11331
NREAD
7 Feb 85

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 January 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, Marine Corps Base, Camp Lejeune. 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:
LANTNAVFACENGCOM (Code 114)

Blind copy to:
BMO (Util Dir)
Supvy Chemist, QCL (2 copies)

CLW

0000001409

Month JANUARY — HADNOT POINT — WATER TREATMENT PLANT AT Camp Lejeune — Method Code: 303

Year 1986 — REPORT OF BACTERIOLOGICAL RESULTS TO DIVISION OF HEALTH SERVICES — Contaminant Code: 3000

N. C. DEPARTMENT OF HUMAN RESOURCES

Serial # 04-67-041

DATE	RAW WATER COLIFORMS (MFP) A: VOLUME FILTERED ml.	A: TOTAL COLONIES	A: COLIFORM COLONIES	B: VOLUME FILTERED ml.	B: TOTAL COLONIES	B: COLIFORM COLONIES	C: VOLUME FILTERED ml.	C: TOTAL COLONIES	C: COLIFORM COLONIES	NO. OF COLIFORMS PER 100 ml.	FILTERED: TOTAL PLATE COUNT	FILTERED: MFP COLIFORMS per 100 ml.	FINISHED: TOTAL PLATE COUNT	FINISHED: MFP COLIFORMS per 100 ml.	DISTRIBUTION SYSTEM: TOTAL PLATE COUNT	COLIFORMS (MFP): AVE. COLIFORMS per 100 ml.	NO. OF SAMPLES EXAMINED	1: COLIFORMS per 100 ml.	2: COLIFORMS per 100 ml.	3: COLIFORMS per 100 ml.	4: COLIFORMS per 100 ml.	5: COLIFORMS per 100 ml.	REPEAT SAMPLES: COLIFORMS per 100 ml.	REPEAT SAMPLES: COLIFORMS per 100 ml.	REPEAT SAMPLES: COLIFORMS per 100 ml.	INCUBATOR TEMP.
1																										
2	>2ND															0	02	01				10				34.6
3																										
4																										
5																										
6																										
7	>7th															0	09	0 0	0 0	0 0	0 0	01				34.5
8																										
9																										
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11																										
12																										
13																										
14	>14th				00000	CLW										0	09	0 0 0 0	0 0	0 0	10	·				34.6
15																										
16																										
17																										
18					01410																					
20																										
21	>21st															0	09	0 0 0 0	0 0	0 1	1a					34.8
22																										
23																										
24																										
25																										
26																										
27	>28th																									
28																0	09	0 0	0 0	0 0	0 0	01				35°
29																										
30																										
31																										

MF MEDIA: BBL mEndo — BACTERIAL DENSITY — ARITH. MEAN

TPC MEDIA — GEO. MEAN

DIST. SYSTEM: 0 / 1

TOTAL NO. SAMPLES: 38

SAMPLES EXCEEDING 3/50. (4/100.) 7/200. 13/500: 0

Elizabeth A Betts

Month JANUARY MARINE CORPS AIR STATION WATER TREATMENT PLANT AT CAMP LEJEUNE

Year 1986 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 (MFP) A: VOLUME FILTERED ml.	A: TOTAL COLONIES	A: COLIFORM COLONIES	B: VOLUME FILTERED ml.	B: TOTAL COLONIES	B: COLIFORM COLONIES	C: VOLUME FILTERED ml.	C: TOTAL COLONIES	C: COLIFORM COLONIES	NO. OF COLIFORMS PER 100 ml.	FILTERED: TOTAL PLATE COUNT	FILTERED: MFP COLIFORMS per 100 ml.	FINISHED: TOTAL PLATE COUNT	FINISHED: MFP COLIFORMS per 100 ml.	DISTRIBUTION SYSTEM: TOTAL PLATE COUNT	COLIFORMS (MFP): AVE. COLIFORMS: per 100 ml.	NO. OF SAMPLES: EXAMINED	1: COLIFORMS per 100 ml.	2: COLIFORMS per 100 ml.	3: COLIFORMS per 100 ml.	4: COLIFORMS per 100 ml.	5: COLIFORMS per 100 ml.	REPEAT SAMPLES: COLIFORMS per 100 ml.	REPEAT SAMPLES: COLIFORMS per 100 ml.	REPEAT SAMPLES: COLIFORMS per 100 ml.	INCUBATOR TEMP.
1																										
2	>2-8															Φ	02	010								34.0
4																										
5																										
6																										
7	>7th															Φ	07	01	010	010	010					34.5
8																										
9																										
10					0																					
11					0																					
12					0																					
13					0																					
14	>14th				1											Φ	07	01	010	010	01	01				34.0
15					4																					
16					1																					
17					1																					
18																										
20																										
21	>21st															Φ	.07	01	010	010	01	10				34.1
22																										
23																										
24																										
25																										
26																										
27																										
28	>28th															Φ	07	01	000	010	01					35
29																		01								
30																										
31																										

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MF MEDIA: RBL mEndo — BACTERIAL DENSITY — ARITH. MEAN — GEO. MEAN

TPC MEDIA

DIST. SYSTEM: 0 / 1

TOTAL NO. SAMPLES 30

SAMPLES EXCEEDING 3/50. (4/100) 7/200. 13/500ml 0

Month JANUARY
Year 1986

HOLCOMB BLVD. WATER TREATMENT PLANT AT Camp Lejeune

REPORT OF BACTERIOLOGICAL RESULTS TO DIVISION OF HEALTH SERVICES

N. C. DEPARTMENT OF HUMAN RESOURCES

Contaminant Code: 3000

Serial # 84-67-043

DATE	RAW WATER COLIFORMS (MFP) A: VOLUME FILTERED ml.	A: TOTAL COLONIES	A: COLIFORM COLONIES	B: VOLUME FILTERED ml.	B: TOTAL COLONIES	B: COLIFORM COLONIES	C: VOLUME FILTERED ml.	C: TOTAL COLONIES	C: COLIFORM COLONIES	NO. OF COLIFORMS PER 100 ml.	FILTERED: TOTAL PLATE COUNT	FILTERED: MFP COLIFORMS per 100 ml.	FINISHED: TOTAL PLATE COUNT	FINISHED: MFP COLIFORMS per 100 ml.	DISTRIBUTION SYSTEM: TOTAL PLATE COUNT	AVE. COLI FORMS per 100 ml.	NO. OF SAMPLES EXAMINED	COLIFORMS (MFP) 1: COLIFORMS per 100 ml.	2: COLIFORMS per 100 ml.	3: COLIFORMS per 100 ml.	4: COLIFORMS per 100 ml.	5: COLIFORMS per 100 ml.	REPEAT SAMPLES: COLIFORMS per 100 ml.	REPEAT SAMPLES: COLIFORMS per 100 ml.	REPEAT SAMPLES: COLIFORMS per 100 ml.	INCUBATOR TEMP.
1																										
2	>2nd															0	02	010								34.6
4																										
5																										
6																										
7	>7th															0	07	0/0	0/0	0/0	0/					34.5
8																										
9																										
10																										
11																										
12																										
13																										
14	>14th															0	07	0/0	0/0	10	0/0					34.6
15																										
16																										
17																										
18																										
19																										
20																										
21	>21st															0	07	0/0	0/0	10	0	0/				34.6
22																										
23																										
24																										
25																										
26																										
27																										
28	>28															0	07	0/0	0/0	10		0/0				35°
29																										
30																										
31																										

MF MEDIA: BBL mEndo — BACTERIAL DENSITY — ARITH. MEAN — 0 — DIST. SYSTEM — TOTAL NO. SAMPLES: 30

TPC MEDIA — GEO. MEAN — 1 — SAMPLES EXCEEDING 3/50. 4/100 7/200. 13/500ml: 0

000001412

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Month JANUARY TARAWA TERRACE WATER TREATMENT PLANT AT Camp Lejeune Method Code: 303

Year 1986 REPORT OF BACTERIOLOGICAL RESULTS TO DIVISION OF HEALTH SERVICES Contaminant Code: 3000

Serial # 04-67-044 N. C. DEPARTMENT OF HUMAN RESOURCES

DATE	RAW WATER COLIFORMS (MFP) A: VOLUME FILTERED ml.	A: TOTAL COLONIES	A: COLIFORM COLONIES	B: VOLUME FILTERED ml.	B: TOTAL COLONIES	B: COLIFORM COLONIES	C: VOLUME FILTERED ml.	C: TOTAL COLONIES	C: COLIFORM COLONIES	NO. OF COLIFORMS PER 100 ml.	FILTERED: TOTAL PLATE COUNT	FILTERED: MFP COLIFORMS per 100 ml.	FINISHED: TOTAL PLATE COUNT	FINISHED: MFP COLIFORMS per 100 ml.	DISTRIBUTION SYSTEM: TOTAL PLATE COUNT	COLIFORMS (MFP): AVE. COLIFORMS per 100 ml.	COLIFORMS (MFP): NO. OF SAMPLES EXAMINED	COLIFORMS (MFP): 1 COLIFORMS per 100 ml.	COLIFORMS (MFP): 2 COLIFORMS per 100 ml.	COLIFORMS (MFP): 3 COLIFORMS per 100 ml.	COLIFORMS (MFP): 4 COLIFORMS per 100 ml.	COLIFORMS (MFP): 5 COLIFORMS per 100 ml.	REPEAT SAMPLES: COLIFORMS per 100 ml.	REPEAT SAMPLES: COLIFORMS per 100 ml.	REPEAT SAMPLES: COLIFORMS per 100 ml.	INCUBATOR TEMP.
1																											
2	>2 ml															0	02	010								34.6
3																											
4																											
5																											
6																											
7	7 ml															0	03	0	010							34.5
8																											
9																											
10																											
11																											
12																											
13																											
14	>14 ml															0	03	0	0	01						34.6
15																											
16																											
17																											
18																											
19																0	03	01	01	10							
21	>21 ml																									34.6
22																											
23																											
24																											
25																											
26																											
27																											
28	>28 ml															0	03	01	01		01					35°
29																											
30																											
31																											

TOTAL NO. SAMPLES

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Year 1986

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

Contaminant Code: 3000

Serial # 04-67-045

DATE	RAW WATER COLIFORMS (MFP) A: VOLUME FILTERED ml.	A: TOTAL COLONIES	A: COLIFORM COLONIES	B: VOLUME FILTERED ml.	B: TOTAL COLONIES	B: COLIFORM COLONIES	C: VOLUME FILTERED ml.	C: TOTAL COLONIES	C: COLIFORM COLONIES	NO. OF COLIFORMS PER 100 ml.	FILTERED: TOTAL PLATE COUNT	FILTERED: MFP COLIFORMS per 100 ml.	FINISHED: TOTAL PLATE COUNT	FINISHED: MFP COLIFORMS per 100 ml.	DISTRIBUTION SYSTEM: TOTAL PLATE COUNT	COLIFORMS (MFP): AVE. COLIFORMS per 100 ml.	NO. OF SAMPLES EXAMINED	1: COLIFORMS per 100 ml.	2: COLIFORMS per 100 ml.	3: COLIFORMS per 100 ml.	4: COLIFORMS per 100 ml.	5: COLIFORMS per 100 ml.	REPEAT SAMPLES: COLIFORMS per 100 ml.	REPEAT SAMPLES: COLIFORMS per 100 ml.	REPEAT SAMPLES: COLIFORMS per 100 ml.	INCUBATOR TEMP.
1																										
2	7															0	02	0 0								34.6
4																										
5																										
6																										
7	>758															0	03	0 1	0 0							34.5
8																										
9																										
10																										
11																										
12																										
13																										
14	>1458															0	03	0 0		0 1						34.6
15																										
16																										
17																										
18																										
21	>2158															0	03	0 1		1 0		0 1				34.6
22																										
23																										
24																										
25																										
26																										
27																										
29	>2858															0	03	0 1				1 0		0 1		35
29																										
30																										
31																										

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Month January

Year 1986

[illegible] WATER TREATMENT PLANT AT Camp Lejeune

Method Code: 301

Contaminant Code: 3000

REPORT OF BACTERIOLOGICAL RESULTS TO DIVISION OF HEALTH SERVICES

N. C. DEPARTMENT OF HUMAN RESOURCES

Serial # 04-67-046

DATE	RAW WATER COLIFORMS (MFP) A: VOLUME FILTERED ml.	A: TOTAL COLONIES	A: COLIFORM COLONIES	B: VOLUME FILTERED ml.	B: TOTAL COLONIES	B: COLIFORM COLONIES	C: VOLUME FILTERED ml.	C: TOTAL COLONIES	C: COLIFORM COLONIES	NO. OF COLIFORMS PER 100 ml.	FILTERED: TOTAL PLATE COUNT	FILTERED: MFP COLIFORMS per 100 ml.	FINISHED: TOTAL PLATE COUNT	FINISHED: MFP COLIFORMS per 100 ml.	DISTRIBUTION SYSTEM: TOTAL PLATE COUNT	COLIFORMS (MFP): AVE. COLIFORMS per 100 ml.	COLIFORMS (MFP): NO. OF SAMPLES EXAMINED	COLIFORMS (MFP): 1 COLIFORMS per 100 ml.	COLIFORMS (MFP): 2 COLIFORMS per 100 ml.	COLIFORMS (MFP): 3 COLIFORMS per 100 ml.	COLIFORMS (MFP): 4 COLIFORMS per 100 ml.	COLIFORMS (MFP): 5 COLIFORMS per 100 ml.	REPEAT SAMPLES: COLIFORMS per 100 ml.	REPEAT SAMPLES: COLIFORMS per 100 ml.	REPEAT SAMPLES: COLIFORMS per 100 ml.	INCUBATOR TEMP.
2	>20ml															0	03	0	0							34.6
4																										
5																										
6																										
7	>7ml															0	03	0	0	0						34.5
8																										
9																										
10																										
11																										
12																										
13																										
14	>14ml																									
15																0	03	0	0	0						34.6
16																										
17																										
18																										
21	>21ml															0	03	0	0	0						34.6
22																										
23																										
24																										
25																										
26																										
27	>28ml																									
28																0	03	0	0		0					35
29																										
30																										
31																										

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MF MEDIA: BBL mEndo

TPC MEDIA

BACTERIAL DENSITY

ARITH. MEAN

GEO. MEAN

0

1

DIST. SYSTEM

TOTAL NO. SAMPLES 15

SAMPLES EXCEEDING 3/50 (1/100) 2/200 1/300 1/500 0

Month JANUARY
Year 1986

COURTHOUSE BAY WATER TREATMENT PLANT AT Camp Lejeune

Method Code: 303
Contaminant Code: 3000

REPORT OF BACTERIOLOGICAL RESULTS TO DIVISION OF HEALTH SERVICES

Sefial # 04-67-047 NC DEPARTMENT OF HUMAN RESOURCES

DATE	RAW WATER COLIFORMS (MFP) A: VOLUME FILTERED ml.	A: TOTAL COLONIES	A: COLIFORM COLONIES	B: VOLUME FILTERED ml.	B: TOTAL COLONIES	B: COLIFORM COLONIES	C: VOLUME FILTERED ml.	C: TOTAL COLONIES	C: COLIFORM COLONIES	NO. OF COLIFORMS PER 100 ml.	FILTERED: TOTAL PLATE COUNT	FILTERED: MFP COLIFORMS per 100 ml.	FINISHED: TOTAL PLATE COUNT	FINISHED: MFP COLIFORMS per 100 ml.	DISTRIBUTION SYSTEM: TOTAL PLATE COUNT	COLIFORMS (MFP): AVE. COLIFORMS per 100 ml.	COLIFORMS (MFP): NO. OF SAMPLES EXAMINED	COLIFORMS (MFP): 1 COLIFORMS per 100 ml.	COLIFORMS (MFP): 2 COLIFORMS per 100 ml.	COLIFORMS (MFP): 3 COLIFORMS per 100 ml.	COLIFORMS (MFP): 4 COLIFORMS per 100 ml.	COLIFORMS (MFP): 5 COLIFORMS per 100 ml.	REPEAT SAMPLES: COLIFORMS per 100 ml.	REPEAT SAMPLES: COLIFORMS per 100 ml.	REPEAT SAMPLES: COLIFORMS per 100 ml.	INCUBATOR TEMP.
1																										
2	>2nd															0	04	0	0	0						34.6
4																										
5																										
6																										
7	>7th															0	04	0	0	0						34.5
8																										
9																										
10																										
11																										
12																										
13																										
14	>14th															0	04	0	0	1	0					34.6
15																										
16				0																						
17				0																						
18				0																						
20				0																						
21	>21st			0												0	04	0	0		0					34.6
22				0																						
23				1																						
24				4																						
25				1																						
26				6																						
27																										
28	>28th															0	04	0	0		0	0				35
29																										
30																										
31																										

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MF MEDIA: BBL mEndo
BACTERIAL DENSITY
ARITH. MEAN
GEO. MEAN

0 DIST. SYSTEM

TOTAL NO. SAMPLES 20

Month JANUARY
Year 1986

ONSLOW BEACH WATER TREATMENT PLANT AT Camp Lejeune

Method Code: 303
Contaminant Code: 3000

REPORT OF BACTERIOLOGICAL RESULTS TO DIVISION OF HEALTH SERVICES

N. C. DEPARTMENT OF HUMAN RESOURCES

Serial # 04-67-048

DATE	RAW WATER COLIFORMS (MFP) A: VOLUME FILTERED ml.	A: TOTAL COLONIES	A: COLIFORM COLONIES	B: VOLUME FILTERED ml.	B: TOTAL COLONIES	B: COLIFORM COLONIES	C: VOLUME FILTERED ml.	C: TOTAL COLONIES	C: COLIFORM COLONIES	NO. OF COLIFORMS PER 100 ml.	FILTERED: TOTAL PLATE COUNT	FILTERED: MFP COLIFORMS per 100 ml.	FINISHED: TOTAL PLATE COUNT	FINISHED: MFP COLIFORMS per 100 ml.	DISTRIBUTION SYSTEM: TOTAL PLATE COUNT	AVE. COLIFORMS per 100 ml.	NO. OF SAMPLES EXAMINED	COLIFORMS (MFP) 1: COLIFORMS per 100 ml.	2: COLIFORMS per 100 ml.	3: COLIFORMS per 100 ml.	4: COLIFORMS per 100 ml.	5: COLIFORMS per 100 ml.	REPEAT SAMPLES: COLIFORMS per 100 ml.	REPEAT SAMPLES: COLIFORMS per 100 ml.	REPEAT SAMPLES: COLIFORMS per 100 ml.	INCUBATOR TEMP.
1																										
2	>2nd															0	02	0 0								34.6
4																										
5																										
6																										
7	>7th															0	02	0 0								34.5
8																										
9																										
10																										
11																										
12																										
13																										
14	>14th															0	02	01	01							34.6
15																										
16																										
17																										
18																										
20																										
21	>21st															0	02	0 0								34.6
22																										
23																										
24																										
25																										
26																										
27																										
28	>28th															0	02	01		10						35
29																										
30																										
31																										

MF MEDIA ... BBL ... BACTERIAL ... ARITH. MEAN ... DIST. ... TOTAL NO. SAMPLES

DATE COLLECTED 1/2/86 | DATE OF ANALYSIS 1/2/86

PARAMETER	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)	8.8	7.7	8.8	7.8	8.6	8.6	9.0	8.8
PHENOLTHALEIN ALKALINITY	6	0	4	0	2	4	2	6
METHYL ORANGE ALKALINITY	62	198	66	168	184	170	58	124
CARBONATES AS $CaCO_3$	12	0	8	0	4	8	4	12
BICARBONATES AS $CaCO_3$	50	198	58	168	180	162	54	112
CHLORIDES AS Cl	12	32	20	22	24	36	10	44
HARDNESS AS $CaCO_3$	72	70	72	62	56	88	60	58
IRON AS Fe	< 0.04	0.32	< 0.04	0.27	< 0.04	0.05	0.07	0.12
FLUORIDE AM	1.15		0.86				1.07	
FLUORIDE PM	1.33	0.20	1.03	0.19	0.12	0.10	1.23	0.53
CHLORINE RESIDUAL	1.1	1.2	1.0	1.8	1.3	1.1	1.2	0.9
TURBIDITY AM	0.3		0.2				0.3	
TURBIDITY PM	0.2	0.5	0.5	0.2	0.2	0.2	1.2	0.6
TOTAL PHOSPHATE		1.33			0.07			
ORTHO PHOSPHATE		0.80			0.0			
META PHOSPHATE		0.53			0.07			
STABILITY	+0.5	-0.7	+0.3	-0.7	+0.1	0.0	+0.4	0.0

REMARKS

COPY TO:

☐ UTIL DIR ☐ _____

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CHEMICAL ANALYSIS -- WATER TREATMENT PLANTS

MCBCL 11330.3 (REV 6-84)

DATE COLLECTED: 1/7/86

DATE OF ANALYSIS: 1/7/86

PARAMETER SERIAL 81-87	HADNOT POINT -341	CAMP JOHNSON -043	TARAWA TERRACE -044	ONSLOW BEACH -048	COURTHOUSE BAY -047	RIFLE RANGE -046	HOLCOMB BLVD -013	NEW RIVER -042		
PH (IN LAB NOT PLANT)	8.9	7.4	8.5	7.8	8.5	8.5	8.6	8.6		
PHENOLTHALEIN ALKALINITY	6	0	2	0	4	6	6	6		
METHYL ORANGE ALKALINITY	60	200	80	166	170	158	78	136		
CARBONATES AS $CaCO_3$	12	0	4	0	8	12	12	12		
BICARBONATES AS $CaCO_3$	48	200	76	166	162	146	66	124		
CHLORIDES AS Cl	14	36	20	24	24	44	22	52		
HARDNESS AS $CaCO_3$	70	90	88	58	64	58	84	52		
IRON AS Fe	< 0.04	0.41	0.06	0.22	0.06	0.07	0.07	0.08		
FLUORIDE AM	0.94		1.06				1.07			
FLUORIDE PM	0.92	0.19	0.93	0.19	0.14	0.11	1.10	0.44		
CHLORINE RESIDUAL	0.9	1.3	1.0	1.4	1.2	1.0	0.9	0.9		
TURBIDITY AM	0.2		0.5				0.2			
TURBIDITY PM	0.2	0.7	0.6	0.2	0.4	0.2	0.6	0.3		
TOTAL PHOSPHATE		1.68			0.07					
ORTHO PHOSPHATE		0.76			0.00					
META PHOSPHATE		0.92			0.07					
STABILITY	+0.5	-0.9	0.0	-0.7	0.0	0.0	+0.2	0.0		

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REMARKS

COPY TO:

☐ UTIL DIR ☐ _____

☐ WATER TREATMENT

DATE COLLECTED 1-14-86

DATE OF ANALYSIS 1-14-86

PARAMETER Serial #04-67	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)	8.6	7.4	8.6	7.3	8.0	8.0	8.6	8.5
PHENOLTHALEIN ALKALINITY	4	0	4	0	4	4	4	12
METHYL ORANGE ALKALINITY	64	190	64	142	164	180	62	132
CARBONATES AS $CaCO_3$	8	0	8	0	8	8	8	24
P[illegible]RBONATES [illegible]aCO_3	56	190	76	142	156	172	74	108
CHLORIDES AS Cl	10	30	20	14	14	40	12	48
HARDNESS AS $CaCO_3$	78	66	60	66	70	86	76	50
IRON AS Fe	AA Down							
FLUORIDE Am	1.37		1.02				1.22	
FLUORIDE Pm	1.45	0.19	1.21	0.21	0.12	0.12	1.25	0.55
CHLORINE RESIDUAL	1.2	1.2	1.0	1.2	1.5	1.0	0.8	0.8
TURBIDITY Am	0.3		0.3				0.3	
TURBIDITY Pm	0.3	1.0	0.4	0.5	0.3	0.4	0.3	1.0
TOTAL PHOSPHATE		2.36			0.06			
ORTHO PHOSPHATE		0.87			0.00			
META PHOSPHATE		1.49			0.06			
STABILITY	+0.9	-0.6	+0.6	-0.6	0.0	0.0	+0.5	+0.1

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REMARKS

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☐ WATER TREATMENT

CHEMICAL ANALYSIS -- WATER TREATMENT PLANTS

MCBCL 11330 3 (REV 6-84)

DATE COLLECTED: 1/21/86

DATE OF ANALYSIS: 1/21/86

PARAMETER (SERIAL # 04-47)	HADNOT POINT -041	CAMP JOHNSON -045	TARAWA TERRACE -044	ONSLOW BEACH -048	COURTHOUSE BAY -047	RIFLE RANGE -046	HOLCOMB BLVD -013	NEW RIVER -018		
PH (IN LAB NOT PLANT)	8.8	7.2	8.4	7.6	8.4	8.3	8.7	8.5		
PHENOLTHALEIN ALKALINITY	4	0	2	0	4	2	2	4		
METHYL ORANGE ALKALINITY	60	185	60	160	170	156	60	146		
CARBONATES AS $CaCO_3$	8	0	4	0	8	4	4	8		
BICARBONATES AS $CaCO_3$	52	185	56	160	162	152	56	138		
CHLORIDES AS Cl	10	30	20	20	18	40	10	46		
HARDNESS AS $CaCO_3$	66	70	70	50	62	70	64	64		
IRON AS Fe	AA Down									
FLUORIDE AM	0.12		0.90				1.01		000	
FLUORIDE PM	0.13	0.15	0.96	0.18	0.10	0.20	0.97	0.54	000	
CHLORINE RESIDUAL	1.1	1.2	1.0	2.0	1.2	1.0	0.9	0.8	000	
TURBIDITY AM	0.2		0.3				0.2		014	CLW
TURBIDITY PM	0.2	0.5	0.3	0.2	0.2	0.4	0.3	0.3	21	
TOTAL PHOSPHATE		0.90			0.07					
ORTHO PHOSPHATE		0.62			0.00					
META PHOSPHATE		0.28			0.07					
STABILITY	+0.6	-0.8	+0.2	-0.8	0.0	0.0	+0.3	+0.1		

REMARKS

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☐ WATER TREATMENT

MCBCO 11330.3 (REV. 6-84)

WATER TREATMENT PLANTS

DATE COLLECTED: 1/28/86

DATE OF ANALYSIS: 1/28/86

PARAMETER Serial #04-47	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)	8.6	7.3	8.7	7.6	8.3	8.4	8.6	8.7		
PHENOLTHALEIN ALKALINITY	2	0	2	0	0	2	2	6		
METHYL ORANGE ALKALINITY	62	180	46	154	162	148	60	118		
CARBONATES AS $CaCO_3$	4	0	4	0	0	4	4	12		
BICARBONATES AS $CaCO_3$	58	180	42	154	162	144	56	106		
CHLORIDES AS Cl	4	14	16	16	16	40	10	42		
HARDNESS AS $CaCO_3$	70	72	66	60	76	44	64	54		
IRON AS Fe	<0.04	0.34	<0.04	0.15	<0.04	0.06	<0.04	<0.04		
FLUORIDE AM	0.15		1.04				1.16			
FLUORIDE PM	0.17	0.16	0.84	0.22	0.12	0.12	1.08	0.50		
CHLORINE RESIDUAL	1.0	1.2	1.0	1.0	1.0	1.0	0.9	0.8		
TURBIDITY AM	0.2		0.2				0.4			
TURBIDITY PM	0.2	1.1	0.5	0.2	0.2	0.3	0.4	0.5		
TOTAL PHOSPHATE		3.06			0.09					
ORTHO PHOSPHATE		1.05			0					
META PHOSPHATE		2.01			0.09					
STABILITY	+0.4	-0.8	+0.5	-0.7	-0.1	-0.1	+0.1	+0.1		

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REMARKS

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☐ 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