

6280/1
NREAD
7 June 1984

From: Commanding General, Marine Corps Base, Camp Lejeune
To: Commanding Officer, Naval Hospital

Subj: WATER QUALITY MONITORING AND RELATED ENVIRONMENTAL HEALTH
CONSIDERATIONS

Ref: (a) CG MCB CLNC ltr NREAD/DDS/th 11330/2 of 19 May 1983

Encl: (1) Weekly Chemical Analysis of Drinking Water
(2) Weekly Bacteriological Analysis of Drinking Water
(3) Weekly NavHosp Ice Samples Bacteriological Analysis
(4) Bacteriological Analysis of Drinking Water after
Water Line Replacement
(5) Analysis of Complaint Samples

1. In accordance with the reference, enclosures (1) through (5) are forwarded for information.

2. Questions regarding this matter should be forwarded to Mr. Danny Sharpe, Supervisory Ecologist, extensions 2083/5003/1690.

J. I. WOOTEN
By direction

Blind copy to:
SupvChem

CLW

0000004327

Writer: E. Betz, NREAD, ext. 5977
Typist: J. Cross, 7 Jun 84

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

DATE COLLECTED

1 May 1984

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	8.3	7.1	8.3	7.2	8.1	8.3	8.6	8.5	
PENOLTHALEIN ALKALINITY	4	0	4	0	4	4	6	10	
METHYL ORANGE ALKALINITY	56	186	58	164	160	134	62	142	
CARBONATES AS CaCO ₃	8	0	8	8	8	8	12	20	
BICARBONATES AS CaCO ₃	48	186	50	164	152	126	50	122	
CHLORIDES AS Cl	10	34	12	24	22	24	12	108	
HARDNESS AS CaCO ₃	62	74	78	80	52	38	62	58	
IRON AS Fe	0.04	0.55	0.04	0.17	0.08	0.09	0.04	0.14	
FLUORIDE	AM PH 1.20 1.06	—	1.13 1.06	—	—	—	0.99 0.79	0.83	
CHLORINE RESIDUAL	1.1	1.4	1.0	0.9	1.5	1.1	1.0	1.5	
TURBIDITY	AM PH 0.2 0.6	0.6	0.6 0.6	0.4	0.4	0.5	0.3 0.2	1.1	
TOTAL PHOSPHATE		1.52			1.76				
ORTHO PHOSPHATE		1.21			0.25				
META PHOSPHATE		0.31			1.51				
STABILITY	+0.1	-0.6	+0.1	-0.7	+0.1	0.0	+0.3	+0.2	

REMARKS

0000004328

CLW

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

Hubbelle

DATE OF ANALYSIS

1 May 1984

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

File

DATE COLLECTED
 5/8/84

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	8.4	7.2	8.6	7.3	8.2	8.1	8.6	8.2
PENOLTHALEIN ALKALINITY	2	0	4	0	0	0	4	2
METHYL ORANGE ALKALINITY	60	174	46	144	166	140	54	144
CARBONATES AS CaCO ₃	4	0	8	0	0	0	8	4
BICARBONATES AS CaCO ₃	56	174	38	144	166	140	46	140
CHLORIDES AS Cl	10	30	10	18	14	16	10	160
HARDNESS AS CaCO ₃	78	76	68	60	68	50	56	76
IRON AS Fe	40.04	0.55	40.04	0.15	0.09	0.06	0.05	0.07
FLUORIDE	1.06 / 1.09	—	1.07 / 1.07	—	—	—	0.91	0.83
CHLORINE RESIDUAL	1.0	1.3	1.0	1.2	1.3	1.0	0.9	1.2
TURBIDITY	0.20 / 0.42	1.60	0.50 / 0.70	0.30	0.35	0.51	3.60 / 2.14	0.61
TOTAL PHOSPHATE		2.75			1.13			
ORTHO PHOSPHATE		1.54			0.32			
META PHOSPHATE		1.11			0.81			
STABILITY	+0.3	-0.5	+0.2	-0.4	+0.2	0.0	0.3	0.0
REMARKS								

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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
 [Signature]

DATE OF ANALYSIS
 5/8/84

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

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DIRL

DATE COLLECTED
5/15/84

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	8.6	7.1	8.3	7.3	8.1	8.2	8.6	8.5
PENOLTHALEIN ALKALINITY	4	0	2	0	0	0	4	14
METHYL ORANGE ALKALINITY	50	180	60	164	150	136	60	140
CARBONATES AS CaCO ₃	8	0	4	0	0	0	8	28
BICARBONATES AS CaCO ₃	42	180	56	164	150	136	52	112
CHLORIDES AS Cl	10	26	10	20	14	20	10	160
HARDNESS AS CaCO ₃	56	72	70	70	68	54	60	60
IRON AS Fe	40.04	0.85	40.04	0.08	0.16	0.05	40.04	0.10
FLUORIDE	0.95 0.99		0.91 1.13				0.95 1.09	0.83
CHLORINE RESIDUAL	1.0	1.3	1.0	1.2	1.3	1.0	0.9	1.3
TURBIDITY	0.31 0.76	1.15	0.29 0.46	0.32	0.41	0.39	0.20 0.30	0.55
TOTAL PHOSPHATE		4.05			1.84			
ORTHOPHOSPHATE		1.62			0.32			
META PHOSPHATE		2.43			1.52			
STABILITY	+0.1	-0.7	0.0	-0.6	0.0	+0.1	+0.2	+0.1

REMARKS

CLW

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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 & LACHAPRIE

DATE OF ANALYSIS: 5/15/84

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

UTILITY DIRECTOR

DATE COLLECTED

5/22/84

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSILOW BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	8.5	7.1	8.5	7.2	8.3	8.1	8.6	8.4
PENOLTHALEIN ALKALINITY	6	0	6	0	6	2	4	4
METHYL ORANGE ALKALINITY	50	180	52	160	144	150	64	136
CARBONATES AS CaCO ₃	12	0	12	0	12	4	8	8
BICARBONATES AS CaCO ₃	38	180	40	160	132	146	56	128
CHLORIDES AS Cl	6	26	10	10	10	20	10	126
HARDNESS AS CaCO ₃	54	70	60	60	52	60	70	58
IRON AS Fe	<0.04	0.57	<0.04	0.10	<0.04	0.06	<0.04	0.07
FLUORIDE	1.09 / 0.99		0.99 / 0.91				0.79 / 0.99	
CHLORINE RESIDUAL	1.0	1.4	1.2	1.3	1.5	1.0	0.9	1.3
TURBIDITY	0.50 / 0.50	0.70	0.20 / 1.41	0.30	0.20	0.54	0.30 / 0.30	0.50
TOTAL PHOSPHATE		1.46			1.00			
ORTHO PHOSPHATE		0.88			0.01			
META PHOSPHATE		0.58			0.99			
STABILITY	+0.3	-0.6	+0.1	-0.8	0.0	+0.1	+0.2	+0.1

REMARKS

CLW

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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 & LACHAPPELLE

DATE OF ANALYSIS

5/22/84

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

File #

DATE COLLECTED
 5/29/84

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	9.0	7.4	8.1	7.5	8.4	8.4	9.0	8.8
PENOLTHALEIN ALKALINITY	8	0	0	0	4	2	6	14
METHYL ORANGE ALKALINITY	50	180	80	160	160	156	56	160
CARBONATES AS CaCO ₃	16	0	0	0	8	4	12	28
BICARBONATES AS CaCO ₃	34	180	80	160	152	152	44	132
CHLORIDES AS Cl	10	30	10	16	18	20	10	120
HARDNESS AS CaCO ₃	50	82	78	60	56	38	54	50
IRON AS Fe	40.04	0.62	40.04	0.08	40.04	0.06	40.04	0.07
FLUORIDE	1.72 0.75	0.18	0.89 0.68	0.17	0.11	0.10	0.70 0.72	0.72
CHLORINE RESIDUAL	1.0	1.4	1.1	1.6	1.5	0.8	0.7	1.2
TURBIDITY	0.15 0.31	0.68	0.22 0.40	0.37	0.29	0.57	0.10 0.26	0.88
TOTAL PHOSPHATE		1.62			1.40			
ORTHO PHOSPHATE		0.96			0.04			
META PHOSPHATE		0.66			1.36			
STABILITY	+0.3	-0.6	-0.1	-0.7	+0.1	-0.1	+0.3	+0.1

REMARKS

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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
 13 June 1984

DATE OF ANALYSIS
 5/29/84

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

DATE COLLECTED
 5/8/84

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	8.4	7.2	8.6	7.3	8.2	8.1	8.6	8.2
PENOLTHALEIN ALKALINITY	2	0	4	0	0	0	4	2
METHYL ORANGE ALKALINITY	60	174	46	144	166	140	54	144
CARBONATES AS CaCO ₃	4	0	8	0	0	0	8	4
BICARBONATES AS CaCO ₃	56	174	38	144	166	140	46	140
CHLORIDES AS Cl	10	30	10	18	14	16	10	160
HARDNESS AS CaCO ₃	78	76	68	60	68	50	56	76
IRON AS Fe	40.04	0.55	40.04	0.15	0.09	0.06	0.05	0.07
FLUORIDE	1.06 / 1.09	—	1.07 / 1.09	—	—	—	0.91	0.83
CHLORINE RESIDUAL	1.0	1.3	1.0	1.2	1.3	1.0	0.9	1.2
TURBIDITY	0.20 / 0.42	1.60	0.50 / 0.70	0.30	0.35	0.51	3.60 / 2.14	0.61
TOTAL PHOSPHATE		2.75			1.13			
ORTHO PHOSPHATE		1.54			0.32			
META PHOSPHATE		1.11			0.81			
STABILITY	+0.3	-0.5	+0.2	-0.4	+0.2	0.0	+0.3	0.0

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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
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DATE OF ANALYSIS
 5/8/84

BACTERIOLOGICAL ANALYSIS OF WATER
MGBCL 11330/4 (REV. 7-83)

DATE COLLECTED
1. 11. 84

REPORTABLE POINTS FOR SDWA

WATER SAMPLES	MARKED	COLIFORM MF/100 ML	RESIDUAL CHLORINE	TIME	WATER SAMPLES	MARKED	COLIFORM MF/100 ML	RESIDUAL CHLORINE	TIME	LABORATORY DATA
RR-3	1	φ	0.8	0910	MCAS-3502	24	φ	0.4	0915	TIME RECEIVED
RR-15	2	I	0.7	0900	MCAS-2002	25	I	0.5	0925	DATE RECEIVED 1.11.84
RR-10	3	I	0.8	0920	MCAS-1157	26	I	0.4	0925	ACCEPTED BY
	4				MCAS-2098	27	I	1.3	0935	DATE ANALYZED 1.11.84
	5	φ	1.5	1355		28				ANALYSIS STARTED
BB-7	6	I	1.3	1305	NRMC 7/11/84	29	φ	0.7	1312	ANALYSIS FINISHED
BB-40	7	I	1.2	2820	PP-2615	30	I	0.6	1138	INCUBATOR TEMP 25°C
BB-145	8	I	1.3	0810	PP-2111	31	I	0.6	1157	PROCESSED BY 1.11.84
	9				BM-5400	32	I	0.6	1220	
BA-103	10	φ	1.4	1045	BM-5173	33	I	0.6	1230	CUSTODY DATA
BA-101	11	I	1.1	1100	LCH-4022	34	I	0.6	1245	DATE
	12				LCH-4015	35	I	0.5	1252	TIME
TT-38	13	φ	1.0	0845		36				SIGNATURE
TT-43	14	I	1.7	0900	H-1	37	φ	0.5	1137	DATE
TT-447	15	I	0.1	1115	H-16	38	I	0.5	1150	TIME
	16				FC-303	39	I	0.7	0921	SIGNATURE
CK-113	17	φ	0.9	1100	FC-420	40	I	1.0	0914	
M-139	18	I	1.1	0955	FC-323	41	I	0.8	0906	COPY TO:
M-128	19	I	1.2	0940	HP-236	42	I	0.6	1120	<input type="checkbox"/> UTIL DIR
	20				HP-540	43	I	0.6	1155	<input type="checkbox"/> WATER TREATMENT
CG-1	21	φ	0.2	1355	HP-1300	44	I	0.4	0957	<input type="checkbox"/> PMU <input type="checkbox"/> MCAS PMO
TC-830	22	I	1.5	0840	HP-1011	45	I	0.5	0957	<input type="checkbox"/> NREAD <input checked="" type="checkbox"/> FILE
TC-650	23	I	1.0	0620		48				<input type="checkbox"/>

REMARKS

0000004334

ENCLOSURE (2)

SIGNATURE

[Signature] 5/1/84

1/16/44 1247

BACTERIOLOGICAL ANALYSIS OF WATER

NON-REPORTABLE

WATER SAMPLES	MARKED	COLIFORM COUNT M-ENDO MEDIUM	RESIDUAL CHLORINE	pH	TIME
BB-97		φ	0.8		0715
FC-19		φ	1.5		1043
SH-8		φ	2.0		1030
M.P. POOL		φ	0.8	7.2	1000
#2 POOL		φ	1.3	7.8	1114
#5 POOL		φ	0.9	7.4	1100
P. P. POOL					
P. P. BABY POOL					
MCAS E-POOL					
MCAS O-POOL					
MCAS BABY POOL					
(756) 1300		φ			0846

REMARKS

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000004335

BACTERIOLOGICAL ANALYSIS OF WATER
 MCBCL 11330/4 (REV. 7-83)


DATE COLLECTED
 8 May 1984

REPORTABLE POINTS FOR SDWA

WATER SAMPLES	MARKED	COLIFORM MF/100 ML	RESIDUAL CHLORINE	TIME	WATER SAMPLES	MARKED	COLIFORM MF/100 ML	RESIDUAL CHLORINE	TIME	LABORATORY DATA
RR - 3	1	0	0.8	0940	MCAS - 3502	24	0	0.2	0952	TIME RECEIVED 1120-1327 DATE RECEIVED 5/8/84 ACCEPTED BY L & H DATE ANALYZED 5/8/84 ANALYSIS STARTED 1200-1330 ANALYSIS FINISHED 1215-1358 INCUBATOR TEMP 35.0° C PROCESSED BY L
RR - 15	2		0.8	0938	MCAS - 2002	25		0.6	1006	
RR - 6	3		0.8	0945	MCAS - 4157	26		0.5	0940	
	4				MCAS - E-1190	27		0.5	1015	
A-1	5		1.3	0920		28				
BB - 7	6		1.3	0840	NRMC - Food Service	29		0.6	1030	
BB - 49	7		1.3	0910	PP - 2615	30		0.5	1015	
BB - 9	8		1.3	0850	PP - 2600	31		0.6	1020	
	9				BM - 5400	32		0.5	1040	
BA - 103	10		1.2	1025	BM - 1984	33		0.6	1045	
BA - 101	11		1.2	1030	LCH - 4022	34		0.5	1055	CUSTODY DATA DATE TIME SIGNATURE
	12				LCH - 4014	35		0.5	1100	
TT - 38	13		1.0	0840		36				
TT - 43	14		0.9	0910	H - 1 12B	37		0.6	1000	DATE
TT - 3411	15		0.8	0920	H - 18	38		0.5	1005	TIME
	16				FC - 303	39		1.0	0925	SIGNATURE
CK - 1600	17		0.8	1015	FC - 420	40		1.0	0915	COPY TO: <input checked="" type="checkbox"/> UTIL DIR <input type="checkbox"/> WATER TREATMENT <input type="checkbox"/> PMU <input type="checkbox"/> MCAS PMO <input type="checkbox"/> NREAD <input type="checkbox"/> FILE <input type="checkbox"/> _____
M - 139	18		1.2	1100	FC - 540	41		0.8	0910	
M - 231	19		1.1	1045	HP - 236	42		0.6	0950	
	20				HP - 540	43		0.7	0900	
CG - 1	21		0.3	0927	HP - 1300	44		0.2	0850	
TC - 830	22		1.1	0915	HP - 20	45		1.0	1130	
TC - 1110	23	0	0.6	0907		46	CLW			

REMARKS BB7 & BB9 showed non-coliform bacteria on 5/8/84
 Resample on 5/9/84 showed no growth. Resample on 5/10/84 showed non-coliform
 on BB9.

0000004336

SIGNATURE

 Robert Lachapelle

BACTERIOLOGICAL ANALYSIS OF WATER

NON-REPORTABLE

WATER SAMPLES	MARKED	COLIFORM COUNT M-ENDO MEDIUM	RESIDUAL CHLORINE	pH	TIME
BB-97		Ø	0.8		0900
FC-19		Ø	1.0		0940
SH-8		Ø	1.5		0930
M.P. POOL		Ø	1.0	7.3	1115
#2 POOL		Ø	0.4	7.5	0950
#5 POOL		Ø	0.6	8.0	0900
P. P. POOL					
P. P. BABY POOL					
MCAS E-POOL					
MCAS O-POOL					
MCAS BABY POOL					
Ice Sample		Ø			0850

REMARKS

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000004337

REPORTABLE POINTS FOR SDWA

WATER SAMPLES	MARKED	COLIFORM MF/100 ML	RESIDUAL CHLORINE	TIME	WATER SAMPLES	MARKED	COLIFORM MF/100 ML	RESIDUAL CHLORINE	TIME	LABORATORY DATA
RR - 3	1	⊕	1.2	1020	MCAS - 3502	24	⊕	0.4	1110	TIME RECEIVED
RR - 15	2	I	0.7	1030	MCAS - 2002	25	I	0.4	1112	DATE RECEIVED 5/15/84
RR - 6	3	I	1.0	1015	MCAS - 4157	26	I	0.5	1100	ACCEPTED BY
	4				MCAS - 1248	27	I	0.6	1130	DATE ANALYZED 5/15/84
	5	⊕	1.0	0900		28				ANALYSIS STARTED
BB - 7	6	I	1.0	0950	NRMC - Food Service	29	⊕	0.7	1140	ANALYSIS FINISHED
BB - 49	7	I	1.0	1010	PP - 2615	30	I	0.5	1117	INCUBATOR TEMP 35.0°C
BB - 31	8	I	0.8	1000	PP - 2607	31	I	0.5	1125	PROCESSED BY Henegant
	9				BM - 5400	32		0.6	1155	
BA - 103	10	⊕	1.0	1120	BM - 5624	33	I	0.6	1210	CUSTODY DATA
BA - 114	11	I	1.0	1130	LCH - 4022	34	I	0.5	1237	DATE
	12				LCH - 4000	35	I	0.5	1250	TIME
TT - 38	13	⊕	1.0	0900		36				SIGNATURE
TT - 43	14	I	1.0	0920	H - 1	37	⊕	0.5	1049	DATE
TT - 915	15	I	0.9	0945	H - 16	38	I	0.5	1043	TIME
	16				FC - 303	39	I	0.7	0946	SIGNATURE
CK - 1506	17	⊕	0.9	1015	FC - 420	40	I	0.6	0938	
M - 139	18	I	1.2	1050	FC - 540	41	I	0.5	0930	COPY TO:
M - 424	19	I	1.1	1030	HP - 238	42	I	0.6	1106	<input checked="" type="checkbox"/> UTIL DIR
	20				HP - 540	43	I	0.5	1030	<input type="checkbox"/> WATER TREATMENT
CG - 1	21	⊕	0.3	1000	HP - 1300	44	I	0.4	0916	<input type="checkbox"/> PMU <input type="checkbox"/> MCAS PMO
TC - 830	22	I	1.0	1045	HP - 1407	45	I	0.5	0922	<input type="checkbox"/> NREAD <input type="checkbox"/> FILE
TC - 501	23	I	0.6	1025		46				<input type="checkbox"/>

REMARKS

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SIGNATURE

0000004338

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5/16/84

BACTERIOLOGICAL ANALYSIS OF WATER

NON-REPORTABLE

WATER SAMPLES	MARKED	COLIFORM COUNT M-ENDO MEDIUM	RESIDUAL CHLORINE	pH	TIME
BB-97		 /	0.6		0955
FC-19			1.2		1012
SH-8			2.0		0959
			0.8		1300
M.P. POOL			0.6		1100
#2 POOL			0.6		1100
#5 POOL			1.2		1025
P. P. POOL					
P. P. BABY POOL					
MCAS E-POOL					
MCAS O-POOL					
MCAS BABY POOL					
ICE (Blk. 1300)		/			0911

REMARKS

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BACTERIOLOGICAL ANALYSIS OF WATER
MCBCL 11330/4 (REV. 7-83)

DATE COLLECTED

22 May 1984

REPORTABLE POINTS FOR SDWA

WATER SAMPLES	MARKED	COLIFORM MF/100 ML	RESIDUAL CHLORINE	TIME	WATER SAMPLES	MARKED	COLIFORM MF/100 ML	RESIDUAL CHLORINE	TIME	LABORATORY DATA
RR - 3	1	0	0.8	0830	MCAS - 3502	24	0	0.2	0945	TIME RECEIVED 1240 - 1315
RR - 15	2		0.7	0840	MCAS - 2002	25		0.9	0956	DATE RECEIVED 5/22/84
RR - 6	3		0.9	0845	MCAS - 1114	26		1.1	1005	ACCEPTED BY H & B
	4				MCAS - 205	27		1.2	1015	DATE ANALYZED 5/22/84
A-1	5		1.4	0920		28				ANALYSIS STARTED 1242
	6		1.3	0950	NRMC - Food service	29		0.7	1200	ANALYSIS FINISHED 1410
BB - 49	7		1.5	0935	PP - 2615	30		0.6	1123	INCUBATOR TEMP 35.1° C.
BB - 177	8		1.3		PP - 2613	31		0.5	1130	PROCESSED BY L
	9				BM - 5400	32		0.5	1137	
BA - 103	10		1.2	1130	BM - 5844	33		0.5	1146	CUSTODY DATA
BA - 101	11		1.0	1145	LCH - 4022	34		0.5	1240	DATE
	12				LCH - 4021	35		0.5	1248	TIME
TT - 38	13		1.2	0900		36				SIGNATURE
TT - 43	14		1.0	0930	H - 1	37		0.5	1050	DATE
TT - 3172	15		0.9	1000	H - 24	38		0.5	1057	TIME
	16				FC - 303	39		0.7	0949	SIGNATURE
CK - 1201	17		0.7	1100	FC - 420	40		0.7	0941	
M - 139	18		1.2	1030	FC - New Snack Bar	41		0.6	0933	COPY TO:
M - 104	19		1.1	0950	HP - 236	42		0.5	1115	<input checked="" type="checkbox"/> UTIL DIR
	20				HP - 540	43		0.6	1045	<input checked="" type="checkbox"/> WATER TREATMENT
CG - 1	21		0.3	0835	HP - 1300	44		0.5	0921	<input checked="" type="checkbox"/> PMU <input checked="" type="checkbox"/> MCAS PMO
TC - 830	22		0.6	0930	HP - 1301	45	0	0.5	0926	<input type="checkbox"/> NREAD <input checked="" type="checkbox"/> FILE
TC - 701	23	0	0.8	0900		46				<input type="checkbox"/>

REMARKS

CLW

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SIGNATURE

Robert Lachapelle

Robert Lachapelle

BACTERIOLOGICAL ANALYSIS OF WATER

NON-REPORTABLE

WATER SAMPLES	MARKED	COLIFORM COUNT M-ENDO MEDIUM	RESIDUAL CHLORINE	pH	TIME
BB-97		∅	0.1		1015
FC-19		∅	1.0		1020
SH-8		∅	0.8		1010
TT Pool		∅	2.0+	6.8	0915
M.P. POOL		∅	1.2	7.6	1015
#2 POOL		∅	0.5	7.4	1108
#5 POOL		∅	1.2	7.0	1040
P. P. POOL					
P. P. BABY POOL					
MCAS E-POOL					
MCAS O-POOL					
MCAS BABY POOL					
Ice Sample		∅			0915

REMARKS

CLW

0000004341

REPORTABLE POINTS FOR SDWA

WATER SAMPLES	MARKED	COLIFORM MP/100 ML	RESIDUAL CHLORINE	TIME	WATER SAMPLES	MARKED	COLIFORM MP/100 ML	RESIDUAL CHLORINE	TIME	LABORATORY DATA
RR - 3	1	4	0.4	0940	MCAS - 3502	24	closed		0952	TIME RECEIVED
RR - 15	2	1	0.5	0930	MCAS - 2002	25	1	0.5	1004	DATE RECEIVED 5/29/84
RR - 10	3	1	0.4	0935	MCAS - 4157	26	1	0.4	0940	ACCEPTED BY
	4				MCAS - 3022	27	1	0.6	1015	DATE ANALYZED 5/11/84
	5	4	1.2	0910		28				ANALYSIS STARTED
BB - 7	6	1	1.4	0830	NRMG - Fuel Service	29	1	0.6	1110	ANALYSIS FINISHED
BB - 49	7	1	1.3	0820	PP - 2615	30	1	0.4	1100	INCUBATOR TEMP 35.0 C
BB - 245	8	1	1.4	0815	PP - 2000	31	1	0.6	1030	PROCESSED BY [Signature]
	9				BM - 5400	32		0.5	1125	CUSTODY DATA
BA - 103	10	4	1.2	1130	BM - 1135	33		0.6	1120	
BA - 101	11	1	1.2	1140	LCH - 4022	34		0.5	1135	DATE
	12				LCH - 4111	35		0.5	1145	TIME
TT - 38	13	4	1.0	0845		36				SIGNATURE
TT - 43	14	1	0.7	0900	H - 1 [unclear]	37	1	0.7	1030	DATE
TT - 115	15	1	1.0	0915	H - 18	38	1	0.7	1040	TIME
	16				FC - 303	39		1.0	0925	SIGNATURE
CK - 1310	17	4	0.8	0930	FC - 420	40		1.0	0930	COPY TO: <input type="checkbox"/> UTIL DIR <input type="checkbox"/> WATER TREATMENT <input type="checkbox"/> PMU <input type="checkbox"/> MCAS PMO <input type="checkbox"/> NREAD <input checked="" type="checkbox"/> FILE <input type="checkbox"/> _____
M - 139	18	1	1.2	1100	FC - 540	41		1.0	0938	
M - 131	19	1	1.1	1030	HP - 236	42		0.7	1020	
	20				HP - 540	43		0.8	0915	
CG - 1	21	4	0.5	0921	HP - 1300	44		0.5	0900	
TC - 830	22	1	1.0	0907	HP - 20	45		1.0	1300	
TC - 110	23	1	0.7	0917		46	CLW			

REMARKS

20, 21, 33 had numerous very red/pink colonies

0000004342

SIGNATURE

[Signature]

QUALITY CONTROL LABORATORY REPORT
 MISCELLANEOUS BACTERIOLOGICAL ANALYSIS OF WATER
 MCBCL 11390/8 (REV. 4/78)

Naval Hospital Infection Co

WATER TYPE		SAMPLE COLLECTED BY		DATE COLLECTED	
ICE		HM3 Dockham		01 MAY 84	
LOCATION	MARKED	COLIFORM			
		TOTAL	FECAL		
4A		φ			
4W		φ			
3W		φ			
3E	out of order				
2W		φ			
2E		φ			
1CU		φ			
CCU	out of order				
LID		φ			
RR		φ			
ER.		φ			

REMARKS Recd h03, 1030 5/1/84 -B

CLW
 0000004343

SIGNATURE *James Spengler* DATE 2 MAY 84

- COPY TO
- NREAD
 - UTILITIES DIRECTOR
 - WATER TREATMENT PLANT (GENERAL FOREMAN)

- BASE PREVENTIVE MEDICINE
- MCAS PREVENTIVE MEDICINE
- FK*

QUALITY CONTROL LABORATORY REPORT
 MISCELLANEOUS BACTERIOLOGICAL ANALYSIS OF WATER
 MCBCL 11330/8 (REV. 4/78)

WATER TYPE	SAMPLE COLLECTED BY		DATE COLLECTED	
Potable	WPO		5/30/84	
LOCATION	MARKED	COLIFORM		
		TOTAL	FECAL	
Bldg. 324	Rm I	Ø		
	Rm J	Ø		
	Rm N	Ø		
FC 19		Ø		

REMARKS

Rec 1420 5/30 L

Rec (FC 19) 1500 5/30 L

CLW

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SIGNATURE

Robert J. Schaefer

DATE

5/31/84

COPY TO

NREAD

UTILITIES DIRECTOR

WATER TREATMENT PLANT (GENERAL FOREMAN)

BASE PREVENTIVE MEDICINE

MCAS PREVENTIVE MEDICINE

File

**QUALITY CONTROL LABORATORY REPORT
MISCELLANEOUS BACTERIOLOGICAL ANALYSIS OF WATER**

MCBCL 11220/8 (REV. 4/78)

WATER TYPE	SAMPLE COLLECTED BY	DATE COLLECTED	
LOCATION	MARKED	COLIFORM	
		TOTAL	FECAL
Potable	Water Plant Personnel	5/11/84	
BB-9 (outside faucet)		0	
BB-9 (inside sink)		0	

REMARKS

CLW
0000004345

SIGNATURE *James B. Hines* DATE 5/12/84

- COPY TO
- NREAD
 - UTILITIES DIRECTOR
 - WATER TREATMENT PLANT (GENERAL FOREMAN)
 - BASE PREVENTIVE MEDICINE
 - MCAS PREVENTIVE MEDICINE
 - t.k.*

QUALITY CONTROL LABORATORY REPORT
 MISCELLANEOUS BACTERIOLOGICAL ANALYSIS OF WATER
 MCBCL 11330/8 (REV. 4/78)

WATER TYPE P.L.W.	SAMPLE COLLECTED BY water plant + Residual	DATE COLLECTED 5/15/84
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LOCATION	MARKED	COLIFORM	
		TOTAL	FECAL
TT 1277 / 1310		16	
TT 1277 / 1310		6	

REMARKS
 * Tittle non-coliform colonies
 + Tittle non-coliform colonies.
 Colonies from both plates has been submitted for confirmation

CLW

0000004346

SIGNATURE <i>Rita B. [unclear]</i>	DATE 5/16/84
---------------------------------------	-----------------

COPY TO

<input type="checkbox"/> NREAD	<input type="checkbox"/> BASE PREVENTIVE MEDICINE
<input type="checkbox"/> UTILITIES DIRECTOR	<input type="checkbox"/> MCAS PREVENTIVE MEDICINE
<input checked="" type="checkbox"/> WATER TREATMENT PLANT (GENERAL FOREMAN)	<input checked="" type="checkbox"/> <i>[initials]</i>

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

FILE

DATE COLLECTED

5/15/84

COMPLAINTS TARAHA TERRACE

PARAMETER	MADNOT POINT 915	MONTFORD POINT 2267	TARAHA TERRACE 1277	ONSLOW BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	8.4	8.3	8.4					
PENOLTHALEIN ALKALINITY	2	2	2					
METHYL ORANGE ALKALINITY	52	50	50					
CARBONATES AS CaCO ₃	4	4	4					
BI-CARBONATES AS CaCO ₃	48	46	46					
CHLORIDES AS Cl	10	10	10					
HARDNESS AS CaCO ₃	70	70	70					
IRON AS Fe	0.05	0.05	0.07					
FLUORIDE	1.16	1.16	1.16					
CHLORINE RESIDUAL	0.9	1.0	1.0					
TURBIDITY	0.37	0.26	1.08					
TOTAL PHOSPHATE								
ORTHO PHOSPHATE								
META PHOSPHATE								
STABILITY								

CLW
0000004347

Coli-Form 915 - 5/16/84 = 0
2267 - 5/16/84 = 0
1277 - 5/16/84 = 10

Note: 2267 TNTC NON-COLIFORM
1277

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

H. J. Burns

DATE OF ANALYSIS

5/15/84

QUALITY CONTROL LABORATORY REPORT
MISCELLANEOUS BACTERIOLOGICAL ANALYSIS OF WATER
MCBCL 11339/8 (REV. 4/78)

WATER TYPE <i>Surface</i>	SAMPLE COLLECTED BY <i>Water Dept Personnel</i>	DATE COLLECTED <i>5/11/89</i>		
		LOCATION	MARKED	COLIFORM
		TOTAL	FECAL	
<i>TT 1277/5</i>	<i>1415</i>	<i>0</i>		
<i>ST 18/7</i>	<i>1400</i>	<i>0</i>		

REMARKS *7 numbers non-coliform colonies*

CLW
0000004348

SIGNATURE *[Signature]* DATE *5/12/89*

- COPY TO
- NREAD
 - UTILITIES DIRECTOR
 - WATER TREATMENT PLANT (GENERAL FOREMAN)
 - BASE PREVENTIVE MEDICINE
 - MCAS PREVENTIVE MEDICINE
 - FK*

QUALITY CONTROL LABORATORY REPORT
 MISCELLANEOUS BACTERIOLOGICAL ANALYSIS OF WATER

MCDCL 11220/8 (REV. 4/78)

WATER TYPE <i>P.H. Lake</i>	SAMPLE COLLECTED BY <i>John Paul Berman</i>	DATE COLLECTED <i>5/16/84</i>
--------------------------------	--	----------------------------------

LOCATION	MARKED	COLIFORM	
		TOTAL	FECAL
<i>TT 2167 / 1.0m 1395 46 1.2</i>		<i>0</i>	

REMARKS
1 TWC non-coliform colonies

CLW
 0000004349

SIGNATURE <i>John Paul Berman</i>	DATE <i>5/16/84</i>
--------------------------------------	------------------------

COPY TO

- NREAD
- UTILITIES DIRECTOR
- WATER TREATMENT PLANT (GENERAL FOREMAN)
- BASE PREVENTIVE MEDICINE
- MCAS PREVENTIVE MEDICINE
- FK*

QUALITY CONTROL LABORATORY REPORT
MISCELLANEOUS BACTERIOLOGICAL ANALYSIS OF WATER
 MCBCL 11330/8 (REV. 4/78)

WATER TYPE: *Tablet* SAMPLE COLLECTED BY: *Water Plant Foreman* DATE COLLECTED: *5/11/84*

LOCATION	MARKED	COLIFORM	
		TOTAL	FECAL
<i>TT 1207 / Tms 1100 Ch 12</i>		<i>4</i>	
<i>TT 1207 / Tms 1115 Ch 13</i>		<i>6</i>	

REMARKS: *2 non-coliform colonies*

CLW
0000004350

SIGNATURE: *Thomas J. Hargreaves, Jr.* DATE: *5/15/84*

- COPY TO:
- NREAD
 - UTILITIES DIRECTOR
 - WATER TREATMENT PLANT (GENERAL FOREMAN)
 - BASE PREVENTIVE MEDICINE
 - MCAS PREVENTIVE MEDICINE
 - FK*

QUALITY CONTROL LABORATORY REPORT
MISCELLANEOUS BACTERIOLOGICAL ANALYSIS OF WATER
 MCBCL 11330/8 (REV. 4/78)

WATER TYPE <i>W. 1 - (S. 1 H.)</i>	SAMPLE COLLECTED BY <i>[Signature]</i>	DATE COLLECTED <i>5/18/84</i>
---------------------------------------	---	----------------------------------

LOCATION	MARKED	COLIFORM	
		TOTAL	FECAL
<i>TT / 1350 1277 / CL 0.8</i>		<i>φ</i>	

REMARKS

CLW
0000004351

SIGNATURE <i>[Signature]</i>	DATE <i>5/19/84</i>
---------------------------------	------------------------

COPY-TO

<input type="checkbox"/> NREAD <input type="checkbox"/> UTILITIES DIRECTOR <input checked="" type="checkbox"/> WATER TREATMENT PLANT (GENERAL FOREMAN)	<input checked="" type="checkbox"/> BASE PREVENTIVE MEDICINE <input type="checkbox"/> MCAS PREVENTIVE MEDICINE <input checked="" type="checkbox"/> <i>[Signature]</i>
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QUALITY CONTROL LABORATORY REPORT
MISCELLANEOUS BACTERIOLOGICAL ANALYSIS OF WATER
 MCBCL 11230/8 (REV. 4/78)

WATER TYPE <i>Potable</i>	SAMPLE COLLECTED BY <i>W. H. ...</i>	DATE COLLECTED <i>5-11-84</i>		
		LOCATION	MARKED	COLIFORM
		TOTAL	FECAL	
<i>77</i>	<i>1710</i>	<i>0</i>		

REMARKS

CLW
 0000004352

SIGNATURE *[Signature]* DATE *5/20/84*

- COPY TO
- NREAD
 - UTILITIES DIRECTOR
 - WATER TREATMENT PLANT (GENERAL FOREMAN)
 - BASE PREVENTIVE MEDICINE
 - MCAS PREVENTIVE MEDICINE
 - TH*

WATER CONTROL LABORATORY REPORT

MISCELLANEOUS BACTERIOLOGICAL ANALYSIS OF WATER

MCBCL 11330/8 (REV. 4/78)

WATER TYPE	SAMPLE COLLECTED BY		DATE COLLECTED	
LOCATION	MARKED	COLIFORM		
		TOTAL	FECAL	
77 1277 / <i>1027</i>		4		
77 1277 / <i>09</i>		4		
77 1277 / <i>1029</i>				
77 1277 / <i>09</i>				

REMARKS

CLW
0000004353

SIGNATURE *[Signature]* DATE *5/20/84*

- COPY TO
- NREAD
 - UTILITIES DIRECTOR
 - WATER TREATMENT PLANT (GENERAL FOREMAN)
 - BASE PREVENTIVE MEDICINE
 - MCAS PREVENTIVE MEDICINE
 - File*