

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

Mr. Price
DATE COLLECTED

5 Oct 1982

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	8.33	7.16	8.24	7.23	7.88	8.17	8.43	8.33
PENOLTHALEIN ALKALINITY	4	0	6	0	6	4	10	10
METHYL ORANGE ALKALINITY	46	170	72	166	200	162	72	134
CARBONATES AS CaCO ₃	8	0	12	0	12	8	20	20
BICARBONATES AS CaCO ₃	38	170	60	166	188	154	52	114
CHLORIDES AS Cl	12	12	12	18	22	32	14	64
HARDNESS AS CaCO ₃	60	50	90	66	68	68	76	52
IRON AS Fe	0.04	0.30	0.07	0.09	0.58	0.51	0.06	0.18
FLUORIDE	AM	0.84	0.97				1.04	
	PM	0.97	0.38	1.10	0.34	0.38	1.30	0.70
CHLORINE RESIDUAL	0.9	1.2	1.0	1.5	1.3	1.2	1.0	1.4
TURBIDITY	AM		0.31				0.26	
	PM	0.18	0.24	0.40	0.24	1.20	0.30	0.74
TOTAL PHOSPHATE		2.34			0.73			
ORTHO PHOSPHATE		1.00			0.45			
META PHOSPHATE		1.34			0.28			
STABILITY	+0.18	----	+0.29	----	+0.05	+0.19	+0.35	+0.11

REMARKS

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

Lachaille *Honeycutt*

DATE OF ANALYSIS

5 Oct 1982
CLW

000003889

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

MR. PRICE

DATE COLLECTED

12 OCT 82

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	TI 33 PUMP	TF 33 SINK
PH	8.76	7.25	8.34	7.24	7.82	8.28	8.74	8.64		
PENOLTHALEIN ALKALINITY	10	0	10	0	0	8	14	26		
METHYL ORANGE ALKALINITY	64	176	96	160	180	156	70	150		
CARBONATES AS CaCO ₃	20	0	20	0	0	16	28	52		
BICARBONATES AS CaCO ₃	44	176	76	160	180	140	42	98		
CHLORIDES AS Cl	12	12	16	22	22	24	20	80		
HARDNESS AS CaCO ₃	84	68	108	70	70	60	90	98		
IRON AS Fe	0.04	0.34	1.13	0.05	0.25	0.35	0.04	0.08		
FLUORIDE	0.16 0.34	0.38	0.74 0.97	0.38	0.62	0.34	0.77 1.10	0.62		
CHLORINE RESIDUAL	1.0	1.4	1.0	1.5	1.0	1.1	1.0	1.4		
TURBIDITY	0.28	0.27	0.62 43.0	0.24	0.88	1.2	0.34 0.28	0.48	0.70	1.2
TOTAL PHOSPHATE		1.13			1.60					
ORTHO PHOSPHATE		0.84			1.84					
META PHOSPHATE		0.29			2.76					
STABILITY	+0.34		+0.26		-0.21	+0.12	+0.38	+0.29		
REMARKS										

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
Heleny Curt

DATE OF ANALYSIS

CLW 08782 / 13 OCT 82

0000003890

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

DATE COLLECTED

19 OCT 1982

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	8.22	6.88	8.18	6.88	7.67	8.05	8.34	7.67	
PENOLTHALEIN ALKALINITY	2	0	6	0	4	8	6	0	
METHYL ORANGE ALKALINITY	58	176	76	160	174	160	64	192	
CARBONATES AS CaCO ₃	4	0	12	0	8	16	12	0	
BICARBONATES CaCO ₃	54	176	64	160	166	144	52	192	
CHLORIDES AS Cl	10	14	14	20	16	34	12	124	
HARDNESS AS CaCO ₃	80	66	90	58	88	50	70	68	
IRON AS Fe	0.04	0.33	0.09	0.04	0.08	0.48	0.04	0.10	
FLUORIDE	AM	1.10	0.87				1.13		
	PM	1.16	0.29	1.13	0.29	0.38	0.20	1.00	1.00
CHLORINE RESIDUAL	1.0	1.4	1.0	1.2	1.2	1.0	1.1	1.4	
TURBIDITY	AM		2.50				0.21		
	PM	0.22	0.21	1.30	0.20	0.30	6.00	0.19	0.44
TOTAL PHOSPHATE		0.64			1.38				
ORTHOPHOSPHATE		0.59			0.52				
METAPHOSPHATE		0.05			0.86				
STABILITY	+0.52		+0.51		+0.12	+0.24	+0.49	-0.16	
REMARKS									

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

Michelle Monahan

DATE OF ANALYSIS

CLW CT 1982

000003891

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

Mr. Price

DATE COLLECTED

26 Oct 82

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLOW BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	8.1	6.8	8.4	7.0	7.7	7.7	8.1	8.1	
PENOLTHALEIN ALKALINITY	2	0	6	0	0	4	4	8	
METHYL ORANGE ALKALINITY	60	160	52	162	166	166	62	110	
CARBONATES AS CaCO ₃	4	0	12	0	0	8	8	16	
BICARBONATES AS CaCO ₃	56	160	40	162	166	158	54	154	
CHLORIDES AS Cl	6	10	6	12	8	36	4	60	
HARDNESS AS CaCO ₃	48	58	78	60	68	58	62	66	
IRON AS Fe	0.04	0.30	0.04	0.10	0.01	0.53	0.04	0.14	
FLUORIDE	0.54 0.83	0.36	0.94 0.54	0.32	0.21	0.23	0.24 0.08	0.74	
CHLORINE RESIDUAL	1.0	1.1	1.0	1.3	1.3	1.2	0.9	1.4	
TURBIDITY	0.40	0.56	0.38 0.52	0.28	0.42	2.8	0.16 0.36	0.72	
TOTAL PHOSPHATE		1.28			0.67				
ORTHO PHOSPHATE		0.84			0.22				
META PHOSPHATE		0.84			0.47				
STABILITY	0.2		0.3		0.2	0.1	0.1	0.1	
REMARKS									

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

Margaret Burns Monahan

DATE OF ANALYSIS

CLW

0000003892

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

DATE COLLECTED

9 NOV 1982

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	8.25	6.94	8.27	6.90	7.73	7.97	8.36	8.14	
PENOLTHALEIN ALKALINITY	6	0	6	0	4	8	8	8	
METHYL ORANGE ALKALINITY	62	170	66	154	180	176	72	168	
CARBONATES AS CaCO ₃	12	0	12	0	8	16	16	16	
BICARBONATES AS CaCO ₃	50	170	54	154	172	160	56	152	
CHLORIDES AS Cl	12	20	10	18	18	42	14	100	
HARDNESS AS CaCO ₃	64	68	86	56	70	64	82	64	
IRON AS Fe	0.04	0.30	0.10	0.15	0.42	0.44	0.04	0.23	
FLUORIDE	AM 0.65 PM 0.73	0.23	0.97 1.00	0.36	0.49	0.32	0.80 0.76	0.90	
CHLORINE RESIDUAL	0.9	1.4	1.0	1.2	1.2	1.1	0.9	1.5	
TURBIDITY	AM 0.20 PM 0.20	0.30	0.26 0.96	0.16	1.00	1.00	0.32 0.24	1.00	
TOTAL PHOSPHATE		0.66			2.52				
ORTHO PHOSPHATE		0.55			0.96				
META PHOSPHATE		0.11			1.56				
STABILITY	+0.72	---	+0.577	----	+0.05	+0.29	+0.53	+0.18	
REMARKS									

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

Lochazelle & Hunsgriff

DATE OF ANALYSIS

CLW

9 NOV 1982

0000003893

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

Mr. Price
DATE COLLECTED

2 NOV 1982

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	8.62	6.95	8.20	6.93	7.94	7.97	8.33	8.08	
PENOLTHALEIN ALKALINITY	10	0	4	0	6	6	6	8	
METHYL ORANGE ALKALINITY	60	172	76	172	180	172	76	164	
CARBONATES AS CaCO ₃	20	0	8	0	12	12	12	16	
BICARBONATES CaCO ₃	40	172	68	172	168	160	64	148	
CHLORIDES AS Cl	12	14	12	18	20	44	16	80	
HARDNESS AS CaCO ₃	60	74	90	56	50	76	72	60	
IRON AS Fe	0.04	0.61	0.04	0.10	0.19	0.39	0.04	0.19	
FLUORIDE	AM PM	0.69 0.65	0.32	1.10 1.13	0.27	0.36	0.23	1.16 0.83	0.80
CHLORINE RESIDUAL		0.8	1.2	1.0	1.2	1.2	1.0	1.0	1.5
TURBIDITY	AM PM	0.18	0.29	0.26 0.36	0.16	0.52	0.94	0.23 0.18	0.89
TOTAL PHOSPHATE			1.04			1.54			
ORTHO PHOSPHATE			0.77			0.48			
META PHOSPHATE			0.27			1.06			
STABILITY		+0.29	---	+0.18	---	-0.08	+0.04	-0.26	-0.05
REMARKS	Temp.	20	21	20	17	19		20	

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

Lachelle Monahan & Sons

DATE OF ANALYSIS

2 NOV 1982

CLW

000003894

ANALYSIS — WATER TREATMENT PLANTS

(REV. 3-82)

Mr Price
DATE COLLECTED
16 NOV 1982

PARAMETER	CR-47	CR-37	Before Filter	After Filter #85	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	6.92	7.03						
PENOLTHALEIN ALKALINITY	0	0						
METHYL ORANGE ALKALINITY	196	180						
CARBONATES AS CaCO ₃	0	0						
CARBONATES AS CaCO ₃	196	180						
CHLORIDES AS Cl	66	8						
HARDNESS AS CaCO ₃	232	170						
IRON AS Fe	4.00	2.05	1.04	0.31				
FLUORIDE	0.23	0.18						
CHLORINE RESIDUAL								
TURBIDITY	13.0	4.3						
TOTAL PHOSPHATE								
ORTHO PHOSPHATE								
META PHOSPHATE								
STABILITY								
REMARKS								

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

Michelle Monahan + Burr ELW

DATE OF ANALYSIS

16 NOV 1982

0000003895

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

Mn. Price
 DATE COLLECTED
 16 NOV 1982

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ON SLOW BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	RR-45
PH	8.40	6.96	7.99	6.85	7.63	7.94	8.29	8.26	7.08
PENOLTHALEIN ALKALINITY	8	0	4	0	4	6	6	14	0
METHYL ORANGE ALKALINITY	54	166	66	140	168	160	66	200	180
CARBONATES AS CaCO ₃	16	0	8	0	8	12	12	28	0
CARBONATES CaCO ₃	38	166	58	140	160	148	54	172	180
CHLORIDES AS Cl	10	10	10	18	16	32	16	110	10
HARDNESS AS CaCO ₃	60	68	78	76	62	60	70	50	172
IRON AS Fe	0.09	0.36	0.14	0.21	0.38	0.25	0.10	0.26	1.60
FLUORIDE	AM 0.87 PM 0.90	0.27	0.80 0.65	0.27	0.32	0.23	0.90 0.94	1.10	0.23
CHLORINE RESIDUAL	1.0	1.4	1.0	1.0	1.2	1.0	1.0	1.3	---
TURBIDITY	AM 0.21 PM 0.21	0.31	0.38 0.43	0.16	0.99	0.46	0.21 0.26	0.74	3.80
TOTAL PHOSPHATE		1.40			0.88				
ORTHO PHOSPHATE		0.81			0.35				
META PHOSPHATE		0.59			0.53				
STABILITY	+0.64	---	+0.20	---	-0.09	+0.06	+0.35	+0.17	---
REMARKS									

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

Lachelle Monahan & Bowers

DATE OF ANALYSIS

OLW 1982

0000003896

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

M. Price
 DATE COLLECTED
 23 NOV 1982

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	8.53	6.96	8.23	6.88	7.82	8.01	8.22	7.98	
PENOLTHALEIN ALKALINITY	2	0	4	0	4	8	8	8	
METHYL ORANGE ALKALINITY	42	170	76	170	188	160	70	170	
CARBONATES AS CaCO ₃	4	0	8	0	8	16	16	16	
BICARBONATES AS CaCO ₃	38	170	68	170	180	144	54	154	
CHLORIDES AS Cl	12	12	14	20	12	48	12	86	
HARDNESS AS CaCO ₃	60	64	82	68	70	54	74	58	
IRON AS Fe	0.04	0.55	0.07	0.07	0.50	0.21	0.05	0.09	
FLUORIDE	AM 0.94 PM 1.13	0.41	1.00 1.04	0.32	0.41	0.27	0.83 0.87	0.87	
CHLORINE RESIDUAL	1.0	1.3	1.0	1.4	1.3	1.00	1.0	1.4	
TURBIDITY	AM 0.25 PM 0.25	0.58	0.60 0.60	0.13	1.10	0.48	0.18 0.16	0.34	
TOTAL PHOSPHATE		2.80			1.17				
ORTHO PHOSPHATE		0.92			0.38				
META PHOSPHATE		1.88			0.79				
STABILITY	+0.82	----	+0.51	---	+0.13	+0.19	+0.40	+0.08	

REMARKS

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

Lockapelle *Helenquist Monahan*

DATE OF ANALYSIS

23 NOV 1982
CLW

0000003897

CHEMICAL ANALYSIS -- WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

file
DATE COLLECTED

30 Nov 82

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	8.64	7.02	8.35	6.86	7.75	7.97	8.42	8.02
PENOLTHALEIN ALKALINITY	16	0	12	0	0	6	10	10
METHYL ORANGE ALKALINITY	50	180	70	136	190	156	62	196
CARBONATES AS CaCO ₃	32	0	24	0	0	12	20	20
BICARBONATES AS CaCO ₃	18	180	46	136	190	144	42	176
CHLORIDES AS Cl	16	14	14	20	22	30	20	90
HARDNESS AS CaCO ₃	58	66	81	48	72	56	74	80
IRON AS Fe	0.06	0.23	0.18	0.18	0.29	0.14	0.04	0.15
FLUORIDE	11.1 PM 0.81	0.49	1.08 1.14	0.36	0.36	0.27	1.02 1.11	1.08
CHLORINE RESIDUAL	1.0	1.4	1.0	1.4	1.2	1.0	1.0	1.4
TURBIDITY	1.1 PM 0.37	0.46	2.0 2.9	0.50	0.86	0.36	0.25 0.20	0.61
TOTAL PHOSPHATE		1.60			0.82			
ORTHO PHOSPHATE		1.54			0.44			
META PHOSPHATE		1.06			0.38			
STABILITY	0.45		0.25		0.20	0.01	0.28	0.00
REMARKS								

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]

[Signature] **CLW**

DATE OF ANALYSIS

30 Nov 82

000003898

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

Mr. Price
 DATE COLLECTED
 7 DEC 1982

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	8.5	6.7	8.2	6.9	7.9	7.9	8.3	8.2	
PENOLTHALEIN ALKALINITY	4	0	4	0	0	2	4	6	
METHYL ORANGE ALKALINITY	42	180	62	156	176	150	64	194	
CARBONATES AS CaCO ₃	8	0	8	0	0	4	8	12	
CARBONATES CaCO ₃	34	180	54	156	176	146	56	182	
CHLORIDES AS Cl	16	110	14	18	18	28	16	94	
HARDNESS AS CaCO ₃	44	182	74	60	78	44	72	60	
IRON AS Fe	0.04	0.81	0.12	0.08	0.46	0.15	0.08	0.24	
FLUORIDE	AM 0.89 PM 0.99	0.36	1.11	0.36	0.36	0.23	0.96 1.14	1.02	
CHLORINE RESIDUAL	1.0	1.3	1.0	1.4	1.0	1.1	1.0	1.5	
TURBIDITY	AM 0.12 PM 0.12	0.48	0.78 0.82	0.17	1.10	0.30	0.24 0.23	0.84	
TOTAL PHOSPHATE		2.18			1.68				
ORTHO PHOSPHATE		0.81			0.52				
META PHOSPHATE		1.37			1.16				
STABILITY	+0.4	---	+0.4	---	+0.3	0.0	+0.3	+0.3	
REMARKS									

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

Lachelle Monahan CLW

DATE OF ANALYSIS

7 DEC 1982

000003899

M.P. Price

DATE COLLECTED

14 DEC 1982

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

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	TT 719	TT 2726
PH	8.8	7.0	8.3	7.1	8.1	8.2	8.4	8.2	8.4	8.5
PENOLTHALEIN ALKALINITY	8	0	6	0	6	6	8	6	4	4
METHYL ORANGE ALKALINITY	42	184	56	160	160	156	68	152	58	58
CARBONATES AS CaCO ₃	16	0	12	0	12	12	16	12	8	8
CARBONATES AS CaCO ₃	26	184	44	160	148	144	52	140	50	50
CHLORIDES AS Cl	12	50	10	18	16	24	12	82	10	10
HARDNESS AS CaCO ₃	58	56	76	68	60	54	76	70	76	90
IRON AS Fe	0.07	0.42	0.09	0.09	0.28	0.14	0.07	0.16	0.11	0.11
FLUORIDE	AM 0.93 PM 0.96	0.41	0.86 0.99	0.13	0.27	0.27	0.83 0.89	0.79	0.96	0.99
CHLORINE RESIDUAL	1.0	1.3	1.0	1.5	1.2	1.0	1.0	1.5	0.9	0.9
TURBIDITY	AM 0.14 PM 0.14	0.26	0.34 0.32	0.12	0.82	0.26	0.28 0.24	0.68	0.34	0.42
TOTAL PHOSPHATE		1.46			0.96					
ORTHO PHOSPHATE		0.63			0.28					
META PHOSPHATE		0.83			0.68					
STABILITY	+0.6	---	+0.1	---	+0.0	+0.1	+0.2	-0.1		

REMARKS

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
Schaeffer & Burns

DATE OF ANALYSIS
14 DEC 1982
CLW

000003900

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

MR PRICE

DATE COLLECTED
12-21-82

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	8.6	7.1	8.4	7.0	7.7	8.1	8.5	8.4	
PENOLTHALEIN ALKALINITY	4	0	2	0	0	2	4	6	
METHYL ORANGE ALKALINITY	54	160	70	70	164	150	60	144	
CARBONATES AS CaCO ₃	8	0	4	0	0	4	8	12	
BICARBONATES AS CaCO ₃	46	160	66	70	164	146	52	132	
CHLORIDES AS Cl	12	30	12	24	22	30	12	90	
HARDNESS AS CaCO ₃	60	100	90	64	60	56	62	62	
IRON AS Fe	0.04	0.35	0.15	0.06	0.05	0.18	0.07	0.15	
FLUORIDE	A.M. 0.61 P.M. 0.61	0.32	A.M. 0.72 P.M. 0.99	0.32	0.32	0.32	A.M. 0.99 P.M. 0.89	0.83	
CHLORINE RESIDUAL	1.0	1.4	1.0	1.4	1.3	1.0	0.9	1.3	
TURBIDITY	0.12	0.26	A.M. 1.90 P.M. 1.00	0.20	0.30	0.28	A.M. 0.22 P.M. 0.32	0.54	
TOTAL PHOSPHATE		1.84			1.00				
ORTHO PHOSPHATE		0.73			0.28				
META PHOSPHATE		1.11			0.72				
STABILITY	0.6	—	0.7	—	-0.1	0.0	0.4	0.1	
REMARKS									

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

B. J. Burns

DATE OF ANALYSIS

12-21-82

CLW

000003901

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

NR PRICE

DATE COLLECTED
 28 DECEMBER 82

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	8.9	6.8	8.6	7.0	7.8	8.1	8.5	8.5	
PENOLTHALEIN ALKALINITY	6	0	2	0	0	2	4	2	
METHYL ORANGE ALKALINITY	42	156	56	146	170	148	56	150	
CARBONATES AS CaCO ₃	12	0	4	0	0	4	8	4	
BICARBONATES AS CaCO ₃	30	156	52	146	170	144	48	146	
ORIDES AS Cl	10	10	12	14	20	10	12	86	
HARDNESS AS CaCO ₃	54	52	86	64	60	62	60	50	
IRON AS Fe	0.04	0.24	0.18	0.07	0.06	0.26	0.08	0.21	
FLUORIDE	A.M. 0.87 P.M. 0.96	0.41	A.M. 0.96 P.M. 0.96	0.32	0.23	0.13	A.M. 0.96 P.M. 0.93	0.79	
CHLORINE RESIDUAL	1.3	1.4	0.9	1.4	1.3	1.2	0.9	1.3	
TURBIDITY	0.18	0.30	A.M. 0.38 P.M. 1.20	0.20	0.30	0.66	A.M. 0.28 P.M. 0.46	1.00	
TOTAL PHOSPHATE		2.95			1.09				
ORTHO PHOSPHATE		.96			.35				
... PHOSPHATE		1.99			0.74				
STABILITY	+0.6	—	+0.8	—	+0.1	+0.2	+0.3	+0.3	
REMARKS									

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 + Monahan + Leland / *CLSW* / *DECEMBER 82*

DATE OF ANALYSIS

000003902

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

DATE COLLECTED
 4 JANUARY 1983

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	8.60	6.81	8.03	6.86	7.87	7.90	8.26	8.08
PENOLTHALEIN ALKALINITY	8	0	4	0	8	8	6	8
METHYL ORANGE ALKALINITY	52	168	86	160	176	170	74	146
CARBONATES AS CaCO ₃	16	0	8	0	16	16	12	16
BICARBONATES AS CaCO ₃	36	168	78	160	160	154	62	130
CHLORIDES AS Cl	12	12	8	20	18	24	12	94
HARDNESS AS CaCO ₃	54	60	106	66	66	58	82	72
IRON AS Fe	0.04	0.28	0.29	0.06	0.09	0.25	0.04	0.21
FLUORIDE	$\frac{Am}{Pm} \frac{1.02}{1.05}$	0.45	$\frac{1.05}{1.02}$	0.32	0.45	0.18	$\frac{1.02}{0.96}$	0.79
CHLORINE RESIDUAL	1.0	1.4	1.0	1.2	1.3	1.0	0.9	1.5
TURBIDITY	$\frac{Am}{Pm}$	0.18	$\frac{0.76}{2.30}$	0.18	0.22	0.62	$\frac{0.26}{0.16}$	0.98
TOTAL PHOSPHATE		3.30			2.70			
ORTHO PHOSPHATE		1.04			0.70			
META PHOSPHATE		2.26			2.00			
STABILITY	+0.78	—	+0.45	—	+0.07	+0.12	+0.42	+0.13
REMARKS								

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

Monahan Schepelle

DATE OF ANALYSIS

CLW JANUARY 1983

000003903

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

DATE COLLECTED

11 JAN 1983

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	8.5	6.8	8.0	6.9	7.9	8.0	8.2	8.7	
PENOLTHALEIN ALKALINITY	6	0	4	0	6	8	6	20	
METHYL ORANGE ALKALINITY	54	168	72	162	180	160	74	182	
CARBONATES AS CaCO ₃	12	0	8	0	12	16	12	40	
CARBONATES AS CaCO ₃	42	168	64	162	168	144	62	142	
CHLORIDES AS Cl	10	10	10	16	16	24	13	90	
HARDNESS AS CaCO ₃	60	56	88	62	64	50	74	40	
IRON AS Fe	0.06	0.32	0.26	0.09	0.04	0.29	0.04	0.19	
FLUORIDE	AM	0.97	0.91				0.97		
	PM	1.03	0.36	0.94	0.27	0.40	0.18	1.00	0.91
CHLORINE RESIDUAL	1.1	1.3	1.0	1.0	1.2	0.9	0.9	1.4	
TURBIDITY	AM		2.30				0.20		
	PM	0.20	0.20	1.40	0.19	0.26	0.84	0.22	0.36
TOTAL PHOSPHATE		2.70			2.00				
ORTHO PHOSPHATE		0.92			0.52				
META PHOSPHATE		1.78			1.48				
STABILITY	+0.7	---	+0.4	---	+0.2	+0.2	+0.4	+0.3	
REMARKS									

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

Lizabeth Monahan

DATE OF ANALYSIS

11 JAN 1983

CLW

000003904

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

Mr. Price
DATE COLLECTED
13 Jan. 83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	AMTRAC AREA WASH. PAD
PH					7.74				8.55
PENOLTHALEIN ALKALINITY					0				20
METHYL ORANGE ALKALINITY					160				176
CARBONATES AS CaCO ₃					0				40
BICARBONATES AS CaCO ₃					160				136
CHLORIDES AS Cl					18				20
HARDNESS AS CaCO ₃					82				80
IRON AS Fe									
FLUORIDE					0.36				0.31
CHLORINE RESIDUAL					0.9				0.0
TURBIDITY					0.20				0.32
TOTAL PHOSPHATE									
HO PHOSPHATE									
META PHOSPHATE									
STABILITY									

REMARKS

Dissolved Oxygen 9.5 (9.6 Treated) 4.3

PH (field) 7.6 8.45

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
Laines H. Henscott

DATE OF ANALYSIS
13 Jan 83

CLW
0000003905

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

Mr. Price
DATE COLLECTED
17 JAN 83

WASH RACK

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURT HOUSE BAY	RIFLE RANGE	HOLEGOMB BLVD 1340	NEW RIVER 1400
PH								
PENOLTHALEIN ALKALINITY					12	20	10	10
METHYL ORANGE ALKALINITY					196	198	206	196
CARBONATES AS CaCO ₃					24	40	20	20
BICARBONATES AS CaCO ₃					172	158	186	176
FLORIDES AS Cl					20	18	16	16
HARDNESS AS CaCO ₃					76	82	96	96
IRON AS Fe					0.09	0.09	2.70	0.41
FLUORIDE					0.84	0.31	0.56	0.48
CHLORINE RESIDUAL						0.0	0.3	0.85
TURBIDITY					0.18	0.24	30.0	15.0
TOTAL PHOSPHATE					1.24	1.10	2.34	1.54
ORTHO PHOSPHATE					0.32	0.80	1.30	0.69
META PHOSPHATE					0.92	0.30	1.04	0.85
STABILITY Free CO ₂					0.5	0.0	1.0	0.5
REMARKS								
Dissolved Oxygen					9.4	7.0	9.3	9.9

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

Henrycutt Burns Monahan

DATE OF ANALYSIS

18 JAN 83

CLW

0000003906

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

MR. Price

DATE COLLECTED

18 JAN 83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	8.5	7.0	8.4	6.9	7.9	7.9	7.9	8.2	
PENOLTHALEIN ALKALINITY	20	0	8	0	4	10	0	10	
METHYL ORANGE ALKALINITY	62	180	64	150	150	172	118	186	
CARBONATES AS CaCO ₃	40	0	16	0	8	20	0	20	
BICARBONATES AS CaCO ₃	22	180	48	150	142	152	118	166	
CHLORIDES AS Cl	12	10	12	18	16	16	10	122	
HARDNESS AS CaCO ₃	62	54	84	66	80	56	116	70	
IRON AS Fe	20.04	0.45	0.12	0.09	0.05	0.30	0.06	0.17	
FLUORIDE	AM PM 1.09 1.34	0.44	0.94 1.21	0.36	0.40	0.31	1.00 1.12	1.00	
CHLORINE RESIDUAL	0.9	1.0	1.3	1.3	1.2	1.0	0.9	1.4	
TURBIDITY	AM PM 0.12	0.20	0.84 0.44	0.12	0.12	0.78	0.22 0.12	0.44	
TOTAL PHOSPHATE		1.17			1.35				
ORTHO PHOSPHATE		0.77			0.38				
META PHOSPHATE		0.40			0.97				
STABILITY	+0.3		+0.4		0.0	0.0	+0.3	+0.2	
REMARKS									

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

Herbert Burns Monahan

DATE OF ANALYSIS

18 JAN 83
GLW

0000003907

CHEMICAL ANALYSIS — WATER TREATMENT I

MCBCL 11330/3 (REV. 3-82)

Mr. Price
DATE COLLECTED
25 JAN 83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	8.6	7.2	8.3	6.9	8.0	8.2	8.5	8.5
PENOLTHALEIN ALKALINITY	12	0	10	0	0	0	16	16
METHYL ORANGE ALKALINITY	60	176	66	150	196	176	66	160
CARBONATES AS CaCO ₃	24	0	20	0	0	0	32	32
BICARBONATES AS CaCO ₃	36	176	46	150	196	176	34	128
CHLORIDES AS Cl	10	16	16	20	20	30	12	100
HARDNESS AS CaCO ₃	60	64	88	66	62	60	70	62
IRON AS Fe	20.04	0.41	0.10	0.12	0.07	0.43	0.06	0.09
FLUORIDE	AM / PM 0.97 / 1.06	0.48	1.00 / 1.24	0.52	0.40	0.40	0.94 / 1.00	1.06
CHLORINE RESIDUAL	1.0	1.3	1.0	1.0	1.2	1.0	0.9	1.5
TURBIDITY	AM / PM 0.20	0.20	0.9 / 0.54	0.16	0.14	1.0	0.24 / 0.32	0.30
TOTAL PHOSPHATE		2.52			0.38			
HO PHOSPHATE		1.13			0.16			
META PHOSPHATE		1.39			0.22			
STABILITY	0.0		+0.2		+0.2	-0.3	0.0	+0.2
REMARKS								

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

Harriet Monahan

DATE OF ANALYSIS

25 JAN 83

CLW

000003908

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

NR FR 102

DATE COLLECTED
 1 FEB 83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLOW BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	8.5	6.9	8.2	7.00	8.00	7.9	8.5	8.5	
PENOLTHALEIN ALKALINITY	4	0	2	0	2	2	2	5	
METHYL ORANGE ALKALINITY	56	156	66	128	150	156	60	150	
CARBONATES AS CaCO ₃	8	0	4	0	4	4	4	10	
BICARBONATES AS CaCO ₃	48	156	62	128	146	152	54	140	
CHLORIDES AS Cl	10	10	10	10	10	20	12	84	
HARDNESS AS CaCO ₃	56	72	84	54	42	50	60	54	
IRON AS Fe	0.04	0.35	0.04	0.10	0.15	0.09	0.04	0.20	
FLUORIDE	A.M. 1.00 P.M. 1.09	0.31	A.M. 0.88 P.M. 1.00	0.27	0.31	0.18	A.M. 0.91 P.M. 1.00	0.88	
CHLORINE RESIDUAL	0.9	1.3	1.0	1.2	1.2	1.0	1.0	1.4	
TURBIDITY	0.22	0.30	A.M. 0.30 P.M. 0.42	0.18	0.46	0.32	A.M. 0.20 P.M. 0.22	0.60	
TOTAL PHOSPHATE		2.05			1.60				
ORTHOPHOSPHATE		0.92			0.48				
META PHOSPHATE		1.13			1.12				
STABILITY	+0.4	-	+0.3	-	0.00	-0.1	+0.5	+0.1	
REMARKS									

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 + CLW

DATE OF ANALYSIS: 1 FEB 83

000003909

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

MR. PRICE

DATE COLLECTED

8 Feb 83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	8.4	6.9	8.3	6.9	7.8	8.0	8.3	8.7	
PENOLTHALEIN ALKALINITY	4	0	2	0	0	0	2	12	
METHYL ORANGE ALKALINITY	52	160	60	156	150	150	60	184	
CARBONATES AS CaCO ₃	8	0	4	0	0	0	4	24	
CARBONATES AS CaCO ₃	44	160	56	156	150	150	56	160	
CHLORIDES AS Cl	14	14	20	20	16	28	18	100	
HARDNESS AS CaCO ₃	70	48	82	64	52	60	64	68	
IRON AS Fe	0.04	0.32	0.06	0.15	0.04	0.04	0.07	0.15	
FLUORIDE	AM/PM 1.10/1.16	0.31	0.91/0.81	0.26	0.12	0.22	0.98/0.98	1.04	
CHLORINE RESIDUAL	1.0	1.3	1.0	1.5	1.1	1.0	0.9	1.4	
TURBIDITY	AM/PM 0.14	0.23	0.40/0.55	0.28	0.24	0.26	0.26/0.36	0.72	
TOTAL PHOSPHATE		2.08			0.22				
ORTHO PHOSPHATE		0.73			0.10				
META PHOSPHATE		1.35			0.12				
STABILITY	+0.4	—	+0.3	—	-0.1	+0.0	+0.2	+0.3	
REMARKS									

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

Monahan, Ledwith & Burns

DATE OF ANALYSIS

CL Web 8.3

000003910

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

MR. PRICE

DATE COLLECTED
2-15-83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	8.6	6.8	8.3	6.9	7.9	7.9	8.4	8.8	
PENOLTHALEIN ALKALINITY	4	0	2	0	2	4	2	16	
METHYL ORANGE ALKALINITY	40	164	60	102	164	164	56	126	
CARBONATES AS CaCO ₃	8	0	4	0	4	8	4	32	
CARBONATES AS CaCO ₃	32	164	56	102	160	156	52	94	
CHLORIDES AS Cl	10	60	10	20	16	26	8	90	
HARDNESS AS CaCO ₃	54	118	86	76	58	60	68	62	
IRON AS Fe	0.04	0.82	0.12	0.06	0.04	0.04	0.04	0.16	
FLUORIDE	A.M. P.M. 0.88 0.91	0.31	0.98 0.91	0.44	0.39	0.31	0.91 1.00	0.63	
CHLORINE RESIDUAL	1.0	1.3	1.0	1.3	1.2	1.0	0.9	1.3	
TURBIDITY	A.M. P.M. 0.12	0.28	0.46 0.88	0.18	0.16	0.14	0.40 0.30	0.62	
TOTAL PHOSPHATE		1.04			1.04				
ORTHO PHOSPHATE		0.77			0.25				
META PHOSPHATE		0.27			0.79				
STABILITY	+0.9	—	+0.4	—	+0.1	0.0	+0.6	+0.4	
REMARKS									

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

Bruce L. ...

DATE OF ANALYSIS

2-15-83

CLW

000003911

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

MR. PRICE
DATE COLLECTED
22 FEB 83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	7.0	6.9	8.2	7.0	8.0	7.9	8.4	8.0	
PENOLTHALEIN ALKALINITY	0	0	2	0	0	0	4	0	
METHYL ORANGE ALKALINITY	66	164	64	158	154	158	60	174	
CARBONATES AS CaCO ₃	0	0	4	0	0	0	8	0	
BICARBONATES CaCO ₃	66	164	60	158	154	158	52	174	
CHLORIDES AS Cl	12	22	12	18	14	20	10	110	
HARDNESS AS CaCO ₃	144	104	100	66	84	52	56	74	
IRON AS Fe	.04	.26	.11	.05	.04	.04	.06	.07	
FLUORIDE	AM/PM 0.95/0.91	0.39	1.13/1.19	0.31	0.17	0.17	1.27/1.16	0.81	
CHLORINE RESIDUAL	1.0	1.3	1.0	1.3	1.5	0.7	0.9	1.4	
TURBIDITY	AM/PM 0.18	0.26	2.20/1.80	0.19	0.17	0.17	0.46/0.44	0.36	
TOTAL PHOSPHATE		1.62			0.38				
THO PHOSPHATE		0.84			0.25				
META PHOSPHATE		0.78			0.13				
STABILITY	+0.3	X	+0.4	X	+0.3	± 0	+0.4	-0.1	
REMARKS									

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

Lachyelle

Monahan

CLW

DATE OF ANALYSIS

22 Feb 83

000003912

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

NR PRICE

DATE COLLECTED
 1 MARCH 83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	8.3	6.8	7.0	6.9	8.1	7.8	8.2	7.7	
PENOLTHALEIN ALKALINITY	2	0	0	0	2	0	2	0	
METHYL ORANGE ALKALINITY	60	170	130	150	140	160	64	184	
CARBONATES AS CaCO ₃	4	0	0	0	4	0	4	0	
BICARBONATES AS CaCO ₃	56	170	130	150	136	160	60	184	
CHLORIDES AS Cl	10	50	10	16	10	20	10	90	
HARDNESS AS CaCO ₃	74	80	156	60	56	50	74	70	
IRON AS Fe	0.06	0.62	0.15	0.14	0.04	0.05	0.11	0.15	
FLUORIDE	A.M. 1.10 P.M. 1.04	0.35	0.81 1.00	0.26	0.31	0.17	1.04 0.95	0.78	
CHLORINE RESIDUAL	1.0	1.4	1.0	1.2	1.0	1.3	1.0	1.4	
TURBIDITY	A.M. P.M.	0.42	0.28	0.76 0.40	0.16	0.20	0.18	0.25 0.34	0.54
TOTAL PHOSPHATE		2.60			1.21				
ORTHO PHOSPHATE		1.38			0.52				
META PHOSPHATE		1.22			0.69				
STABILITY	+0.4	—	+0.5	—	+0.3	0.0	+0.4	-0.2	
REMARKS									

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, HUNYCUIT & YONAHAN

DATE OF ANALYSIS
 1 MARCH 83

CLW
 0000003913

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

Mr. Price
 DATE COLLECTED
 3-8-83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	7.7	7.3	8.3	7.5	8.4	8.3	8.9	8.5	
PENOLTHALEIN ALKALINITY	0	0	2	0	8	6	8	12	
METHYL ORANGE ALKALINITY	128	194	86	166	162	162	60	212	
CARBONATES AS CaCO ₃	0	0	4	0	16	12	16	24	
BICARBONATES AS CaCO ₃	128	194	82	166	146	150	44	188	
CHLORIDES AS Cl	16	60	12	20	16	16	18	178	
HARDNESS AS CaCO ₃	136	100	96	62	66	48	56	58	
IRON AS Fe	0.04	0.75	0.05	0.14	0.05	0.08	0.09	0.15	
FLUORIDE	AM PM 1.00 1.04	0.26	0.78 0.63	0.22	0.26	0.22	1.00 1.04	1.48	
CHLORINE RESIDUAL	1.0	1.3	1.0	1.2	1.2	1.0	1.0	1.4	
TURBIDITY	AM PM 0.18	0.32	0.18 0.22	0.20	0.18	0.22	0.24 0.36	0.44	
TOTAL PHOSPHATE		1.30			1.21				
ORTHO PHOSPHATE		0.73			0.38				
META PHOSPHATE		0.57			0.83				
STABILITY	-0.2	—	+0.3	—	+0.2	+0.1	+0.6	+0.2	
REMARKS									

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:

L. K. Price & Associates

DATE OF ANALYSIS

CLW 3-8-83

000003914

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

NR Prier

DATE COLLECTED
 3-15-83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	9.3	7.3	9.0	7.5	8.5	8.3	9.0	8.7	
PENOLTHALEIN ALKALINITY	2	0	4	0	2	0	4	4	
METHYL ORANGE ALKALINITY	36	170	56	150	140	150	60	130	
CARBONATES AS CaCO ₃	4	0	8	0	4	0	8	8	
BICARBONATES AS CaCO ₃	32	170	48	150	136	150	52	122	
CHLORIDES AS Cl	10	50	10	16	10	20	10	104	
HARDNESS AS CaCO ₃	48	70	88	60	60	50	64	60	
IRON AS Fe	0.04	0.50	0.10	0.22	0.04	0.04	0.06	0.08	
FLUORIDE	AM/ PH. 0.97 0.83	0.26	0.94 0.88	0.21	0.26	0.12	1.04 0.91	0.74	
CHLORINE RESIDUAL	1.0	1.4	1.0	1.2	1.3	1.0	1.0	1.5	
TURBIDITY	0.20	0.26	0.76 0.26	0.18	0.18	0.16	0.46 0.34	0.30	
TOTAL PHOSPHATE		252			1.13				
ORTHO PHOSPHATE		0.77			0.16				
META PHOSPHATE		1.75			0.97				
STABILITY	+0.3	—	+0.3	—	+0.1	0.0	+0.1	0.0	
REMARKS									

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
 Buens, Mountain + Newyett CLW
 DATE OF ANALYSIS
 3-15-83

000003915

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

MR PRICE

DATE COLLECTED
2-22-83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	8.7	7.3	9.0	7.5	8.7	8.5	9.3	8.7
PENOLTHALEIN ALKALINITY	2	0	3	0	2	2	5	4
METHYL ORANGE ALKALINITY	64	164	44	150	140	142	56	174
CARBONATES AS CaCO ₃	4	0	6	0	4	4	10	8
BICARBONATES AS CaCO ₃	60	164	38	150	136	138	46	166
CHLORIDES AS Cl	10	44	12	18	14	24	20	48
HARDNESS AS CaCO ₃	80	64	68	60	60	58	68	40
IRON AS Fe	0.05	0.43	0.09	0.15	0.04	0.04	0.24	0.07
FLUORIDE	AM PH. 0.81 0.84	0.35	1.01 0.97	0.30	0.30	0.16	1.10 1.04	0.91
CHLORINE RESIDUAL	1.0	1.4	1.0	1.3	1.3	1.2	1.0	1.3
TURBIDITY	AM P.M. 0.26	0.20	1.00 0.60	0.20	0.12	0.20	0.80 0.66	0.35
TOTAL PHOSPHATE		2.08			1.40			
ORTHO PHOSPHATE		0.92			0.45			
META PHOSPHATE		1.16			0.95			
STABILITY	+0.3	—	+0.2	—	+0.3	+0.1	+0.6	+0.1
REMARKS								

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, Monahan + Lechman
CLW

DATE OF ANALYSIS

3-22-83

000003916

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

Mr. Price

DATE COLLECTED

29 MARCH 83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	8.7	7.4	8.5	7.4	8.7	8.4	8.8	8.9	
PENOLTHALEIN ALKALINITY	12	0	6	0	8	8	14	28	
METHYL ORANGE ALKALINITY	74	194	72	146	176	166	70	140	
CARBONATES AS CaCO ₃	24	0	12	0	16	16	28	48	
BICARBONATES AS CaCO ₃	50	194	60	146	160	150	42	92	
CHLORIDES AS Cl	12	50	12	14	14	26	18	70	
HARDNESS AS CaCO ₃	68	68	80	72	70	50	60	72	
IRON AS Fe	0.04	0.48	0.15	0.06	0.04	0.15	0.07	0.08	
FLUORIDE	AM / PM 0.81 / 1.04	0.55	0.94 / 1.13	0.26	0.26	0.12	1.01 / (1.27)	0.91	
CHLORINE RESIDUAL	1.0	1.3	1.0	1.1	1.3	1.0	0.9	1.2	
TURBIDITY	AM / PM 0.20	0.29	0.42 / 1.10	0.17	0.14	0.39	0.19 / 0.26	0.24	
TOTAL PHOSPHATE		1.78			0.83				
ORTHO PHOSPHATE		0.76			0.24				
META PHOSPHATE		1.02			0.59				
STABILITY	+ 0.4		+ 0.2		+ 0.6	+ 0.3	+ 0.3	+ 0.2	
REMARKS									

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

Henry J. Burns, Lab. GLW

DATE OF ANALYSIS

29 MARCH 83

000003917

B-2c

2607040 C-N-10 0252
CAMP LEJEUNE
COMMANDING GENERAL
MARINE CORPS BASE
CAMP LEJEUNE NC 28542

CORROSIVITY ANALYSIS

Please check off the construction materials present in your distribution system. If you have more than one distribution system, fill out a separate form for each one. This form must be completed by every community public water supply including purchase supplies. Complete and return this form to the address at the bottom of the page by February 1983.

- Lead from piping, solder, caulking, interior lining of distribution mains, alloys and home plumbing
- Copper from piping and alloys, service lines and home plumbing
- Galvanized piping, service lines and home plumbing
- Ferrous piping materials such as cast iron and steel
- Asbestos cement pipe
- Vinyl lined asbestos cement pipe
- Coal tar lined pipes and tanks
- Other (describe) *P.V.C.*

Return this form to:

Charles E. Rundgren, Head
Water Supply Branch
Division of Health Services
P. O. Box 2091
Raleigh, North Carolina 27602-2091

CLW
0000003918

2497040 C-N-10 0232
CAMP LEJEUNE
COMMANDING GENERAL
MARINE CORPS BASE
CAMP LEJEUNE NC 28542

CORROSIVITY ANALYSIS

Please check off the construction materials present in your distribution system. If you have more than one distribution system, fill out a separate form for each one. This form must be completed by every community public water supply including purchase supplies. Complete and return this form to the address at the bottom of the page by February 1983.

- Lead from piping, solder, caulking, interior lining of distribution mains, alloys and home plumbing
- Copper from piping and alloys, service lines and home plumbing
- Galvanized piping, service lines and home plumbing
- Ferrous piping materials such as cast iron and steel
- Asbestos cement pipe
- Vinyl lined asbestos cement pipe
- Coal tar lined pipes and tanks
- Other (describe) *P.V.C.*

Return this form to:

Charles E. Rundgren, Head
Water Supply Branch
Division of Health Services
P. O. Box 2091
Raleigh, North Carolina 27602-2091

CLW
000003919

0467040 C-N-10 0252
CAMP LEJEUNE
COMMANDING GENERAL
MARINE CORPS BASE
CAMP LEJEUNE NC 28542

CORROSIVITY ANALYSIS

Please check off the construction materials present in your distribution system. If you have more than one distribution system, fill out a separate form for each one. This form must be completed by every community public water supply including purchase supplies. Complete and return this form to the address at the bottom of the page by February 1983.

- Lead from piping, solder, caulking, interior lining of distribution mains, alloys and home plumbing
- Copper from piping and alloys, service lines and home plumbing
- Galvanized piping, service lines and home plumbing
- Ferrous piping materials such as cast iron and steel
- Asbestos cement pipe
- Vinyl lined asbestos cement pipe
- Coal tar lined pipes and tanks
- Other (describe) PVC

Return this form to:

Charles E. Rundgren, Head
Water Supply Branch
Division of Health Services
P. O. Box 2091
Raletgh, North Carolina 27602-2091

CLW

0000003920

M-178

0407043 C-N-10 0282
CAMP LEJEUNE
COMMANDING GENERAL
MARINE CORPS BASE
CAMP LEJEUNE NC 28542

CORROSIIVITY ANALYSIS

Please check off the construction materials present in your distribution system. If you have more than one distribution system, fill out a separate form for each one. This form must be completed by every community public water supply including purchase supplies. Complete and return this form to the address at the bottom of the page by February 1983.

- Lead from piping, solder, caulking, interior lining of distribution mains, alloys and home plumbing
- Copper from piping and alloys, service lines and home plumbing
- Galvanized piping, service lines and home plumbing
- Ferrous piping materials such as cast iron and steel
- Asbestos cement pipe
- Vinyl lined asbestos cement pipe
- Coal tar lined pipes and tanks
- Other (describe) *P.V.C.*

Return this form to:

Charles E. Rundgren, Head
Water Supply Branch
Division of Health Services
P. O. Box 2091
Raleigh, North Carolina 27602-2091

CLW

0000003921

45-110
3

0407040 C-V-10 0292
CAMP LEJEUNE
COMMANDING GENERAL
MARINE CORPS BASE
CAMP LEJEUNE NC 28542

CORROSIVITY ANALYSIS

Please check off the construction materials present in your distribution system. If you have more than one distribution system, fill out a separate form for each one. This form must be completed by every community public water supply including purchase supplies. Complete and return this form to the address at the bottom of the page by February 1983.

- Lead from piping, solder, caulking, interior lining of distribution mains, alloys and home plumbing
- Copper from piping and alloys, service lines and home plumbing
- Galvanized piping, service lines and home plumbing
- Ferrous piping materials such as cast iron and steel
- Asbestos cement pipe
- Vinyl lined asbestos cement pipe
- Coal tar lined pipes and tanks
- Other (describe) *PVC*

Return this form to:

Charles E. Rundgren, Head
Water Supply Branch
Division of Health Services
P. O. Box 2091
Raleigh, North Carolina 27602-2091

R 12-83

0407040 C-N-10 0210
CAMP LEJEUNE
COMMANDING GENERAL
MARINE CORPS BASE
CAMP LEJEUNE NC 28542

CORROSION ANALYSIS

Please check off the construction materials present in your distribution system. If you have more than one distribution system, fill out a separate form for each one. This form must be completed by every community public water supply including purchase supplies. Complete and return this form to the address at the bottom of the page by February 1983.

- Lead from piping, solder, caulking, interior lining of distribution mains, alloys and home plumbing
- Copper from piping and alloys, service lines and home plumbing
- Galvanized piping, service lines and home plumbing
- Ferrous piping materials such as cast iron and steel
- Asbestos cement pipe
- Vinyl lined asbestos cement pipe
- Coal tar lined pipes and tanks
- Other (describe)

Return this form to:

Charles E. Rundgren, Head
Water Supply Branch
Division of Health Services
P. O. Box 2091
Raleigh, North Carolina 27602-2091

CLW

0000003923

BB-190

3407040 C-N-10 0242
CAMP LEJEUNE
COMMANDING GENERAL
MARINE CORPS BASE
CAMP LEJEUNE NC 28542

CORROSIIVITY ANALYSIS

Please check off the construction materials present in your distribution system. If you have more than one distribution system, fill out a separate form for each one. This form must be completed by every community public water supply including purchase supplies. Complete and return this form to the address at the bottom of the page by February 1983.

- Lead from piping, solder, caulking, interior lining of distribution mains, alloys and home plumbing
- Copper from piping and alloys, service lines and home plumbing
- Galvanized piping, service lines and home plumbing
- Ferrous piping materials such as cast iron and steel
- Asbestos cement pipe
- Vinyl lined asbestos cement pipe
- Coal tar lined pipes and tanks
- Other (describe) *PVC*

Return this form to:

Charles E. Rundgren, Head
Water Supply Branch
Division of Health Services
P. O. Box 2091
Raleigh, North Carolina 27602-2091

CLW

0000003924

2467040 C-N-10 0232
CAMP LEJEUNE
COMMANDING GENERAL
MARINE CORPS BASE
CAMP LEJEUNE NC 28542

CORROSIONITY ANALYSIS

Please check off the construction materials present in your distribution system. If you have more than one distribution system, fill out a separate form for each one. This form must be completed by every community public water supply including purchase supplies. Complete and return this form to the address at the bottom of the page by February 1983.

- Lead from piping, solder, caulking, interior lining of distribution mains, alloys and home plumbing
- Copper from piping and alloys, service lines and home plumbing
- Galvanized piping, service lines and home plumbing
- Ferrous piping materials such as cast iron and steel
- Asbestos cement pipe
- Vinyl lined asbestos cement pipe
- Coal tar lined pipes and tanks
- Other (describe) *PVC*

Return this form to:

Charles E. Rundgren, Head
Water Supply Branch
Division of Health Services
P. O. Box 2091
Raleigh, North Carolina 27602-2091

CLW

0000003925

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

MR. PRICE

DATE COLLECTED

5 April 83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	7.7	7.3	8.8	7.4	8.5	8.2	9.0	8.7	
PENOLTHALEIN ALKALINITY	0	0	6	0	4	2	8	18	
METHYL ORANGE ALKALINITY	94	180	56	154	138	170	50	250	
CARBONATES AS CaCO ₃	0	0	12	0	8	4	16	36	
BICARBONATES AS CaCO ₃	94	180	44	154	130	166	34	214	
CHLORIDES AS Cl	14	108	10	18	14	28	16	200	
HARDNESS AS CaCO ₃	118	98	74	70	64	56	66	84	
IRON AS Fe *	0.04	0.45	0.07	0.09	0.05	0.06	0.12	0.06	
FLUORIDE	AM/PM 0.77 0.88	0.21	1.07 1.04	0.21	0.30	0.21	1.01 1.04	1.35	
CHLORINE RESIDUAL	1.0	1.2	1.0	1.2	1.3	1.0	1.0	1.3	
TURBIDITY	AM/PM 0.16	0.26	0.24 0.70	0.20	0.26	0.20	0.36 0.56	0.30	
TOTAL PHOSPHATE *		0.96			1.21				
ORTHO PHOSPHATE *		0.66			0.38				
META PHOSPHATE *		0.30			0.83				
STABILITY	-0.2	—	+0.4	—	+0.2	-0.1	+0.3	+0.2	
REMARKS									

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

Monahan

* Schaeffer

CLW

DATE OF ANALYSIS

5 April 83

000003926

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

MR. FRIGE
 DATE COLLECTED
 12 APRIL 83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	8.8	7.3	8.7	7.3	8.2	8.3	8.7	8.9	
PENOLTHALEIN ALKALINITY	2	0	2	0	0	2	2	4	
METHYL ORANGE ALKALINITY	50	140	50	142	160	120	50	52	
CARBONATES AS CaCO ₃	4	0	4	0	0	4	4	8	
BICARBONATES AS CaCO ₃	46	140	46	142	160	116	46	44	
CHLORIDES AS Cl	10	14	10	20	14	20	10	70	
HARDNESS AS CaCO ₃	60	92	84	62	64	44	68	60	
IRON AS Fe	0.04	0.47	0.06	0.11	0.26	0.05	0.04	0.21	
FLUORIDE	AM/PM 0.77/0.59	0.07	0.70/0.74	0.16	0.16	0.12	0.91/0.63	0.39	
CHLORINE RESIDUAL	1.0	1.4	1.0	1.2	1.3	1.0	1.0	1.3	
TURBIDITY	AM/PM 0.20	0.30	0.47/0.36	0.18	1.0	0.24	0.21/0.24	0.52	
TOTAL PHOSPHATE	OK	1.26			1.00				
ORTHO PHOSPHATE	*	0.96			0.38				
META PHOSPHATE	OK	0.30			0.62				
STABILITY	+0.5	-	+0.4	-	+0.2	+0.1	+0.4	+0.3	
REMARKS									

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:

Barnes *Lehmann* * *McLW*

DATE OF ANALYSIS:

12 April 83

000003927

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

MR 1-

DATE COLLECTED

3 MAY 1983

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	8.5	7.3	8.5	7.3	8.3	8.3	8.8	8.5
PENOLTHALEIN ALKALINITY	2	0	0	0	0	0	3	10
METHYL ORANGE ALKALINITY	56	160	60	142	150	140	54	160
CARBONATES AS CaCO ₃	4	0	0	0	0	0	6	20
BICARBONATES AS CaCO ₃	52	160	60	142	150	140	48	140
CHLORIDES AS Cl	8	10	10	12	10	18	14	70
HARDNESS AS CaCO ₃	62	36	82	56	66	72	56	40
IRON AS Fe	0.04	0.27	0.10	0.07	0.06	0.10	0.04	0.14
FLUORIDE	A.M. P.M. 0.91 / 0.98	0.17	0.98 0.91	0.17	0.21	0.07	0.98 1.04	0.67
CHLORINE RESIDUAL	1.2	1.4	1.0	2.5	1.5	1.0	1.0	1.4
TURBIDITY	A.M. P.M. 0.36 / 0.20	0.28	0.20 0.50	0.22	0.22	0.28	0.22	0.42
TOTAL PHOSPHATE		1.60			1.10			
ORTHO PHOSPHATE		.96			.92			
META PHOSPHATE		0.72			0.18			
STABILITY	+0.4	—	+0.3	—	+0.2	+0.2	0.0	+0.1
REMARKS								

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

Buens, Huseyett, Lockwell

DATE OF ANALYSIS

CLW MAY 83

0000003928

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

MR PRICE

DATE COLLECTED
 3 MAY 1983

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLOW BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	8.5	7.3	8.5	7.3	8.3	8.3	8.8	8.5	
PENOLTHALEIN ALKALINITY	2	0	0	0	0	0	3	10	
METHYL ORANGE ALKALINITY	56	160	60	142	150	140	54	160	
CARBONATES AS CaCO ₃	4	0	0	0	0	0	6	20	
BICARBONATES AS CaCO ₃	52	160	60	142	150	140	48	140	
CHLORIDES AS Cl	8	10	10	12	10	18	14	70	
HARDNESS AS CaCO ₃	62	36	82	56	66	72	56	40	
IRON AS Fe	0.04	0.27	0.10	0.07	0.06	0.10	0.04	0.14	
FLUORIDE	A.M. / P.M. 0.91 / 0.98	0.17	0.98 / 0.91	0.17	0.21	0.07	0.98 / 1.04	0.67	
CHLORINE RESIDUAL	1.2	1.4	1.0	2.5	1.5	1.0	1.0	1.4	
TURBIDITY	A.M. / P.M. 0.36 / 0.20	0.28	0.20 / 0.50	0.22	0.22	0.28	0.22	0.42	
TOTAL PHOSPHATE		1.60			1.10				
ORTHO PHOSPHATE		.96			.92				
META PHOSPHATE		0.72			0.18				
STABILITY	+0.4	—	+0.3	—	+0.2	+0.2	0.0	+0.1	
REMARKS									

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

Buens *[Signature]* Lockwood *[Signature]* OLW

DATE OF ANALYSIS

3 May 83

000003929

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

Mn. Price
 DATE COLLECTED
 10 MAY 83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	8.7	7.4	8.8	7.5	8.3	8.4	8.8	8.4
PENOLTHALEIN ALKALINITY	4	0	6	0	10	6	6	4
METHYL ORANGE ALKALINITY	56	176	60	158	184	158	62	132
CARBONATES AS CaCO ₃	8	0	12	0	20	12	12	8
BICARBONATES AS CaCO ₃	48	176	48	158	164	146	50	124
CHLORIDES AS Cl	14	24	12	18	18	24	14	84
HARDNESS AS CaCO ₃	62	104	84	80	70	52	70	72
IRON AS Fe	< 0.04	0.66	0.09	< 0.04	< 0.04	0.15	< 0.04	0.07
FLUORIDE	AM / PM 0.98 / 1.01	0.30	1.01 / 1.16	0.26	0.21	0.17	1.01	0.67
CHLORINE RESIDUAL	1.0	1.3	1.0	1.2	1.2	1.0	0.9	1.5
TURBIDITY	AM / PM 0.30	0.46	0.46 / 0.64	0.58	0.24	0.46	0.30 / 0.46	0.35
TOTAL PHOSPHATE		2.00			0.22			
ORTHO PHOSPHATE		1.30			0.10			
META PHOSPHATE		0.70			0.12			
STABILITY	+ 0.2		+ 0.4		+ 0.1	+ 0.1	+ 0.3	+ 0.1
REMARKS								

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

Shirley Luchelle Monahan
 CLW

DATE OF ANALYSIS

10 MAY 83

0000003930

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

Mr. Price
 DATE COLLECTED
 17 MAY 83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	8.8	7.3	8.7	7.4	8.2	8.4	8.9	8.5
PENOLTHALEIN ALKALINITY	4	0	6	0	4	5	6	10
METHYL ORANGE ALKALINITY	50	182	66	162	184	178	66	198
CARBONATES AS CaCO ₃	8	0	12	0	8	10	12	20
BICARBONATES AS CaCO ₃	42	182	54	162	176	168	54	178
CHLORIDES AS Cl	14	14	16	22	16	30	14	118
HARDNESS AS CaCO ₃	54	84	84	80	88	54	64	60
IRON AS Fe	0.04	0.79	0.07	0.08	0.04	0.18	0.07	0.05
FLUORIDE	AM / PM 0.94 / 1.07	0.26	0.81 / 1.10	0.26	0.26	0.30	0.94 / 1.01	1.01
CHLORINE RESIDUAL	0.9	1.2	1.1	1.2	1.2	0.7	1.0	1.3
TURBIDITY	AM / PM 0.26	0.42	0.34 / 0.40	0.22	0.18	0.44	0.35 / 0.38	0.24
TOTAL PHOSPHATE		2.54			1.13			
ORTHO PHOSPHATE		1.17			0.13			
META PHOSPHATE		1.37			1.00			
STABILITY	+ 0.2		+ 0.3		0.0	+ 0.1	+ 0.4	+ 0.1
REMARKS								

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

Luchette Mowhan

DATE OF ANALYSIS

17 MAY 83

CLW

000003931

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

Mr. Price
 DATE COLLECTED
 24 MAY 83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH #1	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	ONSLow BEACH #2
PH	8.7	7.4	8.5	7.5	8.3	8.3	8.7	8.4	7.5
PENOLTHALEIN ALKALINITY	1	0	1	0	1	1	2	1	0
METHYL ORANGE ALKALINITY	40	160	64	156	162	160	60	140	160
CARBONATES AS CaCO ₃	2	0	2	0	2	2	4	2	0
BICARBONATES AS CaCO ₃	38	160	62	156	160	158	56	138	160
CHLORIDES AS Cl	10	10	8	18	18	26	10	84	26
HARDNESS AS CaCO ₃	60	60	80	76	76	52	70	68	50
IRON AS Fe	0.04	0.56	0.04	5.04	0.04	0.04	0.04	0.14	0.41
FLUORIDE	AM PM 1.05 0.75	0.19	1.05 0.89	0.9	0.24	0.09	1.05 0.75	0.47	
CHLORINE RESIDUAL	0.9	1.3	1.0	1.0	1.1	1.0	1.3	1.4	
TURBIDITY	0.28	0.38	0.26 0.34	1.4	0.20	0.22	0.30 0.28	0.32	0.24
TOTAL PHOSPHATE		3.00			1.46				
ORTHO PHOSPHATE		1.68			0.25				
META PHOSPHATE		1.32			1.21				
STABILITY	+ 0.3		+ 0.2		+ 0.3	0.0	+ 0.2	0.0	

THE DIFFERENCES BETWEEN OB #1 & #2 WAS BECAUSE #1 WAS TAKEN AT SINK, BY OPERATOR, AND #2 WAS TAKEN AT PUMP, BY FOREMAN. THE

CORRECT LOCATIONS OF RAW & TREATED SAMPLE POINTS SHOULD BE MARKED IN ALL PLANTS TO AVOID FUTURE SAMPLING ERRORS.

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
 Heneycutt & Bernard
 CLW
 DATE OF ANALYSIS
 24 MAY 83

000003932

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

MR. PRICE

DATE COLLECTED

31 May 1983

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLOW BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	8.8	7.5	8.9	7.4	8.4	8.3	8.9	8.7	
PENOLTHALEIN ALKALINITY	2	0	4	0	6	2	4	10	
METHYL ORANGE ALKALINITY	8	196	60	160	172	162	50	180	
CARBONATES AS CaCO ₃	4	0	8	0	12	4	8	20	
BICARBONATES AS CaCO ₃	4	196	54	160	160	158	42	160	
CHLORIDES AS Cl	20	66	18	24	26	32	16	132	
HARDNESS AS CaCO ₃	66	82	80	72	66	58	90	76	
IRON AS Fe	0.04	0.55	0.13	0.32	0.04	0.04	0.04	0.07	
FLUORIDE	AM/PM 0.85	0.29	0.89/0.99	0.19	0.29	0.09	0.78/0.96	0.89	
CHLORINE RESIDUAL	1.0	1.3	1.0	0.5	1.2	1.0	1.0	1.3	
TURBIDITY	AM/PM 0.29	0.32	0.54/1.80	0.22	0.18	0.22	0.24/0.18	0.28	
TOTAL PHOSPHATE		0.90			1.84				
ORTHO PHOSPHATE		0.82			0.22				
META PHOSPHATE		0.08			1.62				
STABILITY	+0.2	—	+0.3	—	+0.1	-0.1	+0.2	±0.0	
REMARKS									

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

Monahan & Burns CLW

DATE OF ANALYSIS

31 May 83

0000003933

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

MR PRICE

DATE COLLECTED
 7 JUNE 1983

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	8.8	7.3	8.8	7.5	8.4	8.3	8.9	8.5
PENOLTHALEIN ALKALINITY	2	0	2	0	2	1	2	4
METHYL ORANGE ALKALINITY	60	170	54	150	154	156	58	146
CARBONATES AS CaCO ₃	4	0	4	0	4	2	4	8
BICARBONATES AS CaCO ₃	56	170	50	150	150	154	54	138
CHLORIDES AS Cl	6	38	6	12	14	20	10	50
HARDNESS AS CaCO ₃	76	24	80	70	68	50	66	60
IRON AS Fe	0.04	0.36	0.07	0.18	0.04	0.04	0.04	0.09
FLUORIDE	AM/PH 1.02 / 1.02	0.33	1.11 / 0.98	0.33	0.42	0.19	0.88 / 0.92	0.74
CHLORINE RESIDUAL	1.0	1.3	1.0	1.2	1.2	1.0	1.0	1.3
TURBIDITY	AM/PH 0.18	0.54	0.44 / 0.36	0.18	0.20	0.18	0.20 / 0.18	0.40
TOTAL PHOSPHATE		2.18			2.08			
ORTHO PHOSPHATE		0.92			0.22			
META PHOSPHATE		1.26			1.86			
STABILITY	+0.3	—	+0.3	—	0.0	+0.1	+0.4	+0.1
REMARKS								

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 & Monahan CLW

DATE OF ANALYSIS

7 JUNE 1983

000003934

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

DATE COLLECTED
6/8/83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH								8.2
PENOLTHALEIN ALKALINITY								1
METHYL ORANGE ALKALINITY								150
CARBONATES AS CaCO ₃								2
BICARBONATES AS CaCO ₃								148
CHLORIDES AS Cl								64
HARDNESS AS CaCO ₃								70
IRON AS Fe								0.10
FLUORIDE								
CHLORINE RESIDUAL								
TURBIDITY								0.38
TOTAL PHOSPHATE								
ORTHO PHOSPHATE								
META PHOSPHATE								
STABILITY								

REMARKS

COMPLAINT CAMP GEIGER MESSHALL

COLI-foen = ϕ

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 CLW

DATE OF ANALYSIS

6/8/83

000003935

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

Mr. Krice

DATE COLLECTED

6-14-83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	8.9	7.3	7.6	7.5	8.4	8.4	8.9	8.6	
PENOLTHALEIN ALKALINITY	8	0	0	0	10	6	6	10	
METHYL ORANGE ALKALINITY	66	196	144	150	190	148	70	156	
CARBONATES AS CaCO ₃	16	0	0	0	20	12	12	20	
BICARBONATES AS CaCO ₃	50	196	144	150	170	136	58	136	
CHLORIDES AS Cl	14	40	14	20	16	28	18	114	
HARDNESS AS CaCO ₃	76	22	98	66	72	46	74	64	
IRON AS Fe	0.05	0.30	0.06	0.16	0.04	0.07	0.04	0.06	
FLUORIDE	AM 1.05 PM 1.08	0.33	1.05 0.78	0.28	0.42	0.19	0.98 1.14	0.81	
CHLORINE RESIDUAL	1.0	1.4	1.0	1.2	1.2	1.0	0.9	1.3	
TURBIDITY	AM PM	0.26	32.0 0.26	0.16	0.16	0.18	0.20 0.18	0.22	
TOTAL PHOSPHATE		2.34			1.92				
ORTHO PHOSPHATE		1.13			0.28				
META PHOSPHATE		1.21			1.64				
STABILITY	+0.4	—	-0.3	—	+0.1	0.0	+0.5	+0.2	
REMARKS									

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

Lachonelle & Associates
CLW

DATE OF ANALYSIS

6-14-83

000003936

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

DATE COLLECTED

21 June 83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	9.0	7.3	8.6	7.4	8.4	8.3	8.8	8.4	
PENOLTHALEIN ALKALINITY	2	0	4	0	8	4	6	6	
METHYL ORANGE ALKALINITY	62	194	68	174	180	176	74	150	
CARBONATES AS CaCO ₃	4	0	8	0	16	8	12	12	
BICARBONATES AS CaCO ₃	58	194	60	174	164	168	62	138	
CHLORIDES AS Cl	14	48	14	16	18	24	16	86	
HARDNESS AS CaCO ₃	70	64	86	70	64	52	76	76	
IRON AS Fe	0.04	0.44	0.06	0.20	0.04	0.04	0.04	0.08	
FLUORIDE	AM / PM 1.08 / 1.05	0.42	AM / PM 1.08 / 0.63	0.24	0.33	0.24	AM / PM 1.02 / 0.95	0.66	
CHLORINE RESIDUAL	1.0	1.4	1.1	1.4	1.3	1.0	0.9	1.5	
TURBIDITY	AM / PM 0.24	0.34	AM / PM 0.62 / 0.47	0.19	0.18	0.20	AM / PM 0.20 / 0.20	0.30	
TOTAL PHOSPHATE		2.60			1.68				
ORTHO PHOSPHATE		0.84			0.32				
META PHOSPHATE		1.76			1.36				
STABILITY	+ 0.5		+ 0.3		+ 0.2	0.0	+ 0.4	+ 0.1	

REMARKS

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 ANALYST BY

CLW *Lecher, B. W. 9 Monahan*

DATE OF ANALYSIS

21 June 83

0000003937

CHEMICAL ANALYSIS — WATER TREATMENT P
 MCBC 11330/3 (REV. 3-82)

DATE COLLECTED
 21 June 83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	9.0	7.3	8.6	7.4	8.4	8.3	8.8	8.4	
PENOLTHALEIN ALKALINITY	2	0	4	0	8	4	6	6	
METHYL ORANGE ALKALINITY	62	194	68	174	180	176	74	150	
CARBONATES AS CaCO ₃	4	0	8	0	16	8	12	12	
BICARBONATES AS CaCO ₃	58	194	60	174	164	168	62	138	
CHLORIDES AS Cl	14	48	14	16	18	24	16	86	
HARDNESS AS CaCO ₃	70	64	86	70	64	52	76	76	
IRON AS Fe	0.04	0.44	0.06	0.20	0.04	0.04	0.04	0.08	
FLUORIDE	AM PM 1.08 1.05	0.42	1.08 0.63	0.24	0.33	0.24	1.02 0.95	0.66	
CHLORINE RESIDUAL	1.0	1.4	1.1	1.4	1.3	1.0	0.9	1.5	
TURBIDITY	AM PM 0.24	0.34	0.62 0.47	0.19	0.18	0.20	0.20 0.20	0.30	
TOTAL PHOSPHATE		2.60			1.68				
ORTHO PHOSPHATE		0.84			0.32				
META PHOSPHATE		1.76			1.36				
STABILITY	+ 0.5		+ 0.3		+ 0.2	0.0	+ 0.4	+ 0.1	
REMARKS									

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

Lachapelle, Brown, CLW, Minahan

DATE OF ANALYSIS

21 June 83

0000003938

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

DATE COLLECTED

5 July 83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	8.71	7.26	8.58	7.38	8.28	8.09	8.92	8.56
PENOLTHALEIN ALKALINITY	2	0	2	0	6	0	4	10
METHYL ORANGE ALKALINITY	56	180	60	158	172	156	52	146
CARBONATES AS CaCO ₃	4	0	4	0	12	0	8	20
BICARBONATES AS CaCO ₃	52	180	56	158	160	156	44	126
CHLORIDES AS Cl	16	34	10	20	16	26	12	46
HARDNESS AS CaCO ₃	60	48	76	82	56	48	70	82
IRON AS Fe	0.40	0.83	0.05	0.19	0.04	0.05	0.04	0.23
FLUORIDE	AM/PM 1.05/1.02	0.33	AM/PM 1.26/1.23	0.24	0.14	0.19	AM/PM 0.98/0.92	0.66
CHLORINE RESIDUAL	1.0	1.1	1.1	1.2	1.2	1.0	1.0	1.2
TURBIDITY	AM/PM 3.4	0.42	AM/PM 0.49/0.42	0.24	0.20	0.26	AM/PM 1.05/0.24	0.46
TOTAL PHOSPHATE		2.08			0.35			
ORTHO PHOSPHATE		1.24			0.07			
META PHOSPHATE		0.84			0.28			
STABILITY	+0.29	—	+0.24	—	-0.01	-0.24	+0.27	+0.17

REMARKS

Re-sample H.P. 7-6-83 - iron < 0.04

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 - *Mondolm*

DATE OF ANALYSIS

5th July '83

000003939

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

DATE COLLECTED

5 July 83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLW BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	8.71	7.26	8.58	7.38	8.28	8.09	8.92	8.56
PENOLTHALEIN ALKALINITY	2	0	2	0	6	0	4	10
METHYL ORANGE ALKALINITY	56	180	60	158	172	156	52	146
CARBONATES AS CaCO ₃	4	0	4	0	12	0	8	20
BICARBONATES AS CaCO ₃	52	180	56	158	160	156	44	126
CHLORIDES AS Cl	16	34	10	20	16	26	12	46
HARDNESS AS CaCO ₃	60	48	76	82	56	48	70	82
IRON AS Fe	0.40	0.83	0.05	0.19	0.04	0.05	0.04	0.23
FLUORIDE	AM/PM 1.05/1.02	0.33	1.26/1.23	0.24	0.14	0.19	0.98/0.92	0.66
CHLORINE RESIDUAL	1.0	1.1	1.1	1.2	1.2	1.0	1.0	1.2
TURBIDITY	AM/PM 3.4	0.42	0.49/0.42	0.24	0.20	0.26	1.05/0.24	0.46
TOTAL PHOSPHATE		2.08			0.35			
ORTHO PHOSPHATE		1.24			0.07			
META PHOSPHATE		0.84			0.28			
STABILITY	+0.29	—	+0.24	—	-0.01	-0.24	+0.27	+0.17

REMARKS

re-sample H.P. 7-6-83 - iron < .04

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

Monahan

CLW

DATE OF ANALYSIS

5th July '83

000003940

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

RESAMPLE H.P. FINISHED H₂O

DATE COLLECTED
 7/6/83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH		RES.	H.L.						
PENOLTHALEIN ALKALINITY									
METHYL ORANGE ALKALINITY									
CARBONATES AS CaCO ₃									
BICARBONATES AS CaCO ₃									
CHLORIDES AS Cl									
HARDNESS AS CaCO ₃									
IRON AS Fe		0.60	<0.04						
FLUORIDE									
CHLORINE RESIDUAL									
TURBIDITY		1.2	.28						
TOTAL PHOSPHATE									
ORTHO PHOSPHATE									
META PHOSPHATE									
STABILITY									
REMARKS									

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
 CLW

DATE OF ANALYSIS
 7/6/83

000003941

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

MR. Price

DATE COLLECTED

12 July 83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	8.80	7.36	8.50	7.62	8.38	8.41	8.93	8.95
PENOLTHALEIN ALKALINITY	4	0	2	0	2	4	4	12
METHYL ORANGE ALKALINITY	60	182	68	158	170	156	62	156
CARBONATES AS CaCO ₃	8	0	4	0	4	8	8	24
BICARBONATES AS CaCO ₃	52	182	64	158	166	148	54	132
CHLORIDES AS Cl	14	40	10	16	16	22	8	116
HARDNESS AS CaCO ₃	66	60	92	60	86	66	74	76
IRON AS Fe	0.04	1.07	0.09	0.17	0.04	0.05	0.04	0.08
FLUORIDE	AM 1.09 PM 0.93	0.57	0.86 0.93	0.27	0.27	0.13	1.06 1.06	0.79
CHLORINE RESIDUAL	1.0	1.3	1.0	1.4	1.0	1.0	0.9	1.2
TURBIDITY	AM 0.20 PM 0.20	1.4	0.74 0.50	0.24	0.22	0.24	0.20 0.24	0.40
TOTAL PHOSPHATE		4.60			1.21			
ORTHO PHOSPHATE		0.77			0.35			
META PHOSPHATE		3.83			0.86			
STABILITY	+0.24		+0.13		+0.16	+0.06	+0.34	+0.22
REMARKS								

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

Harriet Monahan

CLW

DATE OF ANALYSIS

12 July 83

0000003942

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

DATE COLLECTED
 7-26-83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	8.9	7.3	8.7	7.3	8.3	8.2	8.9	8.8
PENOLTHALEIN ALKALINITY	8	0	6	0	8	4	8	16
METHYL ORANGE ALKALINITY	64	186	64	160	170	164	66	196
CARBONATES AS CaCO ₃	16	0	12	0	16	8	16	32
BICARBONATES AS CaCO ₃	48	186	52	160	154	156	50	164
CHLORIDES AS Cl	8	46	8	12	16	24	12	134
HARDNESS AS CaCO ₃	66	60	82	80	60	48	70	50
IRON AS Fe	0.04	0.67	0.08	0.04	0.04	0.05	0.04	0.07
FLUORIDE	^{AM} _{FM} 0.13 0.18	0.32	0.99 1.09	0.27	0.23	0.23	0.83 0.99	1.06
CHLORINE RESIDUAL	0.8	1.4	1.0	1.0	1.3	1.0	1.0	1.2
TURBIDITY	^{AM} _{FM} 0.16	0.30	0.40 0.52	0.14	0.16	0.17	0.16 0.14	0.24
TOTAL PHOSPHATE *		2.52			0.28			
ORTHO PHOSPHATE *		1.38			0.10			
META PHOSPHATE *		1.14			0.18			
STABILITY	+0.4	-	+0.3	-	0.0	-0.1	+0.4	+0.1

REMARKS

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 *Lachapelle*

DATE OF ANALYSIS *7/26/83* * *7/27/83*

000003943

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

Bld. 1604

Complaint

DATE COLLECTED
30 July 83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	<i>8.88</i>								
PENOLTHALEIN ALKALINITY	<i>4</i>								
METHYL ORANGE ALKALINITY	<i>34</i>								
CARBONATES AS CaCO ₃	<i>8</i>								
BICARBONATES AS CaCO ₃	<i>26</i>								
CHLORIDES AS Cl	<i>20</i>								
HARDNESS AS CaCO ₃	<i>60</i>								
IRON AS Fe									
FLUORIDE	<i>1.15</i>								
CHLORINE RESIDUAL	<i>0.6</i>								
TURBIDITY	<i>1.2</i>								
TOTAL PHOSPHATE									
ORTHO PHOSPHATE									
META PHOSPHATE									
STABILITY									
REMARKS									

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

Hemmerly

CLW

DATE OF ANALYSIS

1 Aug 83

000003944

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

NR PRICE

DATE COLLECTED
 4-26-83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	M.P. TREATED
PH	8.7	7.3	8.6	7.3	8.4	8.4	8.7	7.8	7.3
PENOLTHALEIN ALKALINITY	12	0	10	0	8	6	10	0	0
METHYL ORANGE ALKALINITY	70	216	76	104	190	162	76	162	210
CARBONATES AS CaCO ₃	24	0	20	0	16	12	20	0	0
BICARBONATES AS CaCO ₃	46	216	56	104	174	150	56	162	210
CHLORIDES AS Cl	14	54	10	20	20	24	20	94	50
HARDNESS AS CaCO ₃	98	62	106	68	80	62	92	104	32
IRON AS Fe	<0.04	0.27	<0.04	0.05	<0.04	0.23	0.08	0.09	0.14
FLUORIDE	AM/PH 1.13 1.24	0.47	1.16 1.19	0.30	0.30	0.21	1.04 1.19	0.81	0.47
CHLORINE RESIDUAL	1.0	1.4	1.1	1.4	1.2	1.2	1.0	1.4	1.4
TURBIDITY	AM/PH 0.18	0.19	0.36 0.28	0.18	0.21	0.52	0.31 0.34	0.20	0.16
TOTAL PHOSPHATE		2.70			0.84				2.18
ORTHO PHOSPHATE		1.40			0.22				1.26
META PHOSPHATE		1.30			0.62				0.92
STABILITY	+0.4	—	+0.5	—	+0.4	+0.2	+0.4	-0.3	

REMARKS

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] → MONTANA CBWNS

DATE OF ANALYSIS
 4-26-83

000003945

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

MR. PRICE
DATE COLLECTED
7-26-83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	8.9	7.3	8.7	7.3	8.3	8.2	8.9	8.8	
PENOLTHALEIN ALKALINITY	8	0	6	0	8	4	8	16	
METHYL ORANGE ALKALINITY	64	186	64	160	170	164	66	196	
CARBONATES AS CaCO ₃	16	0	12	0	16	8	16	32	
BICARBONATES AS CaCO ₃	48	186	52	160	154	156	50	164	
CHLORIDES AS Cl	8	46	8	12	16	24	12	134	
HARDNESS AS CaCO ₃	66	60	82	80	60	48	70	50	
IRON AS Fe	0.04	0.67	0.08	0.04	0.04	0.05	0.04	0.07	
FLUORIDE	$\frac{AM}{PM} \frac{0.13}{0.18}$	0.32	$\frac{0.99}{1.09}$	0.27	0.23	0.23	$\frac{0.83}{8.99}$	1.06	
CHLORINE RESIDUAL	0.8	1.4	1.0	1.0	1.3	1.0	1.0	1.2	
TURBIDITY	$\frac{AM}{PM} \frac{0.16}{0.16}$	0.30	$\frac{0.40}{0.52}$	0.14	0.16	0.17	$\frac{0.16}{0.14}$	0.24	
TOTAL PHOSPHATE *		2.52			0.28				
ORTHO PHOSPHATE *		1.38			0.10				
META PHOSPHATE *		1.14			0.18				
STABILITY	+0.4	-	+0.3	-	0.0	-0.1	+0.4	+0.1	

REMARKS

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 *Lachapelle* *monahan*
CLW

DATE OF ANALYSIS 7/26/83 * 7/27/83

0000003946

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

NR PRICE

DATE COLLECTED
 2 AUGUST 83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	TT Pool
PH	8.6	7.3	8.5	7.5	8.2	8.2	8.7	8.7	7.3 8.0
PENOLTHALEIN ALKALINITY	4	0	2	0	4	2	6	14	0
METHYL ORANGE ALKALINITY	60	174	62	150	156	150	60	184	70
CARBONATES AS CaCO ₃	8	0	4	0	8	4	12	28	0
BICARBONATES AS CaCO ₃	52	174	58	150	148	146	48	156	70
CHLORIDES AS Cl	8	70	10	10	14	20	10	74	30
HARDNESS AS CaCO ₃	60	142	78	58	64	50	64	48	90
IRON AS Fe	0.04	0.96	0.07	0.10	0.08	0.04	<0.04	0.14	0.07
FLUORIDE	A.M. P.M. 0.18 0.18	0.18	1.23 0.96	0.18	0.08	0.08	0.99 0.96	1.06	0.99
CHLORINE RESIDUAL	1.0	1.3	1.0	0.8	1.0	1.2	1.2	1.4	0.3
TURBIDITY	0.26	0.42	0.46 0.48	0.20	0.26	0.18	0.14 0.18	0.22	0.16
TOTAL PHOSPHATE		1.24			0				
ORTHO PHOSPHATE		1.00			0				
META PHOSPHATE		0.24			0				
STABILITY	+0.1	-0.4	+0.2	-0.6	+0.1	+0.2	+0.2	+0.2	
REMARKS									

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

CLW

DATE OF ANALYSIS

3 AUGUST 83

000003947

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

MR PRICE

DATE COLLECTED
 9 AUGUST 83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	8.8	7.4	8.4	7.5	8.0	8.1	8.7	8.5
PENOLTHALEIN ALKALINITY	4	0	4	0	0	2	8	4
METHYL ORANGE ALKALINITY	50	174	56	144	150	150	60	130
CARBONATES AS CaCO ₃	8	0	8	0	0	4	16	8
BICARBONATES AS CaCO ₃	42	174	48	144	150	146	44	122
CHLORIDES AS Cl	14	36	8	20	14	24	14	94
HARDNESS AS CaCO ₃	64	48	82	56	70	50	60	56
IRON AS Fe	0.11	0.90	0.10	0.20	0.17	0.09	0.10	0.26
FLUORIDE	0.15 0.17	0.20	1.05 1.42	0.18	0.11	0.12	0.98 0.91	0.66
CHLORINE RESIDUAL	1.0	1.3	1.0	1.3	1.3	0.8	0.8	1.4
TURBIDITY	0.26	0.56	0.36 0.36	0.12	0.24	0.18	0.16 0.20	0.26
TOTAL PHOSPHATE		4.80			1.09			
ORTHO PHOSPHATE		1.82			0.25			
META PHOSPHATE		2.98			0.84			
STABILITY	+0.7	-0.7	0.0	-0.7	+0.1	+0.2	+0.2	+0.1
REMARKS								

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, BETZ & MONSEN, CLW

DATE OF ANALYSIS

10 AUGUST 83

000003948

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

Mr. Price
 DATE COLLECTED
 16 Aug 83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	TT Pool
PH	9.0	7.3	8.8	7.4	7.7	8.2	8.7	8.8	7.8
PENOLTHALEIN ALKALINITY	6	0	6	0	2	8	6	16	0
METHYL ORANGE ALKALINITY	50	196	62	168	172	172	76	180	54
CARBONATES AS CaCO ₃	12	0	12	0	4	16	12	32	0
BICARBONATES AS CaCO ₃	38	196	50	168	168	156	64	148	54
CHLORIDES AS Cl	10	36	10	14	18	22	12	102	186
HARDNESS AS CaCO ₃	58	66	76	58	60	58	74	46	106
IRON AS Fe	40.04	0.65	40.04	0.14	40.04	40.04	40.04	0.18	40.04
FLUORIDE	AM / PM 0.15 / 0.14	0.18	1.22 / 1.16	0.17	0.11	0.10	1.00 / 1.04	0.86	
CHLORINE RESIDUAL	0.9	1.3	1.0	1.2	1.1	1.0	0.9	1.3	1.0
TURBIDITY	AM / PM 0.24	0.31	0.22 / 0.26	0.17	0.18	0.8	0.16 / 0.19	0.40	
TOTAL PHOSPHATE		2.60			2.00				
ORTHO PHOSPHATE		1.46			0.38				
META PHOSPHATE		1.14			1.62				
STABILITY	+ 0.4	- 0.8	+ 0.4	- 0.9	- 0.6	- 0.2	+ 0.3	+ 0.1	- 0.5
REMARKS									

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
Lachapelle *WOLWhan*

DATE OF ANALYSIS
 16 Aug 83

000003949

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

Mr PRICE

POOLS
 Area #2 Area #5 TT Pool

DATE COLLECTED
 26 August 1983

PARAMETER	HADNOT POINT	MONTEFORD POINT	TARAWA TERRAGE	ONSLOW BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	6.91	7.77	7.88					
PENOLTHALEIN ALKALINITY	0	0	0					
METHYL ORANGE ALKALINITY	12	36	10					
CARBONATES AS CaCO ₃	0	0	0					
BICARBONATES AS CaCO ₃	12	36	10					
CHLORIDES AS Cl	76	22	292					
HARDNESS AS CaCO ₃	68	70	124					
IRON AS Fe								
FLUORIDE								
CHLORINE RESIDUAL (FREE)			2.1					
TURBIDITY								
TOTAL PHOSPHATE								
ORTHO PHOSPHATE								
META PHOSPHATE								
STABILITY			-0.41					

REMARKS
 COPY TO WATER TREATMENT + PML

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
Elizabeth P. Butler CLW

DATE OF ANALYSIS
 26 AUGUST 1983

000003950

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

MR. P. R. ...

DATE COLLECTED

8/30/83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	8.99	7.2	8.7	7.4	7.9	8.3	8.8	8.5
PENOLTHALEIN ALKALINITY	2	0	2	0	0	2	2	6
METHYL ORANGE ALKALINITY	40	172	50	142	160	142	60	160
CARBONATES AS CaCO ₃	4	0	4	0	0	4	4	12
BICARBONATES AS CaCO ₃	36	172	46	142	160	138	56	148
CHLORIDES AS Cl	10	30	10	20	18	20	10	90
HARDNESS AS CaCO ₃	40	70	80	62	80	52	60	50
IRON AS Fe	<0.04	0.50	0.07	0.10	<0.04	<0.04	<0.04	0.11
FLUORIDE	0.94 / 1.00	0.16	0.62 / 0.86	0.16	0.11	0.09	0.84 / 0.91	0.76
CHLORINE RESIDUAL	1.0	1.4	1.1	1.5	1.2	1.0	0.9	1.3
TURBIDITY	0.18	0.40	0.40 / 0.52	0.18	0.18	0.18	0.14 / 0.18	0.52
TOTAL PHOSPHATE		2.24			2.08			
ORTHO PHOSPHATE		1.00			0.41			
META PHOSPHATE		1.24			1.67			
STABILITY	+0.5	-0.9	+0.3	-0.7	-0.3	0.0	+0.4	0.0
REMARKS								

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

CLW

DATE OF ANALYSIS

8/30/83

000003951

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

DATE COLLECTED

6 Sep 1983

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	8.7	7.3	8.4	7.3	7.8	8.3	8.9	8.4	
PENOLTHALEIN ALKALINITY	4	0	6	0	2	6	6	6	
METHYL ORANGE ALKALINITY	64	194	76	160	176	154	66	160	
CARBONATES AS CaCO ₃	8	0	12	0	4	12	12	12	
BICARBONATES AS CaCO ₃	56	194	64	160	172	142	54	148	
CHLORIDES AS Cl	14	38	16	22	26	28	16	88	
HARDNESS AS CaCO ₃	92	86	124	80	56	92	136	90	
IRON AS Fe	20.04	0.49	20.04	20.04	20.04	20.04	20.04	0.07	
FLUORIDE	AM 1.13 PM 1.10	0.16	0.75 0.58	0.19	0.11	0.10	1.22 0.89	0.58	
CHLORINE RESIDUAL	1.0	1.4	1.1	1.2	1.1	1.0	1.3	1.5	
TURBIDITY	AM PM	0.14	0.52	0.20 0.18	0.16	0.15	0.17	0.18 0.16	0.30
TOTAL PHOSPHATE		2.60			1.09				
ORTHO PHOSPHATE		1.35			0.32				
META PHOSPHATE		1.25			0.77				
STABILITY	+0.2	-0.8	+0.1	-1.0	-0.5	-0.1	+0.4	0.0	
REMARKS									

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

R. [Signature] OLW

DATE OF ANALYSIS

6 Sep 1983

000003952

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

MR Price

DATE COLLECTED
20 Sep 1983

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	8.8	7.2	8.9	7.4	8.0	8.2	9.0	8.5
PENOLTHALEIN ALKALINITY	6	0	4	0	2	6	6	10
METHYL ORANGE ALKALINITY	60	190	46	172	180	158	56	192
CARBONATES AS CaCO ₃	12	0	8	0	4	12	12	20
BICARBONATES AS CaCO ₃	48	190	36	172	176	146	44	172
CHLORIDES AS Cl	14	46	12	22	20	24	10	144
HARDNESS AS CaCO ₃	64	64	68	68	68	46	60	62
IRON AS Fe	<0.04	0.50	0.06	0.06	<0.04	<0.04	<0.04	0.08
FLUORIDE	AM PM 0.95 0.95	0.18	0.84 0.60	0.20	0.11	0.10	0.81 0.81	0.84
CHLORINE RESIDUAL	1.0	1.1	1.0	1.2	1.0	1.0	1.0	1.3
TURBIDITY	AM PM 0.18	0.50	0.26 0.32	0.18	0.16	0.18	0.26 0.18	0.34
TOTAL PHOSPHATE		2.52			2.08			
ORTHO PHOSPHATE		1.17			0.25			
META PHOSPHATE		1.35			1.83			
STABILITY	+0.4	-0.8	+0.2	-0.7	-0.1	-0.1	+0.2	+0.1
REMARKS								

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

Lachapelle + Burns CLW

DATE OF ANALYSIS

20 Sep 1983

000003953

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

NR PRICE

DATE COLLECTED
 9/27/83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLOW BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	8.7	7.3	8.7	7.4	8.4	8.1	8.4	8.5
PENOLTHALEIN ALKALINITY	2	0	6	0	8	2	4	10
METHYL ORANGE ALKALINITY	66	188	62	158	172	148	96	198
CARBONATES AS CaCO ₃	4	0	12	0	16	4	8	20
BICARBONATES AS CaCO ₃	62	188	50	158	156	144	88	178
CHLORIDES AS Cl	6	34	10	16	18	24	8	100
HARDNESS AS CaCO ₃	74	56	84	74	68	48	100	62
IRON AS Fe	<0.04	0.44	<0.04	<0.04	<0.04	<0.04	<0.04	0.05
FLUORIDE	0.96 1.02	0.16	1.15 1.09	0.18	0.10	0.10	0.89 0.95	0.74
CHLORINE RESIDUAL	1.0	1.4	1.1	1.4	1.2	1.0	1.2	1.3
TURBIDITY	0.16	0.39	0.36 0.34	0.18	0.16	0.18	0.24 0.26	0.40
TOTAL PHOSPHATE		2.18			1.68			
ORTHO PHOSPHATE		1.10			0.22			
META PHOSPHATE		1.08			1.46			
STABILITY	+0.3	-0.8	+0.4	-0.7	+0.1	-0.3	+0.3	+0.1
REMARKS								

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

LACHAPELLE + NOVAKIAN CLW

DATE OF ANALYSIS

9/27/83

000003954

CHEMICAL ANALYSIS — WATER TREATMENT PLANTS

MCBCL 11330/3 (REV. 3-82)

MR. P. R. I. E. R.

DATE COLLECTED

9-28-83

PARAMETER	Bldg. 43		TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
	HADNOT POINT Rm. 16	MONTFORD POINT Rm. 25						
PH	8.8	8.8						
PENOLTHALEIN ALKALINITY	4	4						
METHYL ORANGE ALKALINITY	50	52						
CARBONATES AS CaCO ₃	8	8						
BICARBONATES AS CaCO ₃	42	44						
CHLORIDES AS Cl	12	14						
HARDNESS AS CaCO ₃	72	72						
IRON AS Fe	0.06	0.06						
FLUORIDE	0.62	0.62						
CHLORINE RESIDUAL	1.0	1.0						
TURBIDITY	0.98	1.00						
TOTAL PHOSPHATE								
ORTHO PHOSPHATE								
META PHOSPHATE								
STABILITY	+0.3	+0.3						

REMARKS

TT #2 School (complaint)

Coliform - Negative

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

Subramanian

DATE OF ANALYSIS

9-28-83

CLW

000003955

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

MR PRICE

DATE COLLECTED
 25 October 83

PARAMETER	HADNOT POINT	MONTFORD POINT	TARAWA TERRACE	ONSLow BEACH	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER	
PH	8.9	7.3	8.6	7.3	8.4	8.3	8.9	8.5	
PENOLTHALEIN ALKALINITY	6	0	8	0	6	6	6	10	
METHYL ORANGE ALKALINITY	50	192	68	160	170	158	62	154	
CARBONATES AS CaCO ₃	12	0	16	0	12	12	12	20	
BICARBONATES AS CaCO ₃	38	192	52	160	158	146	50	134	
CHLORIDES AS Cl	6	40	8	16	14	22	8	74	
HARDNESS AS CaCO ₃	56	78	86	64	58	52	62	66	
IRON AS Fe	<0.04	0.50	<0.04	0.10	<0.04	<0.04	<0.04	0.08	
FLUORIDE	1.02 1.06	0.19	0.72 0.56	0.19	0.11	0.11	1.04 0.99	0.56	
CHLORINE RESIDUAL	1.0	1.6	1.3	1.4	1.3	1.0	1.1	1.3	
TURBIDITY	0.18	0.44	0.23 0.44	0.20	0.18	0.17	0.18 0.18	0.24	
TOTAL PHOSPHATE		4.60			2.00				
ORTHO PHOSPHATE		2.26			.69				
META PHOSPHATE		2.34			1.31				
STABILITY	+0.3	-0.4	+0.3	-0.7	+0.1	+0.1	+0.3	+0.2	
REMARKS									

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
 LACHAPLLE, BURNS & VIGORAN

CLW

DATE OF ANALYSIS
 25 OCT 83

000003956

TEST WELLS

DATE COLLECTED
 7/10/84

PARAMETER	HADNOT POINT 2	MONTFORD POINT 3	TARAWA TERRACE 4	ONGLOW BEACH 5	COURTHOUSE BAY	RIFLE RANGE	HOLCOMB BLVD	NEW RIVER
PH	7.9	7.9	8.3	8.2				
PENOLTHALEIN ALKALINITY	0	0	0	0				
METHYL ORANGE ALKALINITY	140	184	120	90				
CARBONATES AS CaCO ₃	0	0	120	0				
BICARBONATES AS CaCO ₃	140	184	120	90				
CHLORIDES AS Cl	10	2	2	2				
HARDNESS AS CaCO ₃	150	156	54	94				
IRON AS Fe	4.20	5.00	1.64	2.60				
FLUORIDE	0.15	0.34	1.25	0.28				
CHLORINE RESIDUAL								
TURBIDITY	23.0	25.0	29.0	30.0				
TOTAL PHOSPHATE								
ORTHO PHOSPHATE								
META PHOSPHATE								
STABILITY								
REMARKS								

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

B. J. Burns

CLW

DATE OF ANALYSIS

7/10/84

0000003957

NORTH CAROLINA DEPARTMENT OF NATURAL AND ECONOMIC RESOURCES
 OFFICE OF WATER AND AIR RESOURCES
 GROUND WATER DIVISION
 P. O. BOX 27687 - RALEIGH, N. C. 27611

RECORD

WELL LOCATION: (Show a sketch of the location on back of form) _____

Nearest Town: _____

OWNER: Camp Lejerna _____

Address: _____

TOPOGRAPHY: draw, valley, slope, hilltop, flat _____

USE OF WELL: for base DATE: 8-21-84

DOES THIS WELL REPLACE AN EXISTING WELL? yes

TOTAL DEPTH: 210 RIG TYPE OR METHOD: pottery

FORMATION SAMPLES COLLECTED: YES No. of Bore: _____

CASING: _____

From 0 to 50 ft. 1 1/2" weight/ft. _____

From 0 to 115 ft. 2" _____

From 135 to 163 ft. 2" _____

From 175 to 190 ft. 2" _____

From 0 to 50 ft. concrete _____

SCREEN: Depth _____ Dia. _____ Type and Opening _____

From 115 to 135 ft. 2" _____

From 163 to 175 ft. 2" _____

From 190 to 200 ft. 2" _____

GRAVEL: Depth _____ Size _____ Material _____

From 0 to 210 ft. concrete _____

WATER ZONES (depth): as shown

STATIC WATER LEVEL: 21 1/2" ft. above top of casing.

Casing is 1 ft. above land surface. ELEV. _____

DATE MEASURED: 8-21-84

YIELD (gpm): 275 METHOD OF TESTING: purged

PUMPING WATER LEVEL: 75.11 ft. after 21 hours

at 275 gpm.

CHLORINATION: Type H.t.H. Amount 3 lbs

WATER QUALITY: _____ TEMPERATURE (°F) _____

PERMANENT PUMP: Show a sketch of well head on back of form)

Date installed _____ Type _____ Make _____

Capacity _____ (gpm) HP _____

Intake Depth _____ Air-line Depth 90'

HAVE YOU INFORMED THE WELL OWNER OF THE

DEPARTMENTS REQUIREMENTS AND RECOMMENDATIONS? _____

REMARKS: _____

I do hereby certify that this well record is true and exact.

WELL CONSTRUCTION PERMIT NO. _____
 County: Orange OR
 Ordinance No. Wall 632 1007

DEPTH		FORMATION DESCRIPTION
FROM	TO	
0	1	Top soil
1	8	Sandy clay
8	18	Yellow clay
18	44	Sand
44	60	Sand & clay
60	84	Clay
84	105	Shell rock, soft
105	143	Shell rock, hard
143	158	Clay
158	175	Shell rock, hard
175	186	Clay
186	200	Sand

Signature of Contractor or Agent _____ DATE _____

0000003958

CWM

NORTH CAROLINA DEPARTMENT OF NATURAL AND ECONOMIC RESOURCES

OFFICE OF WATER AND AIR RESOURCES

GROUND WATER DIVISION

P. O. BOX 27687 - RALEIGH, N. C. 27611

WELL RECORD

DRILLING CONTRACTOR Carolina Well & Pump Co.

REG. NO. 136

WELL CONSTRUCTION PERMIT NO.

1. WELL LOCATION: (Show a sketch of the location on back of form)
Nearest Town: Sneads Ferry Rd.

County: Onslow Old # new #

2. OWNER: Camp Lejeune
(Food, Community or Subdivision and Lot No.)

Quadrangle No. 626 628

3. ADDRESS:

DRILLING LOG

4. TOPOGRAPHY: drow, valley, slope, hilltop, flat

DEPTH		FORMATION DESCRIPTION
FROM	TO	
0	1	Top soil
1	9	Sandy clay
9	18	yellow clay
18	54	Sandy clay
54	70	Sand, fine
70	82	Clay
82	90	Rock
90	112	Clay with streak of shell
112	122	Rock, med.
122	130	Clay
130	145	Rock
145	201	Clay & sand

5. USE OF WELL: for Base DATE: 10-2-84

6. DOES THIS WELL REPLACE AN EXISTING WELL? yes

7. TOTAL DEPTH: 200 RIG TYPE OR METHOD: Rotary

8. FORMATION SAMPLES COLLECTED: YES No. of Bores

9. CASING: Inside Well thick. Wool thick.

From 0 to 50 ft. 8" 3/8" steel
 0 to 60 ft. 8" 3/8" galv.
 70 to 85 ft. 8" 3/8" galv.
 89 to 110 ft. 8" 3/8" galv.
 120 to 135 ft. 5" 3/8" Method galv. pumped

11. SCREEN: Depth 60 to 70 ft. 8" S.S. 20 slot
 85 to 89 ft. 8" S.S. 20 slot
 110 to 120 ft. 8" S.S. 20 slot
 135 to 145 ft. 8" S.S. Material 20 slot
 From 0 to 200 ft. course sand

13. WATER ZONES(depth): as shown

14. STATIC WATER LEVEL: 11 ft. above top of casing.
 casing is 1 ft. above land surface. ELEV. _____
 DATE MEASURED: 10-2-84

15. YIELD(gpm): 160 METHOD OF TESTING: pumped
 PUMPING WATER LEVEL: 5717 ft after 24 hours
 at 160 gpm.

17. CHLORINATION: Type H. t. H. Amount 3 lbs.

18. WATER QUALITY: TEMPERATURE(°F) _____

19. PERMANENT PUMP: Show a sketch of well head on back of form)
 Date installed _____ Type _____ Make _____
 Capacity _____ (gpm) HP _____

Inlets Depth _____ Airline Depth 70'

20. HAVE YOU INFORMED THE WELL OWNER OF THE DEPARTMENTS REQUIREMENTS AND RECOMMENDATIONS? _____

21. REMARKS: _____

I do hereby certify that this well record is true and exact.

SIGNATURE OF CONTRACTOR OR AGENT DATE

CLW

0000003959

MCB CAMP LEJEUNE MONITORING

I. BACKGROUND: In response to ESE test results on Well 602:

A. Week of 3 Dec 1984: Tested the seven wells (in the area) and the Water Plant (untreated/treated)

B. Week of 10 Dec 1984: Resampled the seven wells and the Water Plant (treated), and started daily sampling of the Water Plant (untreated) for one week with the far end of the distribution (i.e., French Creek) also to be sampled (only) on the seventh day (to determine if distribution system clear). In addition, for Quality Control, a 3-way sample split will be performed on Well 602 between three laboratories; ESE, JTC and also Grangier (via the Reed Contract).

II. PROPOSED INTERIM MONITORING:

A. Sample the other seven Water Plants (treated, preferably after reservoirs) for VOA only (to determine if the problem is limited to Hadnot Point). Estimate: 1 day to collect.

B. Sample all of the about 100 wells (excluding the seven wells above) for VOA to determine if problem is limited to the three wells. Estimate: 10 wells per day, i.e., 10 normal workdays (2 weeks) to collect, starting with the remaining wells in Hadnot Point, then Holcomb Boulevard.

III. COSTS (LANTNAVFACENCOM FUNDING):

A. Initial 9 samples: 8 X \$200 (routine) + \$600 (2 day) = \$2.2K

B. Next 18 samples: 16 X \$600 (2 day) + 3 X Say \$300 (15 day) =
Say \$10.5K
Subtotal: Say \$12.7K

C. First 7 proposed samples: 7 X \$600 (2 day) = \$4.2K

D. Remaining 100 proposed samples: 100 X \$300 (15 day) = \$30K
Total: \$46.9K Say \$47K

IV. CONTINGENCY PLANS:

LANTNAVFACENCOM is evaluating alternatives to respond to the test results to insure a safe drinking water supply.

V. ADDITIONAL ESE WORK:

ESE to be tasked to define scope of problem/solution, in addition to sampling all the wells for all SDWA/priority pollutant parameters (to determine if there are addition problems. Costs (LANTNAVFACENCOM funding): \$20-30K.

CLW

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