

11330/1
NREAD
10 Apr 1985

Mr. John McFadyen
Water Supply Branch
Division of Health Services
North Carolina Department of
Human Resources
Post Office Box 2091
Raleigh, North Carolina 27602

Dear Mr. McFadyen:

Enclosed are the completed Department of Health Forms (DHS 1942 2/74) for all water treatment plants aboard Marine Corps Base, Camp Lejeune for the period 1-31 March 1985. Also enclosed are the weekly Chemical Analysis Forms (MCBCL 11330/3 Rev 3-82) for the same period, as requested in the 25 October 1982 letter from Mr. Charles Rundgren of your office.

The analysis is run by the Quality Control Laboratory located in the Natural Resources and Environmental Affairs Division, Assistant Chief of Staff, Facilities. Ms. Elizabeth Betz, Supervisory Chemist, Quality Control Laboratory, telephone (919) 451-5977 is the point of contact in this matter.

Sincerely,

J. I. WOOTEN
Director

Encl:
(1) Dept of Health Forms
(2) Chemical Analysis Forms

Copy to:
LANTDIV (Code 114)

Blind copy to:
BMO (Attn: UtilDir)
→ SupvChem

CLW

0000004755

Month: March 1985
 Serial # 04-67-04 1

Hadnot Point Water Treatment System at Camp Lejeune
 Method Code: 303
 Contaminant Code: 3000

Raw Water COLIFORMS (MFP)
 Filtered

DATE	A		B		C		NO. OF COLIFORMS PER 100 ml.	TOTAL PLATE COUNT	MFP COLIFORMS PER 100 ml.	TOTAL PLATE COUNT	HMP COLIFORMS PER 100 ml.	AVE. COLIFORMS PER 100 ml.	NO. OF SAMPLES EXAMINED	DISTRIBUTION SYSTEM					REPEAT SAMPLES	INCUBATOR TEMP.	PLANKTON					
	TOTAL COLONIES	COLUMNIA	VOLUME FILTERED ml.	TOTAL COLONIES	COLUMNIA	VOLUME FILTERED ml.								TOTAL COLONIES	COLUMNIA	1	2	3				4	5	COLIFORMS PER 100 ml.	COLIFORMS PER 100 ml.	COLIFORMS PER 100 ml.
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TPC MEDIA MF MEDIA BBL mEndo BACTERIAL DENSITY ARITH. MEAN GEO. MEAN
 TOTAL NO. SAMPLES: 0
 SAMPLES EXCEEDING 3/50, 6/100, 7/200, 13/500: 0
 DIST. SYSTEM: 1.0
 Signed *Edwards* Cert. Grado B-Well No. _____
 ENCLOSURE (1)

000004756

CLW

Contaminant Code: 3000

RESOURCES

Serial # 4003

RAW WATER COLIFORMS (MFP)

FILTRERS

FINISHED

DISTRIBUTION SYSTEM

DATE	A			B			C			NO. OF COLIFORMS PER. 100 ml.	TOTAL PLATE COUNT	MFP COLIFORMS per 100 ml.	TOTAL PLATE COUNT	HFP COLIFORMS per 100 ml.	NO. OF SAMPLES EXAMINED	COLIFORMS (MFP) per 100 ml.					AVE. COLIFORMS per 100 ml.	HPC COLIFORMS per 100 ml.	NO. OF SYSTEMS	TOTAL NO. SAMPLES	TOTAL NO. SAMPLES EXCEEDING 3/50, 4/100, 7/200, 13/500ml	INCUBATOR TEMP.		
	VOLUME FILTERED ml.	TOTAL COLONIES	COLIFORM COLONIES	VOLUME FILTERED ml.	TOTAL COLONIES	COLIFORM COLONIES	VOLUME FILTERED ml.	TOTAL COLONIES	COLIFORM COLONIES							1	2	3	4	5								
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Plankton

000004758

CLW

PLANTON

SIGNED *[Signature]* Cert. Grade B-Well No. 4087-W

Laboratory Cert. #37807

REPORT # 04-07-04 4

RAW WATER COLIFORMS (MFP)

Contaminant Code: 3000

DISTRIBUTION SYSTEM

FILTERED FINISHED

DATE	A		B		C		NO. OF COLIFORMS PER 100 ml.	TOTAL PLATE COUNT	MFP COLIFORMS PER 100 ml.	TOTAL PLATE COUNT	HFP COLIFORMS PER 100 ml.	AVE. COLIFORMS PER 100 ml.	NO. OF SAMPLES EXAMINED	COLIFORMS (MFP)					REPEAT SAMPLES			INCUBATOR TEMP.	PLANKTON																								
	VOLUME FILTERED ml.	TOTAL COLONIES	VOLUME FILTERED ml.	TOTAL COLONIES	VOLUME FILTERED ml.	TOTAL COLONIES								1	2	3	4	5	COLIFORMS PER 100 ml.	COLIFORMS PER 100 ml.	COLIFORMS PER 100 ml.			COLIFORMS PER 100 ml.	COLIFORMS PER 100 ml.																						
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HFP MEDIA																																															
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TOTAL NO. SAMPLES												0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
TOTAL NO. SAMPLES EXCEEDING 3/500 v/100, 2/200, 13/500 ml.												0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Signed *Robert B. ...*

4

Laboratory Cert. #37807

Cert. Grade B-Well No. 4087-W

Month: March 1985 Onslow Beach Water Treatment System at Camp Lejeune Method Code: 3030
 Serial # 04-67-048 N. C. DEPARTMENT OF ENVIRONMENTAL RESOURCES Contaminant Code: 3000

DATE	RAW WATER COLIFORMS (MFP)						FILTERED		FINISHED		DISTRIBUTION SYSTEM														
	A		B		C		TOTAL COLIFORMS	PER 100 ml.	TOTAL PLATE COUNT	MFP COLIFORMS	PER 100 ml.	TOTAL PLATE COUNT	COLIFORMS (MFP)												
VOLUME FILTERED ml.	TOTAL COLONIES	VOLUME FILTERED ml.	TOTAL COLONIES	VOLUME FILTERED ml.	TOTAL COLONIES	NO. OF COLIFORMS PER 100 ml.	MFP COLIFORMS PER 100 ml.	TOTAL PLATE COUNT	MFP COLIFORMS PER 100 ml.	TOTAL PLATE COUNT	AVE. COLIFORMS PER 100 ml.	NO. OF SAMPLES EXAMINED	1	2	3	4	5	REPEAT SAMPLES	COLIFORMS PER 100 ml.	COLIFORMS PER 100 ml.	COLIFORMS PER 100 ml.	COLIFORMS PER 100 ml.	COLIFORMS PER 100 ml.		
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HF MEDIA		BBL mEndo		BACTERIAL DENSITY		BACTERIAL ARITH. MEAN		GEO. MEAN		TOTAL NO. SAMPLES		DISTR. SYSTEM		TOTAL NO. SAMPLES		DISTR. SYSTEM		TOTAL NO. SAMPLES		DISTR. SYSTEM		TOTAL NO. SAMPLES		DISTR. SYSTEM	
0		0		0		0		0		0		0		0		0		0		0		0		0	
7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0		7.0	

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INCUBATOR TEMP.
35.5

350
35.0
350

8

WATER TREATMENT PLANTS

LABORATORY ANALYSIS
 MCBCL 11330.3 (REV. 6-84)

DATE COLLECTED
 3/5/85

DATE OF ANALYSIS
 3/5/85

PARAMETER	HADNOT POINT	CAMP JOHNSON	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
	-041	-045	-044	-048	-047	-044	-043	-042
PH (IN LAB NOT PLANT)	9.1	7.5	8.6	7.5	8.4	8.3	8.5	8.5
PHENOLTHALEIN ALKALINITY	8	0	4	0	4	2	4	10
METHYL ORANGE ALKALINITY	60	190	52	170	160	162	60	170
CARBONATES AS CaCO ₃	16	0	8	0	8	4	8	20
BICARBONATES AS CaCO ₃	44	190	44	170	152	158	52	150
CHLORIDES AS Cl	10	40	10	24	12	30	14	170
HARDNESS AS CaCO ₃	56	80	76	64	54	100	60	62
IRON AS Fe	0.05	0.57	0.04	0.17	0.07	0.08	0.06	0.09
	1.04		0.97				1.00	
FLUORIDE	1.06	0.18	0.98	0.18	0.13	0.12	1.00	0.79
CHLORINE RESIDUAL	1.0	1.2	1.0	1.2	1.1	1.0	1.3	1.5
	0.40		0.20				1.00	
TURBIDITY	0.40	1.5	0.40	0.70	0.40	0.60	0.60	0.6
TOTAL PHOSPHATE		3.65			1.13			
ORTHO PHOSPHATE		1.13			0.25			
META PHOSPHATE		2.52			0.88			
STABILITY	+0.5	-0.5	+0.1	-0.5	+0.1	+0.3	+0.3	0.0

REMARKS

CLW

COPY TO:

0000004764

- UTIL DIR
 WATER TREATMENT
 PMU MCAS-PMU
 NREAD FILE

LABORATORY ANALYSIS BY

NOTE: All results reported in parts per million unless otherwise noted except for pH, temperature, and specific conductance. One liter of potable water is assumed to weigh one kilogram.

ENCLOSURE (2)

H. J. Burns & Kachapelle

12 MAR 85

12 MAR 85

PARAMETER	HADNOT POINT -041	CAMP JOHNSON -042	TARAWA TERRACE -044	ON SLOW BEACH -048	COURTHOUSE BAY -047	RIFLE RANGE -046	HOLCOMB BLVD -045	NEW RIVER -043
PH (IN LAB NOT PLANT)	8.5	7.3	8.8	7.4	8.4	8.2	8.5	8.7
PHENOLTHALEIN ALKALINITY	10	0	10	0	12	2	8	62
METHYL ORANGE ALKALINITY	60	196	46	164	176	170	88	220
CARBONATES AS CaCO ₃	20	0	20	0	24	4	16	124
BICARBONATES AS CaCO ₃	40	196	26	164	152	166	72	96
CHLORIDES AS Cl	30	36	10	18	14	14	10	110
HARDNESS AS CaCO ₃	60	86	68	68	84	74	80	54
IRON AS Fe	<0.04	0.63	<0.04	0.14	<0.04	<0.04	<0.04	<0.04
AM	1.01	0.76					0.93	
FLUORIDE	1.05	0.15	0.67	0.17	0.12	0.09	0.99	0.74
PM								
CHLORINE RESIDUAL	1.0	1.4	1.0	1.0	1.5	1.0	1.0	1.4
AM	0.2	0.2					0.2	
TURBIDITY	0.3	0.7	0.4	0.3	0.3	0.4	0.2	0.3
PM								
TOTAL PHOSPHATE		1.10			0.59			
ORTHO PHOSPHATE		1.04			0.25			
META PHOSPHATE		0.06			0.34			
STABILITY	+0.1	-0.6	+0.2	-0.7	+0.2	0.0	+0.2	0.0

REMARKS

COPY TO: CLW
 0000004765

- UTIL DIR
- WATER TREATMENT
- PMU MCAS PMU
- NREAD FILE

NOTE: All results reported in parts per million unless otherwise noted except for pH, temperature, and specific conductance. One liter of potable water is assumed to weigh one kilogram.

LABORATORY ANALYSIS BY

2 HUNRYCUTT

CHEMICAL ANALYSIS - WATER TREATMENT PLANTS
 MCBCL 11330 3 (REV. 6-84)

DATE COLLECTED
 19 MAR 1985

DATE OF ANALYSIS
 19 MAR 1985

PARAMETER	HADNOT POINT	CAMP JOHNSTON	TARAWA TERRACE	ONSLOW BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
	-041	-043	-044	-048	-047	-044	-045	-046
PH (IN LAB NOT PLANT)	8.6	7.3	8.6	7.5	8.4	8.3	8.7	8.8
PHENOLTHALEIN ALKALINITY	6	0	4	0	8	4	4	12
METHYL ORANGE ALKALINITY	80	192	58	164	166	150	62	172
CARBONATES AS CaCO ₃	12	0	8	0	16	8	8	24
BICARBONATES AS CaCO ₃	68	192	50	164	150	142	54	148
CHLORIDES AS Cl	10	36	16	20	20	26	8	170
HARDNESS AS CaCO ₃	86	84	78	66	68	70	62	56
IRON AS Fe	<0.04	0.50	<0.04	0.12	<0.04	<0.04	<0.04	<0.04
	1.05		1.13				0.93	
FLUORIDE	0.98	0.16	0.96	0.16	0.12	0.10	0.83	0.75
CHLORINE RESIDUAL	1.0	1.2	1.0	1.2	1.2	0.7	0.9	1.3
	0.2	0.9	0.3	0.2	0.2	0.3	0.1	0.6
TURBIDITY	0.2	0.9	0.2	0.2	0.2	0.3	0.2	
TOTAL PHOSPHATE		1.84			1.26			
ORTHO PHOSPHATE		0.92			0.28			
META PHOSPHATE		0.92			0.98			
STABILITY	+0.4	-0.8	+0.4	-0.7	+0.1	0.0	+0.4	+0.2

REMARKS

COPY TO:

UTIL DIR

WATER TREATMENT

PMU MCAS PMU

NREAD FILE

CLW

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LABORATORY ANALYSIS BY

LACHAPELLE V BARRE

NOTE: All results reported in parts per million unless otherwise noted except for pH, temperature, and specific conductance. One liter of potable water is assumed to weigh one kilogram.

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26 MAR 85

26 MAR 85

PARAMETER <small>SEE INL # 01-67</small>	HADNOT POINT -041	CAMP JOHNSON -043	TARAWA TERRACE -044	ONSLOW BEACH -048	COURTHOUSE BAY -047	RIFLE RANGE -046	HOLCOMB BLVD -045	NEW RIVER -042
PH (IN LAB NOT PLANT)	8.9	7.6	9.0	7.8	8.6	8.4	8.8	8.9
PHENOLTHALEIN ALKALINITY	6	0	6	0	2	6	2	12
METHYL ORANGE ALKALINITY	58	190	46	170	156	162	68	160
CARBONATES AS CaCO ₃	12	0	12	0	4	12	4	24
BICARBONATES AS CaCO ₃	46	190	34	170	152	150	64	134
CHLORIDES AS Cl	12	34	14	20	16	20	14	166
HARDNESS AS CaCO ₃	68	86	70	62	74	54	68	54
IRON AS Fe	<0.04	0.48	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
FLUORIDE	0.96	0.17	0.92	0.15	0.10	0.08	0.93	0.71
CHLORINE RESIDUAL	1.0	1.3	1.0	1.5	1.5	1.0	0.9	1.4
TURBIDITY	0.1	0.9	0.2	0.2	0.3	0.1	0.2	0.2
TOTAL PHOSPHATE	0.2	2.70	0.3		0.45		0.2	
ORTHO PHOSPHATE		1.04			0.16			
META PHOSPHATE		1.66			0.29			
STABILITY	+0.3	-0.8	+0.5	-0.7	0.0	-0.2	+0.3	0.0

REMARKS

COPY TO:

UTIL DIR

WATER TREATMENT

PMU MCAS PMU

NREAD FILE

CLW

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LABORATORY ANALYSIS BY

T.N. BARBER

NOTE: All results reported in parts per million unless otherwise noted except for pH, temperature, and specific conductance. One liter of potable water is assumed to weigh one kilogram.

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