

6280/1
NREAD
7 Jan 85

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

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 Naval Hospital Ice Samples Bacteriological
Analysis
(4) Bacteriological Analysis of Midway Park Water Laterals
(5) Analysis of Complaints

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 or 5003.

J. I. WOOTEN
By direction

Blind copy to:
OCL, NREAD



CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV 6-84)

DATE COLLECTED

4 DEC 84

DATE OF ANALYSIS

4 DEC 84

PARAMETER	HADNOT POINT	CAMP JOHNSON	TARAWA TERRACE	ONSLOW BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER		
PH	8.8	7.3	8.6	7.4	8.6	8.3	8.7	8.7		
PHENOLTHALEIN ALKALINITY	6	0	2	0	10	4	6	16		
METHYL ORANGE ALKALINITY	68	202	58	162	194	160	66	218		
CARBONATES AS CaCO ₃	12	0	4	0	20	8	12	32		
BICARBONATES AS CaCO ₃	56	202	54	162	174	152	54	186		
CHLORIDES AS Cl	8	42	12	22	18	30	18	82		
HARDNESS AS CaCO ₃	70	74	80	82	52	50	68	50		
IRON AS Fe	<0.04	0.42	<0.04	0.15	<0.04	<0.04	<0.04	<0.04		
FLUORIDE	AM PM 0.69 0.66	0.14	1.05 1.00	0.13	0.12	0.09	1.03 0.97	0.90		
CHLORINE RESIDUAL	1.0	1.3	1.0	1.3	1.3	1.2	0.9	1.3		
TURBIDITY	AM PM 0.6 0.3	0.6	0.4 0.4	0.3	0.3	0.4	0.3 0.5	1.9		
TOTAL PHOSPHATE		4.05			1.04					
ORTHO PHOSPHATE		1.32			0.19					
META PHOSPHATE		2.73			0.85					
STABILITY	+0.6	-0.8	+0.4	-0.8	+0.2	-0.1	-0.1	+0.4	+0.1	

REMARKS

COPY TO:

UTIL DIR

WATER TREATMENT

PMU

MCAS PMU

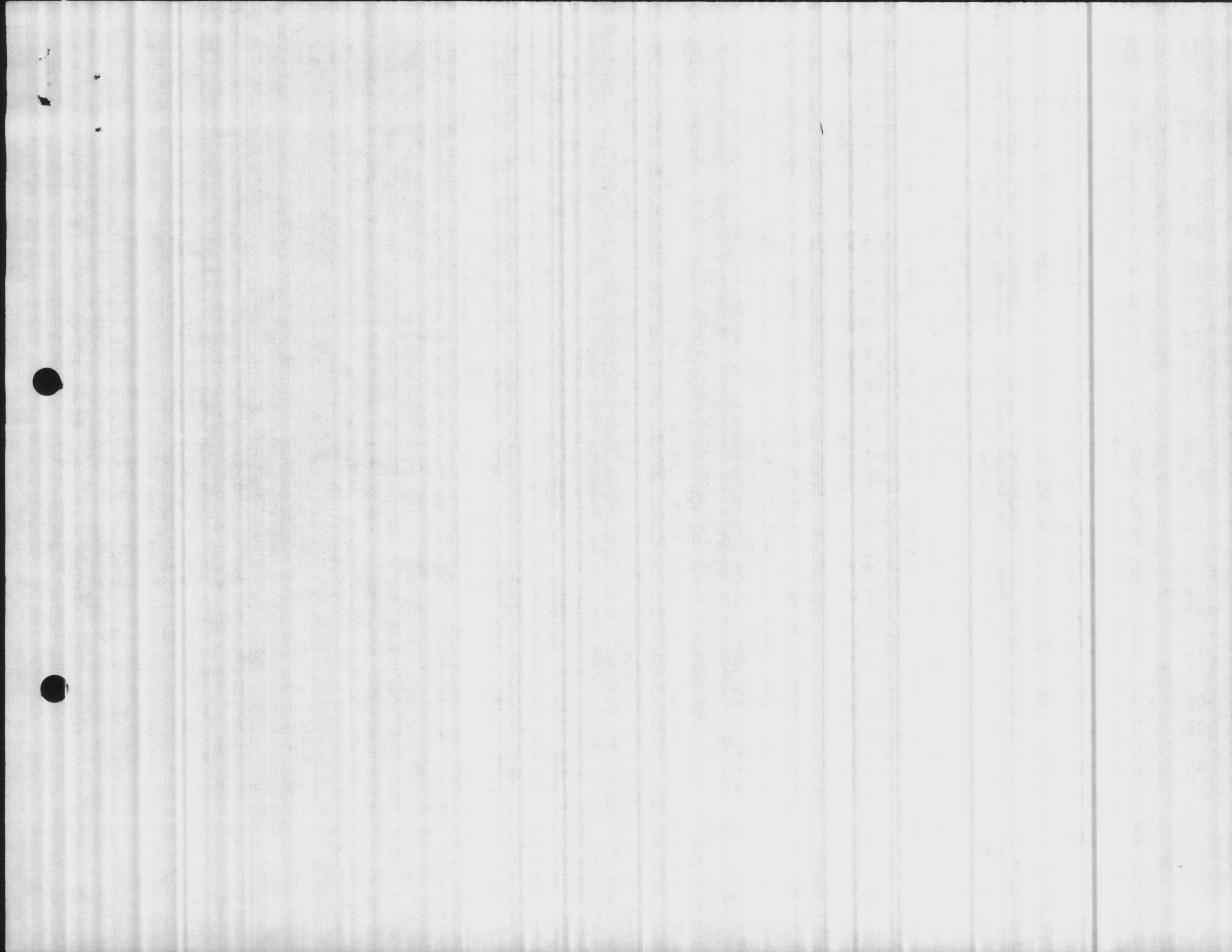
NREAD

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

Hungert Lockelle



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

DATE COLLECTED
 12/11/84

DATE OF ANALYSIS
 12/11/84

PARAMETER	HADNOT POINT	CAMP JOHNSON	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER		
PH	9.0	7.4	8.7	7.5	8.4	8.3	8.9	9.0		
PHENOLTHALEIN ALKALINITY	6	0	4	0	2	0	6	20		
METHYL ORANGE ALKALINITY	50	190	40	150	180	160	50	160		
CARBONATES AS CaCO ₃	12	0	8	0	4	0	12	40		
BICARBONATES AS CaCO ₃	38	190	32	150	176	160	38	120		
CHLORIDES AS Cl	10	36	10	16	10	30	6	110		
HARDNESS AS CaCO ₃	60	74	80	60	60	54	62	56		
IRON AS Fe	<0.04	0.33	<0.04	0.06	<0.04	<0.04	0.08	0.13		
FLUORIDE	1.01	0.15	1.06				1.00			
		1.00			0.16					
		1.05			0.80					
STABILITY	+0.7	-0.7	+0.5	-0.7	+0.1	0.0	+0.6	+0.2		

REMARKS

COPY TO:

UTIL DIR _____

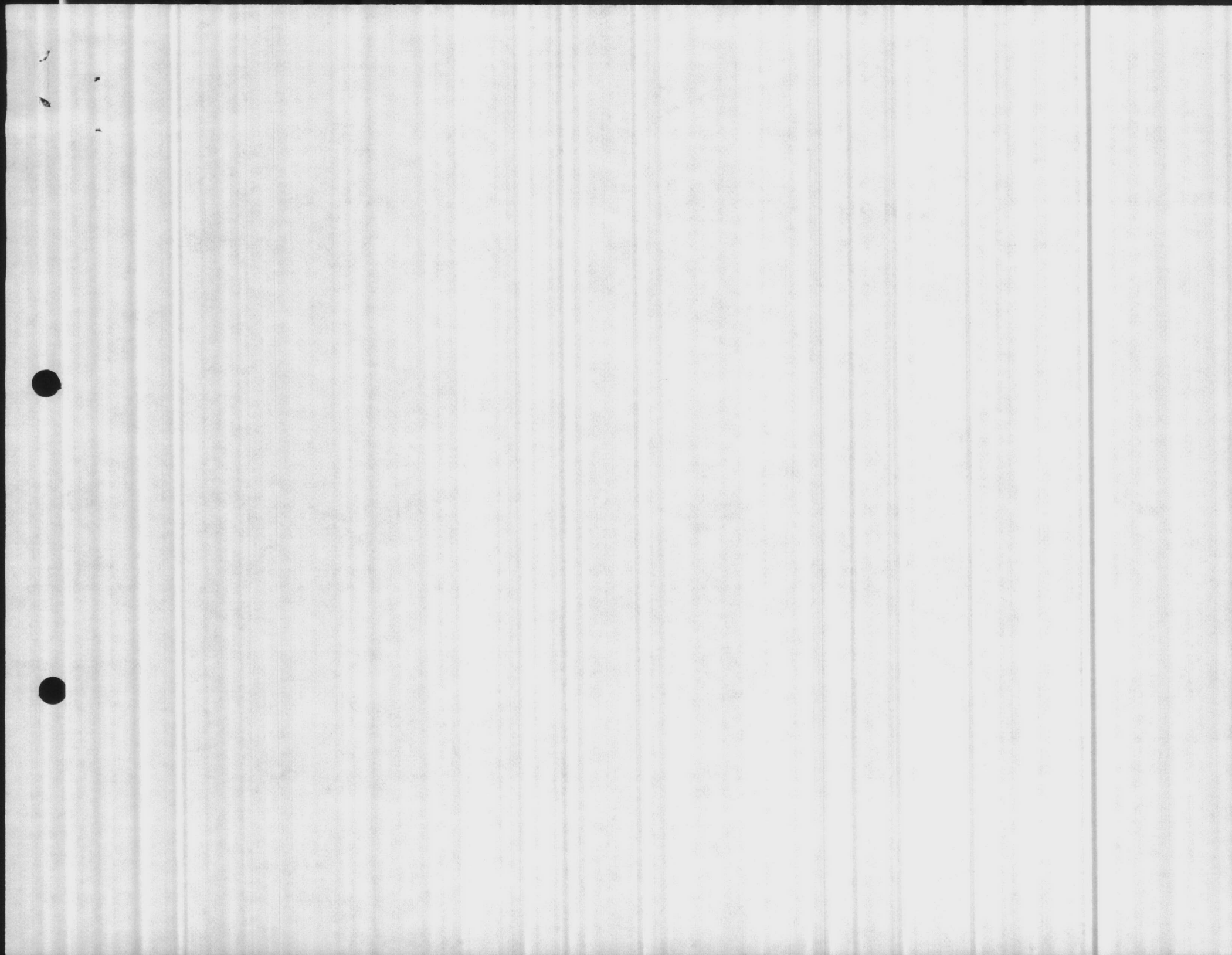
WATER TREATMENT

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
 H. J. Burns + Bob LACAPAZZIE



CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 6-84)

DATE COLLECTED

12-18-84

DATE OF ANALYSIS

12-18-84

PARAMETER	HADNOT POINT	CAMP JOHNSON	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	8.9	7.5	8.5	7.4	8.4	8.2	8.5	8.7
PHENOLTHALEIN ALKALINITY	6	0	4	0	6	6	6	14
METHYL ORANGE ALKALINITY	56	206	58	156	188	172	74 ⁺	184
CARBONATES AS CaCO ₃	12	0	8	0	12	12	12	28
BICARBONATES AS CaCO ₃	44	206	50	156	176	160	62	156
CHLORIDES AS Cl	10	38	12	20	18	30	10	114
HARDNESS AS CaCO ₃	60	86	80	70	74	60	80	50
IRON AS Fe	<0.04	0.42	<0.04	0.26	0.10	<0.04	<0.04	<0.04
FLUORIDE	AA 0.96 PM 0.93	0.16	0.63 0.46	0.19	0.10	0.09	1.01 0.95	0.75
CHLORINE RESIDUAL	1.0	1.4	1.0	1.5	1.2	1.0	0.9	1.4
TURBIDITY	AM 0.2 PM 0.2	0.9	0.5 0.4	0.4	0.5	0.3	0.1 0.1	0.4
TOTAL PHOSPHATE		2.60			1.04			
ORTHO PHOSPHATE		1.09			0.22			
META PHOSPHATE		1.51			0.82			
STABILITY	+0.5	-0.6	+0.2	-0.9	0.0	-0.1	+0.2	+0.1

REMARKS

COPY TO:

UTIL DIR

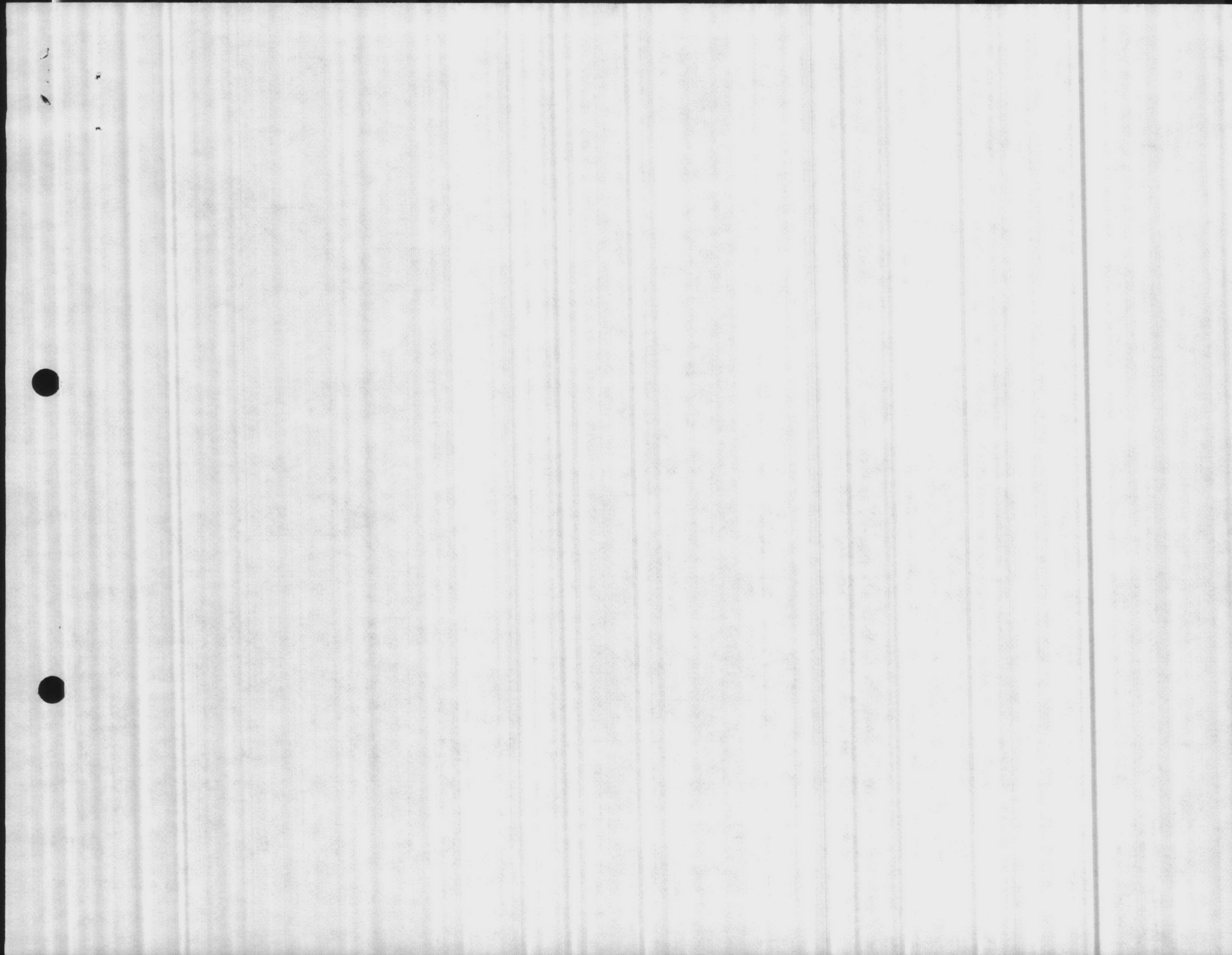
WATER TREATMENT

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

PA 11 CB 1



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

DATE COLLECTED
 12/26/84

DATE OF ANALYSIS
 12/26/84

PARAMETER	HADNOT POINT	CAMP JOHNSON	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	8.9	7.3	8.8	7.4	8.4	8.1	8.7	7.8
PHENOLTHALEIN ALKALINITY	8	0	4	0	2	0	6	0
METHYL ORANGE ALKALINITY	56	216	44	170	160	186	56	268
CARBONATES AS CaCO ₃	16	0	8	0	4	0	12	0
BICARBONATES AS CaCO ₃	40	216	36	170	156	186	44	268
CHLORIDES AS Cl	6	40	10	12	12	30	10	124
HARDNESS AS CaCO ₃	58	82	60	62	51	54	64	144
IRON AS Fe	<0.04	0.61	0.06	0.34	<0.04	0.10	<0.04	0.12
FLUORIDE	0.93 / 0.97	0.18	0.52 / 0.65	0.20	0.12	0.11	0.85 / 0.96	0.86
CHLORINE RESIDUAL	1.0	1.3	1.4	1.4	1.4	1.0	0.9	1.4
TURBIDITY	0.20 / 0.70	0.70	0.30 / 0.33	0.29	0.30	0.27	0.30 / 0.30	0.60
TOTAL PHOSPHATE		2.18			1.04			
ORTHO PHOSPHATE		1.00			0.22			
META PHOSPHATE		1.18			0.82			
STABILITY	+0.7	-0.7	+0.7	-0.9	+0.2	-0.1	+0.5	0.0

REMARKS

COPY TO:

- 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

H. J. Burns + Barber

200



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

DATE COLLECTED

12-4-84

REPORTABLE POINTS FOR SDWA

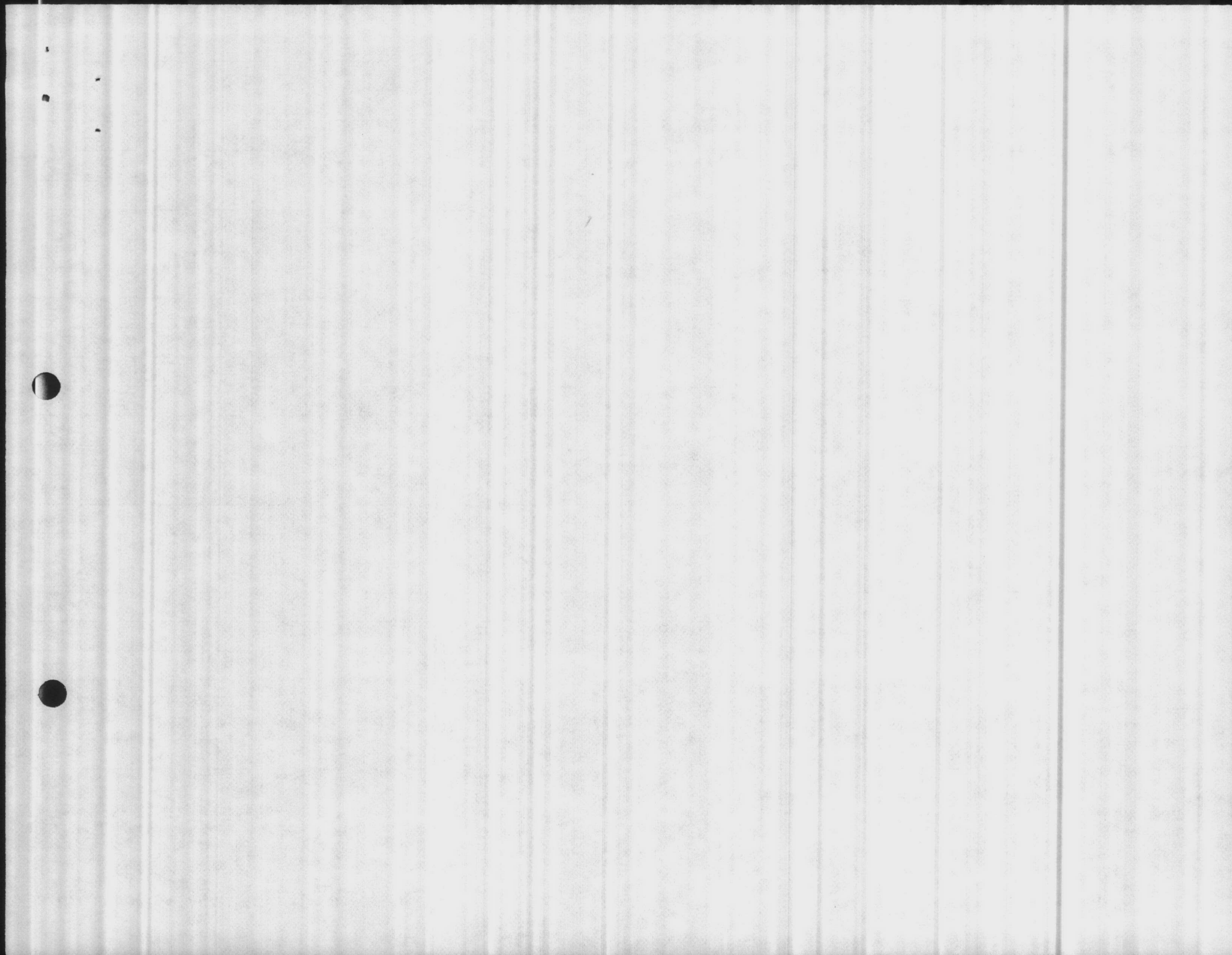
WATER SAMPLES	MARKED	COLIFORM MF/100 ML	RESIDUAL CHLORINE	TIME	WATER SAMPLES	MARKED	COLIFORM MF/100 ML	RESIDUAL CHLORINE	TIME	LABORATORY DATA
RR - 3	1	0	0.9	0840	MCAS - 3502	24	0	0.3	1000	TIME RECEIVED 1250-1330
RR - 15	2		0.8	0850	MCAS - 2002	25		0.4	0945	DATE RECEIVED 12-4-84
RR - 6	3		0.9	0900	MCAS - 4157	26		1.0	0930	ACCEPTED BY 13 JENS
	4				MCAS - 1157	27		0.6	0915	DATE ANALYZED 12-4-84
A-1	5		0.9	0910		28				ANALYSIS STARTED 1300
BB - 7	6		0.9	0920	NRMC - FOOD SERVICE	29		0.7	1115	ANALYSIS FINISHED 1430
BB - 49	7		1.0	0930	PP - 2615	30		0.6	1056	INCUBATOR TEMP 35°
BB - 9	8		0.9	1015	PP - 2617	31		0.5	1105	PROCESSED BY 13 JENS
	9				BM - 5400	32		0.7	1130	
BA - 103	10		1.0	1130	BM - 1985	33		0.7	1255	CUSTODY DATA
BA - 101	11		0.9	1145	LCH - 4022	34		0.5	1155	DATE
	12				LCH - 4014	35		0.5	1200	TIME
TT - 38	13		1.0	0845		36				SIGNATURE
TT - 43	14		1.0	0900	H - 1 WARD 12 - A	37		1.0	1035	DATE
TT - 2264	15		0.9	0918	H - 24	38		1.1	1045	TIME
	16				FC - 303	39		1.0	0930	SIGNATURE
CK - 1607	17		0.8	1100	FC - 420	40		1.1	0935	
M - 136	18		1.2	1030	FC - 400	41		1.1	0945	COPY TO:
M - 19	19		1.1	1015	HP - 236	42		1.0	0845	<input checked="" type="checkbox"/> UTIL DIR
	20				HP - 540	43		1.0	1025	<input type="checkbox"/> WATER TREATMENT
CG - 1	21		0.3	0900	HP - 1300	44		0.9	0910	<input type="checkbox"/> PMU <input type="checkbox"/> MCAS PMO
TC - 830	22		1.5	0830	HP - 1500	45		1.1	0900	<input type="checkbox"/> NREAD <input type="checkbox"/> FILE
TC - 501	23		1.0	0845		46				<input type="checkbox"/> _____

REMARKS

SIGNATURE

16 J. Burns

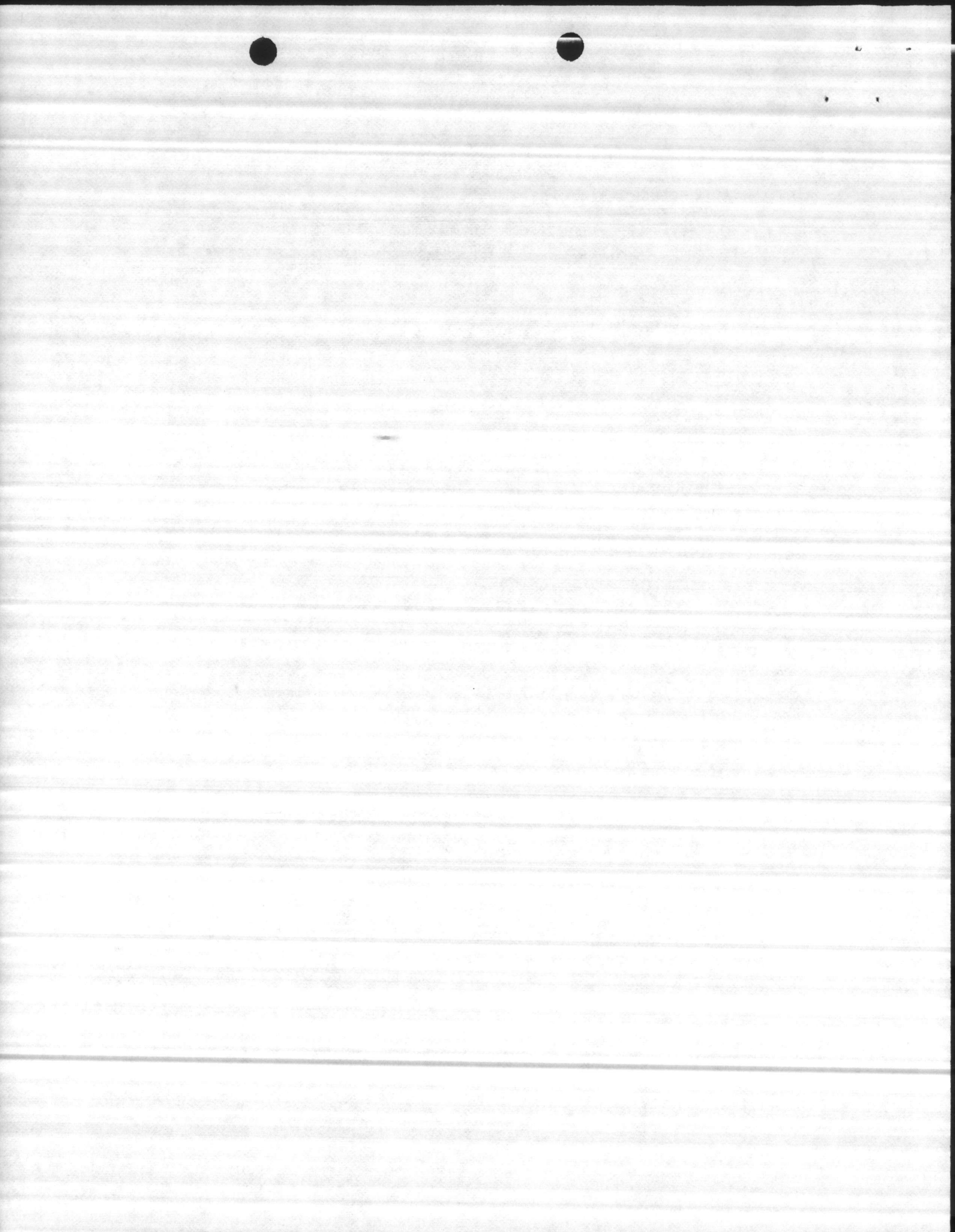
12-5-84



BACTERIOLOGICAL ANALYSIS OF WATER

NON-REPORTABLE

WATER SAMPLES	MARKED	COLIFORM COUNT M-ENDO MEDIUM	RESIDUAL CHLORINE	pH	TIME
BB-97		ϕ	0.2		1030
FC-19					
SH-8		ϕ	0.9		1005
M.P. POOL		ϕ	0.9	7.1	0845
#2 POOL		ϕ	0.5	7.3	1025
#5 POOL					
P. P. POOL					
P. P. BABY POOL					
MCAS E-POOL					
MCAS O-POOL					
MCAS BABY POOL					
REMARKS					



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	1.0	1005	MCAS - 3502	24	0	0.3	0910	TIME RECEIVED 1246-1336
RR - 15	2	0	0.8	1015	MCAS - 2002	25	0	0.4	0920	DATE RECEIVED 12-11-84
RR - 10	3	0	0.8	1020	MCAS - AS 4157	26	0	0.4	0900	ACCEPTED BY THB, L
	4				MCAS - OFF 2066	27	0	0.5	0940	DATE ANALYZED 12-11-84
A-1	5	0	1.0	0940		28				ANALYSIS STARTED 1250
BB - 7	6	0	1.1	0900	NRMC - Food SERVICE	29	0	0.9	1115	ANALYSIS FINISHED 1530
BB - 260	7	0	0.9	0930	PP - 2615	30		0.16	1055	INCUBATOR TEMP
BB - 245	8	0	0.9	0910	PP - 2613	31		0.7	1100	PROCESSED BY
	9				BM - 5400	32		0.7	1150	
BA - 103	10	0	0.8	1120	BM - 1985	33		0.7	1135	CUSTODY DATA
BA - 107	11	0	0.8	1130	LCH - 4022	34		0.8	1125	DATE
	12				LCH - 4025	35		0.7	1155	TIME
TT - 38	13	0	1.0	0845		36				SIGNATURE
TT - 43	14	0	0.9	0900	H - 1 DIV NAVY RECORDS	37	0	0.9	1040	DATE
2937	15	0	0.9	0930	H - 16	38		1.1	1035	TIME
	16				FC - 303	39		1.0	0935	SIGNATURE
CK - 1404	17	0*	0.8	1000	FC - 420	40		0.9	0930	
M - 139 136	18	0	1.2	1100	FC - E CLUB	41		0.9	0920	COPY TO:
M - 424	19	0	1.3	1120	HP - 236	42		0.9	1020	<input type="checkbox"/> UTIL DIR
	20				HP - 540	43		0.7	0910	<input type="checkbox"/> WATER TREATMENT
CG - 1	21	0	0.3	0850	HP - 1300	44		0.7	0850	<input type="checkbox"/> PMU <input type="checkbox"/> MCAS PMO
TC - 830	22	0	1.0	0840	HP - 1407	45		1.0	0855	<input type="checkbox"/> NREAD <input type="checkbox"/> FILE
TC - G-650 RANDOM	23	0*	1.0	0825		46				<input type="checkbox"/> _____

REMARKS
 * NUMEROUS NON-COLIFORM COLONIES

SIGNATURE
 Thomas H. Barber





1 1

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

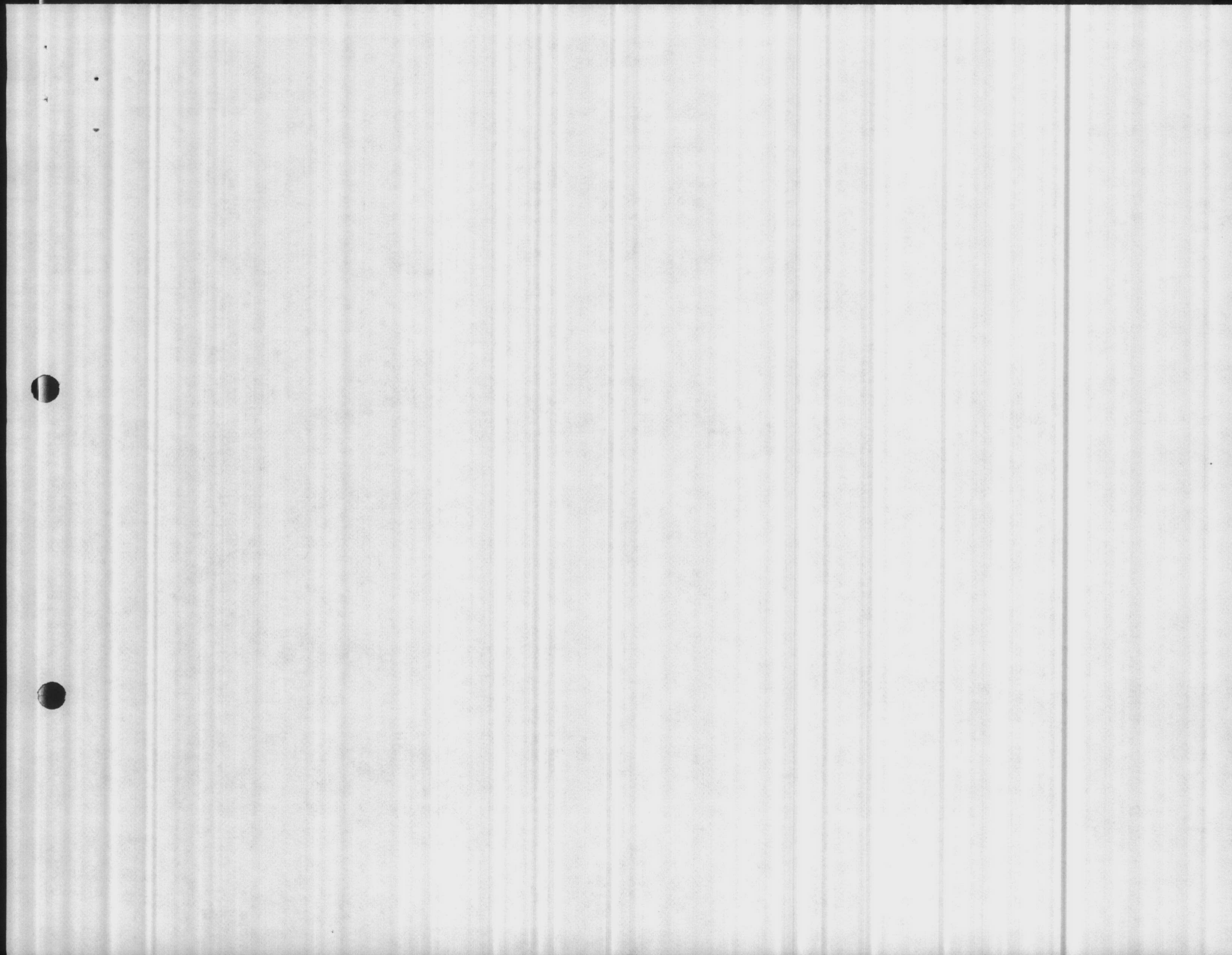
DATE COLLECTED
 12.2/84

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	0	1.0	0930	MCAS - 3502	24	0	0.4	0928	TIME RECEIVED 12/12/84
RR - 15	2		1.0	0929	MCAS - 2002	25		0.6	0930	DATE RECEIVED 12/12/84
RR - 6	3		1.0	0932	MCAS - 4157	26		0.3	0919	ACCEPTED BY L+13
	4				MCAS - 1266	27		0.4	0945	DATE ANALYZED 12/12/84
A-1	5		1.2	0905	MCAS 1141	28		0.6	1000	ANALYSIS STARTED 12 30
BB - 7	6		1.2	0834	NRMC - FOOD SERVICE	29		0.8	1035	ANALYSIS FINISHED 143
BB - 270	7		1.2	0856	PP - 2615	30		0.6	1020	INCUBATOR TEMP 35
BB - 45	8		1.2	0833	PP - 2600	31		0.6	1025	PROCESSED BY B. Burns
	9				BM - 5400	32		0.8	1045	
BA - 103	10		1.5	1005	BM - 1925	33		0.6	1055	CUSTODY DATA
BA - 101	11		1.5	1010	LCH - 4022	34		0.5	1105	DATE
	12				LCH - 4002	35		0.5	1115	TIME
TT - 38	13		1.0	0845		36				SIGNATURE
TT - 43	14		1.0	0950	H-1 WARD 12-A	37		1.0	1005	DATE
TT - 212	15		0.9	1010	H - 16	38		0.8	1010	TIME
	16				FC - 303	39		1.0	0915	SIGNATURE
CK - 1603	17		0.9	1040	FC - 420	40		1.0	0920	
M - 139 136	18		1.2	1100	FC - 540	41		1.0	0930	COPY TO:
M - 231	19		1.1	1120	HP - 236	42		1.0	0955	<input checked="" type="checkbox"/> UTIL DIR
	20				HP - 540	43		0.6	0905	<input type="checkbox"/> WATER TREATMENT
CG - 1	21		0.3	0852	HP - 1300	44	✓	0.6	0845	<input type="checkbox"/> PMU <input type="checkbox"/> MCAS PMO
TC - 830	22	✓	1.5	0842	HP - 20	45	✓	1.0	0855	<input type="checkbox"/> NREAD <input type="checkbox"/> FILE
TC - G-650	23	✓	0.6	0820		46				<input type="checkbox"/>

REMARKS

SIGNATURE
 M. J. Burns
 12/14/84

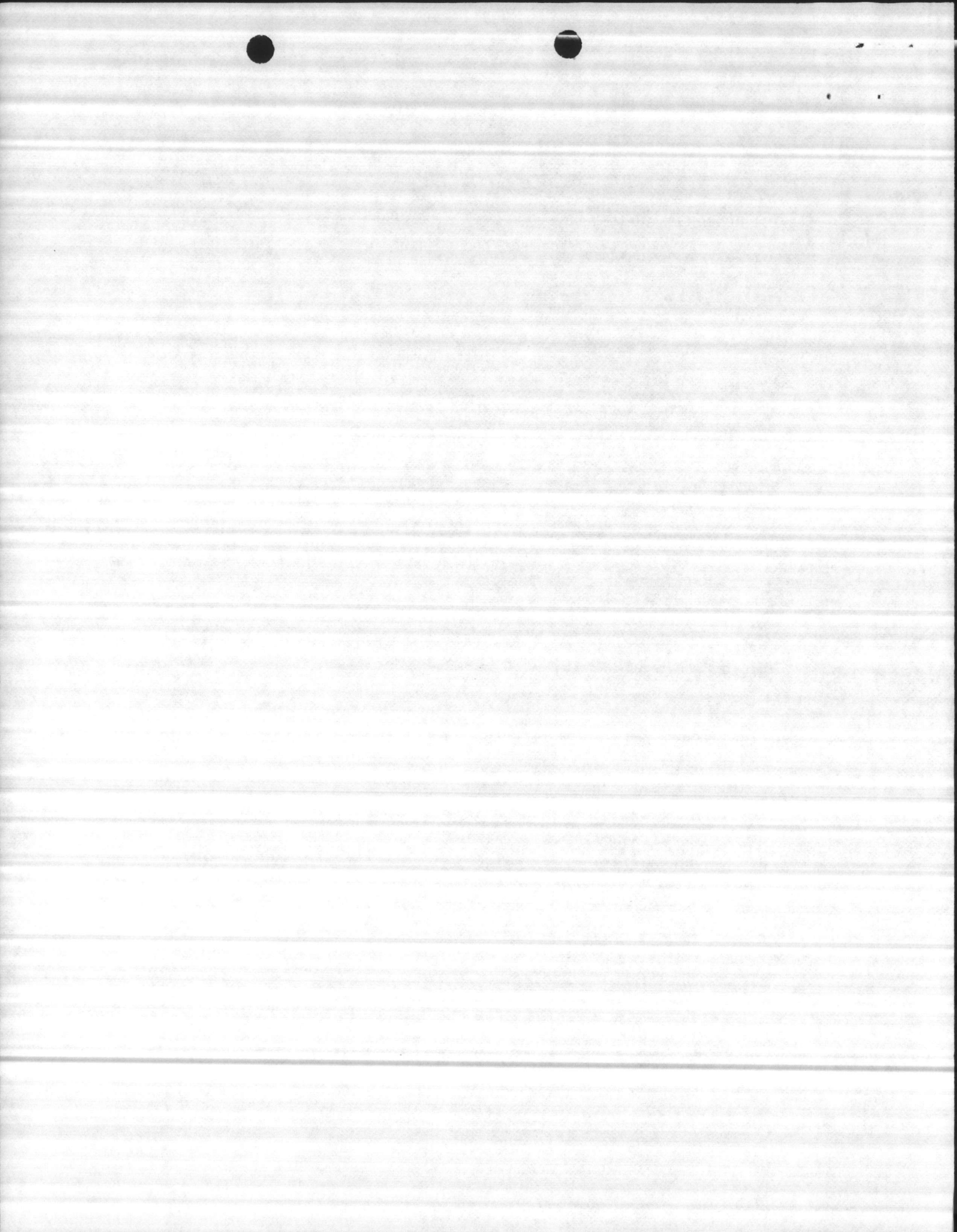


BACTERIOLOGICAL ANALYSIS OF WATER

NON-REPORTABLE

WATER SAMPLES	MARKED	COLIFORM COUNT M-ENDO MEDIUM	RESIDUAL CHLORINE	pH	TIME
BB-97		ϕ	0.8		0846
FC-19					
SH-8		ϕ	0.5		0940
M.P. POOL		CLOSED			
#2 POOL		ϕ	0.8	7.4	0950
#5 POOL		CLOSED			
P. P. POOL					
P. P. BABY POOL					
MCAS E-POOL					
MCAS O-POOL					
MCAS BABY POOL					

REMARKS



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

DATE COLLECTED

12/26/84

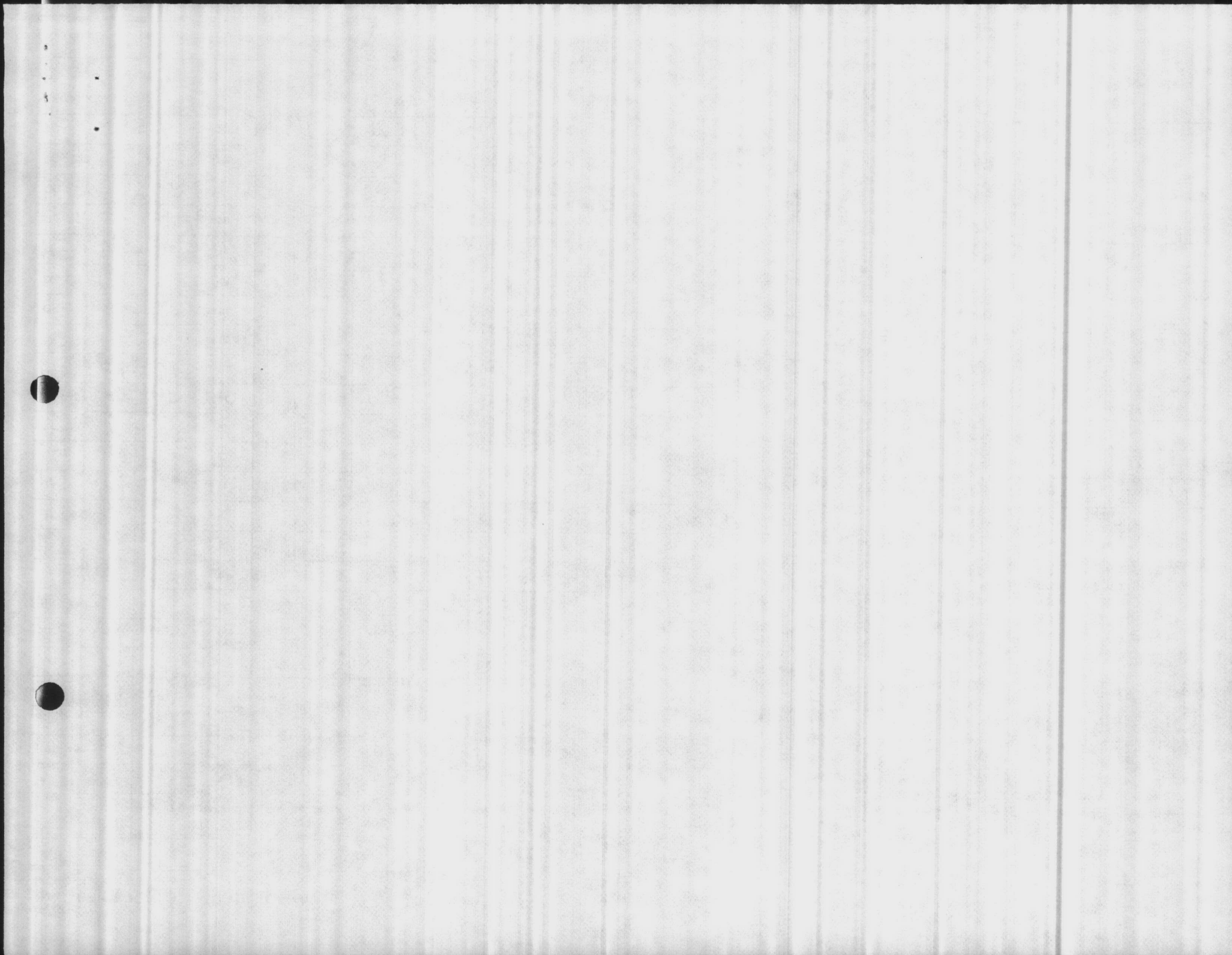
REPORTABLE POINTS FOR SDWA

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	0	0.5	0913	MCAS - 3502	24	0	0.4	0940	TIME RECEIVED 1220-1245
RR - 15	2		0.6	0907	MCAS - 2002	25		0.8	0950	DATE RECEIVED 12/26/84
RR - 6	3		0.5	0921	MCAS - 4157	26		0.3	0930	ACCEPTED BY HUNNEYCUTT
	4				MCAS - 2061	27		0.6	1000	DATE ANALYZED 12/26/84
A-1	5		CLOSED	0830		28				ANALYSIS STARTED 1220
BB - 7	6		1.0	1000	NRMC FOOD SERVICE	29		1.0	1110	ANALYSIS FINISHED 1400
BB - 51	7		0.5	0951	PP - 2615	30		0.4	1053	INCUBATOR TEMP 35°
BB - 45	8		0.6	0945	PP - 2611	31		0.5	1100	PROCESSED BY HUNNEYCUTT
	9				BM - 5400	32		1.0	1120	
BA - 103	10		0.8	1109	BM - MCX	33		0.4	1130	CUSTODY DATA
BA - 101	11		1.0	1111	LCH - 4022	34		0.5	1145	DATE
	12				LCH - 4025	35		0.4	1200	TIME
TT - 38	13		1.3	0845		36				SIGNATURE
TT - 43	14		1.0	0915	H - 1 WARD 12-A	37		1.0	1020	DATE
TT - 2408	15		1.0	0935	H - 14	38		0.4	1030	TIME
	16				FC - 303	39		1.0	0925	SIGNATURE
CK - 1601	17		0.9	0945	FC - 420	40		1.1	0935	
M - 139	18		1.2	0950	FC - 425	41		0.9	0945	COPY TO:
M - 130	19		1.2	1000	HP - 236	42		1.0	0835	<input checked="" type="checkbox"/> UTIL DIR
	20				HP - 540	43		0.5	0915	<input type="checkbox"/> WATER TREATMENT
CG - 1	21		0.3	0920	HP - 1300	44	✓	0.5	0855	<input type="checkbox"/> PMU <input type="checkbox"/> MCAS PMO
TC - 830	22	✓	1.5	0910	HP - 1500	45	0	1.0	0850	<input type="checkbox"/> NREAD <input type="checkbox"/> FILE
TC - 0-650	23	0	0.8	0900		46				<input type="checkbox"/>

REMARKS

SIGNATURE

G. HUNNEYCUTT 12/27/84



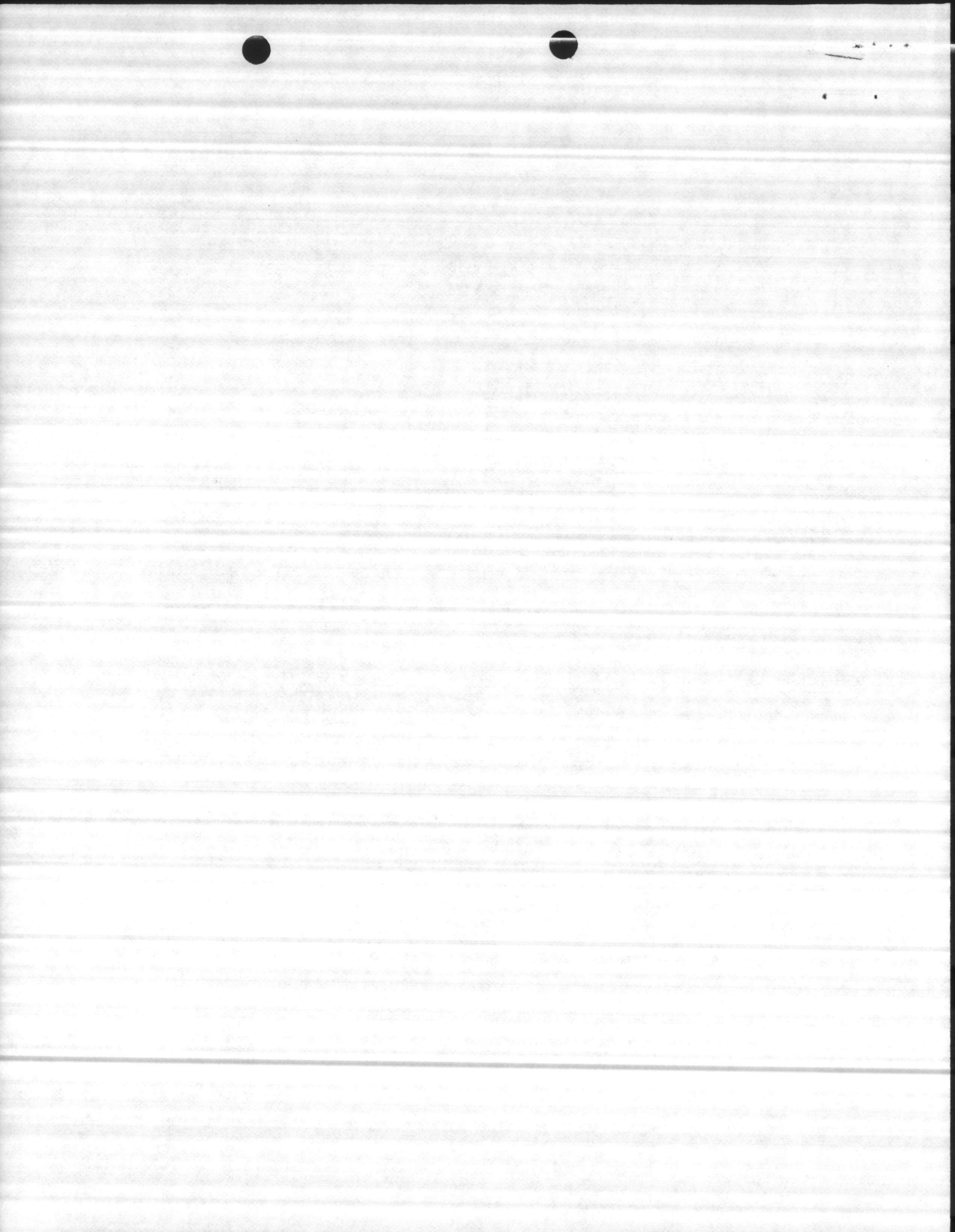
BACTERIOLOGICAL ANALYSIS OF WATER

NON-REPORTABLE

WATER SAMPLES	MARKED	COLIFORM COUNT M-ENDO MEDIUM	RESIDUAL CHLORINE	pH	TIME
BB-97		∅	0.7		1010
FC-19					
SH-8		∅	0.7		1000
M.P. POOL					
#2 POOL		∅	0.5	7.6	0830
#5 POOL		ches			
P. P. POOL					
P. P. BABY POOL					
MCAS E-POOL					
MCAS O-POOL					
MCAS BABY POOL					

REMARKS

SH-8 NUMEROUS NON-COLIFORM NOTED



QUALITY CONTROL LABORATORY REPORT
 MISCELLANEOUS BACTERIOLOGICAL ANALYSIS OF WATER

MCBCL 11390/8 (REV. 4/78)

WATER TYPE **ICE** SAMPLE COLLECTED BY **PMU** DATE COLLECTED **20 DEC 84**

LOCATION	MARKED	COLIFORM	
		TOTAL	FECAL
USNH, CLNC	0817/ER	0	
	0805/3E	0	
	0815/ ^{PHYSICAL} THERAPY	0	
	0800/4W	0	
	0800/4A	0	
	0803/3W	0	
	0811/2W	0	
	0810/2E	0	

REMARKS

SIGNATURE *Kabot Lockwood* DATE **21 Dec 84**

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



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QUALITY CONTROL LABORATORY REPORT
 MISCELLANEOUS BACTERIOLOGICAL ANALYSIS OF WATER

MCBGL 11830/8 (REV. 4/78)

WATER TYPE		SAMPLE COLLECTED BY		DATE COLLECTED	
ICE		PMU		12/28/84	
LOCATION	MARKED	COLIFORM			
		TOTAL	FECAL		
3 EAST	TIME 0920	0			
ICU	0930	0			
3 WEST	0923	0			
PSYCH.	0945	0			
2 WEST	0925	0			
PHISO	0933	0			
PWC	1000	0			
EMER ROOF	0937	0			

REMARKS

Rec'd Lab 1020 10/28/84 B

SIGNATURE Th Barber DATE 29 Dec 84

COPY TO

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



QUALITY CONTROL LABORATORY REPORT
 MISCELLANEOUS BACTERIOLOGICAL ANALYSIS OF WATER
 MCBCL 11220/8 (REV. 4/78)

File

WATER TYPE		SAMPLE COLLECTED BY		DATE COLLECTED	
Potable		Mr. Ken Hughes		4 DEC 84	
LOCATION	MARKED	COLIFORM			
		TOTAL	FECAL		
Bld. 244	Time 1327 Cl ₂ 0.4	0			
Bld. 246	Time 1335 Cl ₂ 0.2	0			
Bld. 245	Time 1327 Cl ₂ 0.2	0			
Bld. 247	Time 1120 Cl ₂ 0.2	0			
244 Midway 12-4-84 11:27 outside Tap Ken Hughes Cl ₂ - 4		245 Midway 12-4-84 11:27 Ken Hughes Cl ₂ - .2			
246 Midway 12-4-84 11:35 Ken Hughes Cl ₂ - .2		247 Midway 12-4-84 11:20 Ken Hughes Cl ₂ - .2			

REMARKS

Lead in Lab on 12/4/84 14.15 ~~11/84~~
 Samples are from Midway Park, collected by K. Hughes
 set up @ 1430 12/4/84 H

SIGNATURE

DATE

COPY TO

NREAD

UTILITIES DIRECTOR

WATER TREATMENT PLANT (GENERAL FOREMAN)

BASE PREVENTIVE MEDICINE

MCAS PREVENTIVE MEDICINE



1
2





QUALITY CONTROL LABORATORY REPORT
MISCELLANEOUS BACTERIOLOGICAL ANALYSIS OF WATER
 MCBCL 11890/8 (REV. 4/78)

WATER TYPE <i>PT. 1/2</i>	SAMPLE COLLECTED BY <i>Mr. Ken Hughes (Public works)</i>	DATE COLLECTED <i>7 DEC 84</i>			
		LOCATION	MARKED	COLIFORM	
				TOTAL	FECAL
<i>Highway Park 237</i>	<i>Time 15:20 Cl₂ 0.4</i>			<i>∅</i>	

REMARKS

Called results to Larry Farina @ 1320 on 11 Dec 1984 *EBB*

SIGNATURE *Allen B. Spang* DATE *8 Dec 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 *Potable* SAMPLE COLLECTED BY *K Hughes* DATE COLLECTED *12-10-84*

LOCATION	MARKED	COLIFORM	
		TOTAL	FECAL
<i>Midway Park 233</i>	<i>Time 0820 Clu 0.4</i>	<i>Ø</i>	
<i>231</i>	<i>0832 0.6</i>	<i>Ø</i>	
<i>251</i>	<i>1125 0.6</i>	<i>Ø</i>	
<i>236</i>	<i>1055 0.6</i>	<i>Ø</i>	
<i>227</i>	<i>1105 0.6</i>	<i>Ø</i>	
<i>247</i>	<i>1120 1.0</i>	<i>Ø</i>	
<i>238</i>	<i>1048 0.6</i>	<i>Ø</i>	

REMARKS
Numerous non-celiform noted on 251.
Called results to Larry Farina @ 1320 on 11 Dec 84. Requested
a Resampling of 251 in occupancy to continue boil water.
ELBtz

SIGNATURE *J. [Signature]* DATE *12-11-84*

- 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	
Potable		K Hughes		12-10-84	
LOCATION	MARKED	COLIFORM			
		TOTAL	FECAL		
Midway Park	323	Time 1330	0.6	Ø	
	316	1345	0.4	Ø	
	309	1400	0.6	Ø	
	321	1340	0.6	Ø	
	313	1350	0.4	Ø	
	306	1325	0.6	Ø	
	310	1355	0.6	Ø	
	331	1335	0.6	Ø	
	301	1320	0.4	Ø	

REMARKS

Few non-coliform Noticed on 316, 306 & 313.
 Called results to Larry Farina @ 1320 on 11 Dec 84 E.L. Betz

SIGNATURE *Robert Schapelle* DATE 12-11-84

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 11390/8 (REV. 4/78)

WATER TYPE Potable SAMPLE COLLECTED BY Public Works DATE COLLECTED 12-11-84

LOCATION	MARKED	COLIFORM	
		TOTAL	FECAL
<u>Midway Park</u>	<u>226</u>	<u>0</u>	
	<u>229</u>	<u>0</u>	
	<u>227</u>	<u>0</u>	
	<u>228</u>	<u>0</u>	
	<u>224</u>	<u>0</u>	
	<u>225</u>	<u>0</u>	
<u>repeat</u>	<u>251</u>	<u>0</u>	
			<u>251 Midway PK. Cl₂ - .6</u> <u>12-11-84</u> <u>3:15 P.M. outside Bib</u> <u>Ken Hughes</u>
			<u>225 Midway PK. Cl₂ - .4</u> <u>12-11-84</u> <u>3:20 P.M. outside Bib</u> <u>Ken Hughes</u>
			<u>228 Midway PK. Cl₂ - .64</u> <u>12-11-84</u> <u>11:03 A.M.</u> <u>Ken Hughes</u>
			<u>226 Midway PK. Cl₂ - .6</u> <u>12-11-84</u> <u>10:50 A.M. outside</u> <u>Ken Hughes</u>

REMARKS

Rec 1130 12/11/84 H
1540 L

PUBLIC WORKS
CLERK 1430
KEN HUGHES

224 Midway PK. Cl₂ - .4
12-11-84
3:30 P.M.
Ken Hughes

229 Midway PK. Cl₂ - .6
12-11-84
11:08 A.M.
Ken Hughes

227 Midway PK. Cl₂ - .6
12-11-84
10:58 A.M.
Ken Hughes

SIGNATURE Thomas A. Barber DATE 12-12-84

COPY TO

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



QUALITY CONTROL LABORATORY REPORT
MISCELLANEOUS BACTERIOLOGICAL ANALYSIS OF WATER

MCBCL 11330/3 (REV. 4/78)

f h e

WATER TYPE <i>POTABLE</i>	SAMPLE COLLECTED BY <i>PUBLIC WORKS</i>	DATE COLLECTED <i>12-12-84</i>			
		LOCATION	MARKED	TOTAL	FECAL
		<i>MIDWAY PARK</i>	<i>221</i>	<i>0</i>	
			<i>222</i>	<i>0</i>	

REMARKS
Rec'd 1455 12-12-84 THB

*221 Midway PK. 12-12-84
1:35 P.M. Ken Hughes*

*222 Midway PK. 12-12-84
1:25 P.M. Ken Hughes*

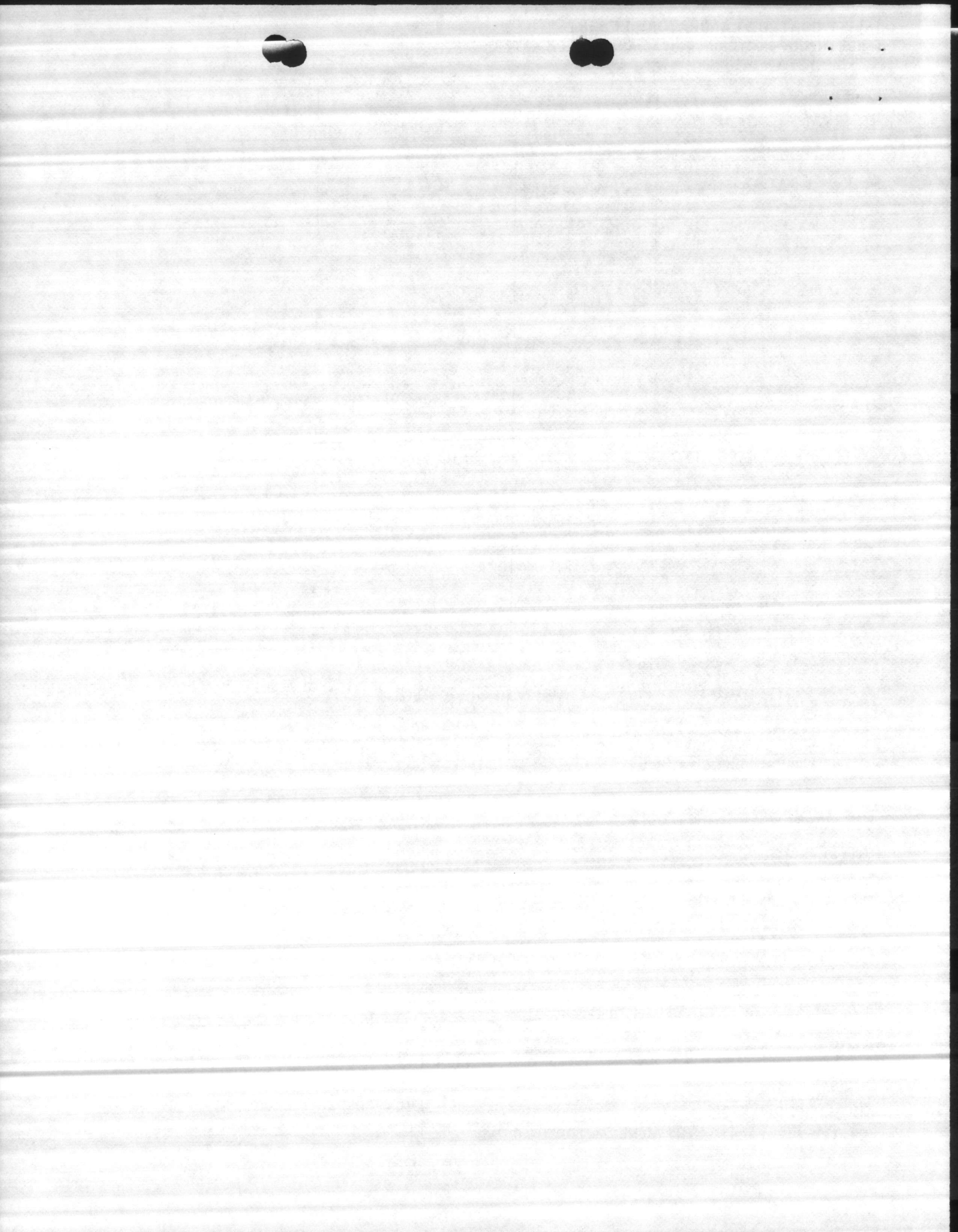
SIGNATURE
H. J. Burns

DATE *12/13/84*

COPY TO

- INREAD
- UTILITIES DIRECTOR
- WATER TREATMENT PLANT (GENERAL FOREMAN)
- BASE PREVENTIVE MEDICINE
- MCAS PREVENTIVE MEDICINE





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

WATER TYPE: *Tap* SAMPLE COLLECTED BY: *Ken Hughes* DATE COLLECTED: *12/17/84*

LOCATION	MARKED	COLIFORM	
		TOTAL	FECAL
<i>Midway Park</i>	<i>211</i>	<i>0</i>	
	<i>212</i>	<i>0</i>	
	<i>213</i>	<i>0</i>	

*211 Midway PK. Cl₂-4
 12-17-84
 1:27 P.M. Ken Hughes*

REMARKS

*212 Midway PK. Cl₂-4
 12-17-84 Outside Bib
 2:15 P.M. Ken Hughes*

*213 Midway PK. Cl₂-4
 12-17-84
 1:22 P.M. Ken Hughes*

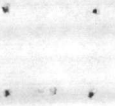
*CALLED TO: Gene FITZPATRICK
 1317 12/19/84*

SIGNATURE: *H. J. Burns* DATE: *12/17/84*

COPY TO

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







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QUALITY CONTROL LABORATORY REPORT OF WATER
MISCELLANEOUS BACTERIOLOGICAL ANALYSIS OF WATER

MCBCL 11330/6 (REV. 4/78)

WATER TYPE		SAMPLE COLLECTED BY		DATE COLLECTED	
POTABLE				20 DEC 84	
LOCATION	MARKED	COLIFORM			
		TOTAL	FECAL		
209 MIDWAY PARK					

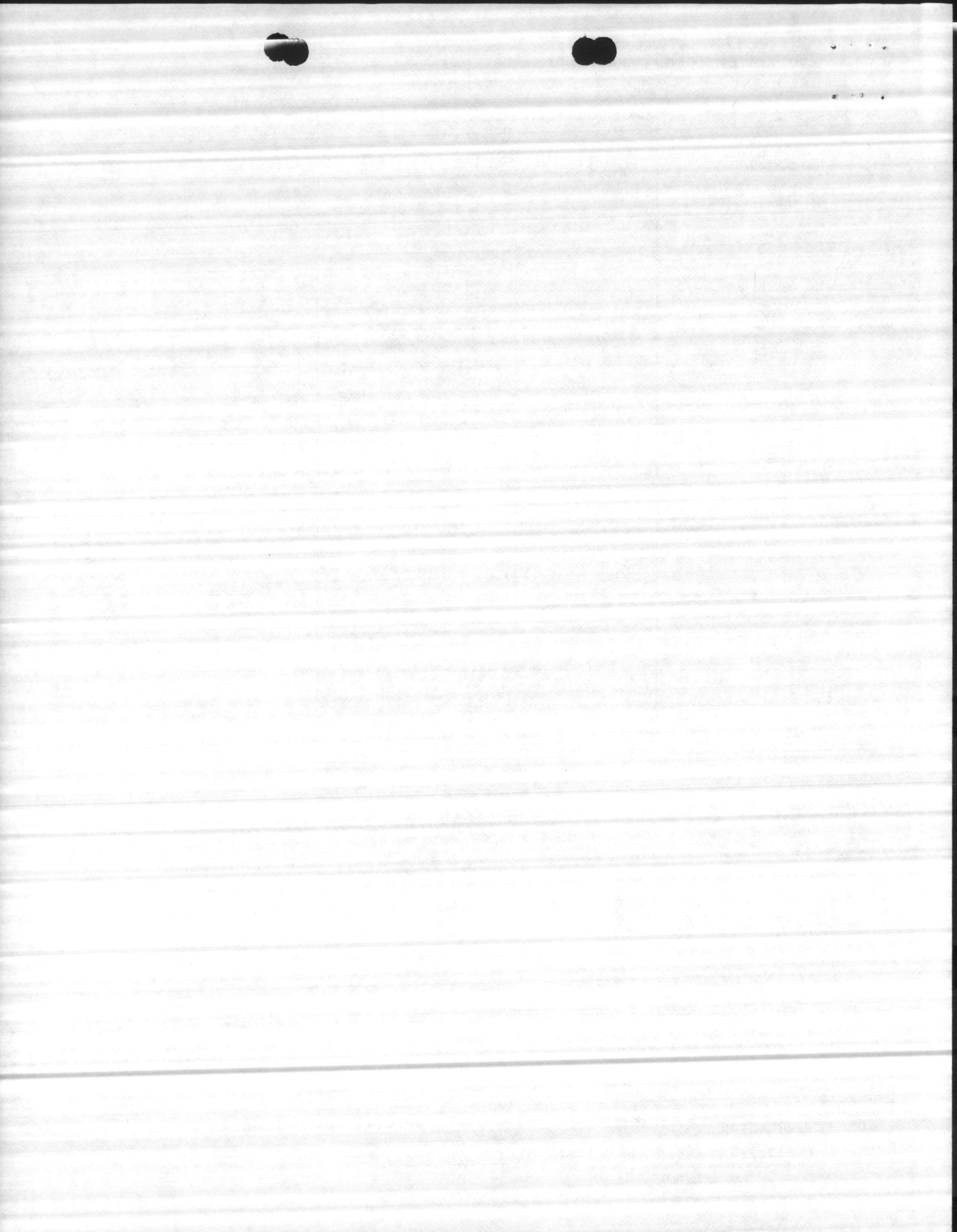
REMARKS
Rec'd by H @ 1536 on 20 DEC 84
Reported to RANDY ACOSTA, 1452 hrs, 21 Dec. 84.

209 Midway PK. 012-4
12-20-84
3:04 P.M. *Ken Hughes*

SIGNATURE _____ DATE _____

COPY TO

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



QUALITY CONTROL LABORATORY REPORT
 MISCELLANEOUS BACTERIOLOGICAL ANALYSIS OF WATER
 MCBCL 11830/6 (REV. 4/78)

WATER TYPE		SAMPLE COLLECTED BY		DATE COLLECTED	
Potable		K. Hughes		12-21-84	
LOCATION	MARKED	COLIFORM			
		TOTAL	FECAL		
Midway Park 200	Time 1005 Cl ₂ 0.2	Ø			
203	1010 [unclear]	Ø			
206	1015 0.4	Ø			
270	1310 0.4	Ø			
209	1330 0.4	Ø			

REMARKS
 Called 1345 12-22-84 No answer L

SIGNATURE Robert Lachmann DATE 12-23-84

COPY TO

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



1 2 3 4

5 6 7 8

QUALITY CONTROL LABORATORY REPORT
MISCELLANEOUS BACTERIOLOGICAL ANALYSIS OF WATER
 MCBCL 11255/8 (REV. 4/78)

WATER TYPE <i>Potable</i>	SAMPLE COLLECTED BY <i>Water Plant Personnel</i>	DATE COLLECTED <i>5 DEC 84</i>
------------------------------	---	-----------------------------------

LOCATION	MARKED	COLIFORM	
		TOTAL	FECAL
<i>Bld. 2600</i>	<i>Time 1300 Cl₂ 1.0</i>	<i>Ø</i>	

REMARKS •

SIGNATURE <i>[Signature]</i>	DATE <i>6 DEC 84</i>
---------------------------------	-------------------------

- COPY TO
- | | |
|--|---|
| <input type="checkbox"/> INREAD | <input type="checkbox"/> BASE PREVENTIVE MEDICINE |
| <input type="checkbox"/> UTILITIES DIRECTOR | <input type="checkbox"/> MCAS PREVENTIVE MEDICINE |
| <input type="checkbox"/> WATER TREATMENT PLANT (GENERAL FOREMAN) | <input checked="" type="checkbox"/> <i>file</i> |



1 2 3 4

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

DATE COLLECTED
 12-5-84

DATE OF ANALYSIS
 12-5-84

PARAMETER	HADNOT POINT	CAMP JOHNSON	TARAWA TERRACE	ONSLOW BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER		
PH			2600 8.3							
PHENOLTHALEIN ALKALINITY			4							
METHYL ORANGE ALKALINITY			56							
CARBONATES AS CaCO ₃			8							
BICARBONATES AS CaCO ₃			48							
CHLORIDES AS Cl			12							
HARDNESS AS CaCO ₃			80							
IRON AS Fe			<0.04							
FLUORIDE			1.09							
CHLORINE RESIDUAL			1.0							
TURBIDITY			0.4							
TOTAL PHOSPHATE										
ORTHO PHOSPHATE										
META PHOSPHATE										
STABILITY										

REMARKS

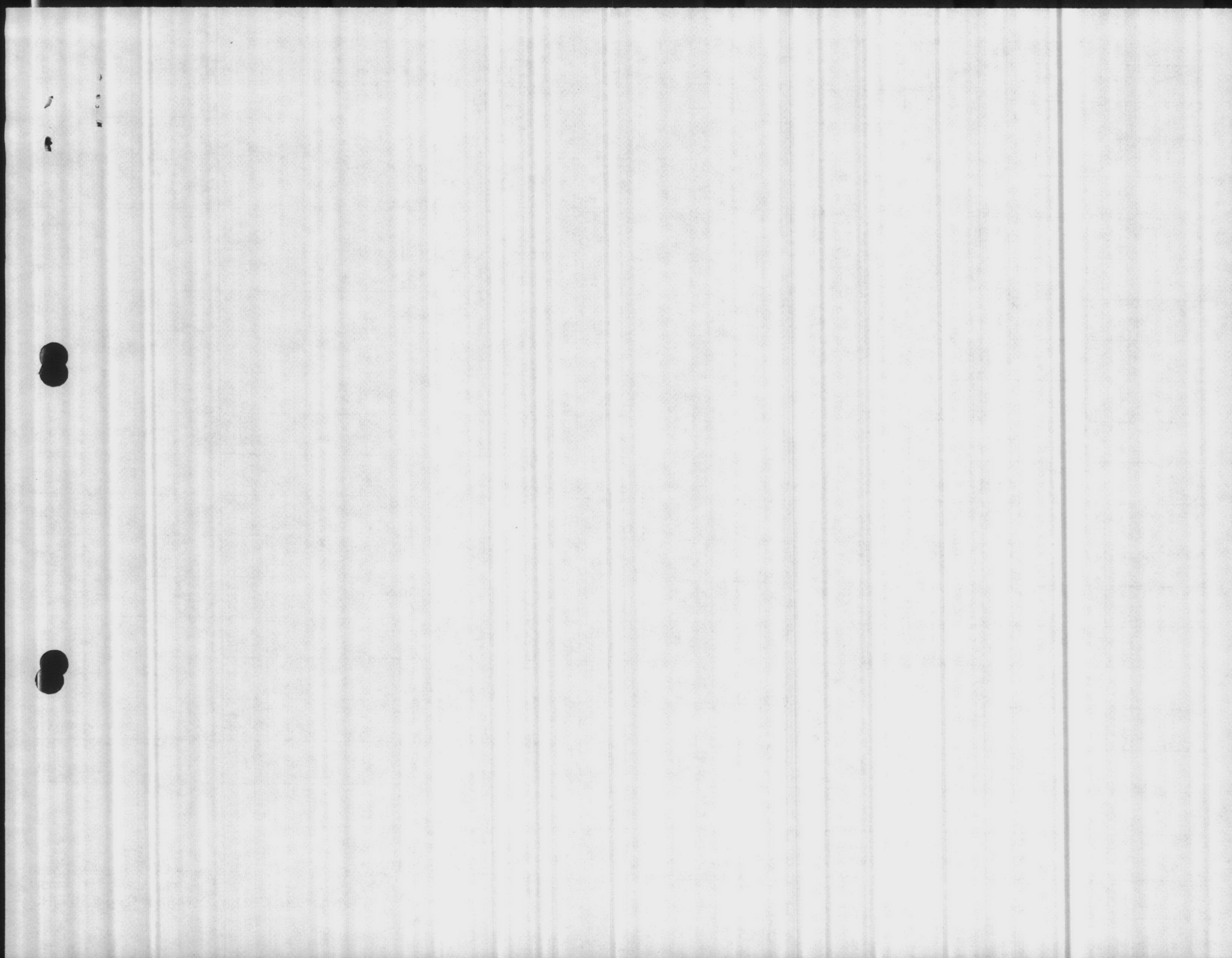
Chlorine smell only smell noted.

COPY TO:

- 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 *[Signature]*



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

WATER TYPE	SAMPLE COLLECTED BY	DATE COLLECTED	
		TIME	DATE
LOCATION	MARKED	TOTAL	FECAL
<i>Potable</i>	<i>Water Plant Personnel</i>		<i>5 DEC 84</i>
<i>Bld 5183</i>	<i>Time 0925</i> <i>Ch. 0.8</i>	<i>0</i>	

REMARKS •

SIGNATURE

Gavin Hennessey

DATE

6 DEC 84

COPY TO

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

- BASE PREVENTIVE MEDICINE
- MCAS PREVENTIVE MEDICINE

File



11-11-11

11-11-11

QUALITY CONTROL LABORATORY REPORT
 MISCELLANEOUS BACTERIOLOGICAL ANALYSIS OF WATER
 MCBCL 11330/6 (REV. 4/78)

WATER TYPE <i>Potable</i>	SAMPLE COLLECTED BY <i>WPO</i>	DATE COLLECTED <i>19 Dec 84</i>	
LOCATION	MARKED	COLIFORM	
		TOTAL	FECAL
<i>T.T., 2600 Bogaville</i>	<i>Time 0930 Cl₂ 0.7</i>	<i>Ø</i>	

REMARKS
2600 Bogaville
T.T.
0930 *0.7* *4*

SIGNATURE <i>Robert J. Schubert</i>	DATE <i>20 Dec 84</i>
COPY TO	
<input type="checkbox"/> INREAD	<input type="checkbox"/> BASE PREVENTIVE MEDICINE
<input type="checkbox"/> UTILITIES DIRECTOR	<input type="checkbox"/> MCAS PREVENTIVE MEDICINE
<input type="checkbox"/> WATER TREATMENT PLANT (GENERAL FOREMAN)	<input checked="" type="checkbox"/> <i>File</i>



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