



## **Plant Branch** Monthly Dewatering Results<sup>1</sup> January 2025

	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	0.94	1.03	***	***	***	
pН	SU	6.6	***	8.2	6.0	***	9.0	
Total Suspended Solids	mg/L	ND <sup>3</sup>	ND	ND	***	30.0	100.0	
Oil and Grease	mg/L	ND	ND	ND	***	15.0	20.0	

			=======================================	ncentration		
Parameter	Units		Daily			
raiametei		Week 1	Week 2	Week 3	Week 4	Average
		1/8/2025	1/15/2025	No Discharge	1/29/2025	
Turbidity <sup>4</sup>	NTU	0.1	0.1		0.1	0.1
Total Residual Chlorine <sup>4</sup>	mg/L	ND	ND		ND	ND
Total Dissolved Solids	mg/L	49	43		182	91
Ammonia	mg/L	ND	ND		ND	ND
Total Kjeldahl Nitrogen	mg/L	ND	ND		ND	ND
Nitrate-Nitrite	mg/L	ND	ND		ND	ND
Organic Nitrogen	mg/L	ND	ND		ND	ND
Phosphorus	mg/L	ND	ND		ND	ND
Ortho-Phosphorus	mg/L	ND	ND		ND	ND
Biological Oxygen Demand	mg/L	ND	ND		ND	ND
Hardness	mg/L	11	13		14	13

Barrantan			Effluent Co	ncentration <sup>5</sup>		Calculated Receiving Water Concentration <sup>5</sup>					Water Quality Criteria <sup>6</sup>	
Parameter	Units	Week 1	Week 2	Week 3	Week 4	Week 1	Week 2	Week 3	Week 4	Average	Acute <sup>7</sup>	Chronic <sup>7</sup>
		1/8/2025	1/15/2025	No Discharge	1/29/2025	1/8/2025	1/15/2025	No Discharge	1/29/2025	ŭ		
Antimony <sup>9</sup>	μg/L	ND	ND		ND	***	***		***	***	***	640
Arsenic	μg/L	ND	ND		ND	***	***		***	***	340	150
Cadmium	μg/L	ND	ND		ND	***	***		***	***	0.94	0.43
Chromium <sup>8</sup>	μg/L	ND	ND		ND	***	***		***	***	16	11
Copper	μg/L	ND	ND		ND	***	***		***	***	7	5
Lead	μg/L	ND	ND		ND	***	***		***	***	30	1.2
Nickel	μg/L	ND	ND		ND	***	***		***	***	260	29
Selenium <sup>9</sup>	μg/L	ND	ND		2.6	***	***		0.3514	0.1171	***	5
Thallium <sup>9</sup>	μg/L	ND	ND		ND	***	***		***	***	***	0.47
Zinc	μg/L	ND	ND		ND	***	***		***	***	65	65
Mercury	ng/L	2.1	1.2		0.7	0.2811	0.1608		0.0986	0.1802	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 Auj is the arithmetic average of all daily values during the entire month.

  ND = Not Detected below the lab's reporting limit).

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

  Calculated Receiving Water Concentration Show the effluent concentration at the discharge once it has fully mixed in the receiving waterbooty. 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, non-detectable effluent concentrations are not translated into Calculated 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.

  Acute (short-term) water quality criterion to be compared with the weekly calculated receiving water concentration.

  Numeric water quality criterion shown is for Hexaelent Chromium.

  The numeric water quality criterion shown are the chronic (long-term) water quality criterion to hexaelent Chromium.

  The numeric water quality criteria shown are the chronic (long-term) water quality criteria on the water quality criterion.

  = Not Applicable

- = Not Applicable
  - mg/L = milligrams per liter = parts per million; µg/L = micrograms per liter = parts per billion; ng/L = nanograms per liter = parts per trillion; SU = Standard Units; MGD = Million Gallons Day



## **Plant Branch**

Prepared by:



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

## January 2025

		Lake Sinclair <sup>2</sup>							
Parameter <sup>3</sup>	Units	1/15/2025	1/15/2025	1/29/2025	1/29/2025				
		Upstream	Downstream	Upstream	Downstream				
рН	SU	7.4	7.5	7.1	7.1				
TSS	mg/L	$ND^4$	ND	6.4	ND				
O&G	mg/L	ND	ND	ND	ND				
TRC	mg/L	***	***	***	***				
Turbidity	NTU	14.6	3.0	8.8	3.5				
TDS	mg/L	83	82	68	73				
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	1.0	ND	ND	ND				
Copper	μg/L	ND	ND	ND	ND				
Lead	μg/L	ND	ND	ND	ND				
Mercury	ng/L	3.4	1.6	2.9	2.5				
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	18.5	ND				
Ammonia	mg/L	ND	ND	ND	ND				
TKN	mg/L	ND	ND	ND	ND				
Nitrate-Nitrite	mg/L	0.28	0.09	0.24	0.08				
Organic Nitrogen	mg/L	ND	ND	ND	ND				
Phosphorus	mg/L	ND	ND	ND	ND				
Ortho-phosphorus	mg/L	ND	ND	ND	ND				
Hardness	mg/L	21	20	23	22				

- 1 Tetra Tech verifies the correct laboratory analysis methods were used.
- 2 Lake Sinclair measured upstream near lat 33.196636 and long -83.295389, and downstream near lat 33.180392 and long -83.322964.
- 3 Metals results are total recoverable.
- 4 ND = Non-detect.
- \*\*\* = Not Applicable.

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