

Perchlorate removal from water by TC-75

Table 11. Sorbent mass, porosity, flow rate, and residence time information for the TC-75 sorbent column experiment.

Sorbent	Mass Sorbent		Porosity	Flow Rate		Residence (min)
	(kg)	(lb)		(mL/min)	(gal/hr)	
TC-75	0.389	0.86	0.33	5.6	0.09	20

Table 12. 95% breakthrough for TC-75 sorbent materials given in pore volumes (PV), bed volume (BV) and minutes along with estimated mass of perchlorate sorbed per mass of sorbent in mg/kg, lb/lb, and percent basis.

Sorbent	Breakthrough			Mass sorbed		Mass Sorbed/Mass Sorbent		
	PV	BV	min	(mg)	(lb)	(mg/kg)	(lb/lb)	(% by sorbent)
TC-75	10	3.3	200	259	0.0006	666	0.00067	0.067

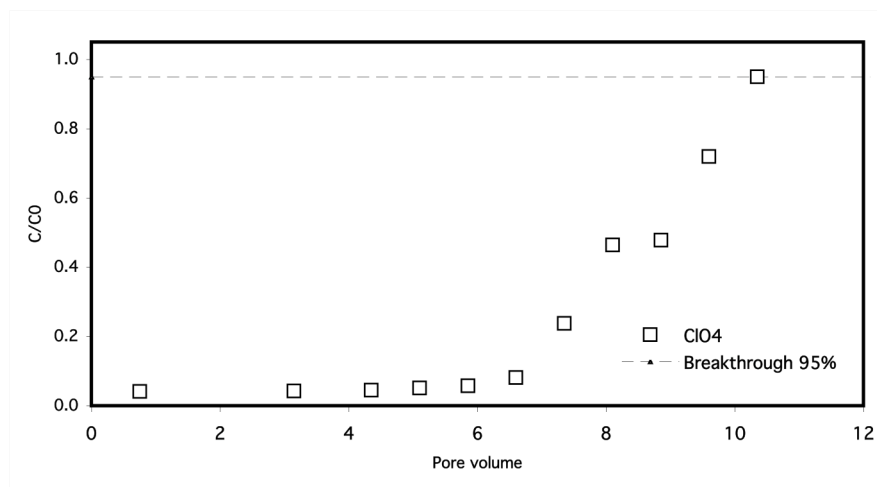


Figure 11. Breakthrough curve (in terms of pore volume) of perchlorate through a column of TC-75.

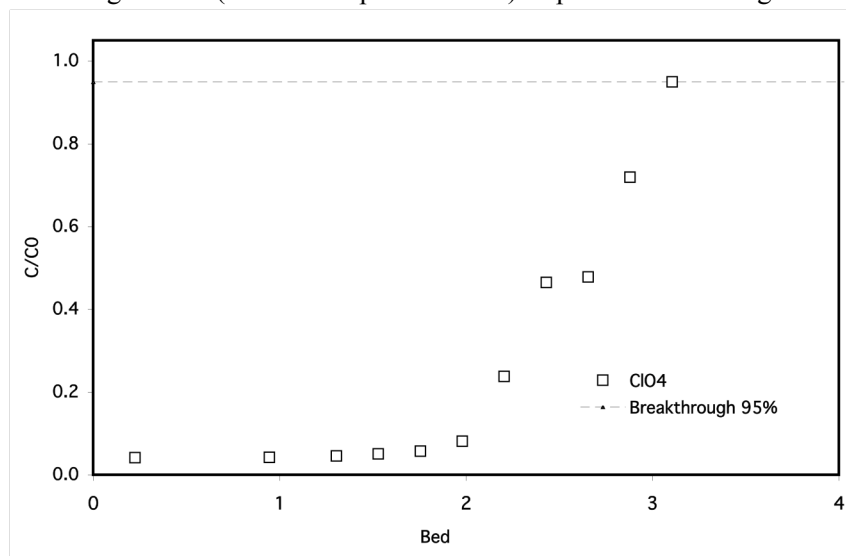


Figure 12. Breakthrough curve (in terms of bed volume) of perchlorate through a column of TC-75