



## **Plant Mitchell** Monthly Dewatering Results<sup>1</sup>

February 2024

D	Units	Efflu	ent Concent	ration	Permit Limits			
Parameter		Daily Min <sup>2</sup>	Daily Avg <sup>2</sup>	Daily Max <sup>2</sup>	Daily Min	Daily Avg	Daily Max	
Flow	MGD	0.00	0.21	0.27	***	***	***	
pН	SU	6.7	***	7.7	6.0	***	9.0	
Total Suspended Solids	mg/L	$ND^3$	ND	ND	***	30.0	100.0	
Oil and Grease	mg/L	ND	ND	ND	***	15.0	20.0	

Parameter	Units	Week 1	Week 2	Week 3	Week 4	Week 5	Daily	
		2/1/2024	2/8/2024	2/15/2024	2/22/2024	2/29/2024	Average	
Turbidity <sup>4</sup>	NTU	1.8	1.2	0.7	0.7	1.0	1.1	
Total Residual Chlorine <sup>4</sup>	mg/L	ND	ND	ND	ND	ND	ND	
Total Dissolved Solids	mg/L	66	134	123	119	135	115	
Ammonia	mg/L	ND	ND	ND	ND	ND	ND	
Total Kjeldahl Nitrogen	mg/L	ND	ND	ND	ND	ND	ND	
Nitrate-Nitrite	mg/L	ND	ND	ND	ND	ND	ND	
Organic Nitrogen	mg/L	ND	ND	ND	ND	ND	ND	
Phosphorus	mg/L	ND	ND	ND	ND	ND	ND	
Ortho-Phosphorus	mg/L	ND	ND	ND	ND	ND	ND	
Biological Oxygen Demand	mg/L	ND	ND	ND	ND	ND	ND	
Hardness	mg/L	62	58	56	58	63	59	

		Effluent Concentration⁵					Calculated Receiving Water Concentration⁵					Water Quality Criteria <sup>6</sup>		
Parameter Units	Units	Week 1	Week 2	Week 3	Week 4	Week 5	Week 1	Week 2	Week 3	Week 4	Week 5			
		2/1/2024	2/8/2024	2/15/2024	2/22/2024	2/29/2024	2/1/2024	2/8/2024	2/15/2024	2/22/2024	2/29/2024	Average	Acute <sup>7</sup>	Chronic <sup>7</sup>
Antimony	μg/L	ND	ND	ND	ND	ND	***	***	***	***	***	***	***	640
Arsenic	μg/L	ND	ND	ND	ND	ND	***	***	***	***	***	***	340	150
Cadmium	μg/L	ND	ND	ND	ND	ND	***	***	***	***	***	***	0.94	0.43
Chromium8	μg/L	ND	ND	ND	ND	ND	***	***	***	***	***	***	16	11
Copper	μg/L	ND	ND	ND	ND	ND	***	***	***	***	***	***	7	5
Lead	μg/L	ND	ND	ND	ND	ND	***	***	***	***	***	***	30	1.2
Nickel	μg/L	5.2	ND	10.6	7.8	6.2	0.0028	***	0.0056	0.0041	0.0033	0.0032	260	29
Selenium <sup>9</sup>	μg/L	4.2	3.4	4.1	4.4	5.0	0.0022	0.0018	0.0022	0.0023	0.0027	0.0022	***	5
Thallium	μg/L	ND	ND	1.1	1.0	1.1	***	***	0.0006	0.0005	0.0006	0.0003	***	0.47
Zinc	μg/L	ND	ND	ND	ND	ND	***	***	***	***	***	***	65	65
Mercury	ng/L	1.0	ND	ND	0.7	0.7	0.0005	***	***	0.0003	0.0004	0.0003	1400	12

- Tetra Tech verifies the correct laboratory analysis methods were used, any applicable permit limits have been met and other results are protective of Georgia EPD's water quality standards.

  Daily Min and Daily Max are the lowest and highest values for any day in the month. Daily Avg is the arithmetic average of all daily values during the entire month.

  1 Turbidity and total residual chlorine are monitored continuously. The value reported is the weekly maximum and the daily average is the average of the weekly maximum values reported.

  5 Calculated Receiving Water Concentration shows the effluent concentration at the discharge once it has fully mixed in the receiving waterbody. This value is calculated as a dissolved concentration for an appropriate comparison to the numeric water quality criteria, which are also in the dissolved form. Consistent with Georgia EPD's non-detectable effluent concentrations are not translated Receiving Water Concentrations.

  Numeric Water Quality Criteria is the maximum concentration of a parameter (calculated at a default hardness of 50 mg/L as calcium carbonate) established for the receiving waterbody that will be protective of the designated use per Georgia EPD's rules and regulations. Calculated Receiving Water Concentrations less than these criteria are protective of the waterbody.

  Numeric water quality criterion to be compared with the weekly calculated receiving water concentration.

  Numeric water quality criterion shown is for Hexavalent Chronium.

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  The numeric water quality criterion shown is the chronic (long-term) water quality criterion shown is the chronic (long-term) water parts per trillion; SU = Standard Units; MGD = Million Gallons Day





## Monthly Instream Results<sup>1</sup>



Prepared by:

## February 2024

		Flint River <sup>2</sup>							
Parameter <sup>3</sup>	Units	2/1/2024 Upstream	2/1/2024 Downstream	2/8/2024 Upstream	2/8/2024 Downstream				
рН	SU	6.9	7.0	7.0	7.0				
TSS	mg/L	8.0	7.2	7.6	6.4				
O&G	mg/L	ND <sup>4</sup>	ND	ND	ND				
TRC	mg/L	0.11	0.12	0.18	0.18				
Turbidity	NTU	23.4	24.0	30.3	31.8				
TDS	mg/L	62	117	318	134				
BOD	mg/L	ND	ND	ND	ND				
Antimony	μg/L	ND	ND	ND	ND				
Arsenic	μg/L	ND	ND	ND	ND				
Cadmium	μg/L	ND	ND	ND	ND				
Chromium	μg/L	ND	ND	ND	ND				
Copper	μg/L	ND	ND	ND	ND				
Lead	μg/L	ND	ND	ND	ND				
Mercury	ng/L	3.6	3.2	3.5	3.3				
Nickel	μg/L	ND	ND	ND	ND				
Selenium	μg/L	ND	ND	ND	ND				
Thallium	μg/L	ND	ND	ND	ND				
Zinc	μg/L	ND	ND	ND	ND				
Ammonia	mg/L	ND	ND	ND	ND				
TKN	mg/L	ND	ND	ND	ND				
Nitrate-Nitrite	mg/L	0.52	0.53	0.38	0.38				
Organic Nitrogen	mg/L	ND	ND	ND	ND				
Phosphorus	mg/L	ND	ND	0.06	0.05				
Ortho-phosphorus	mg/L	ND	ND	ND	ND				
Hardness	mg/L	21	22	24	24				

- 1 Tetra Tech verifies the correct laboratory analysis methods were used.
- 2 Flint River measured 500 ft upstream and 500 ft downstream from the final discharge at Outfall 01B.
- 3 Metals results are total recoverable.
- 4 ND = Non-detect

mg/L = milligrams per liter = parts per million;  $\mu g/L = micrograms$  per liter = parts per billion; ng/L = micrograms per liter = parts per trillion; SU = Standard Units; MGD = Million Gallons Day