

CHEMICAL COMPOSITION AND PHYSICS OF WATER IN RÉUNION ISLAND

I) CHEMICALII) PHYSICS



QUESTION : WHAT IS THE CHEMICAL QUALITY OF THE GRAND BASIN, ST ETIENNE RIVER AND

GOL POUND? (TO THE SOURCE TO THE SEA)

Nitrate (NO_3) ? Nitrite (NO_2) ? Ammonium (NH_4) ? Calcium? phosphate(PO₄)?



RESULTS	Crand E	Sassin, La Pjaine des Catres, Reunion	Pe Gol Etang, Sadges Hauts Etang Sadges Hauts Cetang Sade Chang Sade Sami Louis Riviere St-Ettenne, Réunio			Les Avirons Etang:Salèdes Hauts Etang:Salèdes Hauts Etang-Salè les Bains Réserve naturelle Etang du Col		0
Products	Grand Bassin		St Étienne			Gol pound		<u>European</u> <u>standards</u>
	Near to the edge, calm	Where there is current	Little calm waterway	Main calm river(near to the plants)	Main river where there is current	Near the ocean	In the middle	
Nitrate (NO ₃) in mg/L	0-1	0,5-1	Between 0 and 10	0-10	0	25	0-10	< 100mg/L
Nitrite (NO ₂) in mg/L	> 0,3	>0,3	0	0	0	0	0	<100mg/L
Ammonium (NH ₄) in mg/L	>0,05	>0,05	1,5	0	0	1,5	0	<0,5mg/L
Hardness (calcium) in [°] dh	0-1	0-1	0-1	0-1	0-1	0-1	0-1	
Phosphate (PO ₄) in mg/L	>0,02	0,02- 0,05	0.05-0.1	0.05-0.1	0.05-0.1	0.05-0.1	0.05-0.1	<0,5 mg/L



In two places the rate of ammonium is higher, the process of degradation of the organic matter is incomplete, because of water stagnation, and cause proliferation of the green algaes.

CONCLUSION:

In Reunion Island water is on the European standards, it's not polluted and the rivers have a good chemical qualities.



(THE ST ETIENNE RIVER , GOL POUND AND GRAND BASIN)







RESULTS	
0	Brit Etang (Salé Jes Hauts Brand Bassin, La Plane des Catres Reunon Etang (Salé Jes Hauts) 1 Salé les Bains Etang (Salé Jes Hauts)



	Grand Bassin	St Étienne	Gol pound				
			River mouth	upstream	Under the hyacinths		
Oxygen rate	X	95,33 %	15,7mg/L 180 %	7.10mg/L 93 %	7.65mg/L 101.8 %		
Temperature	18,9°C	21 , 8°C	30°	30°	30°		
Conductivity	50 µs/cm	71µs/cm	2370µs/cm	2300µs/cm	3006µs/cm		
рН	6,8	7	7,7	8,34	8,40		



CONCLUSION:

These measures help being aware of the quality of the water.

Thanks to these measures, we notice that the water of Reunion Island is soft (except near to the ocean) and have a neutral pH.

Reunion Island have a really good water except near the ocean.