

Arsenate removal from water by TC-75

Table 9. Sorbent mass, porosity, flow rate, and residence time information for the arsenate TC-75 sorbent experiment.

Sorbent	Mass Sorbent		Porosity	Flow Rate		Residence
	(kg)	(lb)		(mL/min)	(gal/hr)	
TC-75	0.396	0.87	0.33	5.6	0.09	20

Table 10. 95% breakthrough for TC-75 sorbent materials given in pore volumes (PV), bed volume (BV) and minutes along with estimated mass of arsenate 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 arsenate	27	8.9	540	715	0.0016	1806	0.00181	0.181

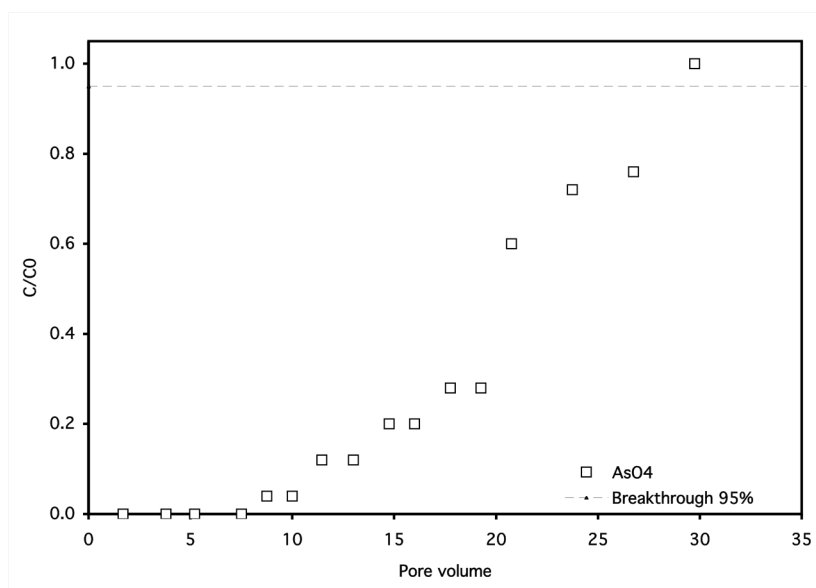


Figure 9. Breakthrough curve (in terms of pore volume) of arsenate through a column of TC-75.

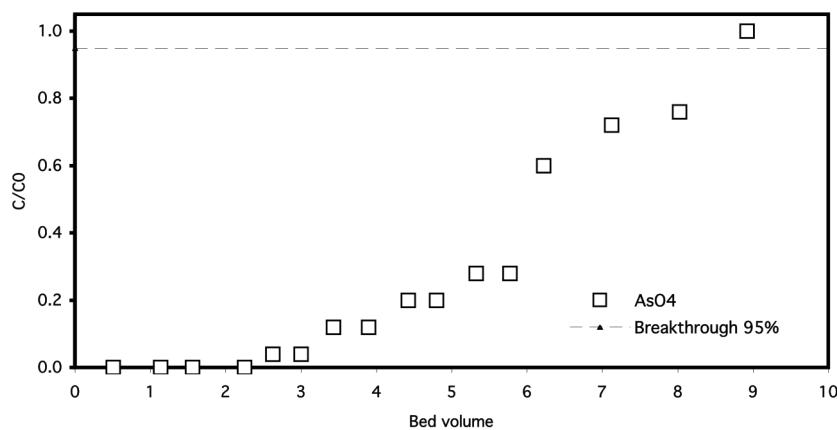


Figure 10. Breakthrough curve (in terms of bed volume) of arsenate through a column of TC-75.