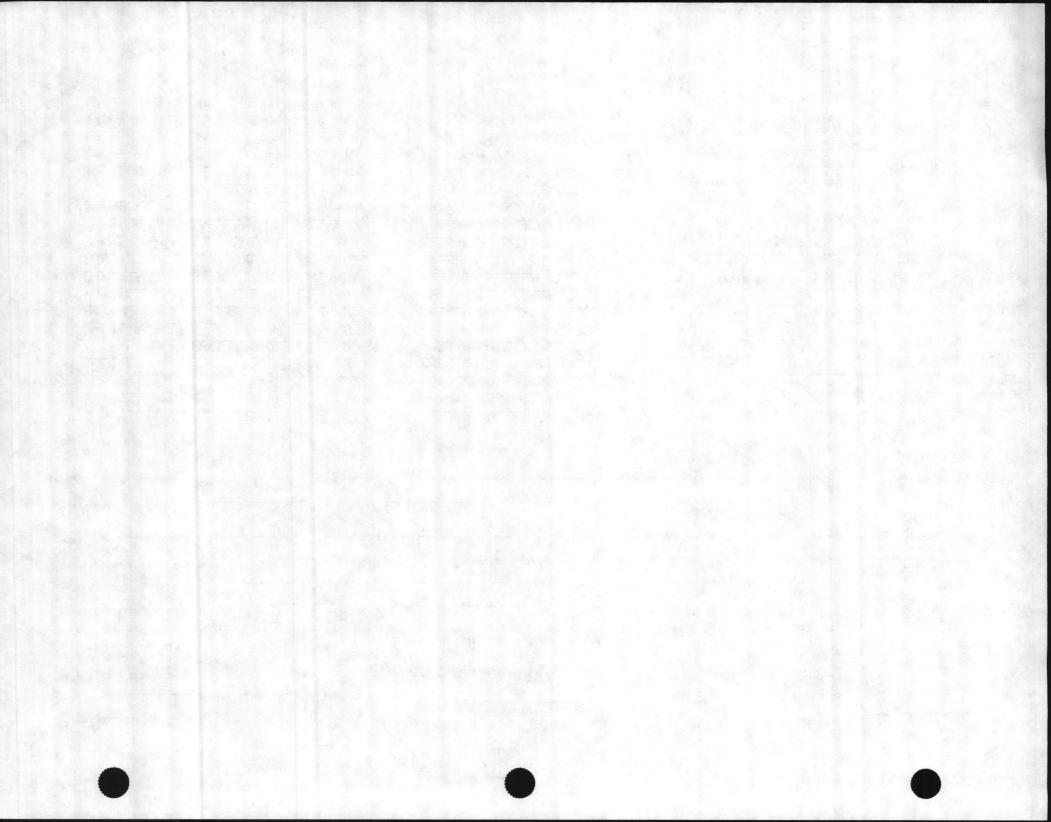
GC/MS/DS used



DEPARTMENT OF NATURAL RESULTING COUNTY OF SLOW JUNG COMMUNICATION DEVELOPMENT 71 | SERIAL NO. ()47 11 () DATE REC'D DEM MAY 31 1985 WILMINGTOROUREMAINENLFOELS LAB FORM REPORT TO: (circle one) ARQ, WSRO, MRO, FRO, WARO, DEM DATA ENTRY BY (WiRO,) RRO, Ahoskie PO, GROUND WATER SECTICI! DATA REPORTED RALEIGH. II. C. PURPOSE: (circle one) baseline, pollution monitor) other DATE COLLECTED () \ ( ) ( ) ( ) Time 1 / ( ) ( ) By .... Location or site ! ] TODETCICIE A WOULD Sampled interval 70-71, 95 75 114 MIN I HOAT DUAP Description of sampling point 11015 (pumping time, air temp, etc.) SIDE O 08-85 Q 1 COLO Field Analysis By: " 11 V/ 19 Lat. 31141917 Long. 772143 W Spec. Cond. Appearance Ct Taste Lab Analysis 250 ug/1 P01075 V Alkalinity to pH 4.5 P00410 Ag-Silver (D) BOD P00310 mg/1 P71850 PO1106 Alkalinity, Hydroxide Al-Aluminum (D) P00341 mg/1 <1000 ug/1 Carbonate P00445 mg/1 Ba-Barium (D) P01005 Coliforn (Fecal MF) P31616 /100ml 73 Bicarbonate Ca-Calcium (D) P00440 P00915 mg/1 Coliform (total MF) P31505 /100ml pH value (when analyzed) P00400 5 unite Cd-Cadmium (D) PQ1025 ug/1 ✓ TOC P00680 mg/1 150 ug/1 P01030 Arsenic (D) P01000 ug/1 Cr-Chromium (D) Turbidity P82079 NTU Ammonia (as Nitorgen) (D) Carbon dioxide P00405 Cu-Copper (D) P01040 P00612 . 0/ mg/1 mg/1 Chloride (D) P00940 Fe-Iron (D) P01046 ug/1 Kieldahl (as Nitrogen) (D) mg/1 P00623 < 0, mg/1 <0, dug/1 Color (True) P00080 units Hg-Mercury P71900 Nitrate + Nitrite (as Nitrogen) (D) P00631 mg/ <50 ug/1 Li-Lithium (D) P01130 Phosphorus, total as P (D) P00720 Cyanide mg/1 P00666 220 mg/1 Dissolved solids (D) P70301 Mg-Magnesium (D) P00925 mg/1 Dissolved Solids - cond. meter P70304 mg/1 0, 2 mg/1 Fluoride (D) P00951 Mn-Manganese (D) P01056 Other Analyses: P00929 7.01 Hardness (as CaCO2) (D) P00900 mg/1 Na-Sodium (D) mg/1 17:11:17:11:2 116/1. </00 ug/1 P01049 Hardness (non-carbonate) (D) P00902 Pb-Lead (D) mg/1 MBAS (D) P38260 mg/1 Zn-Zinc (D) P01090 ug/1 V CHIVINGOOD CO P00935 Phenol (D) P34466 ug/1 K-Potassium (D) VIIA n1Un =5,0 nc/L Silica (D) P00955 mg/1 D = Dissolved Analysis - submit filtered sample (C/C/Mis/PT Sulfate (D) P00946 mg/1 P00094390 UMHOS/cm / Specific Cond. White copy - Headquarters Pink copy - Region Yellow copy - Lab The lase ment at a read GW-54 Revised 1/12/82 \

WILC 12110

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# NORTH CAROLINA DEPARTMENT OF HUMAN RESOURCES DIVISION OF HEALTH SERVICES OCCUPATIONAL HEALTH LABORATORY

COMPANY: Camp Lejeune Water System ADDRESS: Camp Lejeune, Onslow County

SAMPLE TAKEN ON: 02/07/85 SAMPE TAKEN BY: J. Fred Hill SUBMITTED TO LABORATORY: 02/08/85 SUBMITTED BY: J. Fred Hill, E. Betz

DATE OF ANALYSIS: 02/08/85

ANALYSED BY: John L. Neal, Vicki Painter

DATE REPORTED: 02/08/85

## RESULTS IN PPB (ug/L)

LOCATION	trans 1,2-DCE	CHC13	DCBM	TCE	DBCM
Bldg. 20 Res. Fin. Water	5.3	10.3	6.3	16.8	3.4
Bldg. 20 Filter Eff.#1	<2.0	6.8	4.3	<2.0	2.0
Bldg. 20 Filter Eff.#2	<2.0	9.1	5.7	3.4	3.4
Bldg. 20 Influent	<2.0	5.0	4.0	<2.0	1.5
Bldg. 670 Res. Fin. Wate	r <2.0	14.84	8.3	<2.0	3.6
Bldg. 670 Filter Eff.#1	<2.0	11.45	6.1	<2.0	1.2
Bldg. 670 Filter Eff.#2	<2.0	10.03	5.8	<2.0	1.2
Bldg. 670 Influent	<2.0	8.1	4.9	<2.0	1.7
MOQ 2204 Hydr. Dis. Sys.		23.92	10.74	32.4	4.5
Bldg. 5400 Ber. Man. Sch	. 44.8	24.49	10.83	135.1	5.0

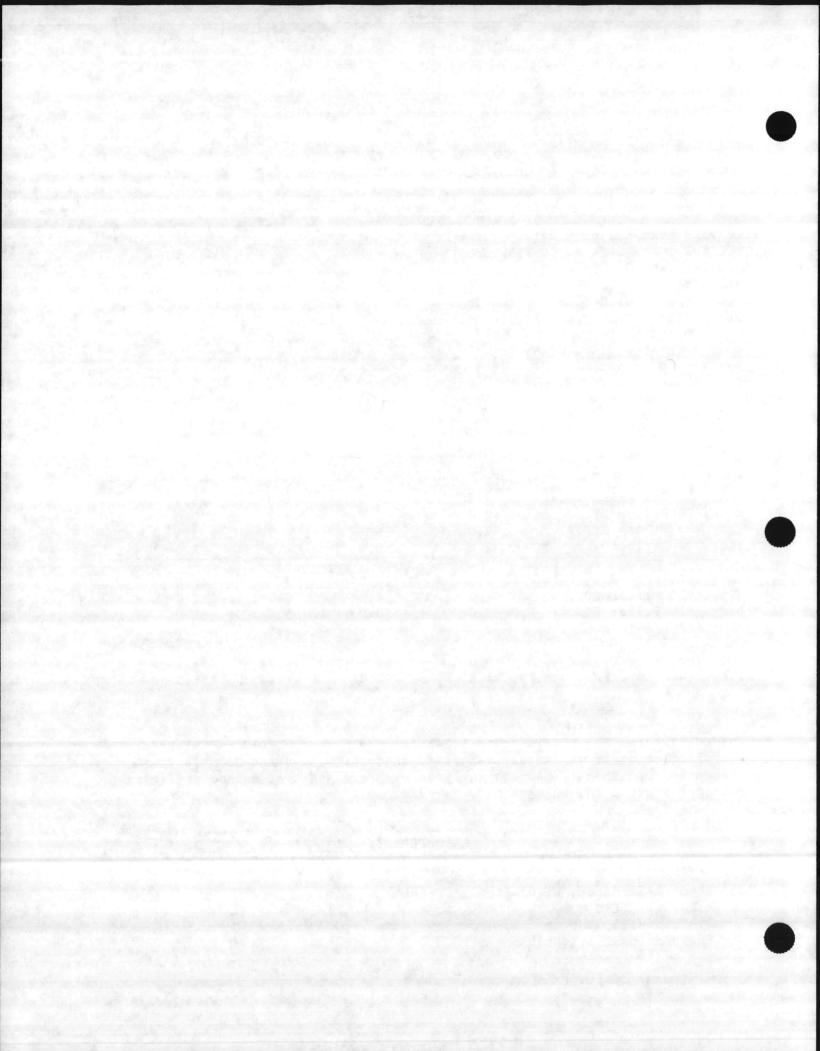
COMMENTS: trans 1,2-DCE is trans 1,2-dichloroethylene, CHCl3 is Chloroform, DCBM is dichlorobromomethane, TCE is trichloroethylene, and DBCM is dibromochloromethane. Samples analysed by purge and trap method utilizing Hall detector in the halogen mode.

REPORTED BY: John R. Neal

cc. Charles Rundgren, Water Supply Branch
Mike Bell, ERO

J. Fred Hill, ERO
Environmental Epidemiology

\* Holcomb Blvd. plant



#### DEPARTMENT OF HUMAN RESOURCE DIVISION OF HEALTH SERVICES LABORAT SECTION OCCUPATIONAL HEALTH

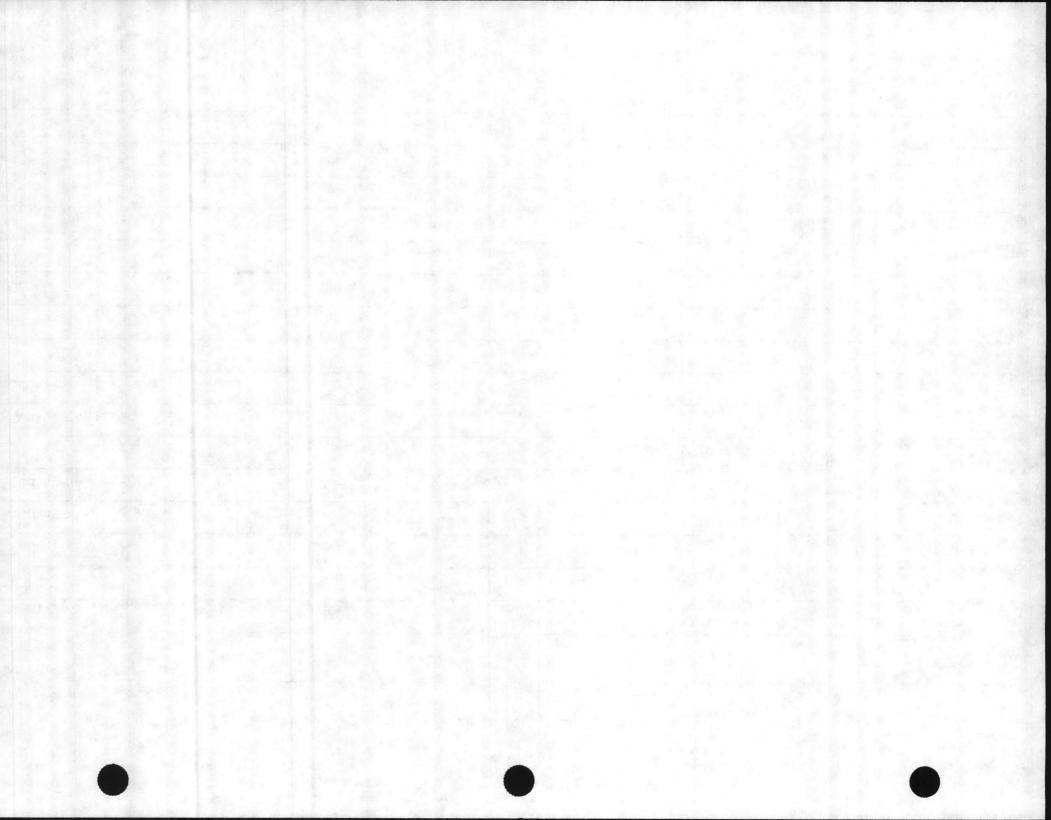
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USMC CAMP LEJEUNE COMPANY:

DATE OF ANALYSIS: Feb. 7, 1985

			I/gu xanandrakanakanak		
SAMPLE #	trans, 1,2- dichloroethylene	CHC1	Dichlorobromo methane	Trichloro- ethylene	Dibromochloro- methane
500446	5.3	10.3	6.3	16.8	3.4
500447	₹2.0	6.8	4.3	<2.0	2.0
500448	< 2.0	9.1	5.7	3.4	3,4
500449	<2.0	5.0	4.0	< 2.0	1.5
500450	< 2.0	14.84	8.3	<2.0	3.6
500451	<2.0	11.45	6.1	<2.0	1.2
500452	₹2.0	10.03	5.8	<2.0	1.2
500453	<b>&lt;</b> 2.0	8.1	4.9	<2.0	1.7
500454	9.0	23.92	10.74	32.4	4.5
500455	44.8	24.49	10.83	135.1	5.0

N.C. Division of Health Services DHS 3068 (6/83 Laboratory)



DOC. NO.: CLEJ-00297-2.04-03/11/86

North Carolina Department of Human Resources Division of Health Services Occupational Health Laboratory

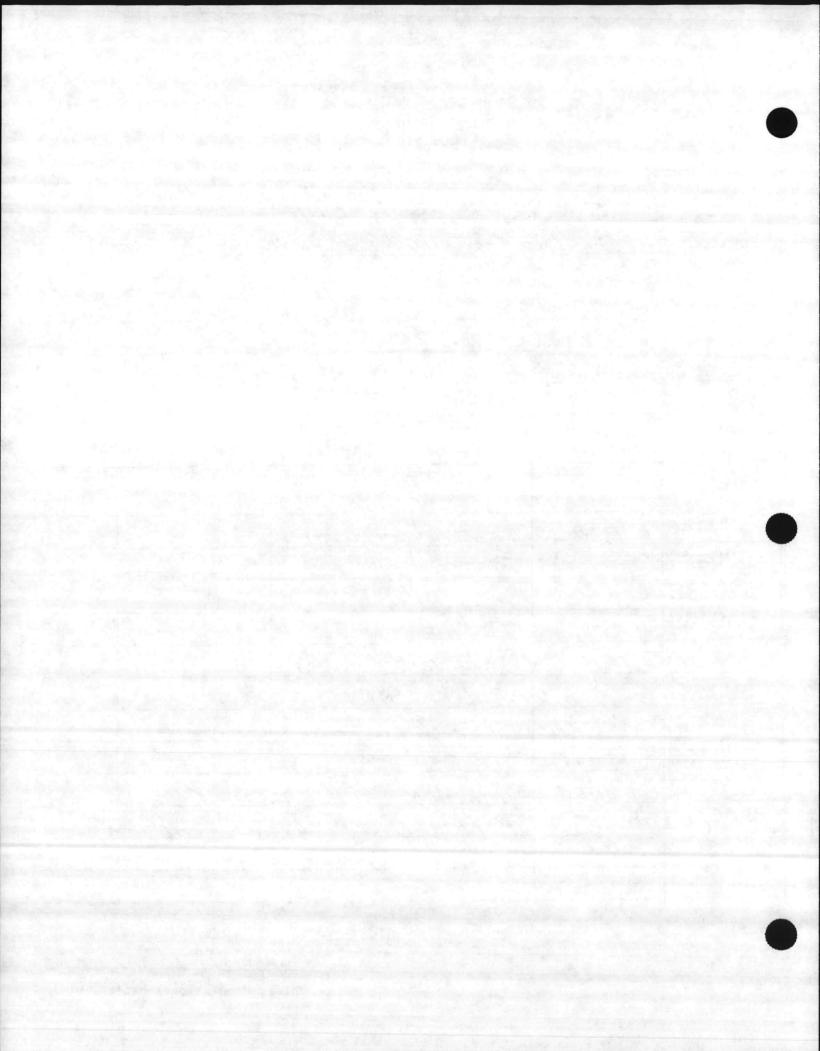
### ANALYSIS REPORT

		* DCE		× / /
	en On: 7 FE6		By: J. FREd	WILL
		7 FEB 85	Ву:	
Date of Ana			Date Reported:	
Analyzed By				
E SEALS II	NEACT RECD. Y	1. P.		
ABORATORY NUMBER	SAMPLE NUMBER	DESCRIPTION	REMARKS	RESULTS IN
500446	#1 Blds.20	RESERVOIR-FINISHE	0710	
DU447	72	FILTER Eff. #1	<b>†</b>	
500448		FirtER EAT, #2		
500449		INflueNt		
5)0450	#5 BHS. 676	RESERVOIR		
500451	111	FILTER Eff. #1		
510452	#7 " 670	FILTER EAT. #2		
	#8 4 670			
500454	#9 M022	204 hy NEANT-dist.	System	/
SMARE	DI 11 5112	BERKley MANDE L	- CIICK	7

Chief, Occupational Health Lab

DHS Form 1440 (Rev. 2-75) Occupational Health

MENTS:



# NORTH CAROLINA DEPARTMENT OF HUMAN RESOURCES DIVISION OF HEALTH SERVICES OCCUPATIONAL HEALTH LABORATORY

COMPANY: Camp Lejeune Water System

ADDRESS: Camp Lejeune, Jacksonville, N.C. SERVICE REQUESTED: VOLATILE ORGANIC ANALYSIS

SAMPLE TAKEN ON:1/31/85
SAMPLE TAKEN BY:Betsy Betz
SUBMITTED TO LABORATORY:2/1/85
SUBMITTED BY:Betsy Betz

DATE OF ANALYSIS:2/1-4/85 ANALYSED BY:John L. NeaL

DATE REPORTED: 2/4/85

#### RESULTS IN PPB (ug/liter)

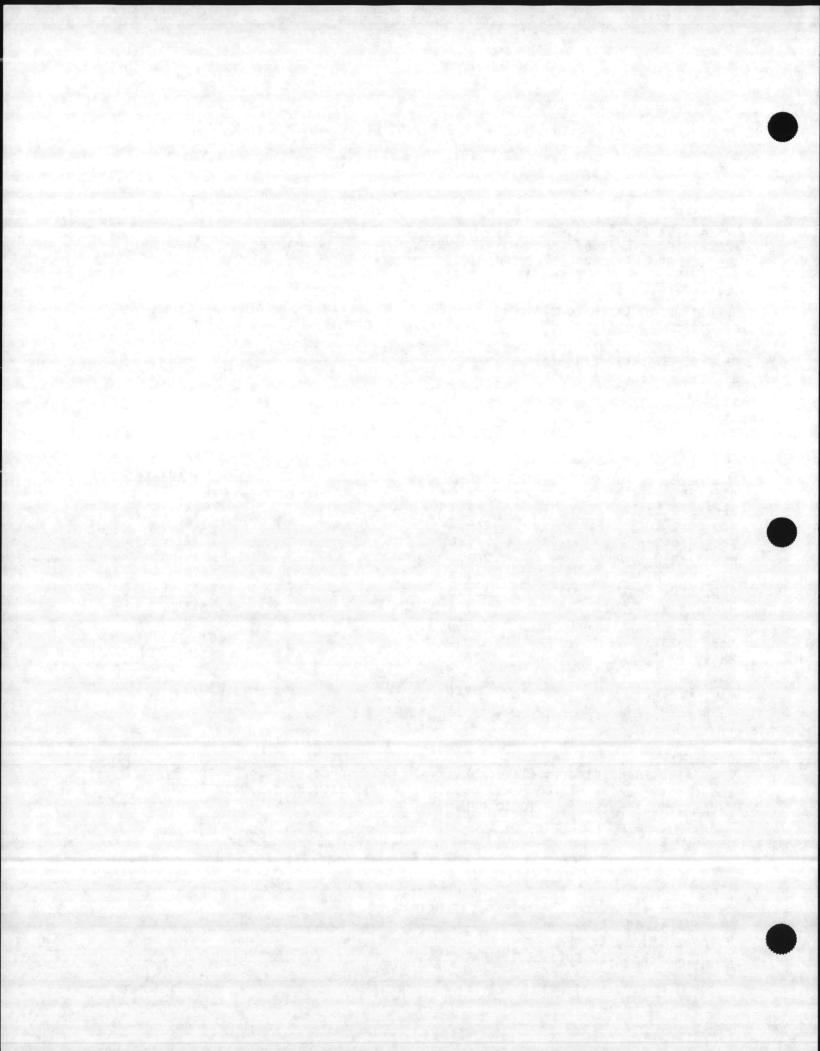
LOCATION	DICHLOROETHYLENE	TRICHLOROETHYLENE
Bldg 20	321.3	900.0
Bldg 670 Bottom	7.4	24.1
MOQ 2212 Cold Water	249.4	724.6
Bldg 670 Top	7.6	26.8
MOQ 2212 Hot Water	201.2	612.9
Bldg 670 Middle	7.8	25.8
Tank SLCH 4004	.107.5	318.3
Hydrant MOQ 2204	307.6	839.7
Hydrant Elev. Tank S-83	0 340.0	849.0
Tank S-2323	159.0	407.1
BM 5677	368.7	981.3
BM 5531	335.0	905.5
Bldg PP 2600	332.4	890.9
Bldg 5400	406.6	1,148.4

#### COMMENTS:

Also identified in all samples were chloroform, dichloromethane, and two (2) unidentified peaks possibly dibromomethane and bromoform. Total Trihalomethanes <<100.0 PPB.

REPORTED BY: John L. Meal

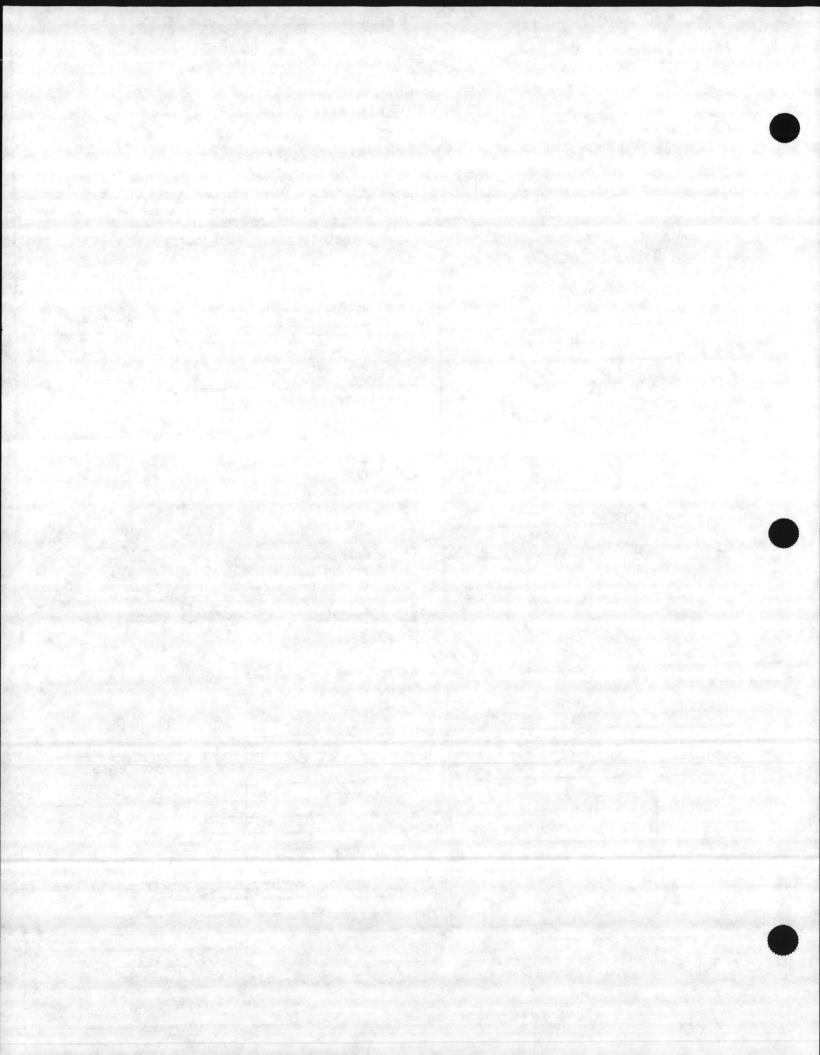
cc. Charles Rundgren, Water Supply Branch
Mike Bell, ERO
Fred Hill, ERO
Environmental Epidemiology



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STATE LABORATORY OF PUBLIC HEALTH
DIVISION OF HEALTH SERVICES
N. C. DEPARTMENT OF HUMAN RESOURCES
P.O. BOX 28047 - 306 N. WILMINGTON ST., RALEIGH 27611

		ALYSES-PRIVATE WATER SYSTE		101
	Complete All Ite (See Instruction	ons on Reverse Side)	1/8	50/
e of 1/5/77C-CA	emp Lejeune	× 3° 3101	W\	
ress <u>Blog. 670</u>	-WTP	Source of Water:  ( Ground ( ) Surface	( )	Both Purchased
ort To: 1.470	4./	Source of Sample:  ( House Tap  ( ) Well Tap		
ess: 404-57 p	Jasseus St	Type of Sample: ( ) Raw	12	Treated
cited By: Manadel	ZIP		(X)	Lime Soda Ash Polyphosphate Water Softener Other
185	Time: 1420 PM	Type of Analysis Desired:	The Park of the Late	
	BUX 670 TREATED	( ) Regular Parameters ( ) Optional Parameters	( )	Both
ks:	PRODUT BIRLY	Regular Parameters Optional Parameters  Optional Parameters  Optional Parameters  H5	D3	Both
KS: PETROLOUM	PASOLOT HIRLY Results	( ) Regular Parameters ( ) Optional Parameters	03 ed)	
KS: PETROLOUM	RESULT RESERVOIR  Results  Units	Regular Parameters Optional Parameters  Optional Parameters  Optional Parameters  H5	D3	
KS: PETROLOUM	PASOLOT HIRLY Results	Regular Parameters Optional Parameters  Optional Parameters  Optional Parameters  H5	03 ed)	
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ks: CTROLOM  Regular Parameters	Results  Results  mg/l  mg/l  mg/l  mg/l	Optional Parameters  Optional Parameters  Optional Parameters (List as needed)  No gasoline Parameters (List as needed)	03	
ks: CTROLOM  Regular Parameters	Results  Results  units  mg/l  mg/l  mg/l  mg/l  mg/l	Optional Parameters  Optional Parameters  Optional Parameters (List as needed)  No gasoline Parameters (List as needed)	03	
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Regular Parameters  Regular Parameters  Sea	Results  Units  mg/l	Optional Parameters  Optional Parameters  Optional Parameters (List as needed)  Optional Parameters (List as needed)  Mo appoline Rys  Inap analysis.  TRICHLOROETHYLENE	03	
KS: PETROLOUM	Results  Units  mg/l  units	Optional Parameters  Optional Parameters  Optional Parameters (List as needed)  Optional Parameters (List as needed)  Mo appoline Rys  Inap analysis.  TRICHLOROETHYLENE	03	



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STATE LABORATORY OF PUBLIC HEALTH
DIVISION OF HEALTH SERVICES

N. C. DEPARTMENT OF HUMAN RESOURCES

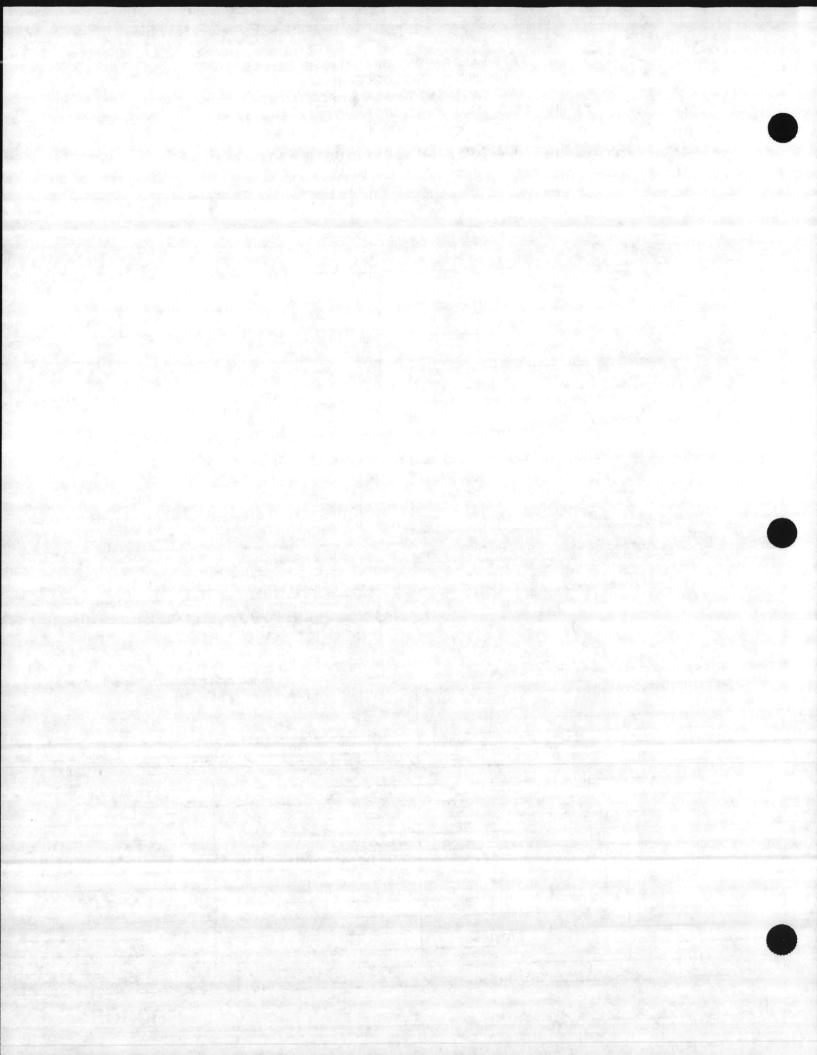
P.O. BOX 28047 – 306 N. WILMINGTON ST., RALEIGH 27611

Complete All Inc.

Complete All Inc.

Complete All Items Above Heavy Line (See Instructions on Reverse Side)

Address Blog. 6	2-Camp lejeune 70-WTP	Source of Water: (X) Ground () Surface	( ) Both ( ) Purchased
County <u>outslo</u>	字·在时间里。	Source of Sample:  ( X ) House Tap ( ) Well Tap	
Report To: 17R	Hardrews St	Type of Sample: ( ) Raw	(X) Treated
Collected By: Slego (2)	ZIP 27839	Type of Treatment:  ( ) None (X) Chlorinated ( ) Fluoridated (X) Filtered ( ) Alum	(X) Lime ( ) Soda Ash ( ) Polyphosphate ( ) Water Softener ( ) Other
Lessies of Commission of Commi	785 Time: 1405 PI		( ) Both
Location of Sampling Point:	DIBE 670 KESERVOIR	Optional Parameters	
Remarks:  CTRECEUM  Regular Parameters	n Passer Dura	Optional Parameters  Optional Parameters  Optional Parameters (List as need)	é Casalive
Remarks:  CTRECETA  Regular Parameters	n Passer Duna	Optional Parameters  Mothers  H3	é Cosalina ed)
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STATE LABORATORY OF PUBLIC HEALTH DIVISION OF HEALTH SERVICES N.C. DEPARTMENT OF HUMAN RESOURCES

P.O. BOX 28047 - 306 N. WILMINGTON ST., RALEIGH 27611

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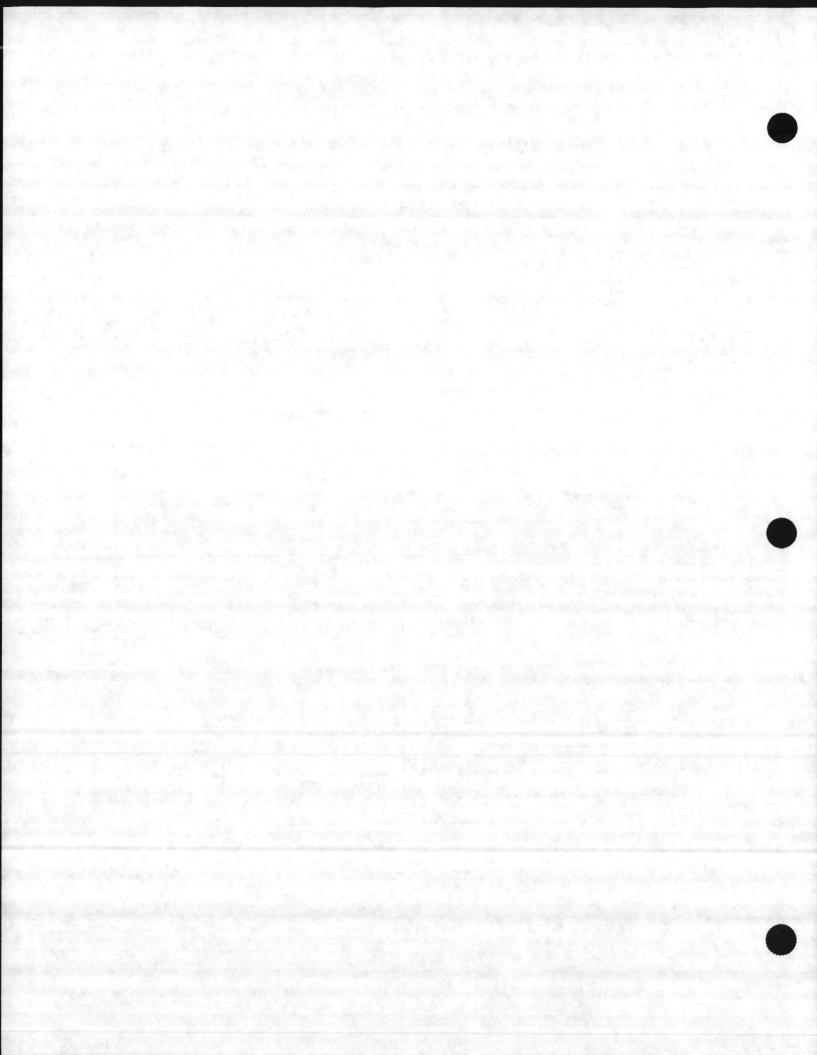
ORGANIC CHÉMICAL ANALYSES - Petroleum Prod

Complete All Items Above Heavy Line (See Instructions on Reverse Side)

Name of System:	SMC-Comple	ejeune			
Address: Bl	6670-11	TO			
Address:	7010 0			Source of Water:	
4 100 20 12		ZIP		Ground ( ) Both	
County:	Ouslow		**	Source of Sample:	hased
	J. TRED HIE			1 VI Distribution T	е Тар
Report To:	11/21			/ ( ) Well	SHOW AND THE REAL PROPERTY.
Address:	404 STHUDZO	ws ST		Type of Sample:	
G	Recoulle 1	PC ZIP 27834	!	( ) Raw (×) Treat	ted
<u>.</u>				Type of Treatment:	
Telephone Num		<b>-</b>		( ) None ( X). Lime ( ) Soda	
Collected By:	Elizabeth ( 15	the !		Fluoridated	hosph
Da ollected:	29 JAN 1985	Time: 1315	AM PM	( ) Filtered ( ) Wate ( ) Othe	r Softer
				Type of Sample:	
Location of Sam	opling Point: <u>MOQ ZZ</u>			( ) Regular ( ) Priva	te
		TOINT		( ) Check (x) Speci	
Remarks:	solive & ED	3 CAMP LEJEUN	E	WATER SYSTEM I.D. NUMBER (COPY FROM MAILIN	G LAB
State Drinking W	Vater Parameters (Require	d)		Optional Parameters (List as needed)	
				Optional Falameters (List as needed)	
CHLORINATED	HYDROCARBONS:)	Results		Results	
	Endrin	mg/I	5	No gasoline Kyprocarbons	
	Lindane	mg/I	4	.0	
	Methoxychlor	mg/I	3	mde cated by purge and	
CHLOROPHENC	Toxaphene	mg/l	4	0 0	
	2,4-D	mg/l	3	trap analysis	
	2,4,5-TP	mg/1	4	TRICHLORO ETHYLENE 1,040	3,9
		Many Things Mark		EDB LSO DOT	1
Date Received	1/30/85 nu		1	-21-66 OR DION	1
Date Neceived _	110	Date Reported	<del>-</del>	-31-85 Reported port L. Mal	
Date Atracted /	-30-8517 1-31-	A Pate Analyzed /	30	Laboratory Number 5 :31	()
Comments:	G	The same	g Que'ri		
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Dug 5		3			
DHS Form 2886 7	/79			OVALES	

OWNER

Mildred A. Kerbaur



Doc. No.: CLEJ-06297-2.04-03/11/86

## NORTH CAROLINA DEPARTMENT OF HUMAN RESOURCES DIVISION OF HEALTH SERVICES OCCUPATIONAL HEALTH LABORATORY

COMPANY: Camp Lejeune Water System

ADDRESS: Camp Lejeune, Onslow County, N.C. SERVICE REQUESTED: Volatile Organic Analysis

SAMPLE TAKEN ON: 02/19/85

SAMPLE TAKEN BY: Gaines Huneycutt/Q.C. Lab

SUBMITTED TO LABORATORY ON: 02/21/85 SUBMITTED BY: via Federal Express

DATE OF ANALYSIS: 02/21-22/85 ANALYZED BY: Vicki Painter

DATE REPORTED: 02/22/85

#### RESULTS IN PPB (ug/liter)

LOCATION	tran	s 1,2-DCE	TCE	TetraCE	CHC13	DiCBM	DiCBM
TT New Well		trace	53.53	26.17	<2.0	<2.0	<2.0
TT-26 Well		trace	3.91	55.17	<2.0	<2.0	<2.0
TT Water Plt.	Trt.	<2.0	<2.0	<2.0	0.9	2.1	3.2

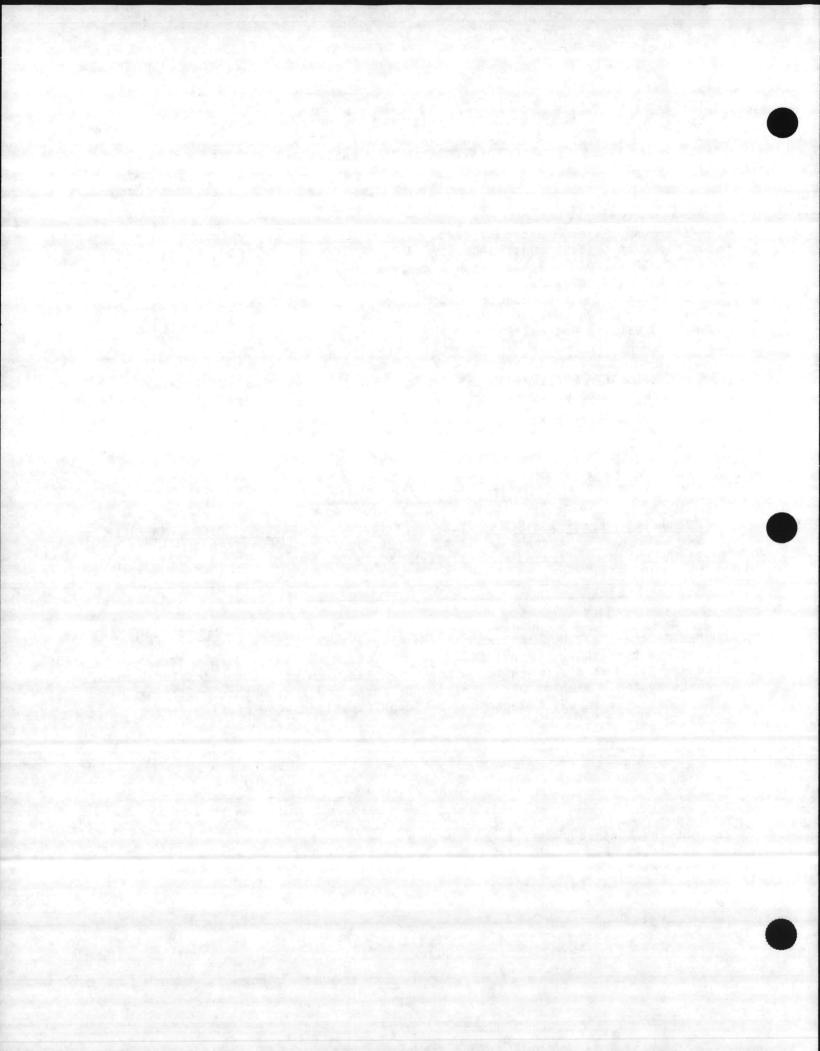
COMMENTS: trans 1,2-DCE is trans 1,2-dichloroethene, TCE is trichloroethene, TetraCE is tetrachloroethene, CHCl3 is chloroform, DiCBM is dichlorobromomethane, DiBCM is dibromochloromethane. Samples were collected from the Tarawa Terrace System. Samples were analysed by purge and trap method utilizing a Hall detector in the halogen mode. Identifications were confirmed by GC/MS.

REPORTED BYJOHN & real

cc. Charles Rundgren Water Supply Branch

Mike Bell, ERO Fred Hill, ERO

Environmental Epidemiology







### G C REPORT SHEET

ERO COMPANY:

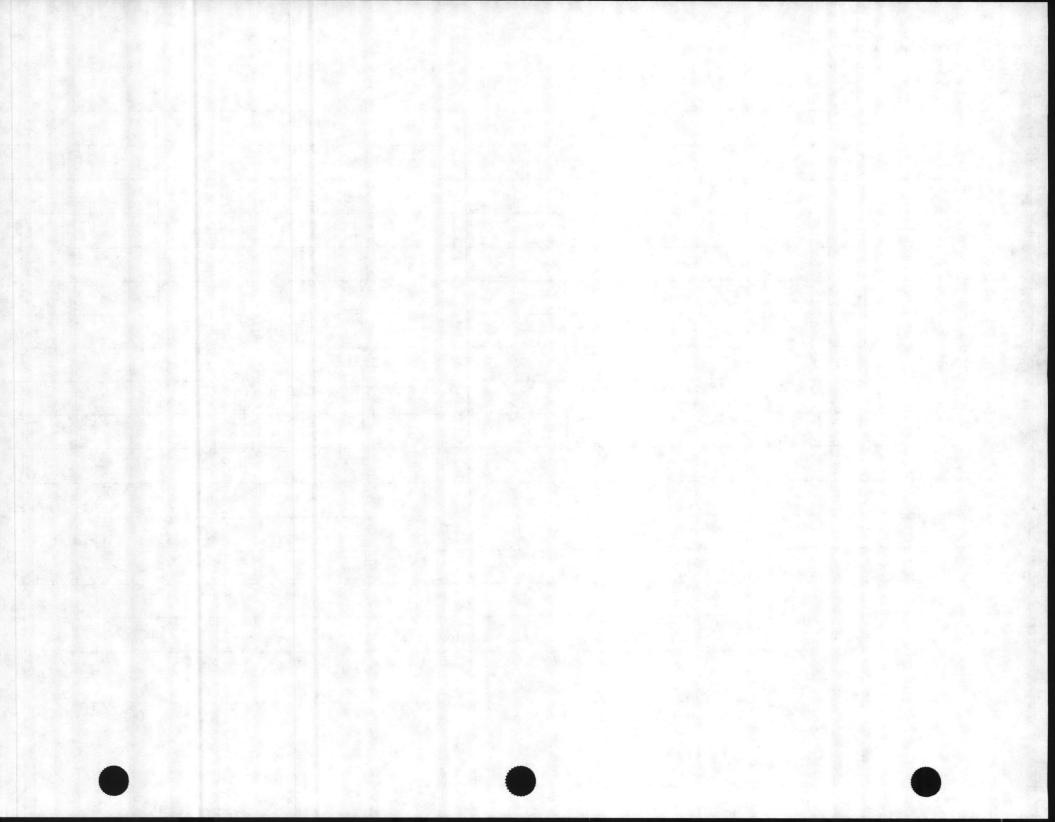
DATE OF ANALYSIS:

2/22/85

PPB THE WAY WAY K BOX X WAXX YO

LE #	Chloroform	Dichlorobromo- methane	Dibromochloro- methane	Trichloro- ethene	Dichloro- ethylene	
3m5400 720	14.6	11.0	4.9	*	*	
now 22	04			and the statement of the same		
/21	15.7	11.2	4.4	*	****	
UD TO	ATCO	I kent I I is to				Kanana Alba
22	16.9	8.7	1.8	* * * * * * * * * * * * * * * * * * * *		fire I to
4B Tre	ATED					
23	10.9	8.1	3.0	*	*	
122 HB Tre 123 BID 65						
24	16.6	8.5	2.4.	1.0	*	
		* = Less than det	ectable concentration by pu	arge and trap utilizing	Hall detector in	
	4.34 - 20-12	halogen	mode			
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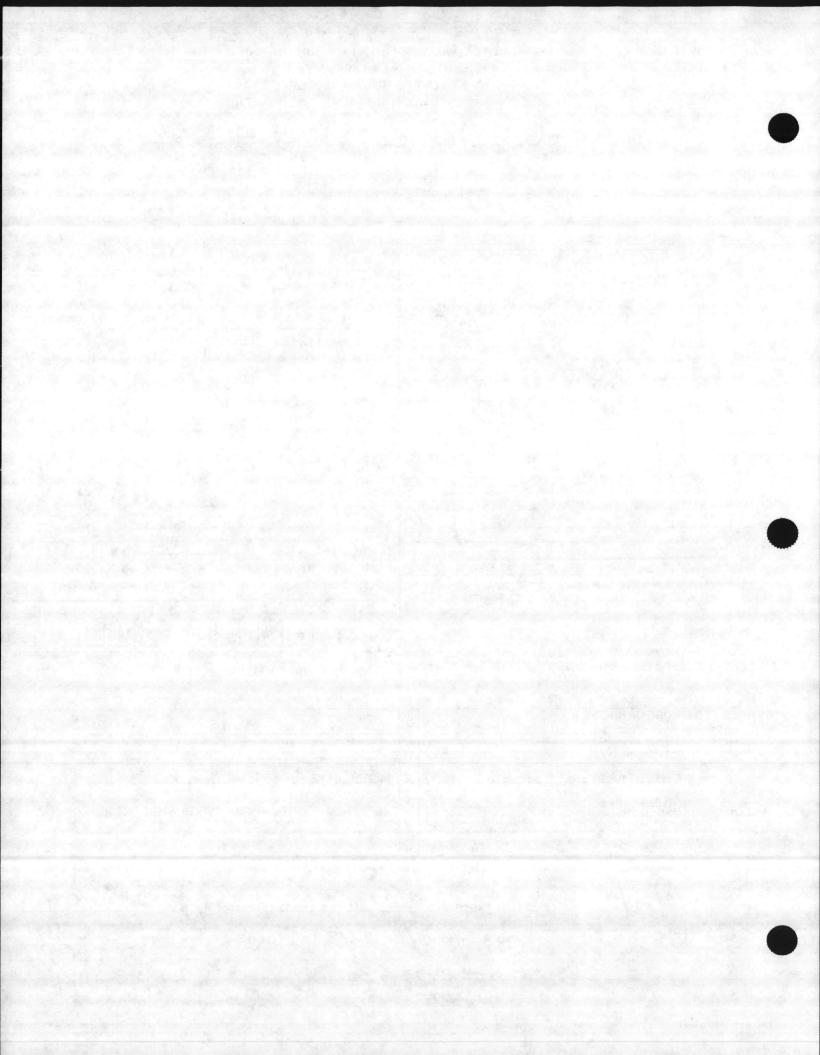
STATE LABORATORY OF PUBLIC HEALTH
DIVISION OF HEALTH SERVICES
N.C. DEPARTMENT OF HUMAN RESOURCES
P.O. BOX 28047 – 306 N. WILMINGTON ST., RALEIGH 27611

#### ORGANIC CHEMICAL ANALYSES - PUBLIC WATER SYSTEM

- Rostraide

Complete All Items Above Heavy Line (See Instructions on Reverse Side)

e of TARA	IWA Transco					
ess:	HIMMING Com	But.		Source of Water:		
	· 11 - 11	ZIP 28542		Ground ( ) Surface	( )	Both Purchased
الله : ity: مراجع	c/			Source of Sample:		
ort To:				( ) Distribution Tap	( )	House Tap Well Tap
iss: Toman	ANDING GENERA	C, MARINE		Type of Sample: ( ) Raw	1.1	- Treated
-a i O	AM STEUNT NC	ZIP 28542		Type of Treatment:	-	
hone Numbe	er: (719) 451	-5977		( ) None ( ) Chlorinated	N.	Lime Soda Ash
cted By: 6	AINES HUNEYCUTT	TOC ZAB		Filtered Filtered	***	Water Softener
Collected:	19 Fr. 1985 Tir	6) 1400	AM PM	( ) Alum	17.1	Other
arks:	mple was collected)	3)TT IVE TO GAN		( ) Check WATER SYSTEM I.D. NUMBER (COP	Y FROM N	Special MAILING LABEL
	Re	sults		Results	•	
ORINATED	HYDROCARBONS:) Endrin	mg/I	5	an le de	A1	
	Lindane	mg/l	4		*1	
	Methoxychlor	mg/l	3	see attached 8	heet	
	Toxaphene	mg/l	4		-	
)ROPHENO	XYS:) 2,4—D	mg/l	3			
	2,4,5-TP	mg/l	4			
Received		Date Reported			m. K.	real
Extracted		Date Analyzed	-/-	21-22/85 Laboratory Numb	- 15	0633
ments:		#50	00	633	5	0634 0635

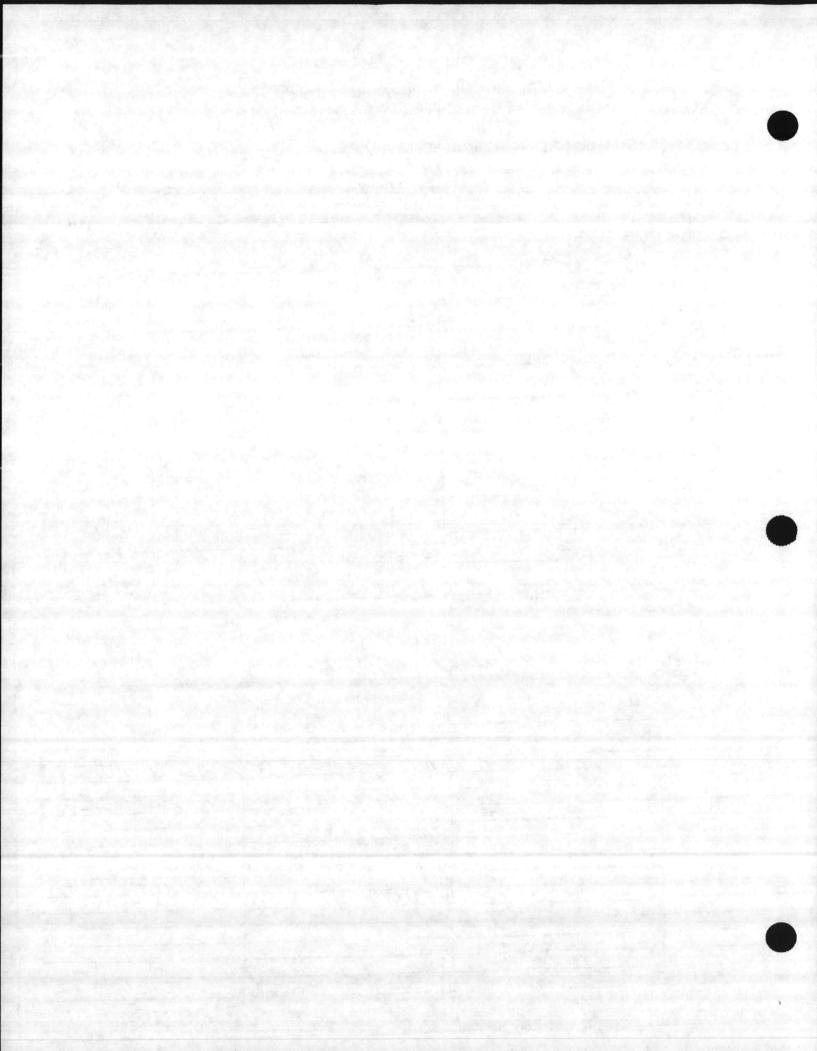


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# STATE LABORATORY OF PUBLIC HEALTH DIVISION OF HEALTH SERVICES N. C. DEPARTMENT OF HUMAN RESOURCES P.O. BOX 28047 – 306 N. WILMINGTON ST., RALEIGH 27611

3,2	Complete All Ite	ms Above Heavy Line on Reverse Side)	EM 48 50	
re of	-Camp Lejeure	× 306 101	K\	
ress <u> </u>	70 -WTP	Source of Water: (	( ) Both	
ort To:	TRED Hill	Source of Sample:  ( House Tap  ( ) Well Tap		
ess: 464-	ST Andrews ST	Type of Sample: ( ) Raw	· · ( Treated	
eted by: Alego	Letto P3to	Type of Treatment:  ( ) None ( X) Chlorinated ( ) Fluoridated ( X) Filtered ( ) Alum	( ) Lime ( ) Soda Ash ( ) Polyphosph ( ) Water Softe ( ) Other	ate
Collected: 1/29	nt: BUSG 670 TERATED  TOTAL RESERVOIR	Type of Analysis Desired:  ( ) Regular Parameters ( ) Optional Parameters	( ) Both	<u>'</u>
	um Parovor Anay	SIS HS	<b>D</b> B	
Regular Paramete	Results	Optional Parameters (List as need	ed)	
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10	mg/l	indicated by	Purse and	
	mg/l '₹ mg/l '₹ mg/l :	trap melyers.		_
C-CCC- (C	mg/l à.	TRICHINENETUVIENE	3305	
-CaCO3 (Ca, Mg) y-CaCO3	mg/l	T KICHLORO ETHYLENE	3.37. 8 ppb	
	mg/l	EDB	< 50 ant	_
_	mg/l		· PPI	_
	units			_
	NTU units			_
ceived	Mg/I	h	1 10 11 1	_
- 11 50	Date Reported	1- 3/- 85 Reported BU	In h. Ment	_
alyzed 1/30/85	1-30-85- Laboratory Number _		500308	_
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63-110 NSN 7540-00-	4-8-80 FORM 63 (Rev. 8-81).  534-4018 STANDARD FORM 63 (Rev. 8-81).  Prescribed by GSA FPMR (41 CFR) 101-11.6	
63-110 NSN /54-0 GPO: 1984 0 - 430-	306	
GPO : 190		

