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**ROCK-EVAL/TOC PYROLYSIS DATA FROM  
THE BASTION RIDGE FORMATION  
(UPPER ALBIAN), GLACIER FIORD,  
ELLESMERE ISLAND, CANADIAN ARCTIC**

**L. Koldo Nuñez-Betelu**

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# **ROCK-EVAL/TOC PYROLYSIS DATA FROM THE BASTION RIDGE FORMATION (UPPER ALBIAN), GLACIER FIORD, ELLESMERE ISLAND, CANADIAN ARCTIC**

**L. KOLDO NUÑEZ-BETELU**

This study was conducted on 89 samples collected at regular intervals from a well exposed outcrop section of the Bastion Ridge Formation at Glacier Fiord, Axel Heiberg Island (Fig. 1). The section is 86 m thick, and exposed on a steep hillside beside a small creek. Dark mudstones with rare, thin interbeds of siltstone and siderite constitute the main lithology. A 7 m thick, fine- to medium-grained sandstone caps the Bastion Ridge Formation at this locality. Based on palynological studies (MacRae, 1992) this formation is considered to be restricted marine with high terrestrial influence.

The database includes 86 outcrop samples from the upper Albian Bastion Ridge Formation and three outcrop samples from the underlying upper Albian Hassel Formation. The Hassel samples were included for comparison purposes and their values are presented as negative numbers as measured from the contact between the Hassel and Bastion Ridge formations downwards.

All 89 samples were run in duplicate and their values are presented herein without removing any possibly erroneous results. Furthermore, samples whose pairs of values did not match closely or seemed to be off the sequence when compared to data from directly preceding and following samples were re-run to obtain matching values or ensure that the data previously obtained in the first run were correct. Re-run samples' metreage appears in database in bold characters. One in-house standard (#9107) was used to ensure that the analytical conditions remained constant. Standards were run at the beginning of each analysis, at every fifteenth sample, and at the end of all sample analysis. Data from these standards is presented at the end of this file.

The database includes sample metreage measured from the base of the formation (Mtr), the amount of sample pyrolysed (qty), and standard Rock-Eval parameters (Espitalie', 1986; Espitalie' *et al.*, 1977, 1985; Peters, 1986) such as Tmax, Sl, S2, S3, PI (Production Index), TOC (Total Organic Carbon), HI (Hydrogen Index), and OI (Oxygen Index).

## **References**

- Espitalie', J. 1986. Use of Tmax as a maturation index for different types of organic matter. Comparison with vitrinite reflectance. In: Thermal modeling in sedimentary basins. Edited by: J. Burrus. Editions Technip, Paris, P. 475-496.
- Espitalie', J. Deroo, G., and Marquis, F. 1985. Rock-Eval Pyrolysis and its applications. Institut Français du Pétrole, Preprint no. 27299.

- Espitalié, J., Laporte, J. L., Madec, M., Marquis, F., Leplant, P., and Paulet, J. 1977. Méthode rapide de caractérisation des roches mères, de leur potentiel pétrolier et de leur degré d'évolution. *Revue Institut Français du Pétrole*, 32(1), 23-45.
- MacRae, R. A., 1992. Palynology of the Bastion Ridge and Strand Fiord formations, western Axel Heiberg Island, Canadian Arctic Islands, N. W. T.: for stratigraphy, age, paleoenvironment, and *Nyktericysta* taxonomy. M.Sc. Thesis. The University of Calgary, 347 pp.
- Peters, K. E. 1986. Guidelines for evaluating petroleum source rock using programmed pyrolysis. *American Association of Petroleum Geologists Bulletin*, 70, 318-329.

Glacier Fiord (78°38'N, 89°55' W), Bastion Ridge Fm.										
Mtr	Qty	Tmax	S1	S2	S3	PI	S2/S3	TOC	HI	OI
(-0.3m)	100.0	427	0.01	0.11	0.50	0.08	0.22	0.93	11	53
(-0.3m)	100.0	435	0.01	0.20	0.46	0.05	0.43	0.96	20	47
(-16.0m)	99.9	443	0.01	0.75	0.74	0.01	1.01	2.38	31	31
(-16.0m)	99.9	440	0.02	0.77	0.74	0.03	1.04	2.38	32	31
(-33.0m)	100.0	439	0.01	0.88	1.13	0.01	0.77	3.68	23	30
(-33.0m)	99.9	437	0.01	0.88	1.16	0.01	0.75	3.57	24	32
0.0m	100.0	435	0.01	0.36	0.32	0.03	1.12	1.18	30	27
0.0m	100.1	434	0.00	0.35	0.33	0.00	1.06	1.20	29	27
0.2m	99.9	434	0.00	0.41	0.39	0.00	1.05	1.80	22	21
0.2m	99.9	437	0.00	0.45	0.44	0.00	1.02	1.93	23	22
0.5m	99.9	436	0.01	0.32	0.33	0.03	0.96	1.47	21	22
0.5m	99.9	436	0.00	0.26	0.33	0.00	0.78	1.46	17	22
1.0m	100.1	435	0.00	0.57	1.46	0.00	0.39	1.89	30	77
1.0m	100.0	436	0.01	0.60	1.44	0.02	0.41	1.90	31	75
2.0m	100.1	434	0.00	0.53	0.41	0.00	1.29	2.17	24	18
2.0m	100.0	435	0.00	0.57	0.46	0.00	1.23	2.19	26	21
3.0m	99.9	433	0.01	0.68	0.57	0.01	1.19	2.73	24	20
3.0m	100.1	430	0.02	1.29	1.29	0.02	1.00	5.56	23	23
3.0m	100.0	439	0.01	0.66	0.52	0.02	1.26	2.62	25	19
3.0m	100.1	439	0.00	0.71	0.51	0.00	1.39	2.63	26	19
4.0m	100.1	436	0.00	1.20	0.50	0.00	2.40	3.18	37	15
4.0m	99.9	436	0.02	1.19	0.49	0.02	2.42	3.22	36	15
5.0m	100.0	438	0.01	0.69	0.40	0.01	1.72	2.45	28	16
5.0m	100.0	435	0.00	0.57	0.45	0.00	1.26	2.33	24	19
6.0m	100.1	435	0.00	0.89	1.12	0.00	0.79	3.43	25	32
6.0m	100.1	437	0.01	0.96	1.10	0.01	0.87	3.47	27	31
7.0m	100.1	436	0.01	1.55	0.81	0.01	1.91	3.79	40	21
7.0m	99.9	435	0.02	2.58	1.37	0.01	1.88	5.79	44	23
7.0m	100.0	438	0.01	1.73	0.78	0.01	2.21	3.70	46	21

Glacier Fiord (78°38'N, 89°55'W), Bastion Ridge Fm.										
Mtr	Qty	Tmax	S1	S2	S3	PI	S2/S3	TOC	HI	OI
7.0m	100.0	440	0.02	1.56	0.78	0.01	2.00	3.70	42	21
8.0m	100.0	433	0.02	1.15	0.95	0.02	1.21	3.72	30	25
8.0m	100.0	434	0.04	1.20	0.93	0.03	1.29	3.65	32	25
8.0m	100.1	436	0.02	1.21	0.87	0.02	1.39	3.65	33	23
8.0m	100.0	438	0.04	1.24	0.86	0.03	1.44	3.69	33	23
9.0m	100.0	440	0.01	1.08	0.65	0.01	1.66	3.14	34	20
9.0m	100.0	438	0.01	0.99	0.72	0.01	1.37	3.12	31	23
10.0m	100.2	433	0.01	0.79	0.51	0.01	1.54	2.30	34	22
10.0m	100.0	444	0.00	0.02	0.52	0.00	0.03	2.22	0	23
10.0m	100.1	439	0.01	0.95	0.53	0.01	1.79	2.55	37	20
10.0m	100.0	437	0.01	0.91	0.54	0.01	1.68	2.45	37	22
11.0m	100.0	433	0.00	0.54	1.29	0.00	0.41	2.30	23	56
11.0m	99.9	437	0.02	0.65	1.25	0.03	0.52	2.32	28	53
12.0m	100.2	435	0.02	1.10	0.81	0.02	1.35	2.94	37	27
12.0m	100.2	435	0.02	1.19	0.85	0.02	1.40	2.96	40	28
13.0m	100.0	434	0.00	0.88	0.51	0.00	1.72	2.61	33	19
13.0m	100.0	433	0.00	0.78	0.53	0.00	1.47	2.62	29	20
14.0m	100.1	435	0.02	0.94	0.32	0.02	2.93	2.13	44	15
14.0m	100.2	433	0.00	0.81	0.34	0.00	2.38	2.15	37	15
15.0m	100.1	436	0.00	1.12	1.28	0.00	0.87	3.41	32	37
15.0m	100.2	436	0.01	1.01	1.09	0.01	0.92	2.90	34	37
15.0m	100.0	448	0.02	1.05	1.05	0.02	1.00	2.99	35	35
15.0m	100.0	442	0.02	1.12	1.13	0.02	0.99	2.89	38	39
15.0m	100.0	439	0.01	1.00	1.05	0.01	0.95	2.79	35	37
16.0m	100.1	433	0.00	0.58	0.38	0.00	1.52	2.02	28	18
16.0m	100.2	434	0.00	0.60	0.42	0.00	1.42	2.02	29	20
17.0m	100.0	433	0.01	0.46	0.28	0.02	1.64	1.83	25	15
17.0m	100.0	435	0.03	0.56	0.29	0.05	1.93	1.82	30	15
18.0m	100.0	434	0.01	0.86	0.81	0.01	1.06	2.67	32	30
18.0m	100.1	432	0.00	0.72	0.82	0.00	0.87	2.52	28	32
18.0m	100.0	438	0.01	0.83	0.81	0.01	1.02	2.63	31	30
18.0m	100.1	435	0.00	0.82	0.77	0.00	1.06	2.59	31	29
19.0m	100.1	434	0.00	0.99	1.21	0.00	0.81	3.02	32	40

Glacier Fiord (78°38'N, 89°55' W), Bastion Ridge Fm.										
Mtr	Qty	Tmax	S1	S2	S3	PI	S2/S3	TOC	HI	OI
19.0m	100.0	434	0.03	1.00	1.24	0.03	0.80	3.04	32	40
19.4m	100.1	434	0.00	0.56	1.65	0.00	0.33	2.03	27	81
19.4m	100.0	433	0.01	0.46	1.72	0.02	0.26	1.99	23	86
20.0m	100.0	434	0.00	0.56	0.95	0.00	0.58	2.28	24	41
20.0m	100.0	435	0.00	0.55	0.94	0.00	0.58	2.27	24	41
<b>20.0m</b>	100.0	438	0.00	0.57	0.92	0.00	0.61	2.24	25	41
<b>20.0m</b>	100.1	437	0.00	0.56	0.91	0.00	0.61	2.18	25	41
21.0m	100.0	434	0.01	0.89	0.54	0.01	1.64	2.67	33	20
21.0m	100.1	435	0.01	0.85	0.53	0.01	1.60	2.60	32	20
<b>21.0m</b>	100.1	439	0.00	0.82	0.51	0.00	1.60	2.56	32	19
<b>21.0m</b>	100.0	438	0.01	0.87	0.52	0.01	1.67	2.57	33	20
22.0m	100.0	434	0.02	0.70	0.87	0.03	0.80	2.45	28	35
22.0m	100.1	437	0.00	0.64	0.94	0.00	0.68	2.50	25	37
23.0m	100.1	433	0.02	0.74	3.23	0.03	0.22	2.70	27	119
23.0m	100.0	436	0.02	0.68	2.98	0.03	0.22	2.71	25	109
24.0m	100.1	436	0.01	0.77	1.26	0.01	0.61	2.54	30	49
24.0m	100.1	437	0.01	0.77	1.25	0.01	0.61	2.58	29	48
26.0m	100.0	435	0.02	0.82	0.96	0.02	0.85	2.50	32	38
26.0m	100.1	434	0.01	0.80	0.94	0.01	0.85	2.58	31	36
<b>26.0m</b>	100.0	438	0.01	0.74	0.90	0.01	0.82	2.44	30	36
<b>26.0m</b>	100.0	436	0.01	0.76	0.86	0.01	0.88	2.50	30	34
27.0m	100.0	435	0.00	0.90	0.87	0.00	1.03	2.92	30	29
27.0m	100.0	435	0.00	0.81	0.89	0.00	0.91	2.95	27	30
28.0m	100.0	440	0.01	1.05	1.59	0.01	0.66	3.29	31	48
28.0m	100.0	438	0.01	0.89	1.50	0.01	0.59	3.27	27	45
29.0m	100.0	434	0.00	0.89	1.25	0.00	0.71	2.61	34	47
29.0m	100.1	435	0.01	1.00	1.20	0.01	0.83	2.55	39	47
30.0m	100.0	434	0.01	1.17	0.77	0.01	1.51	3.09	37	24
30.0m	100.1	435	0.00	1.10	0.79	0.00	1.39	3.06	35	25
31.0m	100.0	433	0.00	0.83	4.60	0.00	0.18	2.94	28	156
31.0m	100.1	433	0.00	0.81	4.55	0.00	0.17	2.88	28	157
32.0m	100.1	433	0.00	0.82	0.57	0.00	1.43	2.54	32	22
32.0m	100.0	435	0.01	1.03	0.59	0.01	1.74	2.61	39	22

Glacier Fiord (78°38'N, 89°55' W), Bastion Ridge Fm.										
Mtr	Qty	Tmax	S1	S2	S3	PI	S2/S3	TOC	HI	OI
32.0m	100.0	439	0.02	1.02	0.55	0.02	1.85	2.58	39	21
32.0m	100.1	438	0.01	0.95	0.54	0.01	1.75	2.57	36	21
33.0m	100.0	436	0.01	1.06	0.49	0.01	2.16	2.93	36	16
33.0m	100.0	434	0.03	1.01	0.53	0.03	1.90	2.99	33	17
34.0m	100.0	434	0.02	0.76	2.04	0.03	0.37	2.29	33	89
34.0m	100.0	437	0.00	0.62	1.96	0.00	0.31	2.25	27	87
35.0m	100.0	436	0.01	1.00	0.62	0.01	1.61	2.33	42	26
35.0m	100.1	436	0.00	1.00	0.61	0.00	1.63	2.36	42	25
35.0m	100.0	438	0.00	0.98	0.64	0.00	1.53	2.35	41	27
36.0m	100.0	433	0.01	0.72	4.56	0.01	0.15	2.32	31	196
36.0m	100.0	435	0.01	0.72	4.40	0.01	0.16	2.26	31	194
37.0m	100.0	434	0.01	0.82	1.03	0.01	0.79	2.58	31	39
37.0m	100.0	436	0.00	0.74	1.10	0.00	0.67	2.54	29	43
38.0m	100.0	434	0.02	0.82	0.92	0.02	0.89	2.25	36	40
38.0m	100.0	434	0.00	0.76	0.95	0.00	0.80	2.26	33	42
39.0m	100.1	434	0.00	0.96	0.37	0.00	2.59	2.59	37	14
39.0m	100.1	434	0.00	0.92	0.41	0.00	2.24	2.50	36	16
40.0m	100.0	434	0.00	0.92	1.13	0.00	0.81	2.71	33	41
40.0m	100.0	434	0.01	0.96	1.15	0.01	0.83	2.71	35	42
40.0m	100.1	438	0.00	0.97	1.21	0.00	0.80	2.62	37	46
40.0m	100.0	441	0.01	0.93	1.24	0.01	0.75	2.61	35	47
41.0m	100.0	433	0.01	0.99	0.80	0.01	1.23	2.79	35	28
41.0m	100.0	435	0.00	0.95	0.77	0.00	1.23	2.74	34	28
42.0m	100.1	434	0.00	1.16	0.63	0.00	1.84	2.96	39	21
42.0m	100.0	434	0.00	1.14	0.63	0.00	1.80	2.93	38	21
43.0m	100.1	433	0.00	0.76	2.63	0.00	0.28	2.16	35	121
43.0m	100.1	433	0.00	0.70	2.55	0.00	0.27	2.16	32	118
44.0m	100.0	435	0.01	0.55	2.46	0.02	0.22	2.03	27	121
44.0m	100.0	435	0.00	0.58	2.42	0.00	0.23	2.03	28	119
45.0m	100.1	434	0.00	0.89	0.48	0.00	1.85	2.65	33	18
45.0m	100.1	435	0.01	0.98	0.47	0.01	2.08	2.71	36	17
46.0m	100.0	432	0.01	0.89	0.59	0.01	1.50	2.72	32	21
46.0m	100.0	436	0.01	0.86	0.64	0.01	1.34	2.78	30	23

Glacier Fiord (78°38'N, 89°55' W), Bastion Ridge Fm.										
Mtr	Qty	Tmax	S1	S2	S3	PI	S2/S3	TOC	HI	OI
47.0m	100.0	435	0.00	0.68	1.36	0.00	0.50	1.96	34	69
47.0m	100.0	437	0.00	0.67	1.32	0.00	0.50	1.94	34	68
48.0m	100.0	435	0.02	0.73	0.34	0.03	2.14	2.21	33	15
48.0m	100.0	433	0.02	0.73	0.35	0.03	2.08	2.18	33	16
48.0m	100.0	438	0.02	0.69	0.32	0.03	2.15	2.20	31	14
48.0m	100.0	438	0.02	0.69	0.31	0.01	2.22	2.17	31	14
49.0m	100.0	435	0.01	1.35	0.62	0.01	2.17	3.14	42	19
49.0m	100.0	435	0.02	1.48	0.60	0.01	2.46	3.11	47	19
49.0m	100.0	438	0.03	1.48	0.57	0.02	2.59	3.08	48	18
49.0m	100.0	438	0.02	1.41	0.57	0.01	2.47	3.08	45	18
50.0m	100.0	435	0.02	1.24	1.02	0.02	1.21	3.05	40	33
50.0m	100.1	433	0.00	1.12	1.02	0.00	1.09	3.07	36	33
51.0m	100.0	434	0.01	1.38	0.64	0.01	2.15	2.72	50	23
51.0m	100.1	435	0.02	1.49	0.62	0.01	2.40	2.76	53	22
52.0m	100.0	435	0.01	1.12	0.47	0.01	2.38	2.78	40	16
52.0m	100.1	435	0.00	1.10	0.43	0.00	2.55	2.79	39	15
53.0m	100.0	437	0.00	0.82	6.40	0.00	0.12	2.41	34	265
53.0m	100.0	439	0.01	0.88	6.40	0.01	0.13	2.53	34	252
54.0m	100.0	435	0.01	1.23	0.94	0.01	1.30	3.00	41	31
54.0m	100.1	433	0.00	1.16	0.97	0.00	1.19	3.07	37	31
55.0m	100.0	431	0.02	0.57	1.14	0.03	0.50	2.65	21	43
55.0m	100.1	431	0.02	0.62	1.14	0.03	0.54	2.67	23	42
56.0m	100.1	435	0.02	1.19	3.35	0.02	0.35	3.43	34	97
56.0m	100.0	434	0.02	1.13	3.24	0.02	0.34	3.43	32	94
57.0m	100.0	436	0.01	1.07	3.32	0.01	0.32	2.94	36	112
57.0m	100.1	436	0.00	0.98	3.39	0.00	0.28	2.81	34	120
58.0m	100.0	433	0.02	1.04	1.31	0.02	0.79	3.48	29	37
58.0m	100.1	432	0.01	1.05	1.34	0.01	0.78	3.45	30	38
59.0m	100.0	434	0.01	1.00	2.14	0.01	0.46	2.35	42	91
59.0m	100.0	434	0.00	0.95	2.10	0.00	0.45	2.29	41	91
60.0m	100.0	434	0.02	0.83	4.68	0.02	0.17	3.57	23	131
60.0m	100.0	436	0.01	0.79	4.56	0.01	0.17	3.25	24	140
61.0m	100.0	436	0.01	1.37	4.80	0.01	0.28	3.48	39	137



<b>Glacier Fiord (78°38'N, 89°55' W), Bastion Ridge Fm.</b>										
<b>Mtr</b>	<b>Qty</b>	<b>Tmax</b>	<b>S1</b>	<b>S2</b>	<b>S3</b>	<b>PI</b>	<b>S2/S3</b>	<b>TOC</b>	<b>HI</b>	<b>OI</b>
61.0m	100.1	436	0.01	1.36	5.03	0.01	0.27	3.59	37	140
62.0m	100.1	437	0.02	1.23	5.95	0.02	0.20	3.62	33	164
62.0m	100.1	436	0.02	1.17	6.15	0.02	0.19	3.62	32	169
<b>62.0m</b>	100.0	438	0.03	1.15	8.08	0.03	0.14	3.48	33	232
<b>62.0m</b>	100.0	436	0.03	1.22	7.68	0.02	0.15	3.51	34	218
63.0m	100.0	435	0.01	1.27	5.96	0.01	0.21	4.17	30	142
63.0m	100.0	434	0.02	1.22	6.12	0.02	0.19	4.13	29	148
64.0m	100.0	437	0.02	1.31	3.92	0.02	0.33	3.39	38	115
64.0m	100.1	437	0.00	1.22	3.91	0.00	0.31	3.36	36	116
65.0m	100.1	437	0.00	1.28	4.39	0.00	0.29	3.41	37	128
65.0m	100.1	436	0.00	1.27	4.71	0.00	0.26	3.48	36	135
66.0m	100.1	438	0.00	0.62	6.19	0.00	0.10	2.48	25	249
66.0m	100.0	435	0.00	0.66	6.40	0.00	0.10	2.47	26	259
67.0m	100.0	436	0.01	1.66	1.44	0.01	1.15	3.84	43	37
<b>67.0m</b>	100.1	439	0.00	1.47	1.09	0.00	1.34	3.62	40	30
<b>67.0m</b>	100.0	441	0.02	1.54	1.10	0.01	1.40	3.66	42	30
68.0m	100.0	434	0.00	0.88	4.40	0.00	0.20	2.49	35	176
68.0m	100.1	435	0.00	0.82	4.55	0.00	0.18	2.41	34	188
69.0m	100.0	436	0.01	0.81	4.08	0.01	0.19	3.12	25	130
69.0m	100.1	436	0.01	0.84	3.95	0.01	0.21	3.06	27	129
70.0m	100.0	436	0.00	0.76	7.04	0.00	0.10	3.06	24	230
70.0m	100.0	437	0.01	0.76	6.56	0.01	0.11	3.07	24	213
71.0m	100.0	437	0.02	1.16	2.32	0.02	0.50	4.09	28	56
71.0m	100.1	436	0.02	1.18	2.31	0.02	0.51	4.09	28	56
72.0m	100.0	436	0.02	0.96	2.80	0.02	0.34	2.80	34	100
72.0m	100.0	434	0.03	1.40	4.88	0.02	0.28	4.37	32	111
<b>72.0m</b>	100.0	440	0.02	0.90	3.12	0.02	0.28	2.70	33	115
<b>72.0m</b>	100.0	438	0.02	0.89	3.06	0.02	0.29	2.69	33	113
73.0m	100.0	435	0.01	0.78	5.08	0.01	0.15	2.85	27	178
73.0m	100.0	436	0.01	0.74	5.04	0.01	0.14	2.86	25	176
74.0m	100.0	437	0.00	0.58	4.44	0.00	0.13	2.75	21	161
74.0m	100.0	435	0.02	0.73	4.12	0.03	0.17	2.80	26	147
75.0m	100.1	433	0.00	0.68	3.19	0.00	0.21	2.97	22	107

Glacier Fiord (78°38'N, 89°55' W), Bastion Ridge Fm.										
Mtr	Qty	Tmax	S1	S2	S3	PI	S2/S3	TOC	HI	OI
75.0m	100.0	436	0.01	0.71	3.12	0.01	0.22	2.95	24	105
75.5m	100.0	438	0.01	1.37	1.75	0.01	0.87	4.14	33	37
75.5m	100.0	438	0.01	1.36	1.66	0.01	0.81	4.13	32	40
76.0m	100.0	436	0.03	1.38	1.76	0.02	0.78	4.43	31	39
76.0m	100.0	435	0.00	1.26	1.82	0.00	0.69	4.42	28	41
77.0m	100.0	436	0.03	1.52	1.68	0.02	0.90	4.23	35	39
77.0m	100.0	436	0.02	1.53	1.78	0.01	0.85	4.40	34	40
78.0m	100.0	438	0.00	0.83	0.83	0.00	1.00	3.22	25	25
78.0m	100.0	439	0.00	0.81	0.81	0.00	1.00	3.18	25	25
78.5m	100.1	436	0.02	1.31	2.59	0.02	0.50	3.24	40	79
78.5m	100.0	436	0.03	1.26	2.64	0.02	0.47	3.20	39	82
79.0m	100.0	434	0.01	0.69	1.60	0.01	0.43	1.98	34	80
79.0m	100.0	436	0.02	0.73	1.58	0.03	0.46	2.02	36	78
79.4m	100.0	440	0.04	2.26	0.74	0.02	3.05	1.72	131	43
79.4m	100.0	439	0.03	2.19	0.68	0.01	3.22	1.80	120	37
81.2m	100.0	439	0.02	1.47	0.84	0.01	1.75	1.43	102	58
81.2m	100.0	438	0.02	1.47	0.96	0.01	1.53	1.47	100	65
85.0m	100.0	436	0.03	1.14	1.37	0.03	0.83	2.54	44	53
85.0m	100.1	438	0.02	1.18	1.36	0.02	0.86	2.56	46	53

Glacier Fiord (78°38'N, 89°55' W), Bastion Ridge Fm.										
Mtr	Qty	Tmax	S1	S2	S3	PI	S2/S3	TOC	HI	OI
Rock-eval pyrolysis data for the Standard #9107.										
#	QTY	Tmax	SI	S2	S3	PI	S2/S3	TOC	HI	OI
Average		440.6	1.34	12.53	0.63			5.17		
St.Dev.		2.2	0.08	0.44	0.08			0.21		
1	100.2	442	1.26	12.17	0.62	0.09	19.62	4.99	243	12
2	100.0	441	1.31	13.07	0.57	0.09	22.92	5.54	235	10
3	100.1	440	1.28	12.34	0.63	0.09	19.58	5.10	241	12
4	100.1	440	1.29	12.38	0.59	0.09	20.98	4.96	249	11
5	100.0	438	1.50	13.69	0.62	0.10	22.08	5.70	240	10
6	100.0	440	1.32	12.32	0.54	0.10	22.81	4.92	250	10
7	100.0	438	1.35	12.89	0.53	0.09	24.32	5.21	247	10
8	100.0	440	1.30	12.72	0.55	0.09	23.12	5.12	248	10
9	100.0	437	1.25	12.55	0.53	0.09	23.67	5.39	232	9
10	100.0	440	1.28	12.33	0.56	0.09	22.01	5.04	244	11
11	100.0	440	1.32	12.77	0.57	0.09	22.40	5.35	238	10
12	100.0	442	1.29	12.49	0.69	0.09	18.10	5.07	247	13
13	100.0	437	1.30	12.66	0.70	0.09	18.08	5.43	233	12
14	100.0	438	1.26	12.76	0.70	0.09	18.22	5.20	245	13
15	100.0	441	1.21	11.36	0.73	0.10	15.56	4.92	230	14

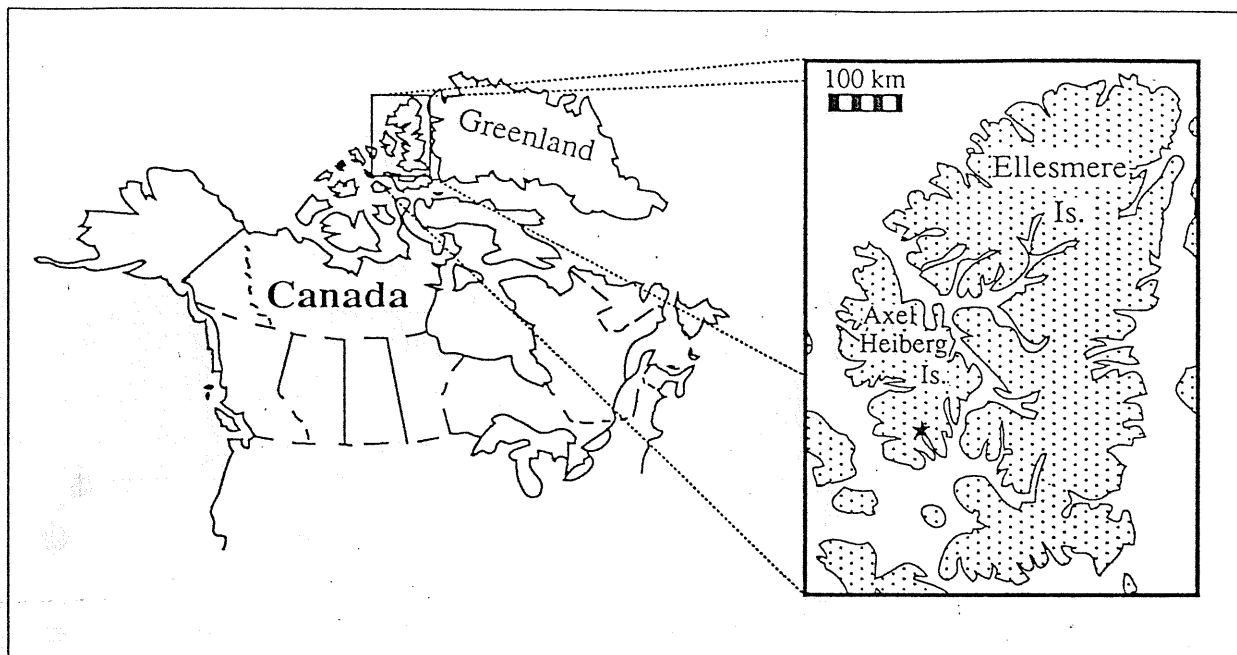


Fig. 1. Location map for the study area, Glacier Fiord (\*), southern Axel Heiberg Island, Canadian Arctic Archipelago. Geographic coordinates: 78° 38' N, 89° 55' W.