

Supplementary Data

**Cotransport of clay colloids and viruses through water-saturated
vertically oriented columns packed with
glass beads: Gravity effects**

by

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Transport experiments in the absence of clay

The normalized Φ X174 and MS2 flowthrough experimental data from the experiments conducted in the absence of clay are presented in Figure S1. The calculated mass recovery values are listed in Table S1. The M_r values indicated that there was very little virus retention in the packed columns, and suggested that there was slightly more mass retained in the columns under vertical up than vertical down flow directions.

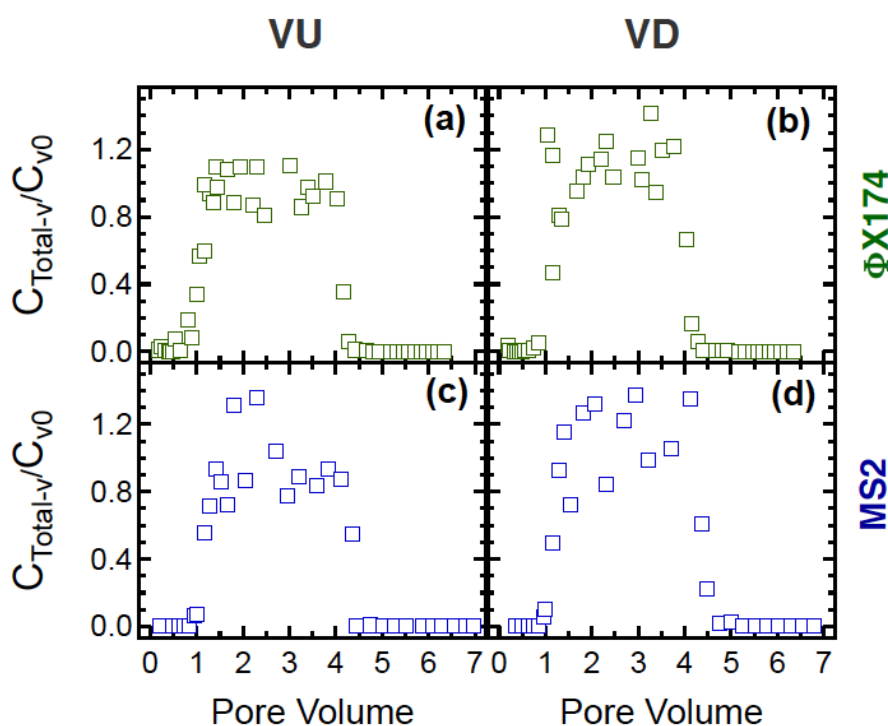


Figure S1. Experimental data of (a-b) Φ X174 and (c-d) MS2 breakthrough in columns packed with glass beads with (a,c) vertical up-flow, (b,d) vertical down flow directional flow conditions. Here, VU-vertical up flow, VD-vertical down flow. Error bars are not shown because they are smaller than the size of the symbol.

Table S1. Experimental conditions and estimated mass recoveries

Exp. No	C_{v0} (pfu/mL)	Flow	M_r (%)	$M_{1(i)}/M_{1(t)}$
ΦX174				
1	5300	VU	100	0.98
2	3817	VD	100	0.97
MS2				
3	6450	VU	98.8	1.01
4	4842	VD	100	1.06