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ANALYTICAL REPORT

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TO: J. F. DOUGHTY - PPD, WASHINGTON WORKS

FROM: S. R. LAAS *SR Laas*

PERFLUOROOCTANOATE (C8) IN WATER
(Job No. 840-0670; PRAL Nos. 84-3201-6; 3464-68; 3979-82, Notebook No. E27552)

Fifteen samples of water have been analyzed for perfluorooctanoate (C8) by electron capture gas chromatography. Method ES-567 was used with the following modifications: sample size was 10g; lyophilization was 18-20 hours; concentration of perfluorodecanoate internal standard was decreased 10 fold. Spiked standards at concentrations of 0.1, 0.2, 0.3, 0.4 ppb were examined. A reproducible detectable peak was observed for 0.4 ppb and we have used this as our detection limit. No C8 peak was detected in the spiked standards < .4 ppb. For the quantitation we had linear calibration curves over the range of 0.4 to 1 ppb. The samples were freeze dried, derivitized, and analyzed in duplicate. The results are expressed as ppb fluoride where $\text{ppb F} = 0.688 \times \text{ppb perfluorooctanoate}$.

The results are given in the attached table. If you have any questions, don't hesitate to call.

msg
Attachment

Keywords:

GC
Perfluorooctanoate
Water

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TABLE I

Perfluorooctanoate in Water

<u>Pral No.</u>	<u>Designation</u>	<u>ng F/g Water (ppb)^(a)</u>
84-3401	P	n.d.
84-3402	D	n.d.
84-3403	L	0.4
84-3404	G	n.d.
84-3405	KD	n.d.
84-3406	WB	0.8
84-3464	B	n.d.
84-3465	WW	n.d.
84-3466	R	n.d.
84-3467	RW	n.d.
84-3468	PP	n.d.
84-3979	WB	0.7
84-3980	L	n.d.
84-3981	WW	n.d.
84-3982	LB	1.0

(a) n.d. = none detected; detection limit = 0.4 ppb.

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