Article

Supplymental Materials: Perchlorate Levels in Polish Water Samples of Various Origin

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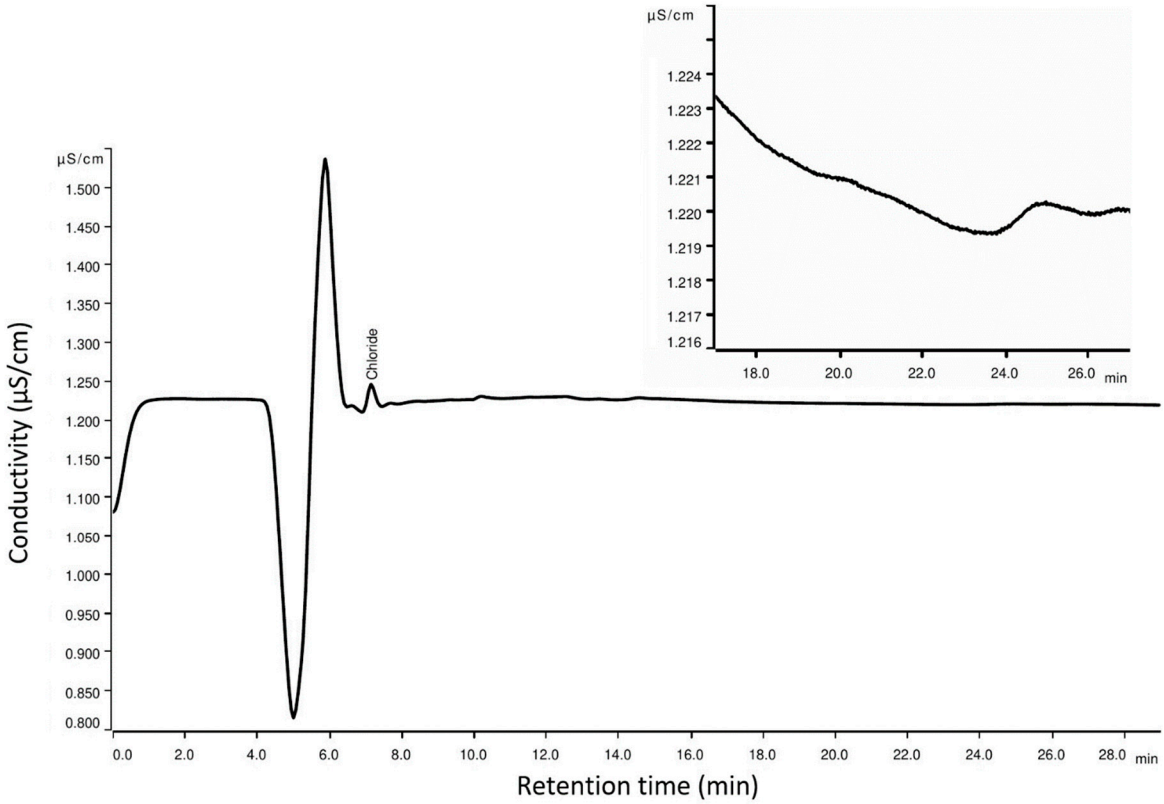


Figure 1S. DI water (blank sample) chromatogram.

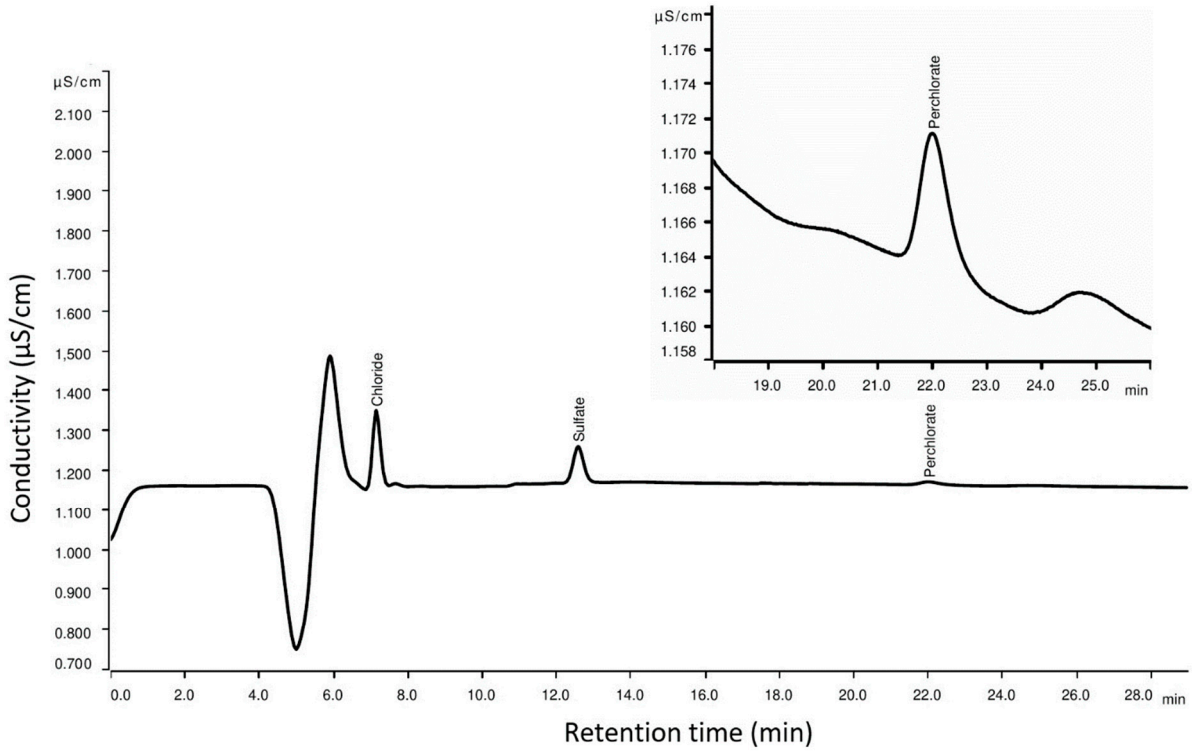


Figure 2S. Perchlorate standard solution (5 µg/L) chromatogram.

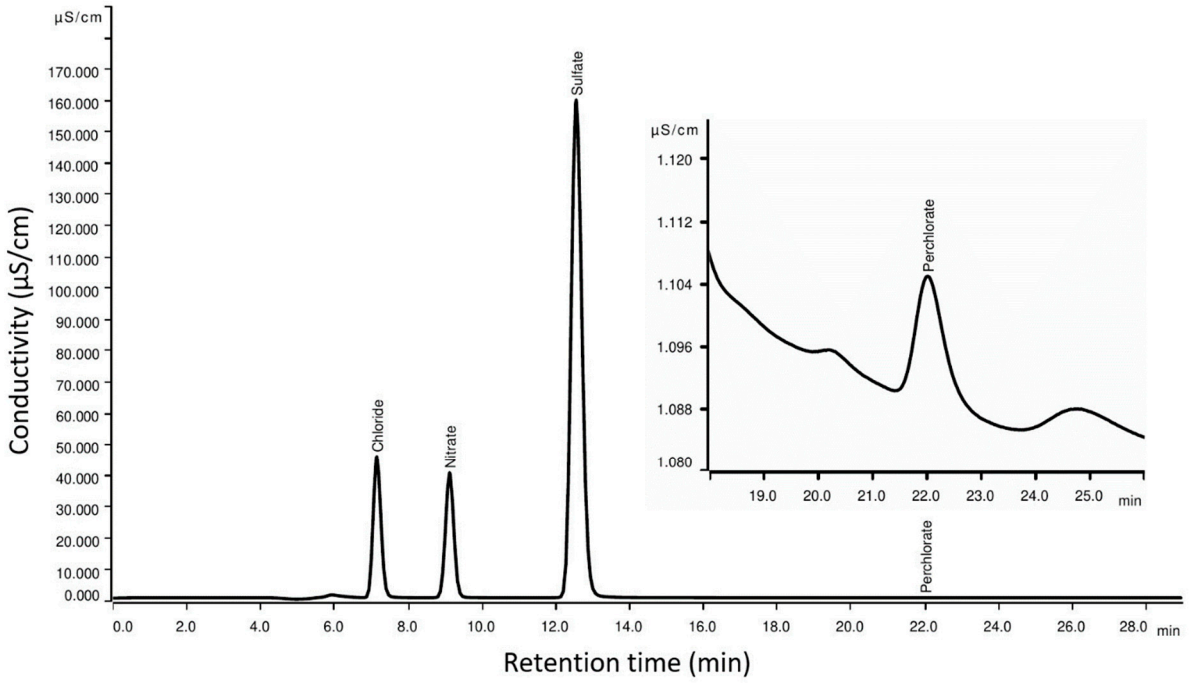


Figure 3S. Real sample (river water No 8) chromatogram. Other matrix ions are present (not quantified).

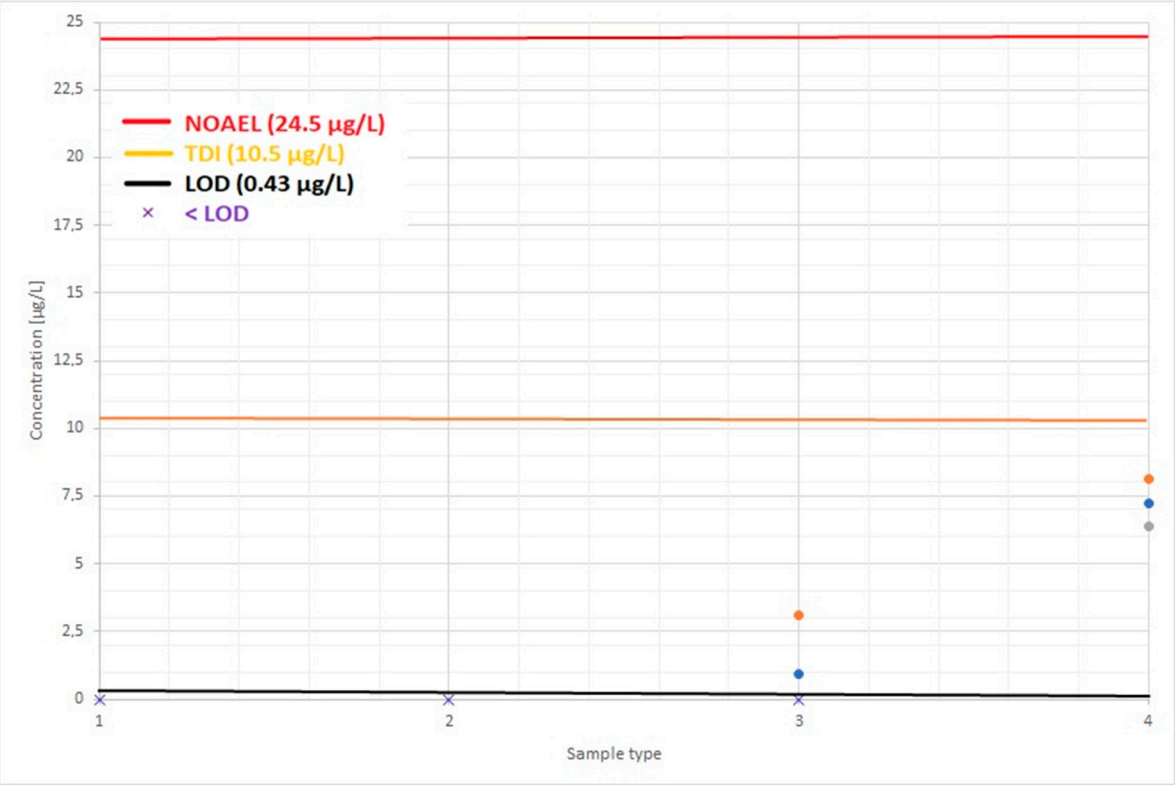


Figure 4S. Comparison of perchlorate health advisory levels in drinking water with results of determination in water samples. The types of samples are represented by numbers (See Table 1 in main document)

Table 1S. Results of perchlorate determination in water samples (extended).

Sample type[1]	Sample number	Sample origin	Source	Region	Perchlorate concentration [µg/L] ± SD[2]
bottled water (1)	1	Mineral water	NA	Małopolskie	<LOD
	2	Mineral water	NA	Małopolskie	<LOD
	3	Mineral water	NA	Małopolskie	<LOD
	4	Mineral water	NA	Małopolskie	<LOD
	5	Spring water	NA	Małopolskie	<LOD
	6	Spring water	NA	Małopolskie	<LOD
	7	Spring water	NA	Małopolskie	<LOD
	8	Spring water	NA	Małopolskie	<LOD
	9	Mineral water	NA	Małopolskie	<LOD
	10	Mineral water	NA	Śląskie	<LOD
	11	Mineral water	NA	Śląskie	<LOD
	12	Spring water	NA	Śląskie	<LOD
	13	Mineral water	NA	Śląskie	<LOD

	14	Mineral water	NA	Lubelskie	<LOD
	15	Mineral water	NA	Lubelskie	<LOD
	16	Mineral water	NA	Lubelskie	<LOD
	17	Spring water	NA	Kujawsko-pomorskie	<LOD
	18	Spring water	NA	Kujawsko-pomorskie	<LOD
	19	Spring water	NA	Kujawsko-pomorskie	<LOD
	20	Spring water	NA	Łódzkie	<LOD
	21	Spring water	NA	Łódzkie	<LOD
	22	Spring water	NA	Podkarpackie	<LOD
	23	Mineral water	NA	Podkarpackie	<LOD
	24	Mineral water	NA	Dolnośląskie	<LOD
	25	Mineral water	NA	Dolnośląskie	<LOD
	26	Mineral water	NA	Małopolskie	<LOD
	27	Mineral water	NA	Małopolskie	<LOD
	28	Mineral water	NA	Małopolskie	<LOD
	29	Spring water	NA	Wielkopolskie	<LOD
	30	Spring water	NA	Świętokrzyskie	<LOD
	31	Mineral water	NA	Mazowieckie	<LOD
tap water (2)	1	Lublin	Municipal	Lubelskie	<LOD
	2	Lublin	Municipal	Lubelskie	<LOD
	3	Lublin	Municipal	Lubelskie	<LOD
	4	Lublin	Municipal	Lubelskie	<LOD
	5	Lublin	Municipal	Lubelskie	<LOD
	6	Lublin	Municipal	Lubelskie	<LOD
	7	Lublin	Municipal	Lubelskie	<LOD
	8	Lublin	Municipal	Lubelskie	<LOD
	9	Lublin	Municipal	Lubelskie	<LOD
	10	Tomaszów Lubelski	Well	Lubelskie	<LOD
	11	Tomaszów Lubelski	Municipal	Lubelskie	<LOD
	12	Tomaszów Lubelski	Municipal	Lubelskie	<LOD
	13	Krasnystaw	Municipal	Lubelskie	<LOD
	14	Krasnystaw	Well	Lubelskie	<LOD
	15	Puławy	Municipal	Lubelskie	<LOD
	16	Puławy	Municipal	Lubelskie	<LOD
	17	Dęblin	Municipal	Lubelskie	<LOD

	18	Dęblin	Municipal	Lubelskie	<LOD
	19	Dąbrowa	Municipal	Lubelskie	<LOD
	20	Zakrzew	Well	Lubelskie	<LOD
	21	Palikije Pierwsze	Well	Lubelskie	<LOD
	22	Parczew	Municipal	Lubelskie	<LOD
	23	Poniatowa	Municipal	Lubelskie	<LOD
	24	Opole Lubelskie	Municipal	Lubelskie	<LOD
	25	Gliwice	Municipal	Śląskie	<LOD
	26	Gliwice	Municipal	Śląskie	<LOD
	27	Gliwice	Municipal	Śląskie	<LOD
	28	Zabrze	Municipal	Śląskie	<LOD
	29	Zabrze	Municipal	Śląskie	<LOD
	30	Zabrze	Municipal	Śląskie	<LOD
	31	Częstochowa	Municipal	Śląskie	<LOD
	32	Częstochowa	Municipal	Śląskie	<LOD
	33	Częstochowa	Municipal	Śląskie	<LOD
	34	Rybnik	Municipal	Śląskie	<LOD
	35	Rybnik	Municipal	Śląskie	<LOD
	36	Katowice	Municipal	Śląskie	<LOD
	37	Katowice	Municipal	Śląskie	<LOD
	38	Katowice	Municipal	Śląskie	<LOD
	39	Żywiec	Municipal	Śląskie	<LOD
	40	Żywiec	Municipal	Śląskie	<LOD
river water (3)	1	Sanna River	Lower course	Lubelskie	<LOQ (0,91)* ± 0,04
	2	Wojsławka River	Lower course	Lubelskie	<LOD
	3	Bystrzyca River	Lower course	Lubelskie	<LOD
	4	Wieprz River	Upper course	Lubelskie	<LOD
	5	Wieprz River	Lower course	Lubelskie	<LOD
	6	Vistula River	Middle course	Lubelskie	<LOD
	7	Tanew River	Lower course	Lubelskie	<LOD
	8	Bytomka River	Middle course	Śląskie	3,12 ± 0,18
	9	Przemsza River	Middle course	Śląskie	<LOD

	10	Odra River	Upper course	Śląskie	<LOD
swimming pool water (4)	1	Lublin	Basin	Lubelskie	7,25 ± 0,21
	2	Lublin	Basin	Lubelskie	8,14 ± 0,01
	3	Lublin	Basin	Lubelskie	6,38 ± 0,04
swimming pool water (1:10 v/v)	1	Lublin	Basin	Lubelskie	<LOD
	2	Lublin	Basin	Lubelskie	<LOD
	3	Lublin	Basin	Lubelskie	<LOD

[1] Numbers in brackets are the sample codes, see Fig. 1

[2] Standard deviation

* estimate, below LOQ and above LOQ

Table 2S. Analytical conditions.

Apparatus	**Metrohm 930 Compact IC Flex**
Column	Metrosep A Supp 5 150 x 4.0 mm
Pre-column	Metrosep A Supp 4/5 Guard 50 x 4.0 mm
Eluent flow rate	0.5 ml/min
Eluent composition	7 mM sodium bicarbonate + 2 mM sodium carbonate + 25% acetonitrile
Column temperature	25 °C
Sample volume	250 µl
Expected backpressure	13,7 MPa