



Supplement of

Brief communication: Organochlorine pesticides in an archived firn core from Law Dome, East Antarctica

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Table 1: Surrogate standard recoveries for ice core sample A and B (in %)

Sampling material	XAD (dissolved compounds)		Glass fibre filter (particles)	
Sample #	A	B	A	B
Hexachlorobenzene, $^{13}\text{C}_6$-	15	18	17	6
α-HCH, $^{13}\text{C}_6$-	46	53	47	50
γ-HCH-D6	30	39	48	51
Heptachlor, $^{13}\text{C}_{10}$-	130	128	77	80
Oxychlordane, $^{13}\text{C}_{10}$-	49	56	64	64
trans-Nonachlor, $^{13}\text{C}_{10}$-	63	66	51	59
Dieeldrin, $^{13}\text{C}_{12}$-	47	55	52	58
Endrin, $^{13}\text{C}_{12}$-	49	67	72	82
Endosulfan II, $^{13}\text{C}_9$-	22	34	43	49
4,4'-DDE, $^{13}\text{C}_{12}$-	36	42	43	46
4,4'-DDD, $^{13}\text{C}_{12}$-	14	21	42	42
4,4'-DDT, $^{13}\text{C}_{12}$-	8	11	40	36
Methoxychlor-D6	102	168	37	36
Mirex, $^{13}\text{C}_{10}$-	5	5	21	18
Mirex, $^{13}\text{C}_8$-*	7	6	30	28
δ-HCH*	135	67	96	110

Notes: * indicates surrogate standards added prior to sampling (XAD) or prior to extraction (filters)

Table 2 Concentrations and deposition rates of detected OCPs in Law Dome firn core, sample A (1945-57) and sample B (1958-67)

	Sample A		Sample B		
	MDL	Concentration	Deposition rate	Concentration	
	$\text{pg}\cdot\text{L}^{-1}$	$\text{pg}\cdot\text{L}^{-1}$	$\text{pg}\cdot\text{cm}^{-2}\text{yr}^{-1}$	$\text{pg}\cdot\text{L}^{-1}$	$\text{pg}\cdot\text{cm}^{-2}\text{yr}^{-1}$
α-HCH	0.87	22	0.24	19	0.25
γ-HCH	1.18	22	0.24	60	0.78
Heptachlor	0.51	2.3	0.03	2.4	0.03
trans-Chlordane	1.25	< 3.3	-	5.0	0.07
Dieeldrin	4.75	222	2.4	310	4.0
Endrin	1.20	4.8	0.05	8.3	0.11

Notes: MDL stands for method detection limits, < indicates values detected below limits of quantifications (determined for each individual sample).