

11330/1  
NREAD  
5 Mar 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 1-28 February 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

0000004694

Writer: E. Betz, NREAD 5977  
Typist: J. Cross. 5Mar85

Serial # 04-67-041

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										INCUBATOR TEMP.	
	A			B			C									COLIFORMS (MFP)					REPEAT SAMPLES						
	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	COLIFORMS per 100 ml.	COLIFORMS per 100 ml.	COLIFORMS per 100 ml.	COLIFORMS per 100 ml.	COLIFORMS per 100 ml.		COLIFORMS per 100 ml.
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	MF MEDIA	BRI mEndo		BACTERIAL DENSITY	ARITH. MEAN		GEO. MEAN		0000004695				0	DIST. SYSTEM	TOTAL NO. SAMPLES										37		
	TPC MEDIA												1.0		SAMPLES EXCEEDING 3/50 (4/100) 7/200, 13/500ml										0		

Laboratory Cont. #37807

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DATE	RAW WATER COLIFORMS (MFP)						NO. OF COLIFORMS PER 100 ml.	TOTAL PLATE COUNT	MFP COLIFORMS per 100 ml.	FINISHED	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.	PLANKTON RAW WATER			
	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						COLIFORMS per 100 ml.	COLIFORMS per 100 ml.	COLIFORMS per 100 ml.
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MF MEDIA	BBI mEndo		BACTERIAL DENSITY	ARITH. MEAN		GEO. MEAN					0	DIST. SYSTEM	TOTAL NO. SAMPLES					28								
TPC MEDIA											1.0		SAMPLES EXCEEDING 3/50. 4/100. 7/200. 13/500ml					0								

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Year 1985

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

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	HFP COLIFORMS per 100 ml.	TOTAL PLATE COUNT	DISTRIBUTION SYSTEM										INCUBATOR TEMP.	PLANKTON			
	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	COLIFORMS per 100 ml.	COLIFORMS per 100 ml.	COLIFORMS per 100 ml.	COLIFORMS per 100 ml.	COLIFORMS per 100 ml.							
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MF MEDIA		BRI mEndo		BACTERIAL DENSITY		ARITH. MEAN																							
TPC MEDIA																													

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0000004697

0 DIST. SYSTEM TOTAL NO. SAMPLES 28  
SAMPLES EXCEEDING 3/50, (4/100) 7/200, 13/500 ml 0

407007

01-11-85

Serial # 04-67-044

N. C. DEPARTMENT OF HUMAN RESOURCES

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 (MFP)					REPEAT SAMPLES			INCUBATOR TEMP.	PLANKTON RAW WATER		
	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	COLIFORM COLONIES	VOLUME FILTERED ml.	TOTAL COLONIES	COLIFORM COLONIES	VOLUME FILTERED ml.	TOTAL COLONIES	COLIFORM COLONIES																		
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MF MEDIA	BRL mEndo			BACTERIAL DENSITY			ARITH. MEAN			0000004698			0			DIST. SYSTEM			TOTAL NO. SAMPLES					12			
TPC MEDIA													10			SAMPLES EXCEEDING 3/50. (4/100, 7/200, 13/500ml)					0						

#37807

Blue Hill CRT. Cont. Grade B-Well No. 4087-W





Year 1985

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

Contaminant Code: 3000

Serial # 04-67-047

DATE	RAW WATER COLIFORMS (MFP)						NO. OF COLIFORMS PER 100 ml.	TOTAL PLATE COUNT	MFP COLIFORMS per 100 ml.	FINISHED	TOTAL PLATE COUNT	MFP COLIFORMS per 100 ml.	TOTAL PLATE COUNT	DISTRIBUTION SYSTEM										INCUBATOR TEMP.	PLANKTON		
	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	COLIFORMS per 100 ml.	COLIFORMS per 100 ml.	COLIFORMS per 100 ml.	COLIFORMS per 100 ml.	COLIFORMS per 100 ml.			COLIFORMS per 100 ml.	COLIFORMS per 100 ml.
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MF MEDIA		BBL mEndo		DACTERIAL DENSITY		ARITH. MEAN								0	DIST. SYSTEM	TOTAL NO. SAMPLES					16						
TPC MEDIA														10		SAMPLES EXCEEDING 3/50. (4/100) 7/200. 13/500=1					0						

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DATE	RAW WATER COLIFORMS (MFP)						NO. OF COLIFORMS PER 100 ml.	FILTERED		FINISHED		DISTRIBUTION SYSTEM					REPEAT SAMPLES			INCUBATOR TEMP.	PLANKTON		
	A		B		C			TOTAL PLATE COUNT	MFP 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							1	2	3	4	5	COLIFORMS per 100 ml.	COLIFORMS per 100 ml.			COLIFORMS per 100 ml.	
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MF MEDIA		BBL mEndo		BACTERIAL DENSITY		ARITH. MEAN						0	DIST. SYSTEM		TOTAL NO. SAMPLES								8
TPC MEDIA												1.0			SAMPLES EXCEEDING 3/50. (4/100, 7/200, 13/500ml)								0

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

DATE COLLECTED  
 5 FEB 85

DATE OF ANALYSIS  
 5 FEB 85

PARAMETER SERIAL # 01-67	HADNOT POINT -041	CAMP JOHNSON -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	7.7	8.9	7.6	8.4	8.3	8.4	8.6		
PHENOLTHALEIN ALKALINITY	6	0	6	0	8	6	6	14		
METHYL ORANGE ALKALINITY	64	198	46	168	192	166	98	192		
CARBONATES AS CaCO <sub>3</sub>	12	0	12	0	16	12	12	28		
BICARBONATES AS CaCO <sub>3</sub>	52	198	34	168	176	154	86	164		
CHLORIDES AS Cl	10	38	10	22	20	16	10	162		
HARDNESS AS CaCO <sub>3</sub>	62	200	60	56	66	48	90	64		
IRON AS Fe		MACHINE DOWN FOR CONSTRUCTION								
FLUORIDE AM PM	<del>1.15</del> 1.11	0.17	<del>1.02</del> 0.99	0.18	0.11	0.10	<del>0.85</del> 0.82	0.77		
CHLORINE RESIDUAL	1.1	1.3	1.0	1.6	1.4	1.0	1.0	1.6		
TURBIDITY AM PM	<del>0.3</del> 0.2	1.0	<del>0.2</del> 0.9	0.3	0.3	0.3	<del>1.1</del> 0.6	0.2		
TOTAL PHOSPHATE		1.00			0.92					
ORTHO PHOSPHATE		0.66			0.16					
META PHOSPHATE		0.34			0.76					
STABILITY	+0.6	-0.3	+0.6	-0.6	+0.1	0.0	+0.2	+0.2		

REMARKS

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0000004703

- COPY TO:
- UTIL DIR     \_\_\_\_\_
- WATER TREATMENT
- PMU     MCAS PMU

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

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

DATE COLLECTED

2/12/85

DATE OF ANALYSIS

2/12/85

PARAMETER SERIAL # 01-67	HADNOT POINT -041	CAMP JOHNSON -045	TARAWA TERRACE -044	ONSLOW BEACH -048	COURTHOUSE BAY -047	RIFLE RANGE -046	HOLCOMB BLVD -043	NEW RIVER -042		
PH (IN LAB NOT PLANT)	9.0	7.3	8.8	7.4	8.3	8.3	8.6	8.2		
PHENOLTHALEIN ALKALINITY	8	0	4	0	2	2	4	0		
METHYL ORANGE ALKALINITY	50	196	52	160	150	150	70	200		
CARBONATES AS CaCO <sub>3</sub>	16	0	8	0	4	4	8	0		
BICARBONATES AS CaCO <sub>3</sub>	34	196	44	160	146	146	62	200		
CHLORIDES AS Cl	10	50	10	20	16	18	14	160		
HARDNESS AS CaCO <sub>3</sub>	60	68	82	62	56	56	74	84		
IRON AS Fe	<0.04	0.51	0.06	0.20	0.09	0.06	<0.04	0.09		
FLUORIDE	<del>0.96</del> 0.93	0.17	<del>0.16</del> 0.83	0.17	0.12	0.09	<del>0.73</del> 0.72	0.70		
CHLORINE RESIDUAL	1.2	1.2	1.0	1.2	1.5	1.0	1.0	1.1		
TURBIDITY	<del>0.20</del> 0.20	0.50	<del>6.6</del> 0.40	0.30	0.70	0.30	<del>0.40</del> 0.30	0.40		
TOTAL PHOSPHATE		1.30			1.26					
ORTHO PHOSPHATE		1.00			0.25					
META PHOSPHATE		0.30			1.01					
STABILITY	+0.4	-0.8	+0.6	-0.9	0.0	+0.1	+0.3	0.0		

REMARKS

CLW

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COPY TO:

UTIL DIR  \_\_\_\_\_

WATER TREATMENT

PMU  MCAS PMU

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

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

DATE COLLECTED

19 FEB 85

DATE OF ANALYSIS

19 FEB 85

PARAMETER SERIAL # 01-67	HADNOT POINT -041	CAMP JOHNSON -045	TARAWA TERRACE -044	ONSLow BEACH -048	COURTHOUSE BAY -047	RIFLE RANGE -046	HOLCOMB BLVD -043	NEW RIVER -042		
PH (IN LAB NOT PLANT)	8.7	7.6	8.8	7.6	8.6	8.4	8.9	9.1		
PHENOLTHALEIN ALKALINITY	10	0	6	0	10	8	10	26		
METHYL ORANGE ALKALINITY	20	190	56	164	172	164	56	170		
CARBONATES AS CaCO <sub>3</sub>	20	0	12	0	20	16	20	52		
BICARBONATES AS CaCO <sub>3</sub>	0	190	44	164	152	148	36	118		
CHLORIDES AS Cl	12	42	12	22	22	22	16	160		
HARDNESS AS CaCO <sub>3</sub>	76	86	80	70	70	60	68	60		
IRON AS Fe	<0.04	0.57	<0.04	0.14	0.09	0.07	0.06	<0.04		
FLUORIDE	<del>0.91</del> 0.88	0.16	<del>1.00</del> 1.04	0.16	0.11	0.09	<del>0.96</del> 0.88	0.70		
CHLORINE RESIDUAL	1.1	1.2	1.0	1.3	1.3	1.0	0.9	1.3		
TURBIDITY	<del>0.3</del> 0.3	0.4	<del>0.2</del> 0.2	0.3	0.3	0.2	<del>0.3</del> 0.5	2.3		
TOTAL PHOSPHATE		2.05			1.68					
ORTHO PHOSPHATE		1.13			0.25					
META PHOSPHATE		0.92			1.43					
STABILITY	+0.2	-0.4	+0.3	-0.6	+0.3	+0.1	+0.3			

REMARKS

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COPY TO:

UTIL DIR  \_\_\_\_\_

WATER TREATMENT

PMU  MCAS PMU

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

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

DATE COLLECTED

26 FEB 85

DATE OF ANALYSIS

26 FEB 85

PARAMETER SERIAL # 01-47	HADNOT POINT -041	CAMP JOHNSON -042	TARAWA TERRACE -044	ONSLow BEACH -048	COURTHOUSE BAY -047	RIFLE RANGE -046	HOLCOMB BLVD -043	NEW RIVER -042		
PH (IK LAB NOT PLANT)	8.8	7.4	8.8	7.5	8.4	8.3	8.8	8.5		
PHENOLTHALEIN ALKALINITY	4	0	4	0	6	2	6	4		
METHYL ORANGE ALKALINITY	44	190	54	160	148	158	60	180		
CARBONATES AS CaCO <sub>3</sub>	8	0	8	0	12	4	12	8		
BICARBONATES AS CaCO <sub>3</sub>	36	190	46	160	136	154	48	172		
CHLORIDES AS Cl	10	36	8	14	18	12	16	186		
HARDNESS AS CaCO <sub>3</sub>	56	80	74	60	60	60	60	64		
IRON AS Fe	<0.04	0.74	<0.04	0.10	<0.04	<0.04	<0.04	<0.04		
FLUORIDE Am	<del>1.07</del>		<del>1.10</del>				<del>1.11</del>			
FLUORIDE Pm	1.01	0.57	1.08	0.17	0.12	0.10	1.02	0.82		
CHLORINE RESIDUAL	1.0	1.3	1.0	1.5	1.4	1.0	1.0	1.3		
TURBIDITY Am	<del>0.4</del>		<del>0.2</del>				<del>0.3</del>			
TURBIDITY Pm	0.5	1.2	0.3	0.2	0.2	0.2	0.4	0.4		
TOTAL PHOSPHATE		1.54			1.84					
ORTHO PHOSPHATE		0.90			0.19					
META PHOSPHATE		0.64			1.65					
STABILITY	+0.2	-0.8	+0.2	-0.8	0	-0.2	+0.1	-0.1		

REMARKS

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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  
 T.N. BARBEE