Date: 3 November 1982

Memorandum for the Record

From: Ms. Betz, Quality Control Lab, Environmental Br, NREAD, Facilities

Subj: Water Plant ID Numbers

- 1. During the phone conversation with Don Beesley, of the State, in August 1982, the question of Plant ID numbers came up. Mr. Beesley stated that on all reports the ID numbers would have to be listed to make it easier to key the information on the computer. I said we didn't have any. He said we had to have them and Fred Hill should know them.
- 2. Contact was made with Fred Hill, who came 1 September 1982, to assign the base water plants ID numbers. Fred Hill spent the morning with Mr. Price and Mack Frazelle at the Hadnot Point water plant talking it over.
- 3. That afternoon, Fred Hill came by the lab and showed me what was decided. He stated that since there were connections between Hadnot Point and Holcomb Blvd and between Tarawa Terrace and Camp Johnson they would combine the plants. With the old population statistics, Mr. Price had provided, the required # of samples were assigned. Below shows what was determined and the effect of the possible combining.

Plant	Serial Number	Population	Required #/Month
Hadnot Point	04-67-040	27,000	30
Holcomb Blvd	04-07-040	8,000	9 > 40
New River	04-67-041	11,000	13
Tarawa Terrace	04-67-042	5,700	6
Camp Johnson	04-07-042	2,000	2
Rifle Range	04-67-043	1,100	2
Courthouse Bay	04-67-044	1,800	2
Onslow Beach	04-67-045	900	1

Total Required #(Combined) 67
(REGULAR) 65

4. It was stated that the understanding on base is that the connections between

plants was only open when one of the plants was out of service. Fred Hill said that the serial numbers assigned above and the combining was not definite and to wait until the letter from the State was received.

5. Fred Hill also asked that copies of the Lab's weekly Chemical Aanlysis forms

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Subje Hair Blant ID Humbers

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3. That alternoon Trod Till and by the lab and Showed me what was decided. We a Lated what since those were connected a strengt Robert and are Tarlace and Camb Johnson they would construct the Lands. The the observation states to the Lands are now to decided to the samples were assigned. Refer to the water assigned the Refer to the samples were assigned. Refer to the effect of the samples were assigned.

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Total Required - ? Conbined) : 67

4. It was stated that no understanding or have a bight ine constitution

clares was only crea whan one of the plants out of parvice. This yill said that the estal numbers assigned above and the constitut cas not definite and to wate unitions latter from the State was recoived.

5. Trad Hill also as to the contest of a lack of the Hill also the state of the contest to the

be sent with the monthly bacteria report. He said no explanation for unusual readings would need to be made.

6. When the letter of 25 October 1982 was received it showed none of the plants had been combined. The serial numbers are listed below.

Plant	Serial #	Require #/Month
	50 Disk (5. 75 M Bit Shift a S	34 TO THE PROPERTY OF THE PROP
Hadnot Point	04-67-041	30
New River	04-67-042	13
Holcomb Blvd	04-67-043	9
Tarawa Terrace	04-67-044	6
Camp Johnson	04-67-045	2
Rifle Range	04-67-046q	22
Courthouse Bay	04-67-047	2
Onslow Beach	04-67-048	1

Elizabeth A. Betz

Supervisory Chemist

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DIVISION OF HEALTH SERVICES P.O. Box 2091 Raleigh, N.C. 27602-2091

October 25, 1982

Commanding General USMC Camp Lejeune Camp Lejeune, North Carolina 28542

ATTN: R. F. Calta, Lieutenant Colonel
USMC Base Maintenance Officer

Sir:

To conform the potable water treatment facilities of USMC Camp Lejeune to the provisions of the North Carolina Safe Drinking Water Act, the following public water supply I.D. numbers have been assigned.

04-67-041	USMC	Hadnot Point
04-67-042	USMC	New River Air Station
04-67-043	USMC	Holcomb Boulevard
04-67-044	USMC	Tarawa Terrace
04-67-045	USMC	Camp Johnson
04-67-046	USMC	Rifle Range
04-67-047	USMC	Courthouse Bay
04-67-048	USMC	Onslow Beach

These I.D. numbers should be shown on all reports of chemical analysis and operations from the respective treatment facilities and microbiological analyses from representative points within the respective distribution system.

These should be reported to Mr. John McFadyen in this office monthly.

Thank you for your continued cooperation.

Very truly yours,

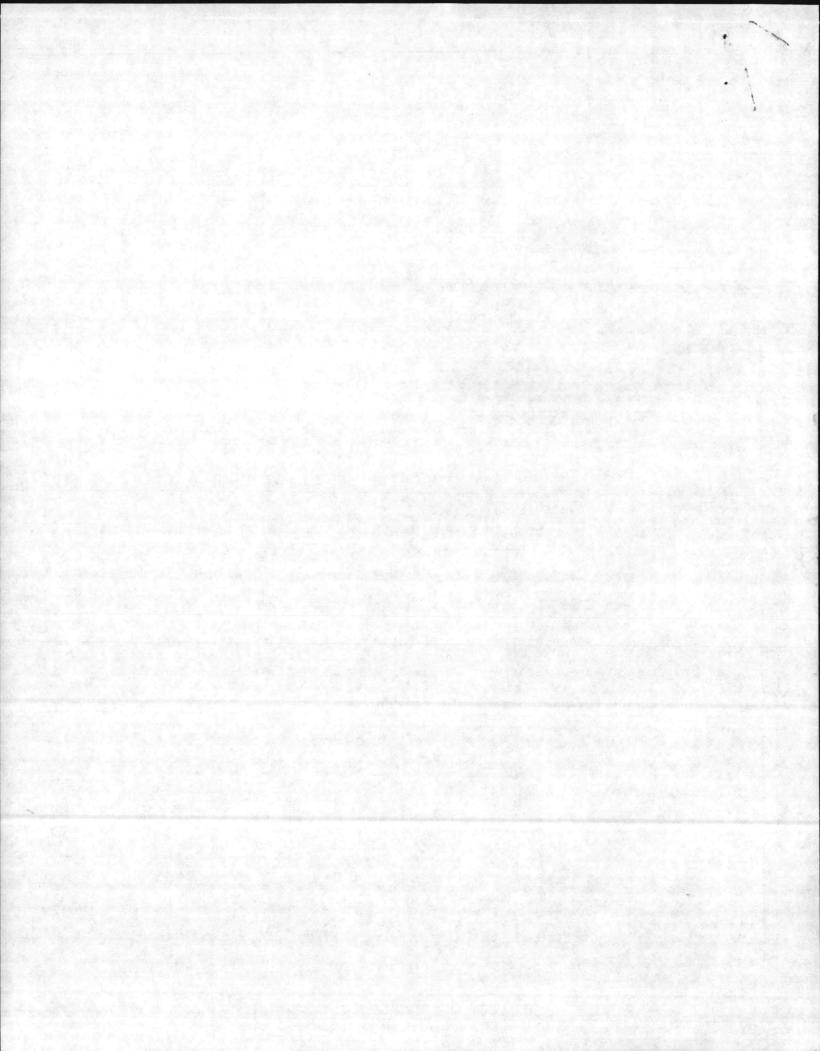
Charles E. Rundgren, Head

Water Supply Branch

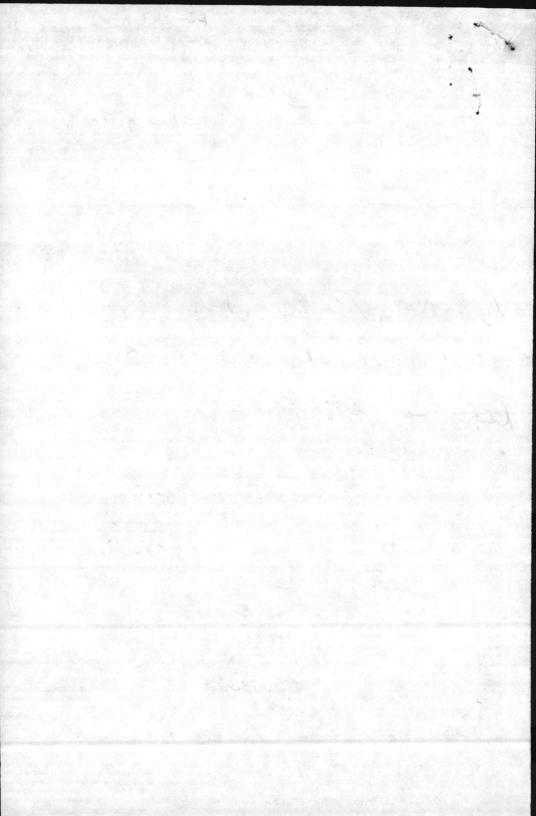
Environmental Health Section

CER: chf

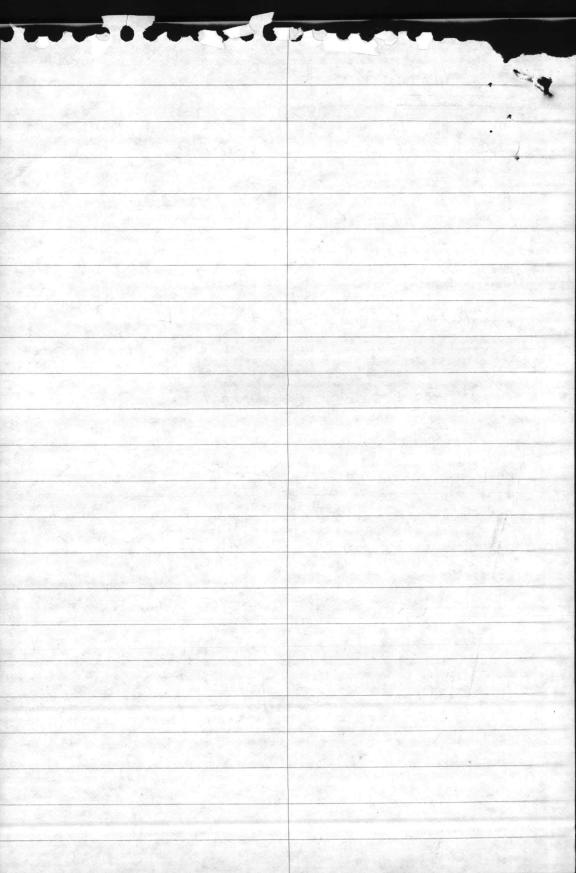
cc: Mr. M. P. Bell



Betsy- For your info NATURAL RESOURCES AND ENVIRONMENTAL AFFAIRS BRANCH BASE MAINTENANCE DIVISION MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA 28542 8-27-82 Date From: Director
To: B M O 1. Planned visit to Comp Lijums by Stati Fotable Water Representive. Fred is located in the Greenville Regional Office and has been to Camp Lijeune before. Julian To Dangulu DDS.



Fred Hill will be Here I Sept TO work with Betsy + Price on establish 10 #5 for water plants And Possibly Permanent SAMple Points Shark



WG-13 MEND OF BECORD MONTHLY < HP + HB 0447-040 40 27,000 + 8,000 0467-042 5,700 + 11+ CJ 2,000 MCAS 0467-041 13 11,000 RR 043 1,100 CHB 044 1,800 08 045 900

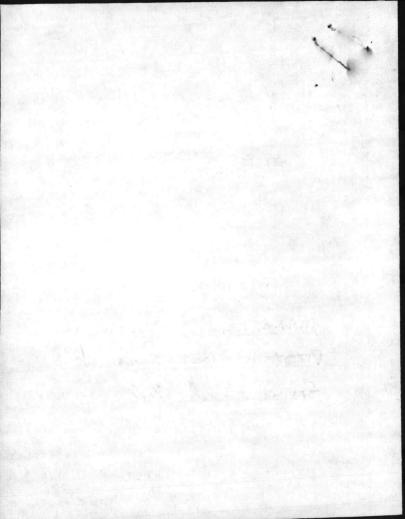
Tigata M CPC - THE FEB. NO. 19 No. 514 0. 10 - 1 - 10 1 3 MASSES CONTRACTOR OF THE STATE 5 C 6478

ROUTING SLIP INITIAL

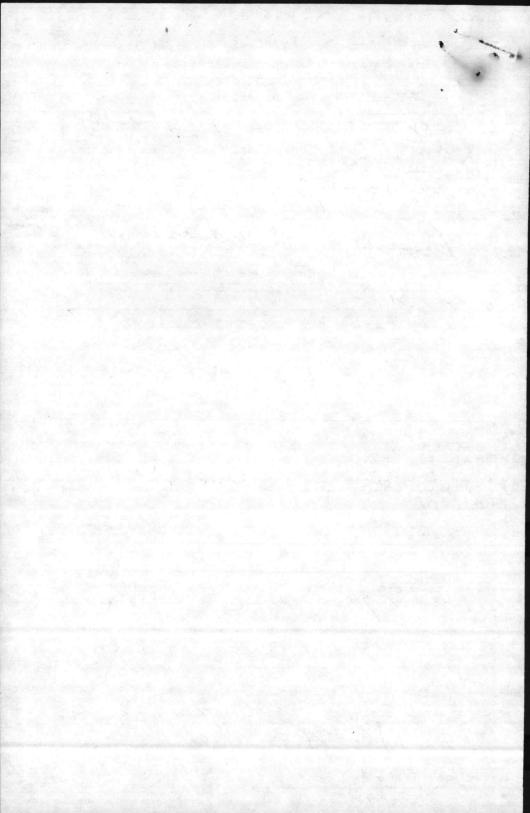
ECOLOGIST
CHEMIST
TECHNICIAN

ACTION REQUIRED:

MAKE Herded Changes in Program. Get Serial #'S Sion Fred Hill



NATURAL RESOURCES AND ENVIRONMENTAL AFFAIRS BRANCH Base Maintenance Division Marine Corps Base Camp Lejeune, North Carolina 28542 Date 8-9-82 From: Director, NREAB To: Danny Subj: Rwiew and advise if anything I need to know. Julia Don't you just hove it? Your Action Shape Betsy is MAKing Changes Sec Her Memo which 15 attachel Of July gr Slame



JULIAN - FOR YOUR

Date: 10 August 1982

From: Ms. Betz, Quality Control Lab., Environmental Section, NREAB, BMaintBiv

To: Mr. Sharpe, Supervisory Ecologist, Environmental Section, NREAB, BMaintDiv

Subj: Letter from the State of North Carolina on Data Reporting

1. After reviewing the letter from the Division of Health Services fo the State of North Carolina, I contacted Mr. D. Beesley, of the State, to answer some questions.

- 2. Concerning the coliform form. If we used this form in place of the one we are presently using, we would use approximately 164 sheets/month instead of 8 sheets/month. Mr. Beesley stated that we should continue using the DHS 1942 2/74 form. However, we needed to add the method code(303 for Membrane filter), the contaminant code (3000 for coliform), the Lab ID number(certificate #100), and the water system ID numbers to the forms. He stated that our systems had to have ID numbers and that Fred Hill should know them.
- 3. As for the inorganic and THM contaminants, these forms should be used. The results need to be sent to the State on these forms so the results get keyed in correctly.
- 4. Please see that copies of the forms enclosed with the letter, including the tables of codes are sent back to me.

Elazabeth A. Betz Supervisory Chemist THE CONTRACT OF THE STATE OF TH

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DIVISION OF HEALTH SERVICES STATE LABORATORY OF PUBLIC HEALTH 306 N. Wilmington St. P.O. Box 28047 Raleigh, N.C. 27611-8047

MEMORANDUM

TO:

All certified laboratories reporting data for drinking water

compliance.

FROM:

E. D. Beesley

Ellen Neill

Laboratory Certification Evaluators

Environmental Sciences Branch

SUBJECT: Data Reporting

In order to permit orderly and accurate transfer of information to the Model State Information System (MSIS) computer network, the enclosed data sheets have been designed to permit easy and accurate reporting of information concerning potable water to the Office of Water Supply.

Included on each form, in addition to the usual sample information are blocks in which to enter the contaminant code* (10-13) and method code* (14-16) for each parameter. Blocks 17-21 are provided for entering test results. When contaminants not on the data sheets are reported, they should be entered in the blocks provided under optional parameters.

These forms may be used directly with the laboratory letterhead or a similar format including all of the necessary information may be used.

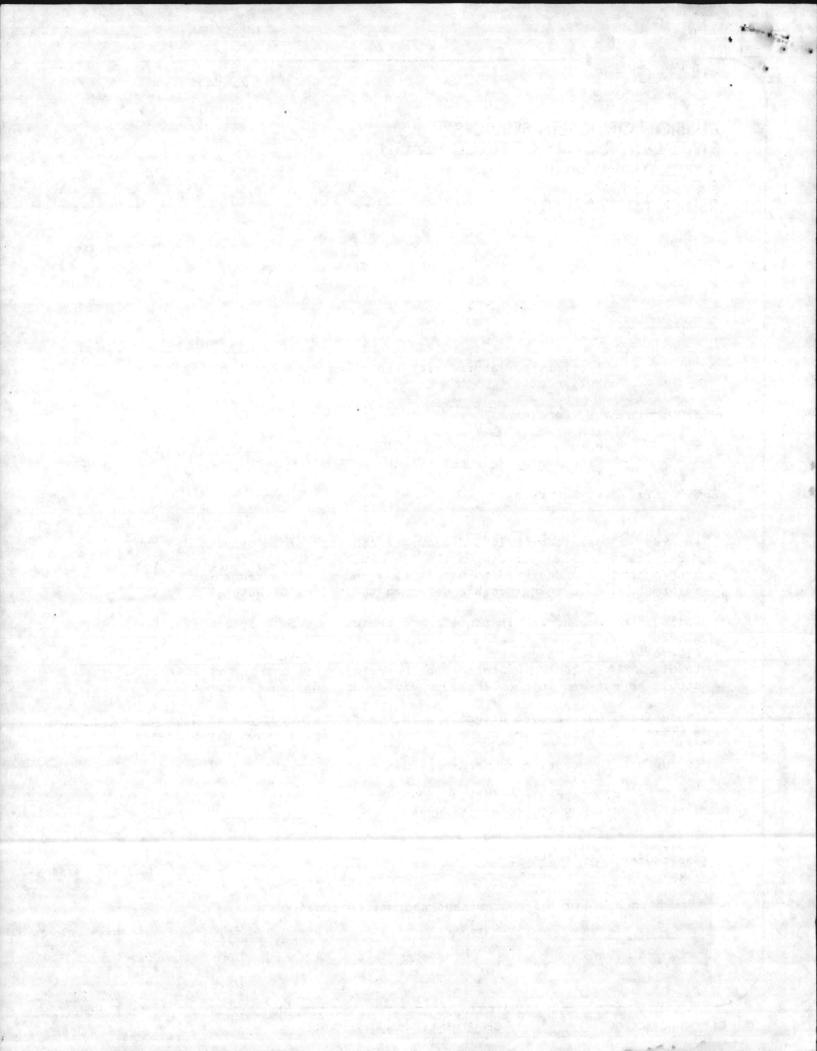
If further information is needed please contact us at:

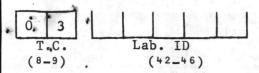
E. D. Beesley (919) 733-7308 Ellen Neill (704) 256-9284

EDB; EN/leh Enclosures 7-82

*See attached list of contaminant and method codes.

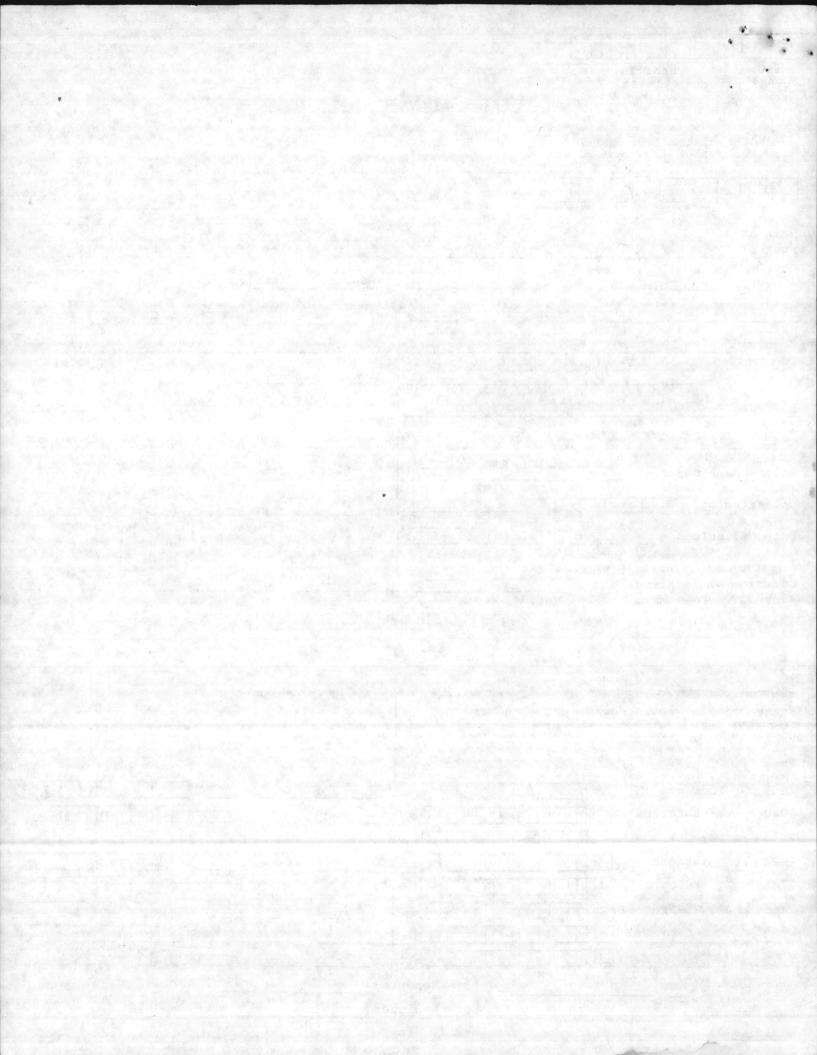






ORGANIC CHEMICAL ANALYSES - PUBLIC WATER SYSTEM

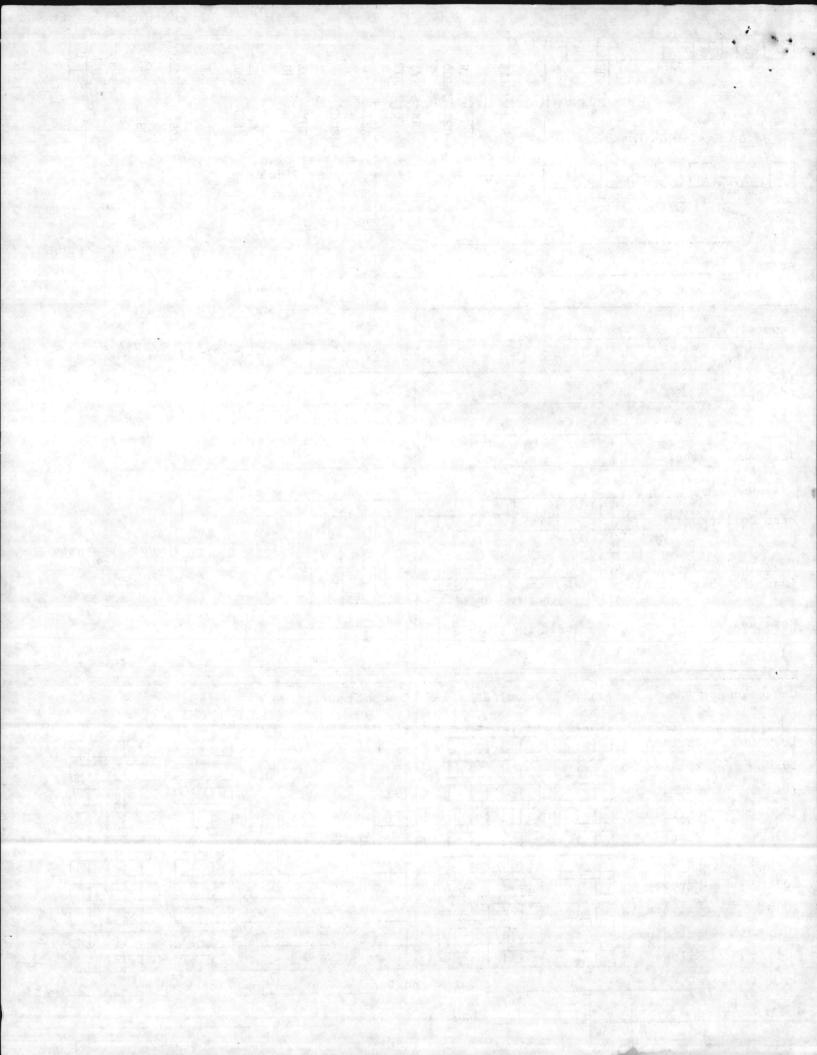
Water System I.D. Number Complete All Ite (1-7)	ems Above Heavy Line
Name of System:	Type of System: () Community () Non-Community
Address:Zip	Source of Water: () Ground () Both () Surface () Purchased
County:	Source of Sample:
Report To: Address:	() Distribution Tap () House Tap () Plant Tap () Well Tap
Telephone Number: () - Collected By: Date Collected: Time: PM MM DD YY (38-41) (31-36) Location of Sampling Point:	<pre>Type of Treatment: () None () Lime () Chlorinated () Soda Ash () Fluoridated () Polyphosphate () Filtered () Water Softener () Alum () Other</pre>
(Address where sample was collected) Loc. Code Remarks: (28-30)	Type of Sample: (37) () D-Regular () M-M.R.T. () C-Check () S-Special
State Drinking Water Parameters (Required) Contaminant Name Method Results Mg/1 ID	Optional Parameters (List as needed) Contaminant Name Method Results Mg/l ID
(10-13)	



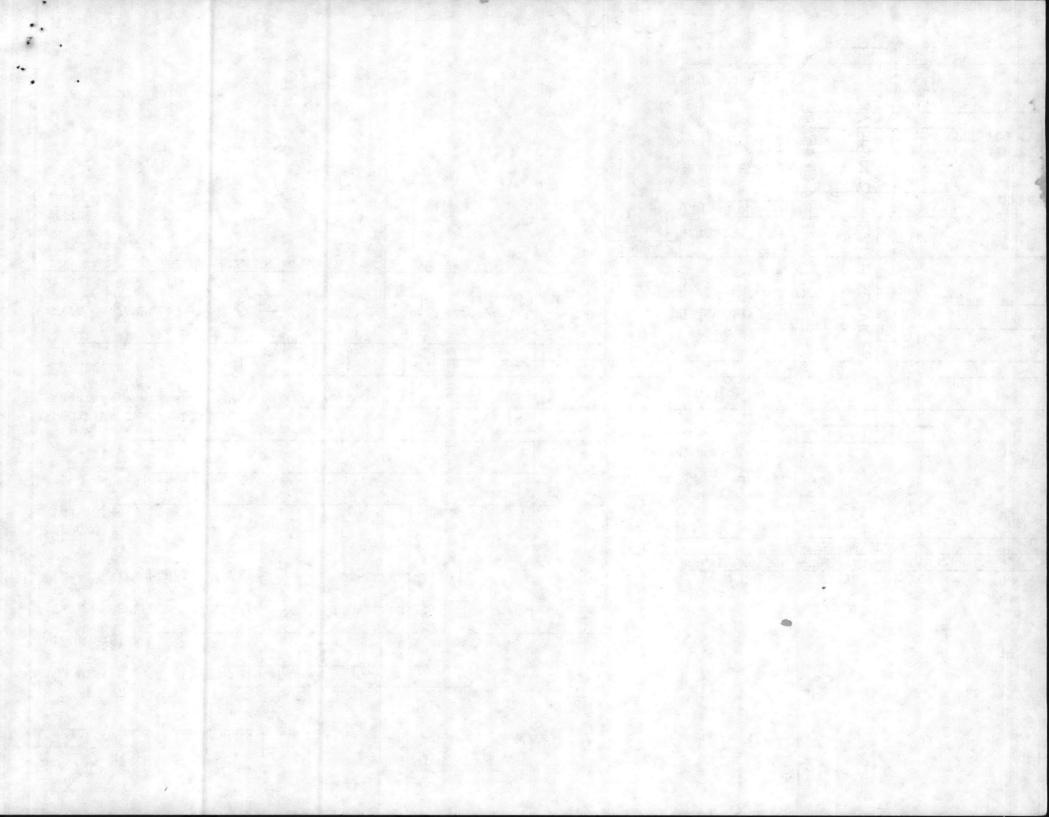
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T.C		Lab. ID	
(8_	9)	(42-46)	

INORGANIC CHEMICAL ANALYSES - PUBLIC WATER SYSTEM

Water System I.D. Number Complete All It (See Instructi	ems Above Heavy Line ons on Reverse Side)
(1-7) Name of System: Address:	Type of System: () Community () Non-Community
Zip	Source of Water:
County:	() Ground () Both () Surface () Purchased
Report To:	() Surface () Purchased
Address:	Source of Sample:
Zip_	() Distribution Tap () House Tap () Plant Tap () Well Tap
Telephone Number: () -	
Collected By:	Type of Treatment:
Date Collected: MM DD YY (38-41)	() None () Lime () Chlorinated () Soda Ash () Fluoridated () Polyphosphate () Filtered () Water Softener () Alum () Other
Remarks: (28_30)	Type of Sample: (37) () D-Regular () C-Check () S-Special
Contaminant Name Method Results Mg/1 ID	Contaminant Name Method Results Mg/1 ID (10-13)



T.C. Lab. ID (8-9) (42-46) COLIFORM ANALYSIS - PUBL	WAQC-107-B LIC WATER SYSTEM
NAME OF SYSTEM COUNTY TYPE OF SUPPLY: COMMUNITY NON-COMMUNITY TREATMENT: CHLORINATED NON-CHLORINATED	DO NOT WRITE IN THIS SPACE MULTIPLE-TUBE FERMENTATION METHOD MEDIA POSITIVE TUBES
REPORT TO: NAME PHONE	LTB 1 2 3 4 5
ADDRESS	BGB 1 2 3 4 5
CITY ZIP LOCATION OF SAMPLING POINT CODE (28-30 (47-61)	CONFIRMED BGB
COLLECTED BY: DATE TIME P.M	
TYPE OF SAMPLE: D-REGULAR (31-36) (38-41) C-CHECK S-SPECIAL (ivory)	TYPICAL COLONIES VERIFIED ATYPICAL COLONIES VERIFIED TNTO CONFLUENT NON-IDEAL COUNT
ALL INFORMATION REQUESTED MUST BE GIVEN. COMMENTS: (62-71)	3 0 0 0



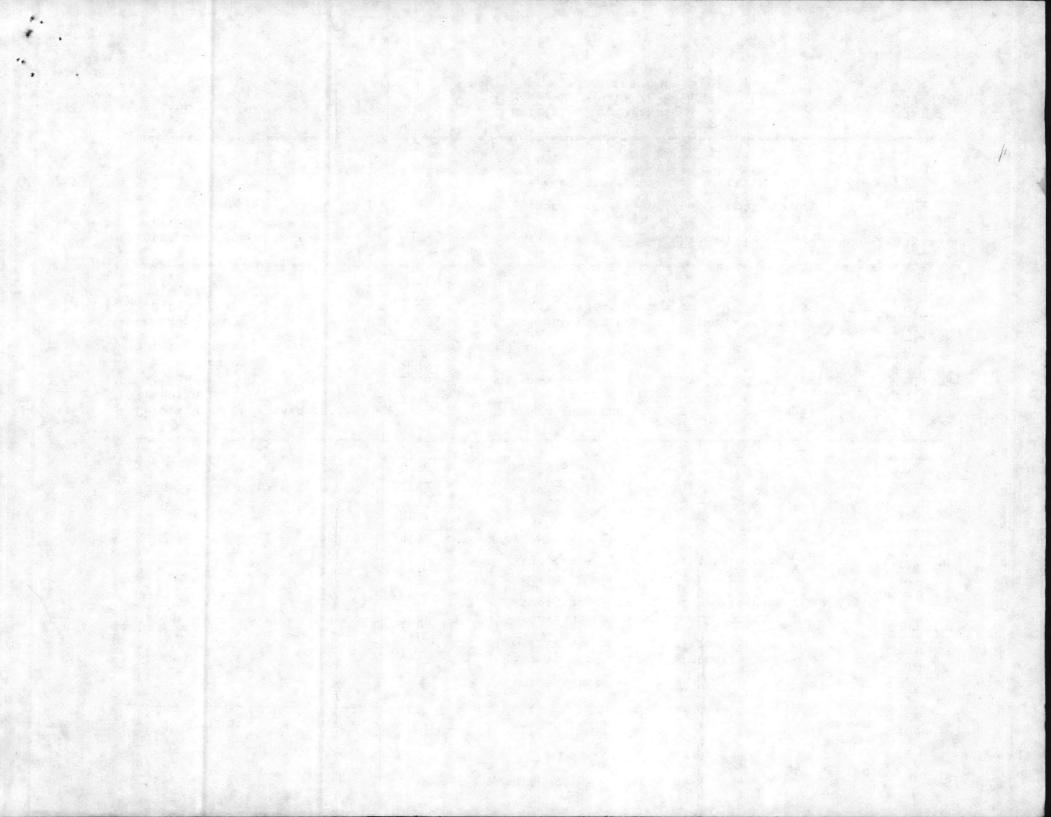
MODEL STATE INFORMATION SYSTEM (MSIS)

Contaminant	Contaminant Code	Methodology	Method Code
Alkalinity	1927	Methyl orange titrimetric or Potentiometric	142
Arsenic	1005	Atomic absorption; furnace technique Atomic absorption; gaseous hydride Spectrophotometric, silver diethyldithiocarbamate	125 123
Barium	1010	Atomic absorption; direct aspiration Atomic absorption; furnace technique	101 125
Cadmium	1015	Atomic absorption; direct aspiration Atomic absorption; furnace technique	101
Calcium Hardness	1919	EDTA titrimetric Atomic absorption; direct aspiration	141
Chloride	1017	Potentiometric	127
Chromium	1020	Atomic abosrption; direct aspiration Atomic absorption; furnace technique	101 125
Corrosivity	1910	Langelier index Aggressive index	140
Fluoride	1025	Colorimetric SPADNS; with distillation Potentiometric ion selective electrode Automated Alizarin fluoride blue; with distillation Automated ion selective electrode Zirconium eriochrome cyanine R; with distillation	111 107 115 118
Free chlorine residual	_1012	Colorimetric DPD	301
Lead	1030	Atomic abosrption; direct aspiration Atomic absorption; furnace technique	101
Mercury	1035	Manual cold vapor technique Automated cold vapor technique	103
Nitrate	1040	Colorimetric brucine Spectrometric; cadmium reduction Automated hydrazine reduction Automated cadmium reduction	105 109 121 163
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MODEL STATE INFORMATION SYSTEM (MSIS)

Contaminant	Contaminant Code	Methodology	Method Code
рН	1925	Potentiometric	135
Selenium	1045	Atomic absorption; furnace technique Atomic absorption; gaseous hydride	125
Silver	1050	Atomic absorption; direct aspiration Atomic absorption; furnace technique	101 125
Sodium	1052	Atomic absorption; direct aspiration Atomic absorption: furnace technique	101 125
Sulfate	1055	Turbidimetric	137
Temperature	1996	Thermometer	130
Total filterable residue	1930	Gravimetric	139
Turbidity	0100	Nephelometric	001
Chlorinated hydrocarbons: endrin lindane methoxychlor toxaphene	2005 2010 2015 2020	Solvent extraction, gas chromatography	201 201 201 201
Chlorophenoxys: 2,4-D 2,4,5-T	2105	Solvent extraction, derivatization, gas chromatography	203
Total Trihalomethanes	2950	Purge and trap, gas chromatography	213
(TTHM)		Solvent extraction, gas chromatography	215
		Gas chromatography/mass spectrometry	217
Coliforms	3000	Multiple Tube Technique Membrane Filter Technique	305 303



After five days return to

STATE LABORATORY OF PUBLIC HEALTH
P. O. Box 28047

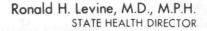
Raleigh, North Carolina 27611-8047



CAMP LEJEUNE/WTR QC BACT LAB BASE MAINT DEPT/BLDG 65 CAMP LEJEUNE

NC 28542







DIVISION OF HEALTH SERVICES P.O. Box 2091 Raleigh, N.C. 27602-2091

DEC 2 3 1982

CAMP LEJEUNE/WTR QC BACT LAB BASE MAINT DEPT/BLDG 65 CAMP LEJEUNE

NC 28542

Re: Analytical Reporting Forms

Dear Sir:

In August 1982 a memorandum from Mr. E. D. Beesley and Ms. Ellen Neill, Laboratory Certification Evaluators, was mailed to all certified laboratories reporting data for drinking water compliance. The subject of the August memorandum was data reporting and contained the enclosed model reporting forms for inorganic, organic and bacteriological analyses. The memorandum requested each laboratory to either utilize the appropriate enclosed form or a similar form, of the laboratory's design, that included all of the information listed on the model form. The rationale for such a request is that it will permit an orderly and accurate transferal of information to a computer format which has previously been established by the Environmental Protection Agency. As of this date, this office is still receiving analytical data from private laboratories which does not comply with the previously mentioned memorandum.

It is the responsibility of the Water Supply Branch to enter <u>all</u> of the required monitoring data which is supplied by certified private laboratories. This office has neither the manpower nor the time to fill in information which is missing. Therefore, as of <u>February 1, 1983</u>, this office will begin returning all reporting forms that do not contain all of the requested information. The forms will be returned to either the laboratory that conducted the analysis or the owner depending upon who submits the forms. Subsequently, if the reporting forms are not returned to this office within the prescribed reporting period the public water system will be considered in violation of the monitoring and reporting requirements and will be notified of such.

As a reminder, Section .1631 of the "Rules Governing Public Water Supplies" states that all reports shall be received by this office within the <u>first ten (10) days</u> following the end of the required monitoring period. The bacteriological monitoring period for a community public water system is each calendar month. Thus reports for bacteriological samples collected and analyzed during October 1982 should be received by this office no later than November 10, 1982.



Also, there appears to be some confusion concerning the compliance procedures that may be utilized by a public water system that has exceeded the bacteriological maximum contaminant level (MCL). For your information, there are two procedures which may be utilized to bring a public water system back into compliance thus eliminating the need for complying with the public notification requirements. The two procedures are: substitution and percentage.

The substitution procedure can be utilized only by those public water systems that collect ten (10) or less bacteriological samples per month and may be used for only one positive sample. This procedure requires that two (2) check samples and another regular monthly sample be collected during the same month in which the violation occurs. If coliform bacteria is not detected in any of the additional samples then the owner can request in writing that this office substitute the negative regular monthly sample for the positive regular monthly sample. This procedure may not be utilized two consecutive months.

The percentage procedure may be utilized by all public water systems. This procedure requires that enough additional bacteriological samples be collected to reduce the monthly average below the MCL. The required number of extra samples needed to satisfy this procedure can best be determined by contacting this office. All extra samples must be collected during the month in which the violation occurs. This procedure may be utilized as often as desired.

If you have any further questions, please do not hesitate to contact Mr. Larry Elmore at telephone (919) 733-2321.

Very truly yours,

Charles E. Rundgren, Head

Charles & Kuntore

Water Supply Branch

Environmental Health Section

WLE:spm

Enclosures