

11330/1
NREAD
5 Nov 1984

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 October 1984. 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

Writer: E. Betz, NREAD, 5977
Typist: J. Cross, 5Nov84

CLW

0000004418

SERIAL # 04-67-041

DATE	RAW WATER COLIFORMS (MFP)						NO. OF COLIFORMS PER 100 ml.	FILTERED		FINISHED		DISTRIBUTION SYSTEM					INCREASING TEMP.							
	A		B		C			TOTAL PLATE COUNT	MFP COLIFORMS per 100 ml.	TOTAL PLATE COUNT	MFP COLIFORMS per 100 ml.	COLIFORMS (MFP)						REPEAT SAMPLES						
	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.				
1																								
2	SW											0	9	0	0	0	0	0	0	0	35			
5																								
6																								
7																								
8																								
9	SW											0	9	0	0	0	0	0	0	0	35			
10	SW													0										
11																								
12																								
13																								
14																								
15																								
16	SW											0	9	0	0	0	0			0	35			
17	SW													0	0									
18																								
20																								
21																								
22																								
23	SW											0	9	0	0	0	0			0	35			
24															0	0								
25																								
26																								
27																								
29																								
29																								
30	SW											0	9	0	0	0	0			0	35			
31														0	0									
HF MEDIA	BBL M-ENDO		BACTERIAL DENSITY		ARITH. MEAN																			
TPC MEDIA					GEO. MEAN																			

CLW
0000004419

DIST. SYSTEM TOTAL NO. SAMPLES SAMPLES EXCEEDING 3/50, (4/100) 7/200, 13/500ml 15 0

Anal(1)

Month OCTOBER

WARREN COLDS AIR STATION WATER TREATMENT PLANT AT LAJUMP LESERONE

METHOD CODE: 300

Year 1984

REPORT OF BACTERIOLOGICAL RESULTS TO DIVISION OF HEALTH SERVICES

CONTAMINANT CODE: 3000

N. C. DEPARTMENT OF HUMAN RESOURCES

SERIAL # 04-67-042

DATE	RAW WATER COLIFORMS (HFP)						NO. OF COLIFORMS PER 100 ml.	FILTERED TOTAL PLATE COUNT	FINISHED TOTAL PLATE COUNT	TOTAL PLATE COUNT	DISTRIBUTION SYSTEM COLIFORMS (HFP)					REPEAT SAMPLES			INCUBATOR TEMP.	
	A		B		C						1	2	3	4	5	COLIFORMS per 100 ml.	COLIFORMS per 100 ml.	COLIFORMS per 100 ml.		
	VOLUME FILTERED ml.	TOTAL COLONIES	VOLUME FILTERED ml.	TOTAL COLONIES	VOLUME FILTERED ml.	TOTAL COLONIES														COLIFORMS per 100 ml.
1																				
2											0	7	0	0	0	0	0			35.5
3																				
4																				
5																				
6																				
7																				
8																				
9											0	7	0	0	0	0	0	0	0	35.5
10																				
11																				
12																				
13																				
14																				
15																				
16											0	7	0	0	0	0	0	0	0	35.0
17																				
18																				
19																				
20																				
21																				
22																				
23											0	7	0	0	0	0	0	0	0	35.5
24																				
25																				
26																				
27																				
28																				
29																				
30											0	7	0	0	0	0	0	0	0	35.5
31																				
MF MEDIA	BBL M-ENDO						DACTERIAL DENSITY	ARITH. MEAN				0	DIST. SYSTEM	TOTAL NO. SAMPLES					35	
TPC MEDIA								GEO. MEAN				10		SAMPLES EXCEEDING 3/50, (4/100) 7/200, 13/500ml					0	

GLW
000004420

Month 11/05/54
 Year 1954

FALLOUTS DIV.

REPORT OF BACTERIOLOGICAL RESULTS TO DIVISION OF HEALTH SERVICES
 N. C. DEPARTMENT OF HUMAN RESOURCES

METHOD CODE: 303
 CONTAMINANT CODE: 3000

SERIAL # 04-67-043

DATE	RAW WATER COLIFORMS (MFP)						NO. OF COLIFORMS PER 100 ml.	TOTAL PLATE COUNT	MFP COLIFORMS per 100 ml.	TOTAL PLATE COUNT	MFP COLIFORMS per 100 ml.	TOTAL PLATE COUNT	DISTRIBUTION SYSTEM					COLIFORMS per 100 ml.	COLIFORMS per 100 ml.	COLIFORMS per 100 ml.	INCUBATOR TEMP.				
	A		B		C								COLIFORMS (MFP)									REPEAT SAMPLES			
	VOLUME FILTERED ml.	TOTAL COLONIES	VOLUME FILTERED ml.	TOTAL COLONIES	VOLUME FILTERED ml.	TOTAL COLONIES							1	2	3	4	5					1	2	3	
1																									
2													0	7	0	0	0	0	0					35.0	
3																									
4																									
5																									
6																									
7																									
8																									
9													0	7	0	0	0	0	0	0	0	0	0	0	35.0
10																									
11																									
12																									
13																									
14																									
15																									
16													0	7	0	0	0	0	0	0	0	0	0	0	35.0
17																									
18																									
19																									
20																									
21																									
22																									
23													0	7	0	0	0	0	0	0	0	0	0	0	35.0
24																									
25																									
26																									
27																									
28																									
29																									
30													0	7	0	0	0	0	0	0	0	0	0	0	35.0
31																									
RF MEDIA	BBL M-ENDO		BACTERIAL DENSITY	ARITH. MEAN		GEO. MEAN		CLW					0	DIST. SYSTEM	TOTAL NO. SAMPLES					35					
TPC MEDIA								000000442					1.0		SAMPLES EXCEEDING 3/50, (4/100) 7/200, 13/500ml					0					

2 OCTOBER 1984

PARAMETER SERIAL #04-61	HADNOT POINT -041	MONTFORD POINT -045	TARAWA TERRACE -044	ONSLow BEACH -048	COURTHOUSE BAY -047	RIFLE RANGE -046	HOLCOMB BLVD -043	NEW RIVER -042
PH (IN LAB NOT PLANT)	8.9	7.3	8.7	7.4	8.5	8.3	9.0	8.6
PENOLTHALEIN ALKALINITY	6	0	2	0	4	0	8	8
METHYL ORANGE ALKALINITY	52	174	40	160	158	152	56	114
CARBONATES AS CaCO ₃	12	0	4	0	8	0	16	16
BICARBONATES CaCO ₃	40	174	36	160	142	152	40	148
CHLORIDES AS Cl	10	20	10	20	10	16	10	90
HARDNESS AS CaCO ₃	60	50	62	54	60	42	60	0.58
IRON AS Fe	<0.04	0.41	<0.04	0.17	<0.04	<0.04	0.15	0.12
FLUORIDE	AM 0.94 PM 0.95	0.14	0.97 1.05	0.13	0.09	0.07	0.96 0.90	0.81
CHLORINE RESIDUAL	1.0	1.2	1.0	1.3	1.3	1.0	0.9	1.3
TURBIDITY	AM 0.20 PM 0.30	1.00	0.30 8.00	0.40	0.40	0.30	0.3 8.10	3.90
TOTAL PHOSPHATE		3.85			0.69			
ORTHO PHOSPHATE		1.32			0.19			
META PHOSPHATE		2.53			0.50			
STABILITY	+0.7	-0.9	+0.3	-0.7	+0.4	0.0	+0.7	+0.1

REMARKS

CLW

0000004427

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

BURNS + BARBEE *BB*

DATE OF ANALYSIS

20 OCT 1984

Encl (2)

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS
 MCBCL 11330/3 (REV. 3-82)

DATE COLLECTED
 9 OCTOBER 1984

PARAMETER SERIAL #04-67	HADNOT POINT -041	MONTFORD POINT -045	TARAWA TERRACE -044	ONslow BEACH -048	COURTHOUSE BAY -047	RIFLE RANGE -046	HOLCOMB BLVD -043	NEW RIVER -046
PH (IN LAB NOT PLANT)	8.8	7.8	8.9	7.6	8.3	8.3	8.9	8.7
PENOLTHALEIN ALKALINITY	6	0	6	0	4	2	6	12
METHYL ORANGE ALKALINITY	82	196	52	166	172	196	60	220
CARBONATES AS CaCO ₃	12	0	12	0	8	4	12	24
BICARBONATES AS CaCO ₃	70	196	40	166	164	192	48	196
CHLORIDES AS Cl	10	20	18	18	20	52	20	94
HARDNESS AS CaCO ₃	74	66	76	56	50	52	66	48
IRON AS Fe	0.04	0.34	0.04	0.15	0.04	0.09	0.04	0.04
FLUORIDE	AM 0.93		1.24				0.98	
	PM 0.95	0.16	1.19	0.16	0.11	0.10	0.84	0.87
CHLORINE RESIDUAL	0.9	1.4	1.0	1.5	1.1	1.0	0.9	1.3
TURBIDITY	AM 0.33		0.46				0.40	
	PM 0.31	0.94	0.75	0.25	0.21	0.46	0.35	0.63
TOTAL PHOSPHATE		2.75			0.81			
ORTHO PHOSPHATE		1.04			0.22			
META PHOSPHATE		1.71			0.59			
STABILITY	+0.3	-0.3	+0.5	-0.8	-0.2	-0.2	+0.2	+0.1

REMARKS

CLW

0000004428

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

BARBER + HONEYCUTT *EB*

DATE OF ANALYSIS

9 OCT 1984

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS
 MCBCL 11330/3 (REV. 3-82)

DATE COLLECTED
 16 OCTOBER 1984

PARAMETER SERIAL #04-67	HADNOT POINT -041	MONTFORD POINT -045	TARAWA TERRACE -044	ONSLow BEACH -048	COURTHOUSE BAY -017	RIFLE RANGE -046	HOLCOMB BLVD -043	NEW RIVER -046
PH (IN LAB NOT PLANT)	9.1	7.4	7.8	7.5	8.5	8.1	8.8	8.5
PENOLTHALEIN ALKALINITY	8	0	0	0	4	0	4	6
METHYL ORANGE ALKALINITY	56	182	134	168	142	176	66	244
CARBONATES AS CaCO ₃	16	0	0	0	8	0	8	12
BICARBONATES AS CaCO ₃	40	182	134	168	134	176	58	232
CHLORIDES AS Cl	10	24	18	22	16	20	8	116
HARDNESS AS CaCO ₃	64	68	144	56	50	60	66	58
IRON AS Fe	0.04	0.43	0.06	0.14	0.04	0.04	0.04	0.04
FLUORIDE	AM 0.97		1.10				1.05	
	PM 0.95	0.16	1.16	0.15	0.10	0.09	0.84	0.89
CHLORINE RESIDUAL	1.1	1.3	1.0	1.5	1.4	1.0	1.0	1.3
TURBIDITY	AM 0.30		0.40				0.20	
	PM 0.40	0.96	0.42	0.20	0.29	0.33	0.28	0.50
TOTAL PHOSPHATE		3.30			1.32			
ORTHO PHOSPHATE		1.17			0.16			
META PHOSPHATE		2.13			1.16			
STABILITY	+0.5	-0.6	-0.1	-0.8	0	-0.3	+0.2	0

REMARKS

CLW

0000004429

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

BARBER + HUNYCLIFF

EBB

DATE OF ANALYSIS

16 Oct 1984

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS
 MCBCL 11330/3 (REV. 3-82)

DATE COLLECTED
 23 October 1984

PARAMETER SERIAL #0467	HADNOT POINT -041	MONTFORD POINT -045	TARAWA TERRACE -044	ONSLow BEACH -018	COURTHOUSE BAY -017	RIFLE RANGE -016	HOLCOMB BLVD -043	NEW RIVER -042
PH (IN LAB NOT PLANT)	8.9	7.3	8.5	7.4	8.3	8.3	8.7	8.5
PENOLTHALEIN ALKALINITY	4	0	2	0	0	0	4	6
METHYL ORANGE ALKALINITY	50	174	60	160	142	144	60	210
CARBONATES AS CaCO ₃	8	0	4	0	0	0	8	12
BICARBONATES AS CaCO ₃	42	174	56	160	142	144	52	198
CHLORIDES AS Cl	10	10	10	14	12	14	10	90
HARDNESS AS CaCO ₃	54	80	80	60	70	46	70	48
IRON AS Fe	<0.04	0.36	<0.04	0.13	<0.04	<0.04	<0.04	<0.04
FLUORIDE	AM 1.00		0.78				0.83	
	PM 1.07	0.17	0.72	0.15	0.11	0.09	0.79	0.93
CHLORINE RESIDUAL	1.0	1.5	1.0	1.3	1.3	1.0	1.0	1.3
TURBIDITY	AM 0.34		0.47				0.23	
	PM 0.55	1.03	0.64	0.26	0.30	0.29	0.26	0.47
TOTAL PHOSPHATE		1.92			1.54			
ORTHO PHOSPHATE		0.84			0.28			
META PHOSPHATE		1.08			1.26			
STABILITY	+0.6	-0.8	+0.3	-0.7	+0.1	0.0	+0.4	+0.1

REMARKS

CLW

0000004480

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

BURNS + BARBER ^{EOB}

DATE OF ANALYSIS

23 Oct 1984

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS
 MCBCL 11330/3 (REV. 3-82)

DATE COLLECTED
 30 OCTOBER 1984

PARAMETER SERIAL #04-67	HADNOT POINT -041	MONTFORD POINT -045	TARAWA TERRACE -044	ONSLow BEACH -048	COURTHOUSE BAY -047	RIFLE RANGE -046	HOLCOMB BLVD -043	NEW RIVER -046
PH (IN LAB NOT PLANT)	9.0	7.5	9.0	7.5	8.5	8.5	9.5	8.8
PENOLTHALEIN ALKALINITY	4	0	6	0	4	2	8	10
METHYL ORANGE ALKALINITY	48	184	46	160	160	152	48	238
CARBONATES AS CaCO ₃	8	0	12	0	8	4	16	20
BICARBONATES AS CaCO ₃	40	184	34	160	152	148	32	218
CHLORIDES AS Cl	10	12	12	18	18	16	12	88
HARDNESS AS CaCO ₃	64	66	66	72	68	52	50	44
IRON AS Fe	<0.04	0.41	<0.04	0.13	<0.04	<0.04	0.04	0.06
FLUORIDE	AM 1.03 PM 0.99	0.16	0.91 0.89	0.15	0.11	0.10	0.91 0.93	0.98
CHLORINE RESIDUAL	1.0	1.3	1.0	1.5	1.3	1.0	1.0	1.3
TURBIDITY	AM 0.3 PM 0.3	1.5	0.7 1.2	0.3	0.2	0.2	0.2 0.3	0.3
TOTAL PHOSPHATE		2.08			1.00			
ORTHO PHOSPHATE		1.00			0.25			
META PHOSPHATE		1.08			0.75			
STABILITY	+0.6	-0.8	+0.4	-0.8	+0.1	ELON	+0.6	+0.2

REMARKS

0000004431

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

DATE OF ANALYSIS

30 OCT 1984