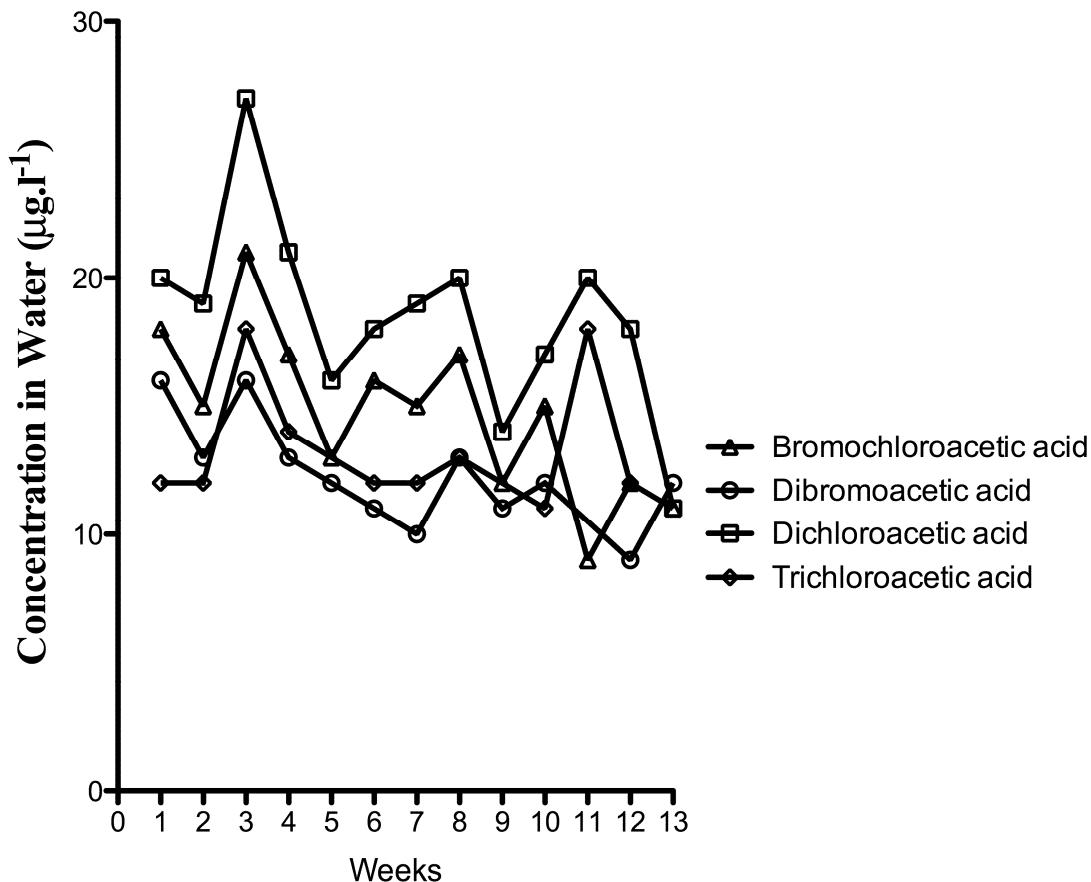


**Electronic Supplementary Information**

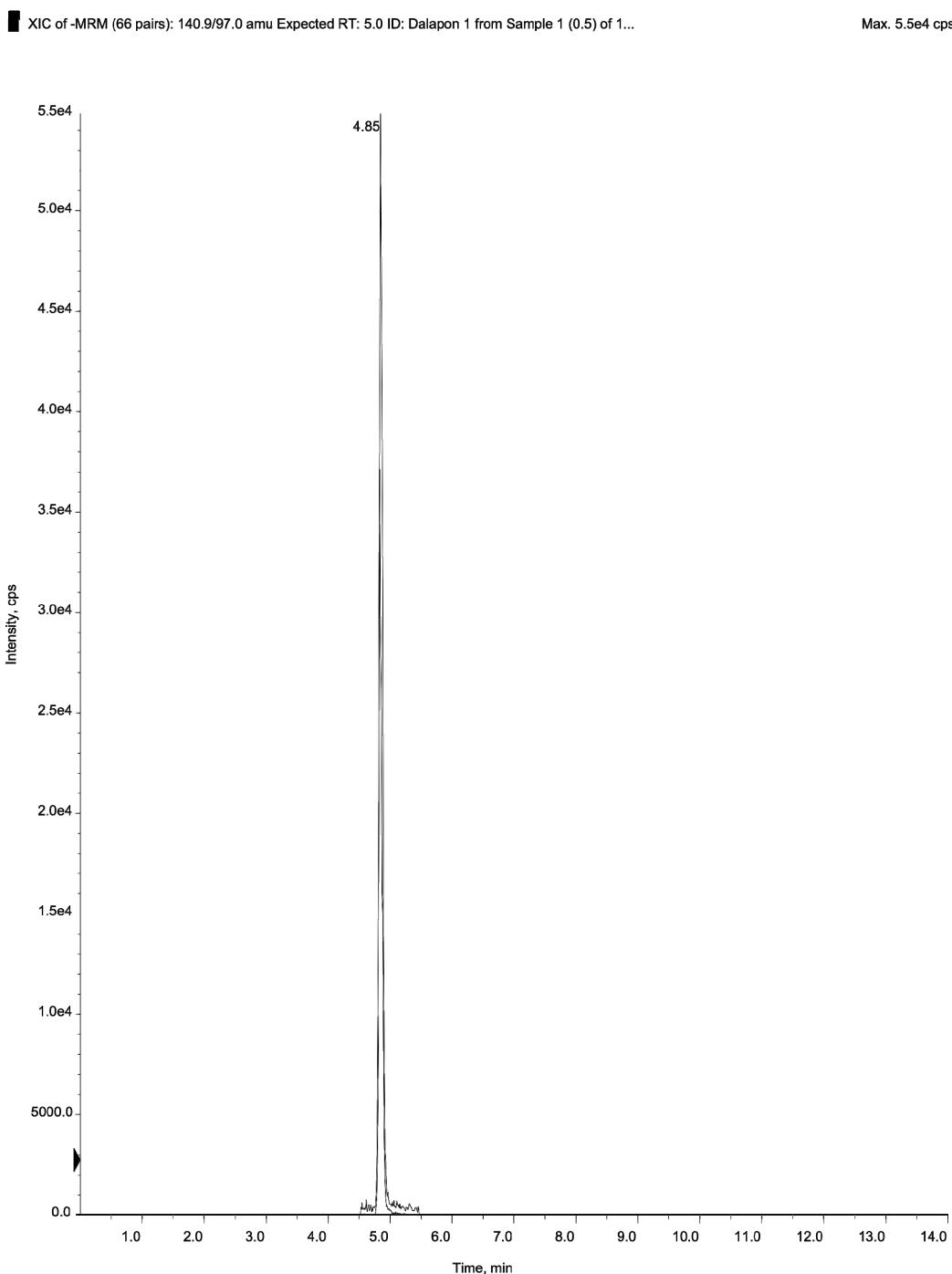


**Fig. SI 1** Concentrations of haloacetic acids (HAAs) ( $\mu\text{g l}^{-1}$ ) in treated potable water samples collected weekly for 13 consecutive weeks. Missing points indicate samples where concentration was below detection limit. For chloroacetic acid and bromoacetic acid, concentrations in all samples were below the detection limit.

**Table SI 1** Spearman's rank correlation between 2,2-Dichloropropionate and HAAs in treated water samples from the 13-week sampling program. None of the coefficients are significant at the  $P < 0.01$  level.<sup>23</sup>

DBP 1	DBP 2	Coefficient
Dibromoacetic Acid	2,2-Dichloropropionate	0.54
Bromochloroacetic Acid	2,2-Dichloropropionate	0.59
Dichloroacetic Acid	2,2-Dichloropropionate	0.51
Trichloroacetic Acid	2,2-Dichloropropionate	0.35

**Fig. SI 2** Typical extracted ion chromatogram (XIC) of 2,2-dichloropropionic acid under the conditions employed.



**Tables SI 2 and 3** Operating conditions for sample concentrator and autosampler in THM analysis.

Typical Tekmar Velocity Purge and Trap Sample Concentrator operating parameters

Mode: Purge		Mode: Desorb		Mode: Bake	
Valve over temperature	150°C	GC start	Start of desorb	Bake time	2 min
Transfer line temperature	150°C	Desorb drain	On	Bake temperature	270°C
Sample mount temperature	90°C	Desorb time	0.5 min	Dryflow bake temperature	300°C
Purge ready temperature	35°C	Desorb temperature	250°C	Bake flow	400 mL/min
Dryflow standby temperature	175°C	Desorb flow	200 mL/min		
Standby flow	10 mL/min				
Pre-purge time	0 min				
Pre-purge flow	40 mL/min				
Sample heater	On				
Sample preheat time	1 min				
Preheat temperature	40°C				
Purge time	7 min				
Purge temperature	0°C				
Purge flow	40 mL/min				
Dry purge time	3 min				
Dry purge temperature	40°C				
Dry purge flow	200 mL/min				

Typical EST 8100 Purge and Trap Autosampler Parameters

Parameter	Typical setting	Comments
First vial	01	
Last vial	XX	Vary according to the number of VOA vials
Sample volume	5 mL	
Dilution factor	No	
Rinse volume	13 mL	
Rinses	1	
Standard 1	Yes	
Standard 2	No	
Stir	No	
W stir time	0	
W settle time	0	
Syringe flushes	1	
Desorb time	0	
Operate mode	Remote	
Cycle timer	0	
Aux. timer	0	
Link to method	XX	Change as required to complete the run