

**Location:** Sutton Plant on Cape Fear River

**Date:** 9/27/2018, DWR Total Metals Samples

Sample Fraction	Parameter	Units	Fresh WQS	SUTTON_UP	SUTTON_LK_BREACH	SUTTON_DOWN
Total	Hardness (calculated)	mg/L	NA	15	12	15
Total	Silver (Ag)	µg/L	NA	1.0 U	1.0 U	1.0 U
Total	Aluminum (Al)	µg/L	NA	730	600	850
Total	Antimony (Sb)	µg/L	NA	10 U	10 U	10 U
Total	Arsenic (As)	µg/L	10	2.0 U	2.3	2.0 U
Total	Boron (B)	µg/L	NA	50 U	50 U	50 U
Total	Barium (Ba)	µg/L	NA	28	19	27
Total	Beryllium (Be)	µg/L	NA	5.0 U	5.0 U	5.0 U
Total	Cadmium (Cd)	µg/L	NA	0.50 U	0.50 U	0.50 U
Total	Cobalt (Co)	µg/L	NA	50 U	50 U	50 U
Total	Chromium (Cr)	µg/L	NA	5.0 U	5.0 U	5.0 U
Total	Copper (Cu)	µg/L	NA	2.4	2.4	2.6
Total	Iron (Fe)	µg/L	NA	1600	1100	1700
Total	Potassium (K)	mg/L	NA	3.7	4.1	3.8
Total	Manganese (Mn)	µg/L	NA	330	110	290
Total	Molybdenum (Mo)	µg/L	NA	10 U	10 U	10 U
Total	Sodium (Na)	mg/L	NA	2.7	2.1	2.8
Total	Nickel (Ni)	µg/L	NA	2.0 U	2.0 U	2.0 U
Total	Lead (Pb)	µg/L	NA	2.0 U	2.0 U	2.0 U
Total	Selenium (Se)	µg/L	5	1.0 U	1.0 U	1.0 U
Total	Strontium (Sr)	µg/L	NA	21	18	21
Total	Thallium (Tl)	µg/L	NA	2.0 U	2.0 U	2.0 U
Total	Titanium (Ti)	µg/L	NA	10 U	10 U	12
Total	Vanadium (V)	µg/L	NA	10 U	10 U	10 U
Total	Zinc (Zn)	µg/L	NA	10 U	10 U	10 U

- Results below DWR laboratory detection limits (non-detects) are shown with the analytical practical quantitation limit (PQL) and a U qualifier.
- Water Quality Standards (WQS) provided for screening purposes, as some WQS require multiple metals sampling events to fully evaluate compliance.
- All sampling locations are classified as fresh water.

**Location:** Sutton Plant on Cape Fear River

**Date:** 9/27/2018, DWR Dissolved Metals Samples

Sample Fraction	Parameter	Units	Acute WQS (hardness=12)	Acute WQS (hardness=15)	Chronic WQS (hardness=12)	Chronic WQS (hardness=15)	SUTTON_UP Rep-1	SUTTON_UP Rep-2	SUTTON_LK_BREACH Rep-1	SUTTON_LK_BREACH Rep-2	SUTTON_DOWN Rep-1	SUTTON_DOWN Rep-2
Dissolved	Silver (Ag)	µg/L	0.08	0.12	0.06	0.06	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dissolved	Aluminum (Al)	µg/L	NA	NA	NA	NA	320	470	310	300	310	510
Dissolved	Antimony (Sb)	µg/L	NA	NA	NA	NA	10 U	10 U	10 U	10 U	10 U	10 U
Dissolved	Arsenic (As)	µg/L	340	340	150	150	2.0 U	2.0 U	2.1	2.0 U	2.0 U	2.0 U
Dissolved	Boron (B)	µg/L	NA	NA	NA	NA	50 U	50 U	50 U	50 U	50 U	50 U
Dissolved	Barium (Ba)	µg/L	NA	NA	NA	NA	24	25	17	16	23	25
Dissolved	Beryllium (Be)	µg/L	65	65	6.5	6.5	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dissolved	Cadmium (Cd)	µg/L	0.43	0.52	0.10	0.10	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dissolved	Cobalt (Co)	µg/L	NA	NA	NA	NA	50 U	50 U	50 U	50 U	50 U	50 U
Dissolved	Chromium (Cr)	µg/L	16	16	11	11	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dissolved	Copper (Cu)	µg/L	1.8	2.2	1.5	1.8	2.0 U	2.0	2.3	2.2	2.0 U	2.0 U
Dissolved	Iron (Fe)	µg/L	NA	NA	NA	NA	1000	1300	620	430	820	1100
Dissolved	Potassium (K)	mg/L	NA	NA	NA	NA	3.7	3.6	3.9	3.8	3.8	3.8
Dissolved	Manganese (Mn)	µg/L	NA	NA	NA	NA	300	320	99	94	270	290
Dissolved	Molybdenum (Mo)	µg/L	NA	NA	NA	NA	10 U	10 U	10 U	10 U	10 U	10 U
Dissolved	Sodium (Na)	mg/L	NA	NA	NA	NA	2.7	2.7	2.0	2.0	2.7	2.8
Dissolved	Nickel (Ni)	µg/L	78	94	8.7	10.4	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Dissolved	Lead (Pb)	µg/L	6.0	7.8	0.2	0.3	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Dissolved	Selenium (Se)	µg/L	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dissolved	Strontium (Sr)	µg/L	NA	NA	NA	NA	21	21	17	17	20	21
Dissolved	Thallium (Tl)	µg/L	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Dissolved	Titanium (Ti)	µg/L	NA	NA	NA	NA	10 U	10 U	10 U	10 U	10 U	10 U
Dissolved	Vanadium (V)	µg/L	NA	NA	NA	NA	10 U	10 U	10 U	10 U	10 U	10 U
Dissolved	Zinc (Zn)	µg/L	19	23	20	24	10 U	10 U	10 U	10 U	10 U	10 U

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- Water Quality Standards (WQS) provided for screening purposes, as some WQS require multiple metals sampling events to fully evaluate compliance.
- Some metals WQS vary based on water hardness. See total metals results table for hardness values at each sampling location.
- Chromium results represent dissolved total chromium. WQS shown are for hexavalent chromium VI. Future monitoring events will include analysis of both dissolved total Cr and Cr VI.