



Supplement of

Deposit-feeding of *Nonionellina labradorica* (foraminifera) from an Arctic methane seep site and possible association with a methanotroph

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Figure S1. Screen shot of the site of the geochemistry core PUC2/F7 on which which geochemical analysis (Table S1) was performed.

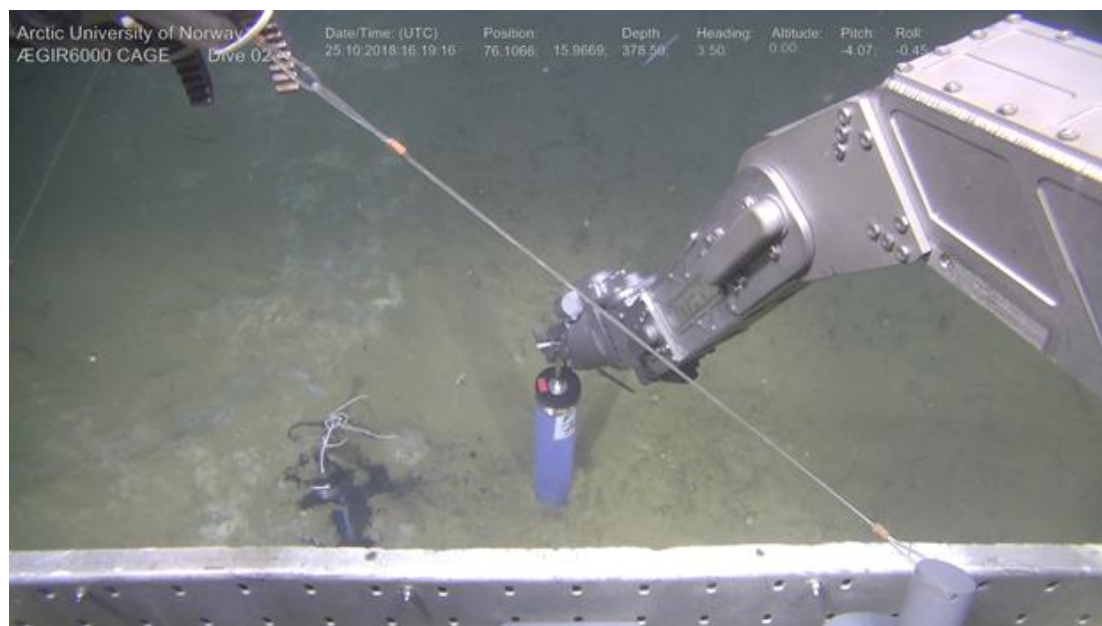


Table S1. Geochemistry of push corer PUC2. A decline in sulfate concentration indicates that the anaerobic oxidation of methane (AOM) occurred at app. 13 cm depth. The entire profile of this core indicates that this site is an active methane emission site.

Name of Core	Depth [cm bsf]	Sulfate [ppm]	d13C VPDB [‰]	DIC conc [mM]
PUC2	1	2753	-6,9	2,4
	2	2754	-8,3	2,6
	3	2618	-13,5	3,3
	4	2506	-16,4	3,6
	5	2378	-21,2	4,8
	6	2048	-22,7	5,2
	7	1959	-25,5	6,4
	8	1718	-27,0	7,9
	9	1486	-29,0	9,4
	10	1349	-29,3	10,6
	11	1210	-30,1	11,8
	12	1021	-30,5	13,0
	13	706	-31,3	15,8
	14	546	-29,3	12,8
	15	408	-30,5	16,0
	16	500	-30,2	17,1
	17	376	-29,6	17,8
	18	341	-29,3	17,7
	19	244	-28,9	16,9
	20	1333	-28,3	16,1
	22	225	-27,5	18,6
	24	256	-26,9	19,1
	26	198	-26,1	19,2

bsf: below sea floor

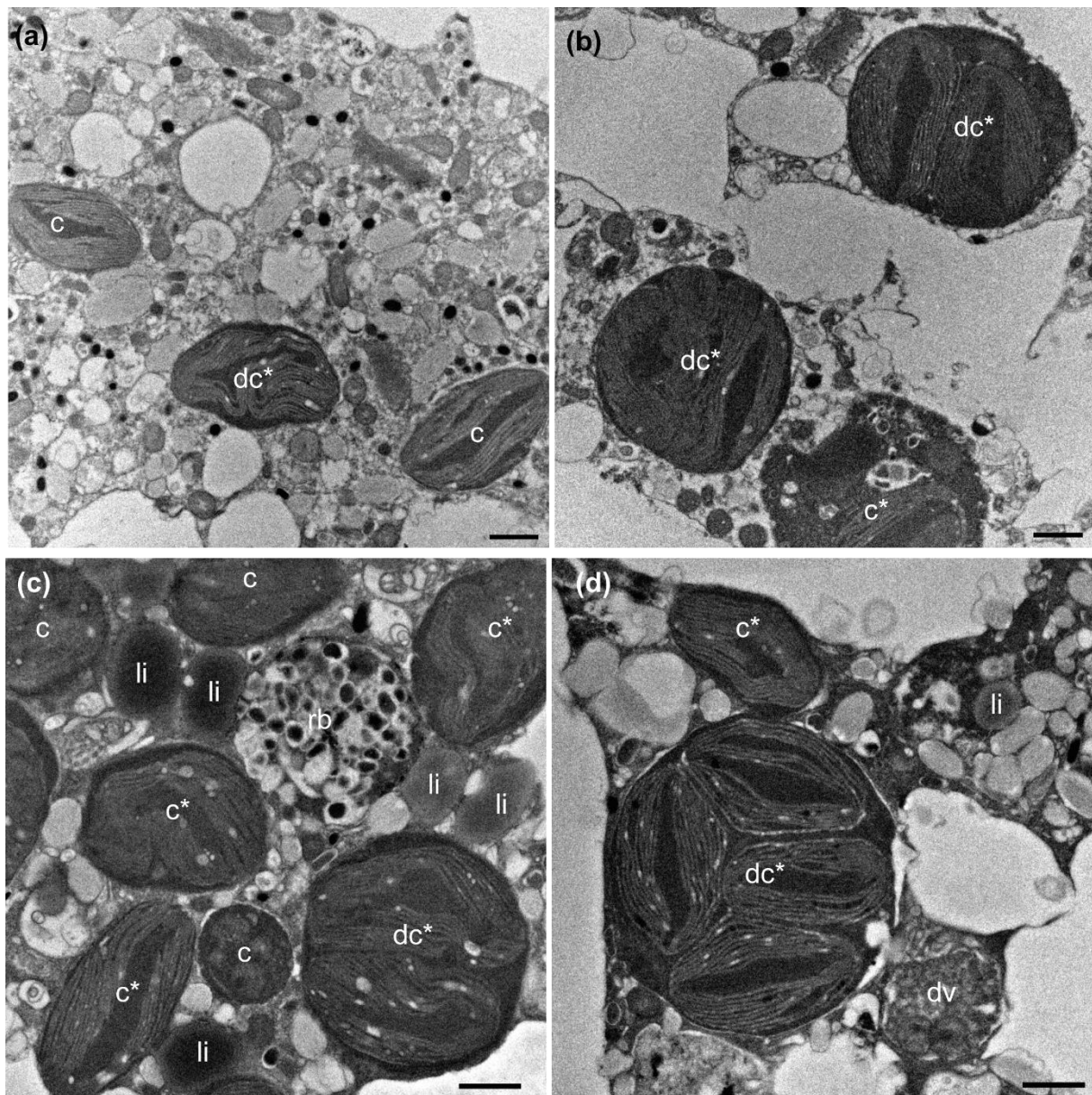


Figure S2. Kleptoplasts in *N. labradorica* from active methane emitting site (a-b). Degraded chloroplasts [marked with c*] and degraded double chloroplast [dc*] in comparison to intact chloroplasts, marked with [c], are characterized with undamaged pyrenoids and thylakoids, degraded chloroplasts [dc*] have peripheral degradation of the membranes (increasing number of white areas inside the membranes) (sample E5, not exposed to bacteria), (c-d). chloroplasts (samples E28 and E29, from 4-h incubation) c: intact chloroplast, c*: degraded chloroplast, dc*: degraded double chloroplast, li: lipid droplets, rb: residual body, dv: digestive vacuole. scale bar: 1 μ m

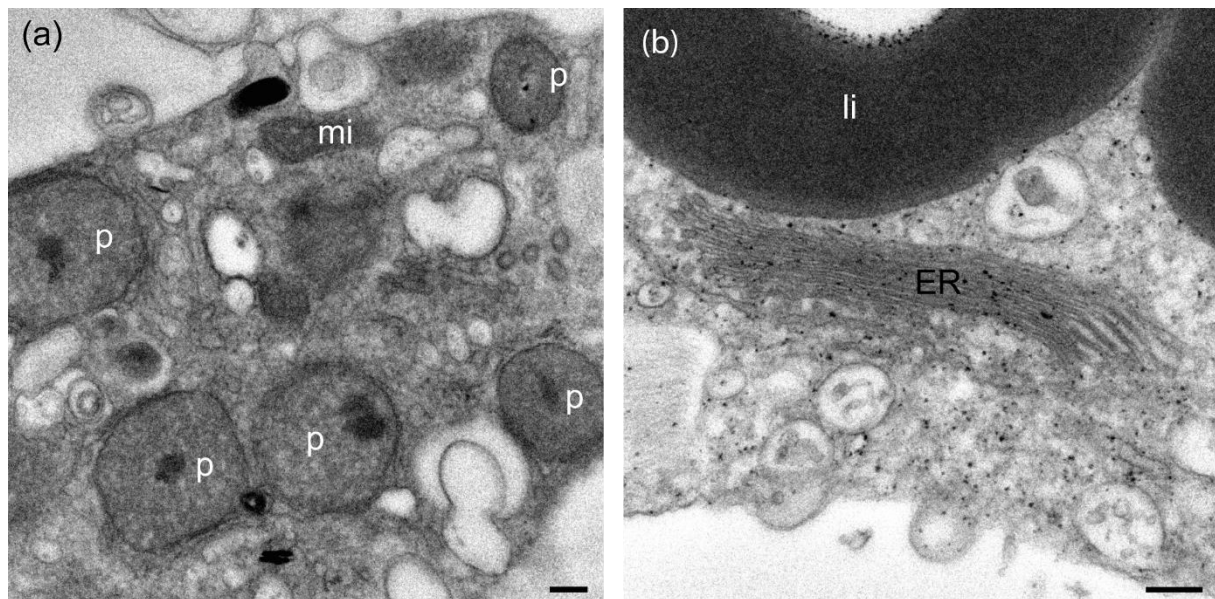


Figure S3 Peroxisomes and endoplasmatic reticulum in *N. labradorica* from active methane emitting site (a) five peroxisomes (b) (c) endoplasmatic reticulum (ER) close to a lipid droplet, scale bar: 200 nm

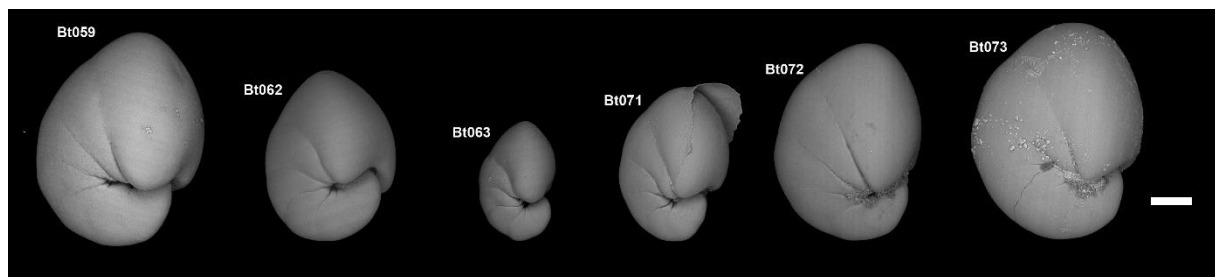


Figure S4. Scanning electron images of *N. labradorica* specimens extracted for DNA analysis. Identification numbers in bold indicate specimens positive for DNA amplification and sequencing. Scale bar 100 μ m.