

11331  
NREAD  
7 Aug 87

Mr. John McPadyen  
Water Supply Branch  
Division of Health Services  
North Carolina Department of  
Human Resources  
Post Office Box 2091  
Raleigh, North Carolina 27602

Dear Mr. McPadyen:

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 July 1987. 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 Environmental Chemistry and Microbiology Laboratory, located in the Natural Resources and Environmental Affairs Division, Assistant Chief of Staff, Facilities. Ms. Betz, Supervisory Chemist, telephone (919) 451-5977, is the point of contact in this matter.

Sincerely,

JULIAN I. WOOTEN  
Director, Natural Resources Division  
By direction of the Commanding General

Encls: (1) Dept of Health Forms  
(2) Chemical Analysis Forms

Copy to:  
LANTNAVFACENCOM (Code 114)

Blind copy to:  
BMO (Attn: UTIL DIR)  
Supvy Chem (2)

Writer/Typist Betz / Trianaldi  
Date Typed 7 Aug 87  
Word Processor Number 11331

11311  
11312  
11313

Mr. J. Edgar Hoover  
Director, Federal Bureau of Investigation  
Washington, D. C.

Reference is made to the letter of August 1, 1951, from the  
Director, Bureau of Health Services, Department of Health, Education  
and Welfare, Washington, D. C., to the Director, FBI, regarding  
the matter of the health services of the Federal Bureau of Investigation.

The Bureau of Health Services, Department of Health, Education  
and Welfare, is currently conducting a study of the health services  
of the Federal Bureau of Investigation. The Bureau of Health Services  
is currently conducting a study of the health services of the Federal  
Bureau of Investigation.

JULIAN H. WOOD  
Director, Bureau of Health Services, Division  
of Research of the Department of Health, Education and Welfare

Enclosed for the Bureau of Health Services are  
two copies of the report of the Bureau of Health Services.

Very truly yours,  
J. Edgar Hoover

Blind copy for  
Mr. Tolson (113-11311)  
Sovoy Grom (2)

W. J. Tolson  
J. Edgar Hoover  
J. Edgar Hoover

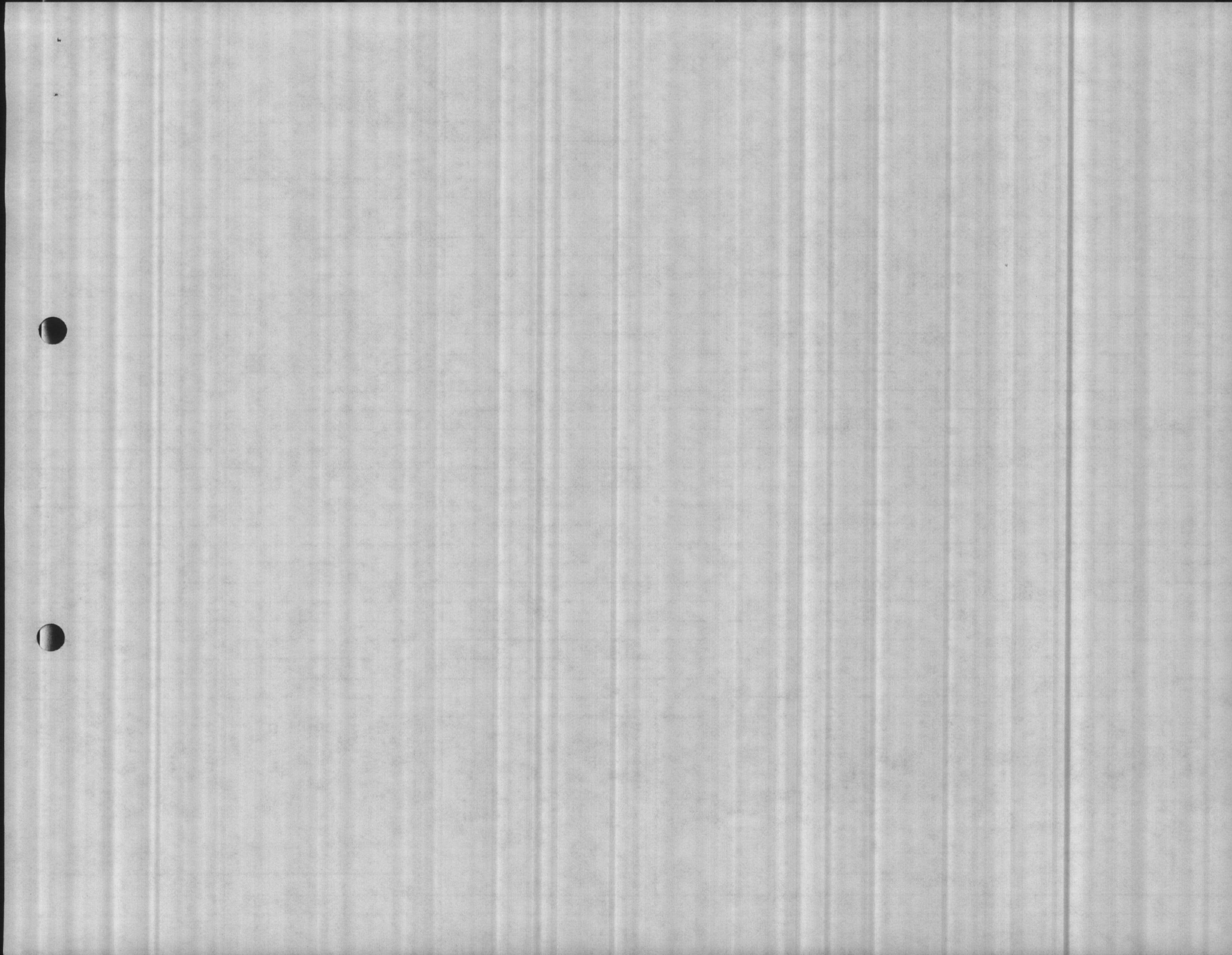
Serial # 04-67-041

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					REPEAT SAMPLES				
	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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3																						
4																						
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6																						
7	77											0	9	0	0	0	0	0	0	35		
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14	14											0	9	0	0	0	0	0	0	35		
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22																						
23	23											0	9	0	0	0	0	0	0	35		
24																						
25																						
26																						
27																						
28	28											0	9	0	0	0	0	0	0	35		
29																						
30																						
31																						
MF MEDIA		BBL mEndo		BACTERIAL DENSITY		ARITH. MEAN						0		DIST. SYSTEM		TOTAL NO. SAMPLES					36	
TPC MEDIA						GEO. MEAN						1.0				SAMPLES EXCEEDING 1/50. (4/100) 7/200. 13/500ml					C	

LAB ID # 37807

*Elizabeth A. Betty*

CERT GRADE B-WELL # 4087-W



AIR STATION  
Serial # 04-67-042

REPORT OF BACTERIOLOGICAL RESULTS TO DIVISION OF HEALTH SERVICES  
U. S. DEPARTMENT OF HUMAN RESOURCES

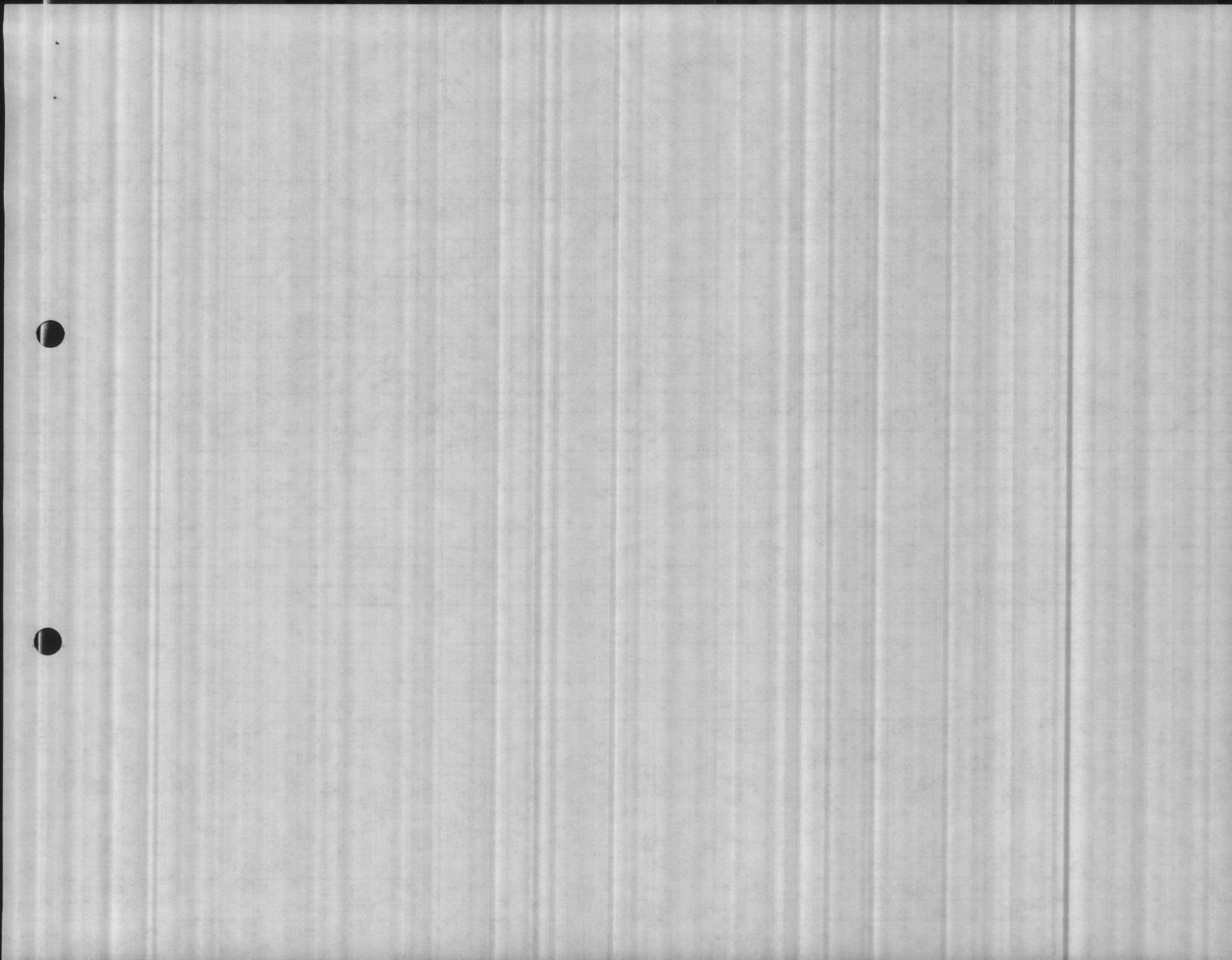
CONTAMINANT CODE: 303

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					REPEAT SAMPLES		
	A		B		C								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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7	37											0	7	0	0	0	0	0	35	
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14	14											0	7	0	0	0	1	0	35	
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28	28											0	7	0	0	0	1	0	35	
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30																				
31																				
MFP MEDIA		BRI mEndo		BACTERIAL DENSITY		ARITH. MEAN						0		DIST. SYSTEM		TOTAL NO. SAMPLES		2		
TPC MEDIA						GEO. MEAN						1.0				SAMPLES EXCEEDING 3/50, 4/100, 7/250, 13/500ml		0		

LAB ID # 37807

*Elizabeth O. Betz*

CERT GRADE: B-WELL # 4087-W



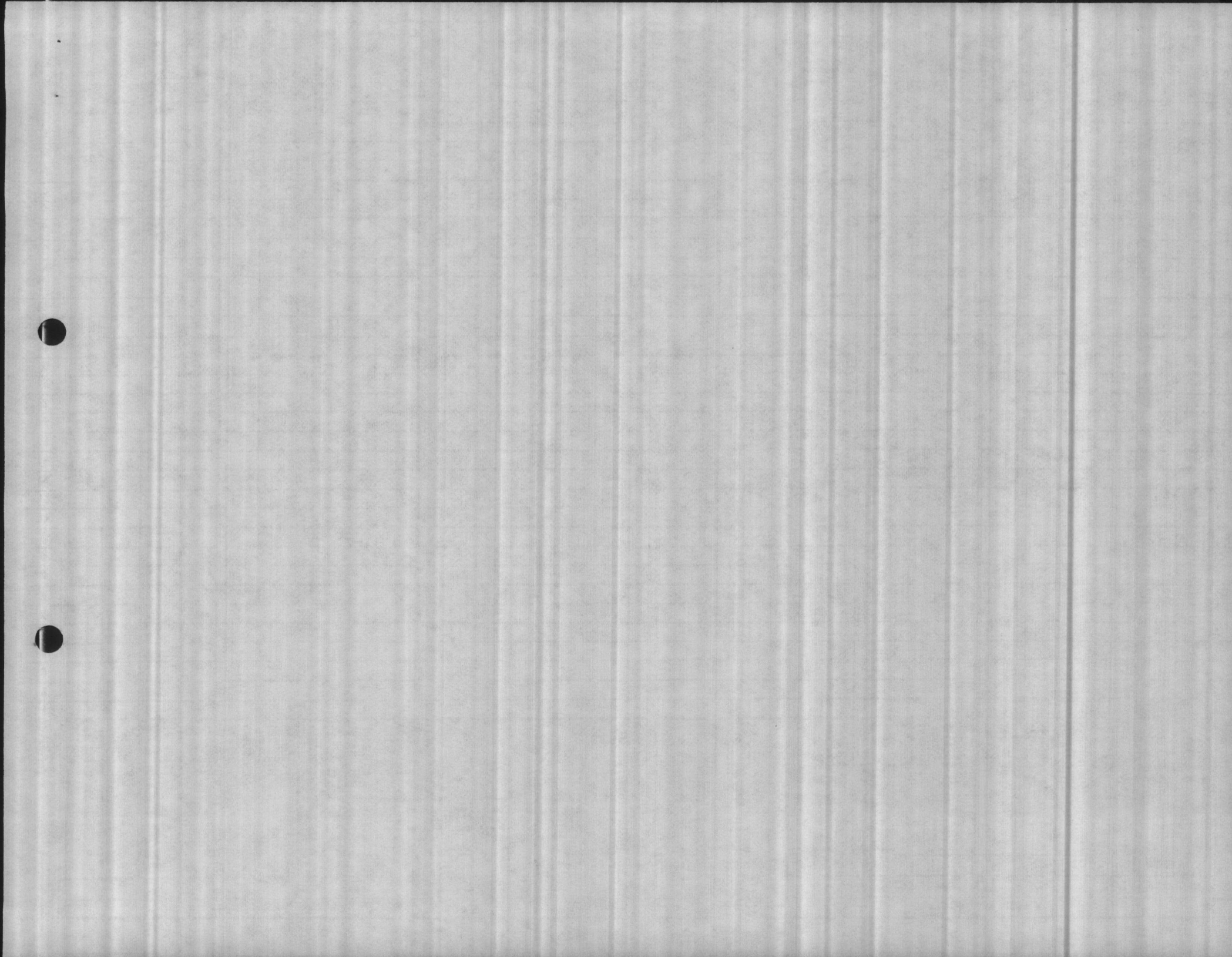
Serial # 04-67-043

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					REPEAT SAMPLES			INCREASING
	A		B		C								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.	
1																					
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7	37									0	7	0	0	0	0	0				35	
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13	>14																				
14										0	7	0	0	0	0	0				35	
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26																					
27																					
28	28									0	7	0	0	0	0	0				35	
29																					
30																					
31																					
MF MEDIA		BRL mEndo		BACTERIAL DENSITY		ARITH. MEAN				0		DIST. SYSTEM		TOTAL NO. SAMPLES					2		
TPC MEDIA						GEO. MEAN				1.0				SAMPLES EXCEEDED 3/50. 4/100. 7/200. 13/500ml					0		

LAB ID # 37807

*Elizabeth A. Bely*

CERT GRADE: B-WELL # 4087-W





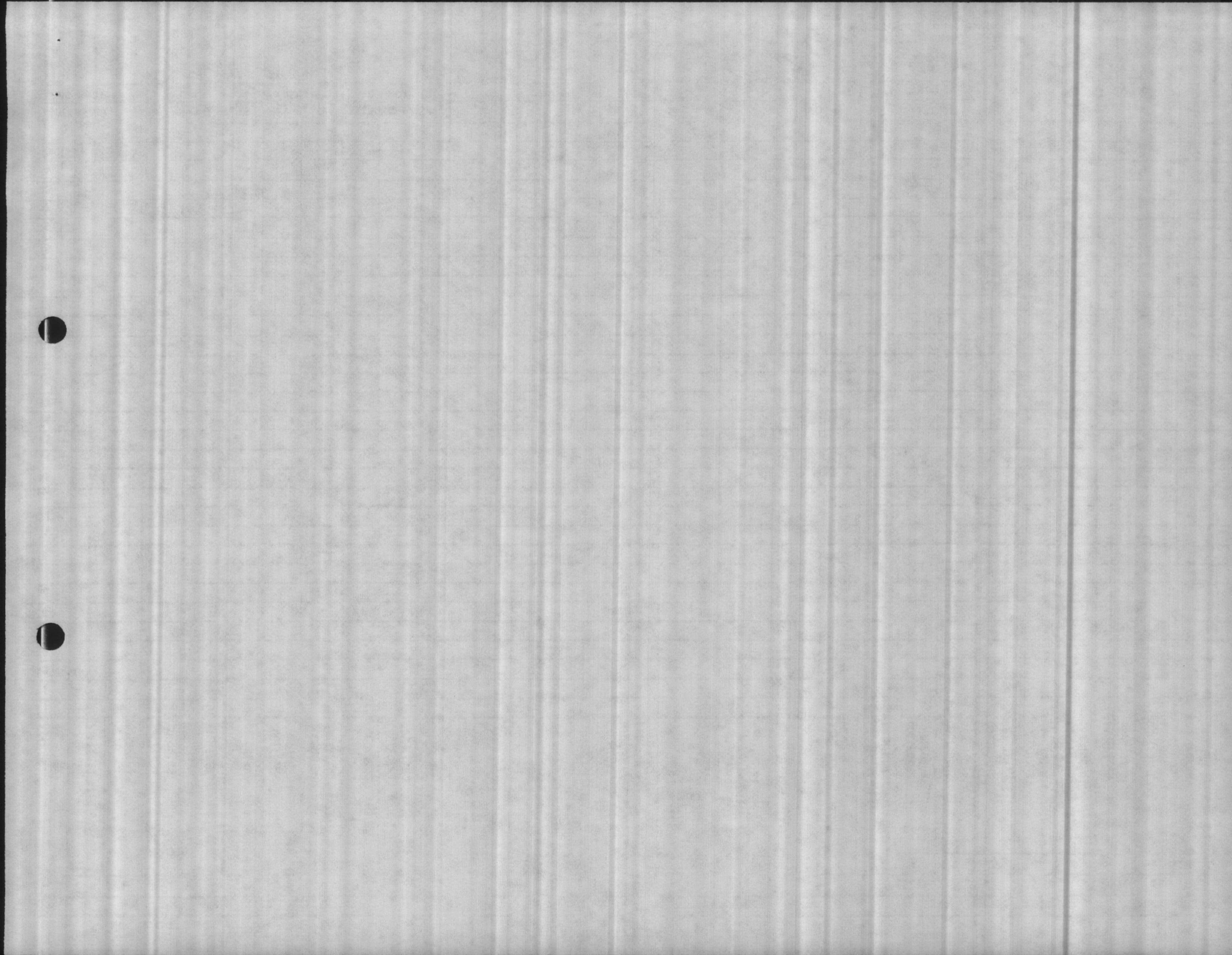
Serial # 04-67-044

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					REPEAT SAMPLES			INCLINATION						
	A		B		C								COLIFORMS (MFP)														
	VOLUME FILTERED ml.	TOTAL COLONIES	VOLUME FILTERED ml.	TOTAL COLONIES	VOLUME FILTERED ml.	TOTAL COLONIES							1	2	3	4	5										
1																											
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7												0	4	0	0	0									35		
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14												0	4	0		0	0									35	
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26																											
27																											
28																											
29												0	4	0	0						0	0					35
30																											
31																											
MFC MEDIA		BBL mEndo		BACTERIAL DENSITY		ARITH. MEAN								0	DISTR. SYSTEM		TOTAL NO. SAMPLES										12
TFC MEDIA						GEO. MEAN								1.0			SAMPLES EXCEEDING 1/50, <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">4</span> /100, 7/200, 13/500ml									0	

LAB ID # 37807

*Elizabeth A. Bray* CERT GRADE B - WELL # 4087-W



Serial # 04-67-045

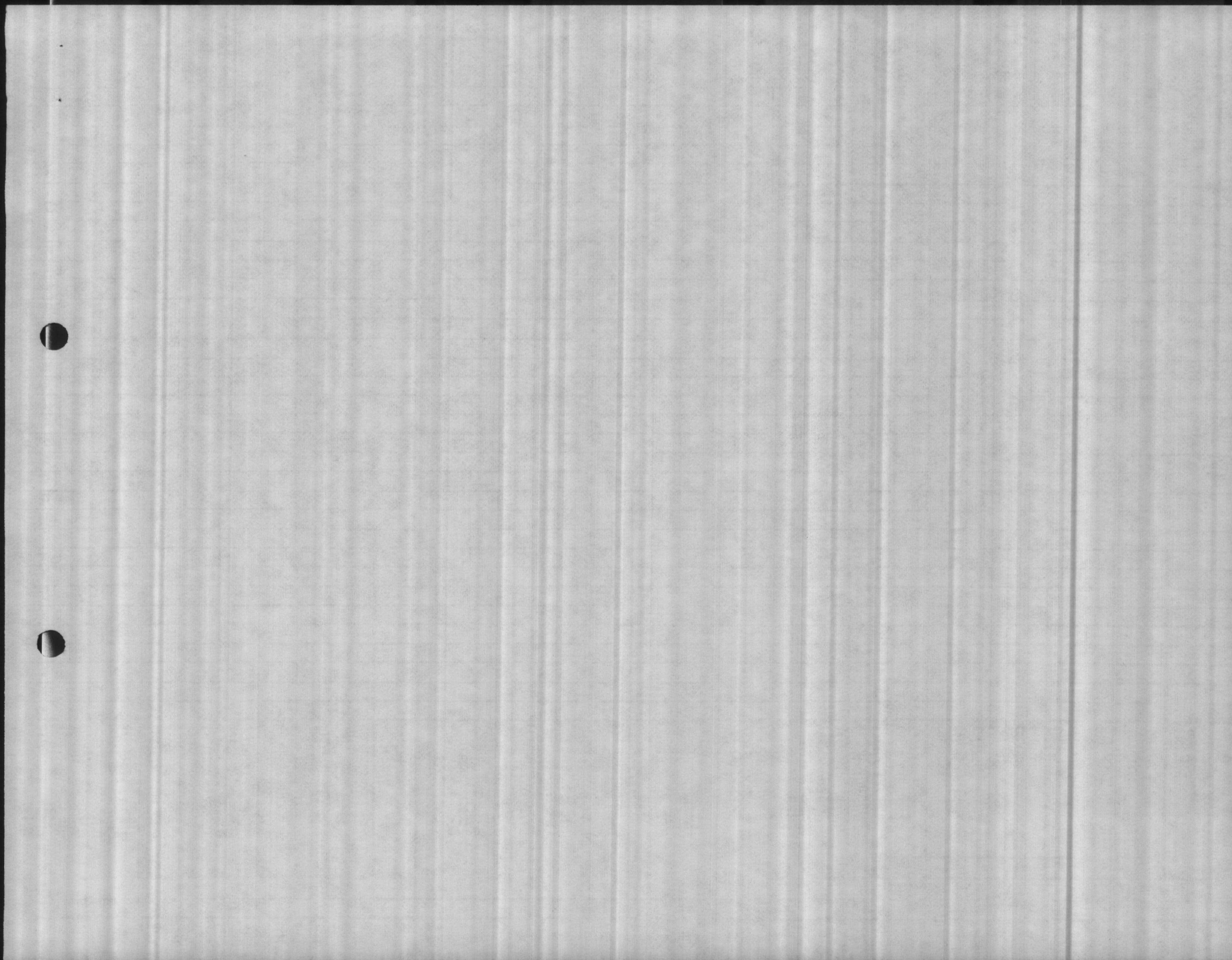
DATE	RAW WATER COLIFORMS (MFP)						NO. OF COLIFORMS PER 100 ml.	TOTAL PLATE COUNT	MFP COLIFORMS per 100 ml.	TOTAL PLATE COUNT	MFP COLIFORMS per 100 ml.	TOTAL PLATE COUNT	DISTRIBUTION SYSTEM COLIFORMS (MFP)					REPEAT SAMPLES			INCUBATOR TEMP.
	A		B		C								1	2	3	4	5	COLIFORMS per 100 ml.	COLIFORMS per 100 ml.	COLIFORMS per 100 ml.	
	VOLUME FILTERED ml.	TOTAL COLONIES	VOLUME FILTERED ml.	TOTAL COLONIES	VOLUME FILTERED ml.	TOTAL COLONIES															
1																					
2																					
3																					
6																					
7	77									0	2	0	0							35.4	
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14	14									0	2	0	0							35.4	
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27																					
28	72									0	2	0	10							35.4	
29																					
30																					
31																					

MF MEDIA TPC MEDIA  
BRI mEndo  
BACTERIAL DENSITY  
ARITH. MEAN  
GEO. MEAN

0  
1.0  
DIST. SYSTEM  
TOTAL NO. SAMPLES  
SAMPLES EXCEEDING 3/50. (4/100, 7/200, 13/500ml) 6

LAB ID # 37807

*Elizabeth A. Bely* CERT GRADE B-WELL # 4087-W



Serial # 04-67-046

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

Contaminant Code: 500

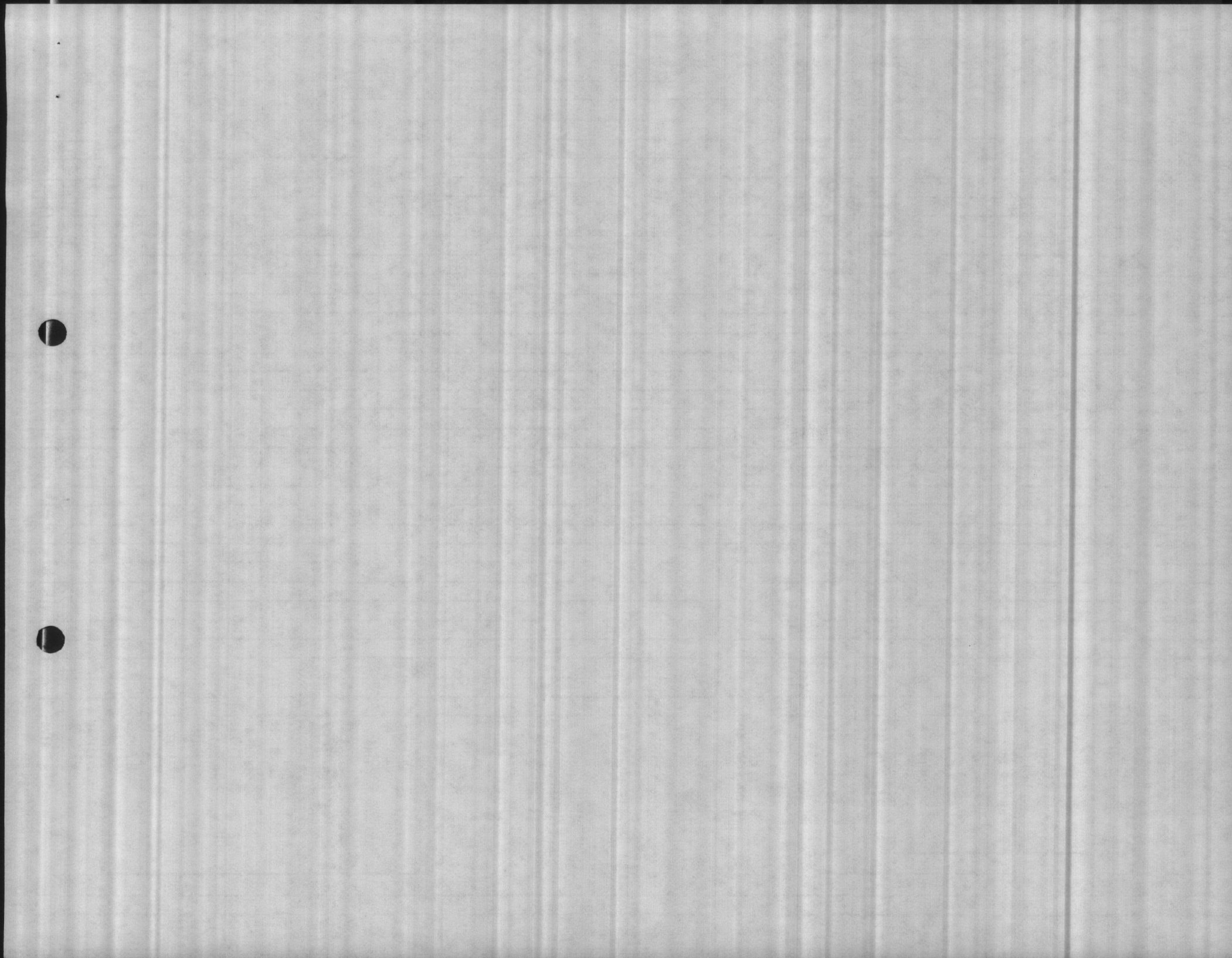
DATE	RAW WATER COLIFORMS (MFP)						NO. OF COLIFORMS PER 100 ml.	FILTERED TOTAL PLATE COUNT	FINISHED TOTAL PLATE COUNT	MFP COLIFORMS per 100 ml.	TOTAL PLATE COUNT	DISTRIBUTION SYSTEM COLIFORMS (MFP)					REPEAT SAMPLES			INDICATOR TEND
	A		B		C							1	2	3	4	5	COLIFORMS per 100 ml.	COLIFORMS per 100 ml.	COLIFORMS per 100 ml.	
	VOLUME FILTERED ml.	TOTAL COLONIES	VOLUME FILTERED ml.	TOTAL COLONIES	VOLUME FILTERED ml.	TOTAL COLONIES														
1																				
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4																				
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7	7											0	3	0	0	0				35
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28	7	28										0	3	0	0	0				35
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31																				

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

0 1.0 DIST. SYSTEM TOTAL NO. SAMPLES 9 SAMPLES EXCEEDING 3/50. 4/100. 7/200. 13/500ml 0

LAB ID # 37807

Elizabeth A. [Signature] CERT GRADE B-WELL # 4087-W



Serial # 04-67-047

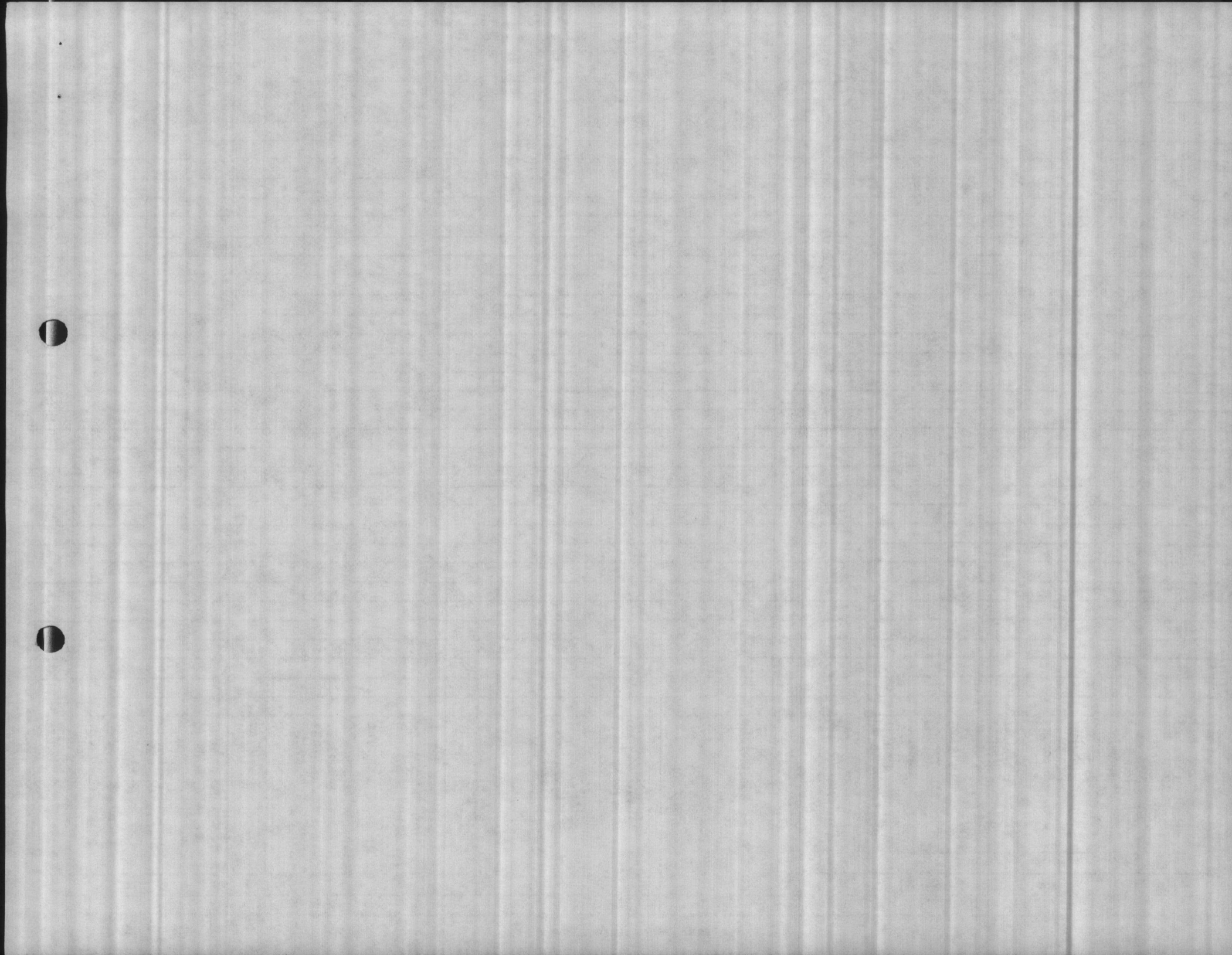
U. S. DEPARTMENT OF HUMAN RESOURCES

DATE	RAW WATER COLIFORMS (MFP)						NO. OF COLIFORMS PER 100 ml.	FILTERED		FINISHED		DISTRIBUTION SYSTEM					REPEAT SAMPLES				
	A		B		C			TOTAL PLATE COUNT	MFP COLIFORMS per 100 ml.	TOTAL PLATE COUNT	MFP COLIFORMS per 100 ml.	TOTAL PLATE COUNT	COLIFORMS (MFP)					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							1	2	3	4	5				
1																					
2																					
3																					
4																					
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6																					
7	27											0	4	0	0	0				35	
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14	274											0	4	0	0	0				35	
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28	28											0	4	0	0				0	0	
29																					
30																					
31																					
MF MEDIA		BRL mEndo		BACTERIAL DENSITY		ARITH. MEAN						0	DIST. SYSTEM	TOTAL NO. SAMPLES							
TPC MEDIA						GEO. MEAN						1.0		SAMPLES EXCEEDING 3/50. (4/100) 7/200. 13/500=1							

LAB ID # 37807

*Elizabeth A. Boy*

CERT. GRADE B-WELL # 4087-W





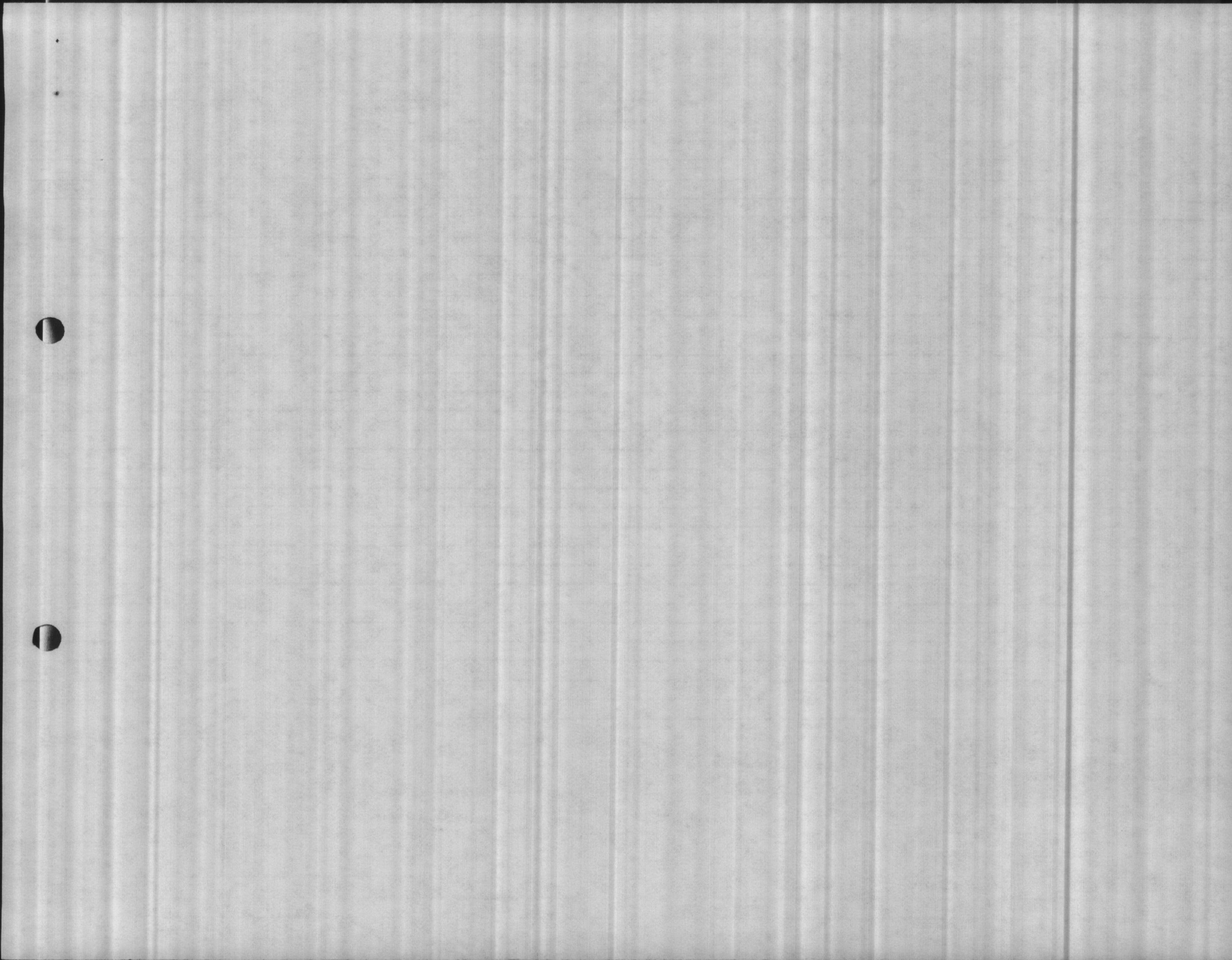
Serial # 04-67-048

A. C. DEPARTMENT OF HUMAN RESOURCES

DATE	RAW WATER COLIFORMS (MFP)									FILTERED		FINISHED		DISTRIBUTION SYSTEM											
	A			B			C			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	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.		
1																									
2																									
3																									
4																									
5																									
6																									
7	77																0	2	0	0					
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14	714																0	2	0	0				3	
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31																									
MF MEDIA			BRL mEndo			BACTERIAL DENSITY			ARITH. MEAN						DIST. SYSTEM			TOTAL NO. SAMPLES							
TPC MEDIA									GEO. MEAN						1.0			SAMPLES EXCEEDING 3/50. (4/100) 7/200. 13/500=1							

LAB ID # 37807

Elizabeth Betty CERT GRADE B-WELL # 4087-W



CHEMICAL ANALYSIS - WATER TREATMENT PLANTS  
MCBCL 11330/3 (REV 7-87)

DATE COLLECTED

7-7-87

DATE(S) ANALYZED

7-7-87

PLANT PARAMETER (UNITS)	HADNOT POINT 04-67-041	MCAS NEW RIVER 04-67-042	HOLCOMB BLVD 04-67-043	COURTHOUSE BAY 04-67-046	RIFLE RANGE 04-67-047	ONSLow BEACH 04-67-048			
pH-LABORATORY	8.8	8.5	8.6	8.6	8.4	7.6			
STABILITY	+0.4	0.0	+0.3	-0.5	-0.1	-0.8			
PHENOLTHALEIN ALKALINITY (PPM)	6	6	4	0	2	0			
METHYL ORANGE ALKALINITY (PPM)	54	140	66	166	130	150			
CARBONATES AS CaCO <sub>3</sub> (PPM)	12	12	8	0	4	0			
BICARBONATES AS CaCO <sub>3</sub> (PPM)	42	128	52	166	126	150			
CHLORIDES AS Cl (PPM)	14	70	10	14	48	20			
HARDNESS AS CaCO <sub>3</sub> (PPM)	62	50	60	50	50	52			
IRON AS Fe (PPM)	-	-	A. A. Down		-	-			
FLUORIDE (PPM)	AM 1.07	0.58	0.99	0.12	0.10	0.17			
	PM 1.07								
TURBIDITY (NTUS)	AM 0.2	0.2	0.3	0.1	0.1	0.2			
	PM 0.2								
CHLORINE RESIDUAL (PPM)	1.0	0.8	1.2	1.3	1.1	1.5			

REMARKS:

COPY TO:

- UTIL Div, BMD
- WATER TREATMENT, UTIL Div, BMD
- PMU, NAVHOSP
- PMU, MCAS-NR
- DIVISION OF HEALTH SERVICES  
N.C. DEPT OF HUMAN RESOURCES

REPORT DATE:

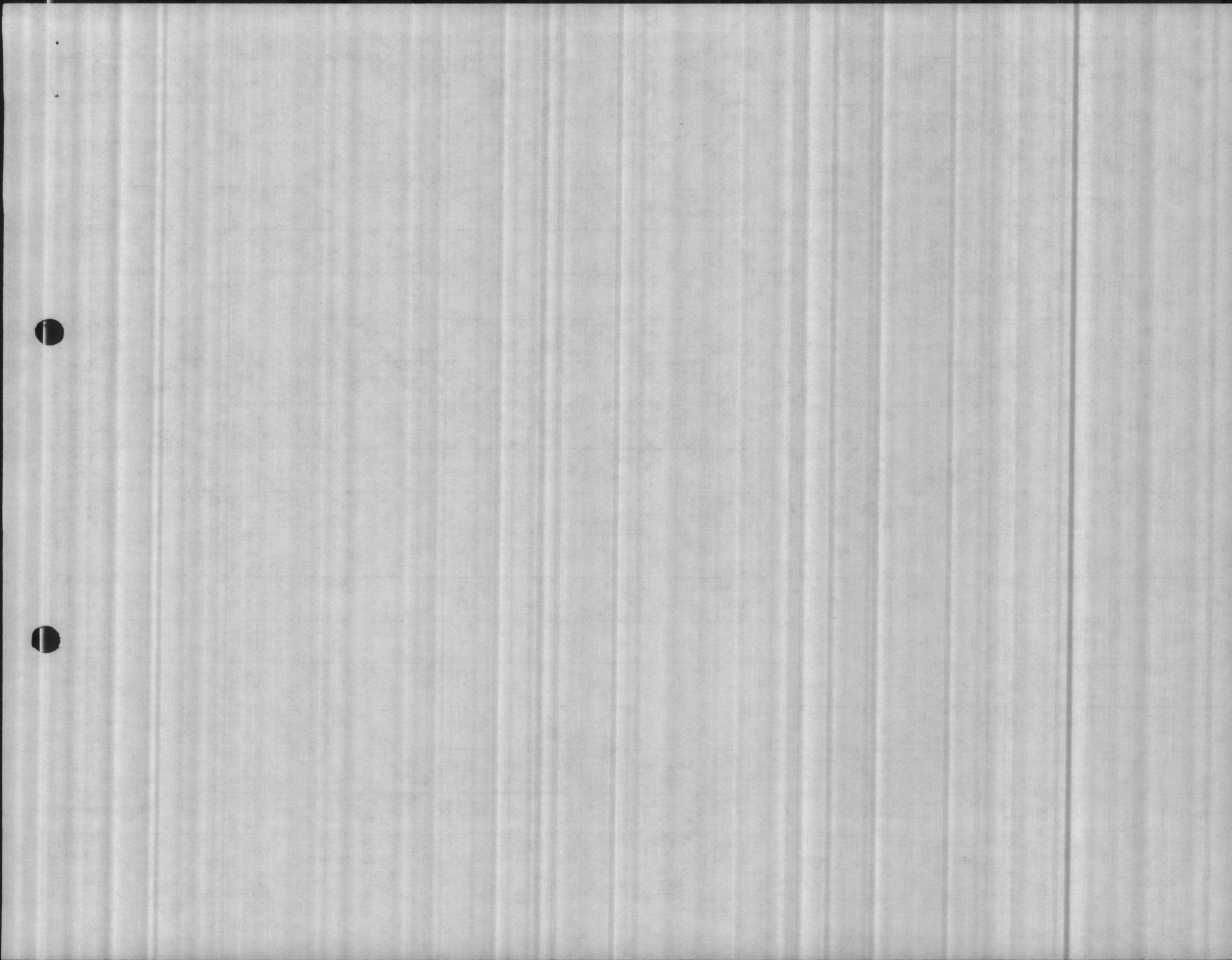
7-7-87

REPORT PREPARED BY:

H. J. Burns

NREAD

FILE (ATTACH WKST)



ENVIRONMENTAL CHEMISTRY & MICROBIOLOGY LABORATORY REPORT  
 CHEMICAL ANALYSIS - WATER TREATMENT PLANTS  
 MCBCL 11330/3 (REV 7-87)

DATE COLLECTED

7-14-87

DATE(S) ANALYZED

7-14-87

PLANT PARAMETER (UNITS)	HADNOT POINT 04-67-041	MCAS NEW RIVER 04-67-042	HOLCOMB BLVD 04-67-043	COURTHOUSE BAY 04-67-046	RIFLE RANGE 04-67-047	ON SLOW BEACH 04-67-048			
pH-LABORATORY	8.7	8.6	8.6	7.8	8.3	7.6			
STABILITY	+0.3	0.0	+0.6	-0.5	-0.2	-0.8			
PHENOLTHALEIN ALKALINITY (PPM)	4	12	4	6	6	0			
METHYL ORANGE ALKALINITY (PPM)	60	140	56	160	156	150			
CARBONATES AS CaCO <sub>3</sub> (PPM)	8	24	8	0	0	0			
BICARBONATES AS CaCO <sub>3</sub> (PPM)	52	116	48	160	156	150			
CHLORIDES AS Cl (PPM)	10	70	160	14	44	20			
HARDNESS AS CaCO <sub>3</sub> (PPM)	70	48	60	50	50	54			
IRON AS Fe (PPM)	--	=	=	A.P	Down	--			
FLUORIDE (ppm)	AM	0.75	0.55	1.00	0.13	6.10	0.16		
	PM								
TURBIDITY (NTUS)	AM	0.2	0.1	8.5	0.1	0.1	6.4		
	PM								
CHLORINE RESIDUAL (PPM)		0.9	0.9	1.4	1.2	1.0	1.6		

REMARKS:

COPY TO:

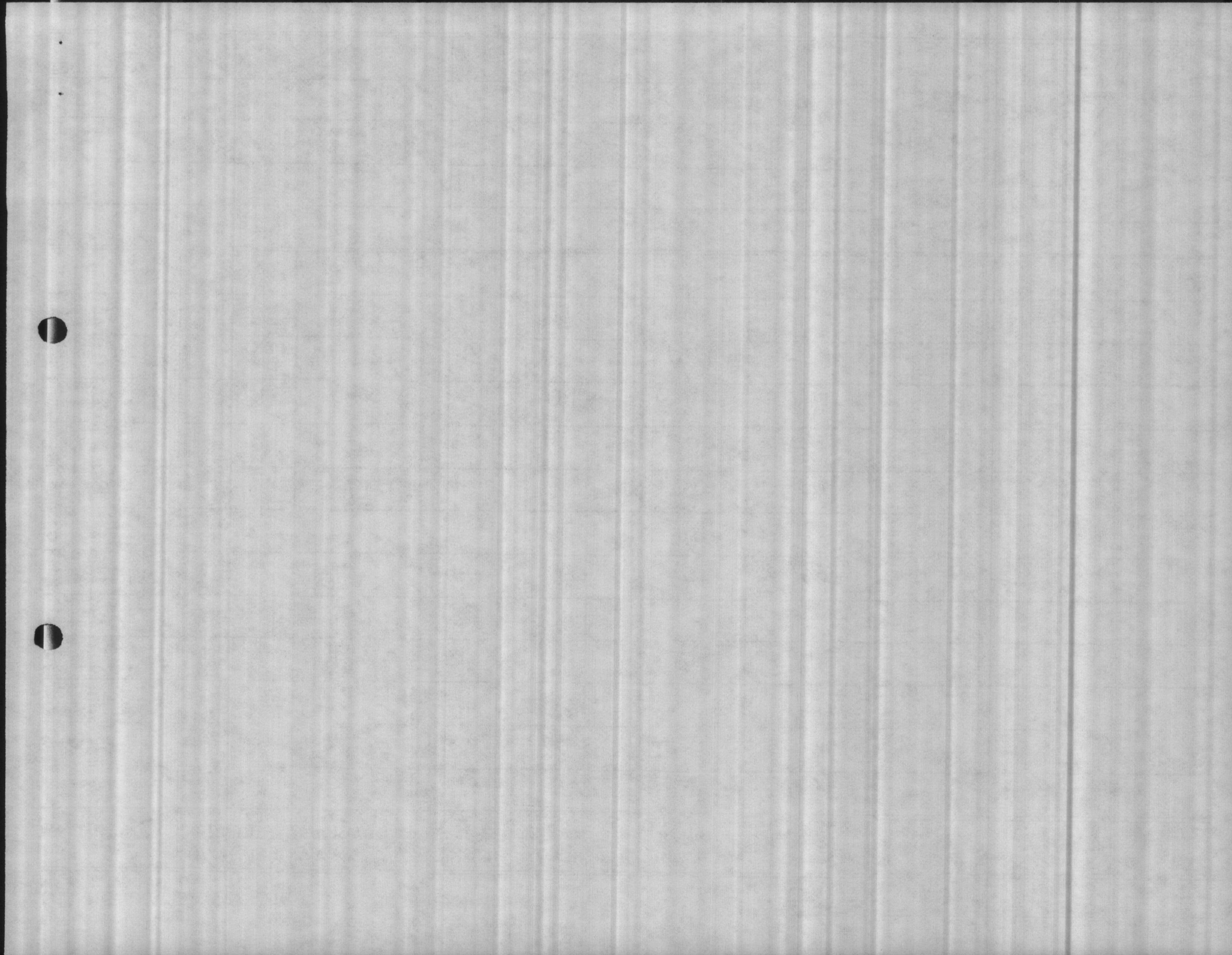
- UTIL DIR, BMD     \_\_\_\_\_  
 WATER TREATMENT, UTIL DIV, BMD  
 PMU, NAVHOSP     PMU, MCAS-NR  
 DIVISION OF HEALTH SERVICES  
 N.C. DEPT OF HUMAN RESOURCES  
 NREAD     FILE (ATTACH WKST)

REPORT DATE:

7-14-87

REPORT PREPARED BY:

M. J. Burns



ENVIRONMENTAL CHEMISTRY & MICROBIOLOGY LABORATORY REPORT  
 CHEMICAL ANALYSIS - WATER TREATMENT PLANTS  
 MC8CL 11330/3 (REV 7-87)

DATE COLLECTED  
 7-21-87

DATE(S) ANALYZED  
 7-21-87

PLANT PARAMETER (UNITS)	HADNOT POINT 04-67-041	MCAS NEW RIVER 04-67-042	HOLCOMB BLVD 04-67-043	COURTHOUSE BAY 04-67-046	RIFLE RANGE 04-67-047	ONSLow BEACH 04-67-048			
pH-LABORATORY	9.5	8.5	8.7	7.9	8.2	7.6			
STABILITY	+0.3	+0.2	+0.6	-0.4	-0.1	-0.6			
PHENOLTHALEIN ALKALINITY (PPM)	4	10	6	0	0	0			
METHYL ORANGE ALKALINITY (PPM)	60	144	52	160	160	160			
CARBONATES AS CaCO <sub>3</sub> (PPM)	8	20	12	0	0	0			
BICARBONATES AS CaCO <sub>3</sub> (PPM)	52	122	40	160	160	160			
CHLORIDES AS Cl (PPM)	10	70	10	16	50	18			
HARDNESS AS CaCO <sub>3</sub> (PPM)	56	54	60	56	60	56			
IRON AS Fe (PPM)									
FLUORIDE (PPM)	AM	1.01	0.54	AM	0.99	0.12	0.09	0.13	
	PM	0.78		PM	0.94				
TURBIDITY (NTUS)	AM	0.2	0.1	AM	0.2	0.1	0.1	0.2	
	PM	0.2		PM	0.6				
CHLORINE RESIDUAL (PPM)	1.10	0.8	1.4	1.4	1.0	1.7			

REMARKS:

COPY TO:

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REPORT DATE:

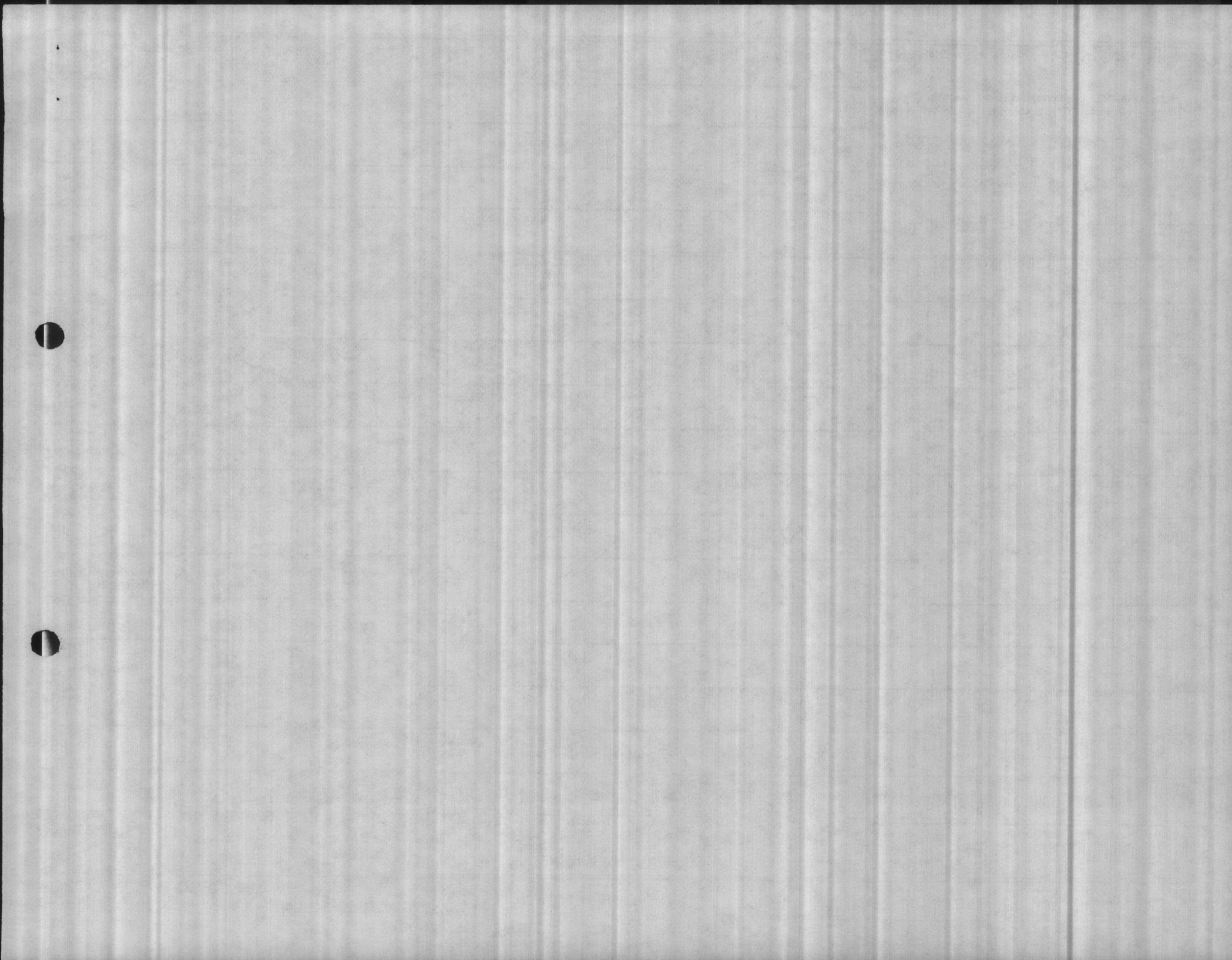
REPORT PREPARED BY:

7-21-87

M. J. Burns

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ENVIRONMENTAL CHEMISTRY & MICROBIOLOGY LABORATORY REPORT  
 CHEMICAL ANALYSIS - WATER TREATMENT PLANTS  
 MCBCL 11330/3 (REV 7-87)

DATE COLLECTED  
 7-28-87

DATE(S) ANALYZED  
 7-28-87

PLANT PARAMETER (UNITS)	HADNOT POINT 04-67-041	MCAS NEW RIVER 04-67-042	HOLCOMB BLVD 04-67-043	COURTHOUSE BAY 04-67-046	RIFLE RANGE 04-67-047	ONSLOW BEACH 04-67-048			
pH-LABORATORY	8.4	8.6	8.6	8.0	8.2	7.5			
STABILITY	+0.4	+0.2	+0.5	+0.3	-0.1	-0.7			
PHENOLTHALEIN ALKALINITY (PPM)	2	8	4	0	0	0			
METHYL ORANGE ALKALINITY (PPM)	56	138	60	164	154	156			
CARBONATES AS CaCO <sub>3</sub> (PPM)	4	16	8	0	0	0			
BICARBONATES AS CaCO <sub>3</sub> (PPM)	52	122	52	164	154	156			
CHLORIDES AS Cl (PPM)	12	70	16	18	40	20			
HARDNESS AS CaCO <sub>3</sub> (PPM)	62	48	70	56	56	60			
IRON AS Fe (PPM)			A.A. Down						
FLUORIDE (PPM)	AM PM 6.14 1.12	0.58	AM PM 1.12 0.99	6.14	0.11	0.15			
TURBIDITY (NTUS)	AM PM 0.1 0.5	0.7	AM PM 0.1 0.1	0.2	0.2	0.6			
CHLORINE RESIDUAL (PPM)	1.0	0.8	0.9	1.3	1.7	1.3			

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