



EM Johnson WTP Monthly Finished Water Quality Report December 2021

Parameter	Plant Tap	Primary MCL **	Secondary MCL **
Temperature, °C	13.1		
Color, units	1.0		15
pH, units	8.4		6.5 - 8.5
Free Carbon Dioxide, mg/l	0.26		
Total Alkalinity, mg/l as CaCO ₃	33.8		
Total Hardness, mg/l as CaCO ₃	21.4		
Total Dissolved Solids, mg/l	102		500
Specific Conductivity, uS/cm	208		
Iron, mg/l	<0.10		0.3
Manganese, mg/l	<0.01		0.05
Fluoride, mg/l	0.67	4	2
Chloride, mg/l	13.2		250
Ammonia, mg/l as N	0.55		
Nitrate, mg/l as N	0.14	10	
Silica, mg/l as SiO ₃	3.69		
Total Coliform Bacteria*	Absent	0	
E. Coli	Absent	0	
Total Trihalomethanes, mg/l	0.0119	0.080	

* In 95% of samples collected

**MCL = Maximum Contaminant Level

Certified By: Vannessa Barnes

Vannessa Barnes, Laboratory Scientist Supervisor

NC Lab ID Number 37604

*Raleigh Water: Serving the people of Garner, Knightdale, Raleigh, Rolesville,
Wake Forest, Wendell, and Zebulon areas.*

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EM Johnson WTP Finished Water Quality Report 2021 Plant Tap Summary

Parameter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
Temperature, °C	9.1	10.2	12.1	16.7	20.8	24.7	27.1	29.7	27.6	23.5	17.5	13.1	19.3
Color, units	0.5	0.8	0.8	0	1.5	1.4	0	0.2	0.3	0.3	0.0	1.0	0.6
pH, units	8.5	8.5	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.5	8.4	8.4
Free Carbon Dioxide, mg/l	0.14	0.14	0.15	0.16	0.18	0.21	0.23	0.21	0.25	0.28	0.24	0.26	0.20
Total Alkalinity, mg/l as CaCO ₃	20.9	19.9	20.7	21.1	23.7	26.6	28.6	29.6	31.6	35.9	34.8	33.8	27.3
Total Hardness, mg/l as CaCO ₃	21	22	19.8	21.4	24.2	25.7	25.8	26.6	27.4	20.4	19.6	21.4	22.9
Total Dissolved Solids, mg/l	123	127	92	89	89	94	97	99	105	108	101	102	102
Specific Conductivity, uS/cm	186	191	187	181	187	192	198	203	215	220	206	208	198
Iron, mg/l	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Manganese, mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Fluoride, mg/l	0.57	0.67	0.68	0.68	0.70	0.75	0.68	0.64	0.67	0.78	0.74	0.67	0.69
Chloride, mg/l	10.2	9.0	8.7	7.9	10.5	10.9	12.1	9.87	11.8	12.5	13.5	13.2	10.8
Ammonia, mg/l as N	0.56	0.58	***	0.47	0.51	0.64	0.59	0.57	0.53	0.52	0.53	0.55	0.6
Nitrate, mg/l as N	0.24	0.29	0.29	0.11	0.08	0.06	0.07	0.06	0.03	0.05	0.10	0.14	0.13
Silica, mg/l as SiO ₃	8.60	8.4	8.60	8.00	7.10	6.7	6.50	4.7	2.10	1.80	2.40	3.69	5.72
Total Coliform Bacteria	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
E. Coli	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
Total Trihalomethanes, mg/l	0.0046	0.0048	0.0049	0.0119	0.0115	0.0144	0.0174	0.0213	0.0200	0.0147	0.0116	0.0119	0.0124

***Chlorine Burnout, no ammonia added

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