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CANADIAN GEOTHERMAL DATA COLLECTION

– Northern Wells, 1955 to February 1974

by
A. E. Taylor and A. S. Judge

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ABSTRACT

Subsurface temperatures are necessary to solve many problems which occur in resource development particularly in northern regions. This volume collects together all such information available within the public domain for holes greater than 125 m in depth. An introductory section discusses data acquisition and accuracy, the disturbance to thermal equilibrium by drilling and the determination of equilibrium permafrost thickness. A table and figure give the values of permafrost thickness determined from the presented data.

RÉSUMÉ

Il est nécessaire de connaître les températures souterraines pour résoudre de nombreux problèmes d'exploitation de ressources, surtout dans les régions septentrionales. Le présent volume rassemble tous les renseignements accessibles au public au sujet des trous d'une profondeur supérieure à 125 m. L'introduction traite du prélèvement et de la précision des données, de la rupture de l'équilibre thermique par le forage ainsi que des façons de déterminer l'épaisseur du pergélisol par l'équilibre. Un tableau et une figure donnent les différentes épaisseurs de pergélisol établies d'après les données soumises.

PREFACE

This volume contains available underground temperature data from northern drillholes, greater than 125m. in depth, collected prior to February 1974. Its object is to make widely available some of the base data required for planning and conducting resource developments in northern Canada. Analysis of the results has been and will continue to be published elsewhere. Much of the data is from wells not yet in thermal equilibrium. Where two or more logs are available for a well, equilibrium temperatures have been estimated. Future supplementary volumes are planned to be issued at yearly intervals. These will update the observations at each site and include data from new sites no longer considered confidential.

The collection consists of the following sections:

I Introductory text.

II Measured temperature versus depth and plotted profiles.

III Interpolated temperature gradients versus depth.

IV Estimated equilibrium temperatures using the logarithmic return.

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SECTION I

Introductory Text

INTRODUCTION

Information on underground temperatures and geothermal gradients is of importance in many applied resource problems, such as designing ventilation systems for mines and the utilisation of geothermal energy. It is of particular importance in northern Canada from a practical point of view because of the presence of permafrost. Permafrost thickness and temperature is important in many phases of the petroleum and mining industries. Permafrost information is necessary in the interpretation of seismic reflection surveys to reveal the presence of underground structures (Boulware, 1961) and for the safe design of wells in the drilling and production stage. In the latter case the thaw of ice in the walls of a well, caused either by the circulation of drilling fluids or the production of hot oil and gas from depth present certain engineering problems (Smith and Clegg, 1971). In the mining industry, permafrost information is important in geophysical interpretations (Burns and Hamilton, 1974), in slope stability of open pits, in explosive charge design (Garg and Stacey, 1973), in underground ventilation design, and in drift and stope stabilities (Pike, 1966).

Geothermal research in northern Canada was for many years hampered by a general lack of interest in the nature of the underground thermal regime, except in the realm of pure science, and by the enormous cost of operating and logistically supporting a drill-rig in the north. Pioneering deep geothermal studies were made by Hemstock (1949) and later by Garland and Lennox (1962) at Norman Wells, by Bremner (1955) at Resolute Bay on Cornwallis Island, by Jacobsen (1963) and the United States Geological Survey at Winter Harbour on Melville Island, by Beck and Sass (1966) at the Muskox Intrusion near Coppermine, and by Mackay (1967) in the lower Mackenzie Valley. Many of these studies led to a much greater understanding of permafrost. For example, Misener (1955), using Bremner's work was able to determine a terrestrial heat flow at Resolute Bay: the resulting high value caused Goguel (1956) to consider the effect of surface temperature change and Lachenbruch (1957) to consider theoretically the effect of a shoreline on the underground thermal regime. In spite of these pioneering studies Brown (1967) in his map of the permafrost distribution in Canada was only able to show two sites in the Arctic Islands. The number of observational sites on the mainland was larger because of the larger number of mining ventures and site engineering studies in areas of generally thinner permafrost.

A more complete regional geothermal study has become feasible in the past few years because of the greatly increased activity associated with resource development. With very considerable assistance from industry and from the Department of Indian and Northern Affairs, in making wells available, with logistic support from the Polar Continental Shelf Project and financial support from the Environmental-Social Committee on Northern Pipelines, the Earth Physics Branch of Energy, Mines and Resources has been making deep temperature measurements at more than 38 sites in northern Canada, 18 of them in the Arctic Islands. Locations of the sites reported in this volume are shown in Fig. 1 and tabulated in Table 1.

DATA IN COLLECTION

In this first report an attempt has been made to collect together all deep subsurface temperature information from holes of depth greater than 125 m., within the permafrost regions of Canada, and which are either beyond the confidential period or for which prior data release has been obtained. The depth chosen coincides with that prescribed for the shallowest depth which comes under the jurisdiction of the oil and gas regulations (Canada Oil and Gas Land Regulations, 1968) and physically excludes holes which do not penetrate the maximum depth of penetration of the annual temperature variation and those not penetrating the maximum depth of penetration of the climatic warming in the past 100 years. It is hoped that later reports can be assembled by this or other groups which will be concerned with shallow thermal studies.

The present collection, it is believed, contains all available non-confidential subsurface temperature information within the limits described. The early results of Misener, Garland and Lennox, and Beck and Sass have been included together with published and unpublished data acquired by the Earth Physics Branch and by industrial agancies. In Table 1 site name, coordinates, measurement technique used, elevation and maximum depth of the temperature observations are given. The main body of the report lists in order of E.P.B. number shown on Table 1 not only measured temperatures versus depth but includes interpolated temperature gradients and estimated equilibrium or undisturbed rock temperatures for non-equilibrium wells, as described in the section on drilling disturbance.

Section II of the report lists the measured temperatures versus depth. Since a study of how close the measured temperatures are to equilibrium requires a knowledge of the well history, such information as the dates of spud and abandonment and the total depth of the well is included. The current status of the well, the type of measurement made and the source of measured temperatures is also given. It is often more convenient to refer to a plot of temperature against depth and so a series of plots for each well are included at the rear of Section II.

Section III lists the interpolated temperature gradients between two successive temperature measurements for each of the temperature logs on each well listed in Table 1. The gradient is assigned to a depth which is the mid-point of the interval.

Section IV lists the estimated equilibrium temperatures at several selected depths in each well for which there are more than two temperature profiles measured at different times. The theory used for this calculation is given in the section of drilling disturbance. An explanation of the other symbols used for this listing is given in the same section.

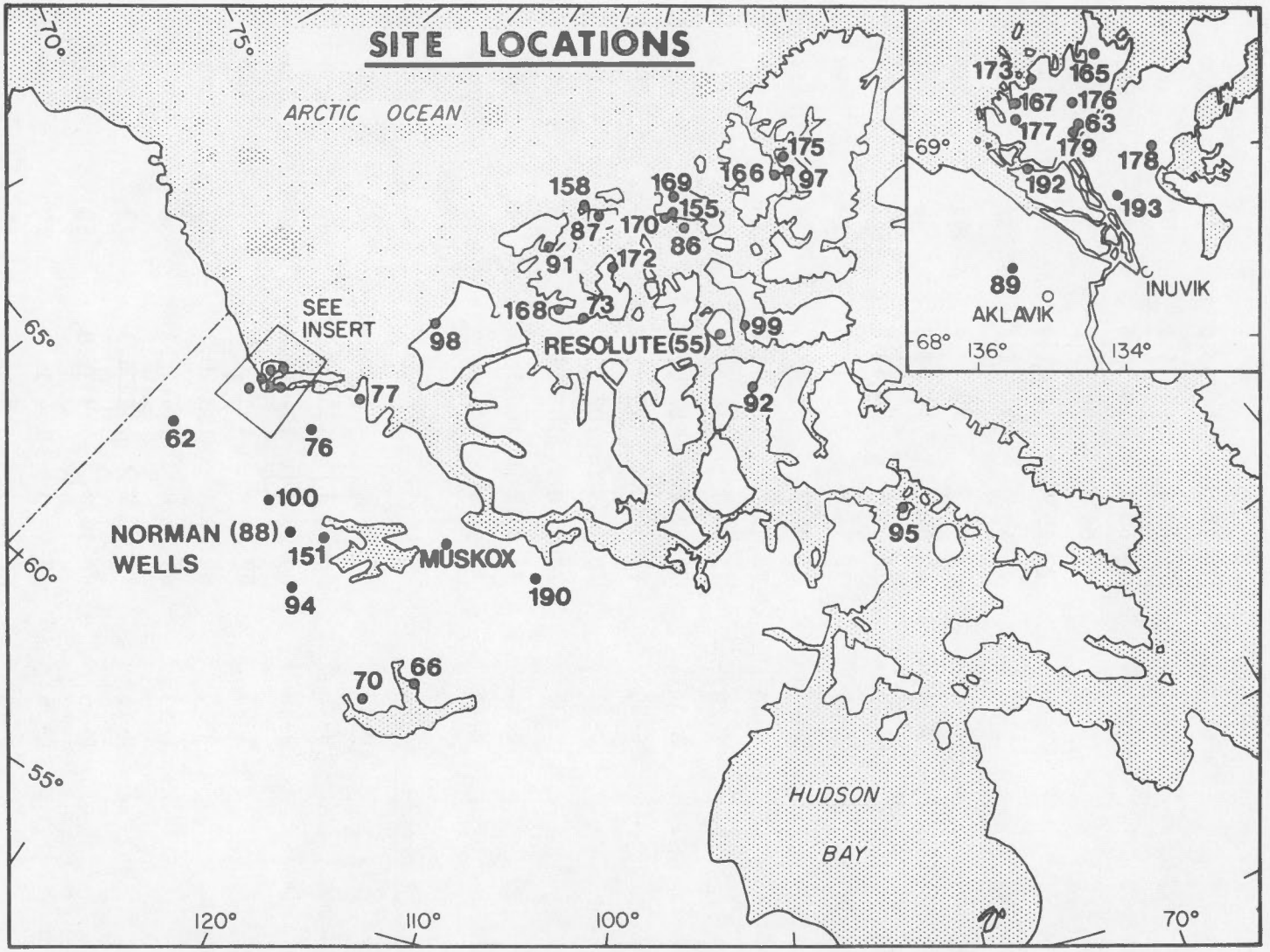

Figure 1. Site Locations:

Numbers refer to E.P.B. file numbers used throughout report. Names are given to early site without E.P.B. number. These sites are listed under 0 in Data section of report.

TABLE 1 Sites Included in Report

EPB#[3]	Name	Designation[4]	Latitude N	Longitude W	Elevation m	Depth m	Meas. Tech.
Arctic Islands							
0	Resolute 1	Dom. Obs.	74 41.0	94 53.8	10	200	M[2]
55	2	L-41	74 40.7	94 44.6	61	183	S[1]
73	Winter Harbour	Dome #1	74 48.1	110 30.6	22	605	M
86	Hoodoo	H-37	78 06.5	99 45.6	156	610	S
87	Wilkins	E-60	77 59.3	111 21.7	64	709	S
91	Jameson Bay	C-31	76 40.2	116 43.7	58	716	S
92	Garnier	O-21	73 40.9	90 36.8	369	610	M
95	Rowley Island	M-04	69 04.0	79 03.8	48	451	S
97	Fosheim	N-27	79 36.9	84 43.3	562	367	M
98	Storkerson	A-15	72 54.0	124 33.5	14	396	S
99	Devon Island	E-45	75 04.3	91 48.3	244	152	S M
155	Kristoffer	B-06	78 15.3	102 32.0	15	500	S
158	Brock	I-20	77 59.7	114 33.9	17	701	S
166	Mokka	A-02	79 32.2	87 01.2	253	442	M
168	Dundas	C-80	74 39.0	113 23.0	240	610	S
169	Louise Bay	O-25	78 44.9	102 42.0	69	610	S
170	Thor	P-38	78 07.8	103 15.2	5	564	S
172	Drake	B-44	76 23.1	108 16.1	4	306	S
175	Gemini	E-10	79 59.4	84 04.2	126	792	S
Arctic Mainland - Mackenzie Delta							
63	Reindeer 1	D-27	69 06.1	134 36.9	29	602	M
89	Beaverhouse	H-13	68 22.3	135 33.0	67	1158	S
165	Kilagmiotak	F-48	69 27.5	134 11.9	20	580	S
167	Unipkat	I-22	69 11.6	135 20.5	9	762	S
173	Niglintgak	H-30	69 19.4	135 20.1	2	305	S
176	Ya Ya	P-53	69 12.8	134 42.8	36	564	S
177	Titalik	K-26	69 05.5	135 06.3	12	199	S
178	Parsons	N-10	68 59.8	133 31.8	68	667	S
179	Reindeer 2	F-36	69 05.3	134 39.0	10	360	S
192	Kugpik	O-13	68 52.9	135 18.3	18	728	S
193	Ikhil	I-37	68 46.6	134 07.8	125	610	S

TABLE 1 Sites Included In Report (con't)

EPB#	Name		Designation	Latitude N	Longitude W	Elevation m	Depth m	Meas. Tech.
Arctic Mainland								
0	Muskox	1	G.S.C.	67 5.5	115 13.0	536	1042	S
		2	G.S.C.	67 5.5	115 16.5	513	1036	S
0	Norman Wells	1	Canol 33X	65 16.9	126 50.5	61	408	S
62	N. Cath		YTB-62	66 11.2	138 41.6	535	960	M
66	Yellowknife		Rodstrom	62 30.5	114 25.3	207	921	S
70	Providence		A-47	61 26.2	117 22.5	162	497	S
76	Kugaluk		N-02	68 32.0	131 31.3	213	671	S
77	Horton River		G-02	69 51.4	127 15.9	34	351	S
88	Norman Wells	2	Canol 30X	65 17.2	126 51.9	65	381	S
88	Norman Wells	3	Canol 18X	65 17.1	126 52.0	61	397	S
88	Norman Wells	4	Canol 19X	65 17.1	126.52.8	53	397	S
88	Norman Wells	5	Canol 7X	65 17.0	126 50.8	61	412	S
88	Norman Wells	6	Bear I.#13	65 15.5	126 53.3	54	580	S
88	Norman Wells	7	Bear I.#7	65 15.4	126 52.9	52	580	S
94	Dahadinni		M-43A	63 53.0	124 39.3	248	231	S
100	Hume R.		D-53	65 52.0	129 11.0	84	282	S
151	W. Whitefish		H-34	65 33.4	124 35.7	227	354	S
190	Hackett R.	1	Cominco	65 55.2	108 28.0	436	244	M
		2	Cominco	65 55.2	108 28.0	445	244	M

Notes: 1. S Single thermistor log.

2. M Multithermistor cable installed.

3. EPB # corresponds to number given on Figure 1.

4. Gives well designation - refer to depth: temperature tables for full name.

AQUISITION & ACCURACY OF DATA

Methods of temperature measurement used by EPB in northern wells have been discussed elsewhere (Jessop, 1969; Judge, 1973a); industrial methods have been discussed by Kljucec and Telford (1972). In general temperature measurements made using EPB equipment are accurate to better than 0.01°C with a systems resolution of .003°C. Convection of heat in the bore fluid is observed in some wells in areas of high geothermal gradient. When convection occurs the measured fluid temperature may differ from the rock temperature outside the well by ± 0.1°C. Several of the wells in the Mackenzie Delta and the Arctic Islands have been logged using both EPB equipment and industrial equipment. In some of the industrially made measurements inaccuracies of ± 0.5°C may exist in the temperatures. Such logs have been indicated on the tables of temperature against depth. Multithermistor cables have been installed immediately after drilling at several prospective mining developements. These are considered as reconnaisance tools and are generally manufactured with thermistors accurate to ± 0.1°C. Measurement of depth with all of these various systems is generally 1% or better even at depths of several hundred metres.

PRESERVATION OF BOREHOLES

There are many problems involved in obtaining useful temperature measurements in northern boreholes. The most difficult is that of either preserving an open hole or instrumenting a well and yet fulfilling the abandonment requirements of the regulatory agencies. This is necessary because of the length of time that a borehole takes to return to thermal equilibrium. Other problems arise from the cost and difficulty of access to many of the sites. Further details on the preservation of northern wells for temperature observations are given in Kljucec and Telford (1972), Judge (1973a, 1974).

THE DRILLING DISTURBANCE

Unfortunately the process of drilling a well disturbs the temperature of the rock surrounding the well. Examples of this disturbance and the factors on which it depends have been discussed elsewhere (Lachenbruch and Brewer 1959, Judge 1974). Temperatures in and around deep northern wells drilled in the search for hydrocarbons are usually severaly disturbed by the drilling process. Studies of the geothermal flux, the depth distribution of permafrost, the past surface temperature history of the area, and a determination of where permafrost is aggrading or degrading all depend on a knowledge of the equilibrium rock temperature. Non-equilibrium profiles have their own uses. Individually they can be used to determine the porosity of the surrounding rocks, the salinity of water in the pores and the depth to which pore water is frozen. A series of non-equilibrium temperature profiles can be used to estimate the equilibrium temperature.

Lachenbruch and Brewer (1959) suggested that the return of a well to thermal equilibrium at the completion of drilling could be expressed by:

$$T(t) - T(\infty) = C \ln \left(\frac{t}{t-s} \right)$$

where s represents the time elapsed from the day the drill bit first reached the depth in question until the cessation of drilling; t is the time measured from the time the drill bit first reached the depth in question until the time of the temperature measurement, T(t); T(∞) is the undisturbed equilibrium ground temperature at that depth and C, known as the source function, can be treated as a constant. The source function is given by;

$$C = \frac{q}{4\pi k}$$

where q represents the source strength, defined as the mean rate of heat release per unit depth by drilling, and k the thermal conductivity of the rock wall at that depth. If the measured temperatures at various times since the end of drilling are plotted against $\ln \left(\frac{t}{t-s} \right)$ the results approximate a straight line of slope $\frac{q}{4\pi k}$ and an intercept of T(∞) on the temperature axis. In practice it is more convenient to fit a least squares line through the measurements. This procedure is adopted to derive the results given in Section IV of the report. For each depth given in Column 1, Columns 2 and 3 give the determined value of T(∞) and the standard deviation. Columns 4 and 5 give the value of C, the source function, and the standard deviation. Column 6 gives the time in years for the well at that depth to return to within 0.1°C of the equilibrium temperature T(∞). This figure is given by the following expression:

$$t = \frac{s}{1 - e^{-0.1/C}}$$

In some instances in the tables the calculated values of C and t are negative. Such results can arise where the equilibrium temperatures were little disturbed by drilling and results of differing accuracies have been combined. A negative C could also result from the hole being cooled during drilling. Such results have no other significance. The heat transfer coefficient λ across the walls of the well can also be determined and is given by:

$$\lambda = \frac{q}{\pi d \Delta T}$$

where d is the diameter of the borehole and ΔT the temperature difference between the drilling fluid temperature and the equilibrium temperature T(∞) Determinations of λ are rather coarse because heat is lost vertically as well as radially and the effective value of d is uncertain in permeable formations.

The logarithmic method is only valid where no latent heat effect enters in the return to equilibrium and hence only data from below the permafrost can be used to determine the base of the permafrost unless the permafrost section is of zero porosity or has completely refrozen. Further discussion and examples of some of these curves may be found in Judge (1974). The ratio of $\frac{t-s}{s}$ can be used qualitatively as an indicator of how close a well is to thermal equilibrium and so this parameter is listed in Table 2.

Many northern wells, particularly through rocks of high porosity, show certain characteristic temperature profiles shortly after the completion of the drilling. This has been described in some detail by Jessop and Judge (1974) and so comments here will be brief. Because of the delay in rise of wall temperature, caused by the melting of pore ice, a pattern of temperatures develop in which the well becomes isothermal within the frozen section, but shows abrupt increase in temperature over a small interval at the base of the frozen section and a steady rise in temperature with depth below this. The depth of the almost step-like increase in temperature is taken as the depth to the base of the frozen section.

DISTRIBUTION OF PERMAFROST

Figure 2 shows the distribution of permafrost thickness, i.e. the depth below the collar of the $0^{o}C$ isotherm, as determined for each of the sites in this report. Where several sets of temperature logs have been run at different times over a period of several years and an equilibrium temperature has been determined, the value for the permafrost thickness has been underlined. These are the more reliable values. For those sites where the value is based on one log at present or a few logs made shortly after completion and where further logs are possible, a revised estimate will be available later. Reference to the description of hole status beneath the data listing for the well in Section II indicates whether further temperature results will be forthcoming. Lachenbruch and Brewer (1959) estimated, for example, that when $\frac{t-s}{s}$ equalled 27, the well temperatures were approximately $0.1^{o}C$ above the equilibrium undisturbed temperatures in the Barrow well. Table 2 lists the best value available for the permafrost thickness at each site and indicates how the value was derived. Where sufficient logs were available the logarithmic method was used. Where there are too few logs to determine an equilibrium value, the value of $\frac{t-s}{s}$ is expressed in column 7 of the table. The terms are as defined in the previous section. The larger the ratio of $\frac{t-s}{s}$ the closer the result will be to an equilibrium value. Where a borehole penetrates high porosity rocks the thickness of frozen ground, i.e. that depth to which the pores in the rock contain ice, can often be determined shortly after drilling. The development of a high temperature gradient in a well as indicator of the base of the frozen section has been described in the previous section, and results determined in this way are given in Column 6.

Since the presence of nearby lakes and shorelines may cause considerable thinning of permafrost in wells, Column 8 lists the distance to the closest large body of water of sufficient size to alter the permafrost thickness. Further discussion of these effects can be found in Lachenbruch (1957).

The determined values of permafrost thickness can be used to plan future local operations in the vicinity of the measured site but can also be used to determine values at remote locations as shown by Judge (1973b).

Detailed discussion of the results obtained in relation to other parameters will be published elsewhere.

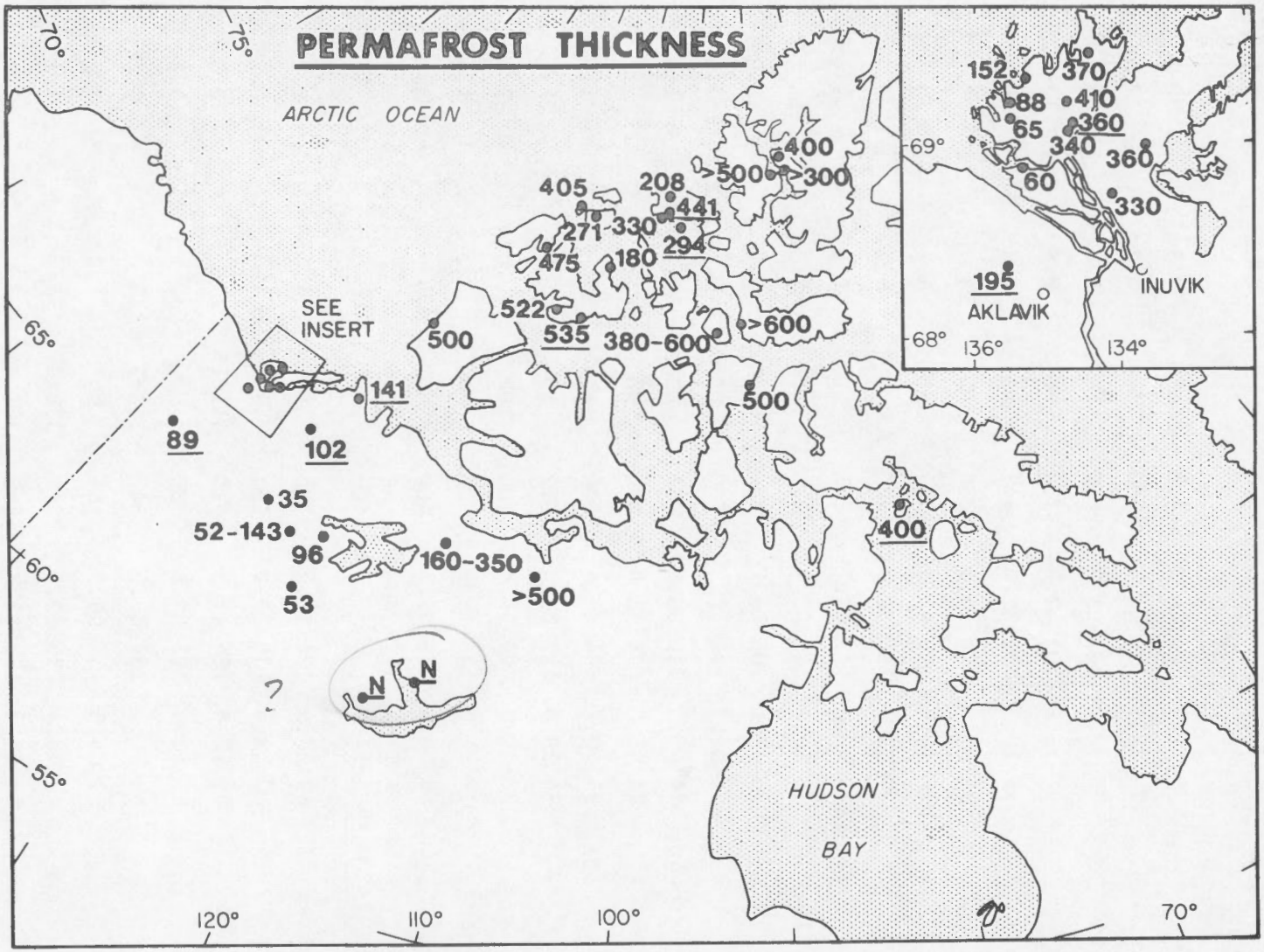

Figure 2. Permafrost Thickness:

Numbers give calculated thickness in metres. Accuracies of estimates can be assessed using Table 2. Where several logs allowed a value to be determined with high precision the value is underlined.

TABLE 2 Permafrost Thickness

EPB #	Site Name	Latitude N	Longitude W	Depth to 0°C m.	Thickness Frozen m.	Drill to Measurement Ratio[2]		Distance to Water Body km.
Arctic Islands								
175	Gemini	79 59.4	84 04.2	400	ND[1]	0.3[2]		20
97	Fosheim	79 36.9	84 43.3	>300	ND	0.2		7
166	Mokka	79 32.2	87 01.2	>500	ND	0		3
169	Louise Bay	78 44.9	102 42.0	208	ND	1.6		13
155	Kristoffer	78 15.3	102 32.0	441	ND	3.5	E[3]	0.1
170	Thor	78 07.8	103 15.2	330	ND	13	E	0.1
86	Hoodoo	78 06.5	99 45.6	294	ND	4.2	E	13
158	Brock	77 59.7	114 33.9	405	ND	4.4		5
87	Wilkins	77 59.3	111 21.7	271	ND	1.1		9
91	Jameson Bay	76 40.2	116 43.7	475	ND	8.8	E	12
172	Drake	76 23.1	108 16.1	180	ND	5.7		.05
99	Devon	75 04.3	91 48.3	>600	ND	5.7	X[4]	1.6
73	Winter Harbour	74 48.1	110 30.6	535	ND	19	E	1.0
0	Resolute 1	74 41.0	94 53.8	380	ND		X	
55	Resolute 2	74 40.7	94 44.6	>600	ND	34	EX	1.3
168	Dundas	74 39.0	113 23.0	522	ND	1.0		21
92	Garnier	73 40.9	90 36.8	500	ND	0.02		2
98	Storkerson	72 54.0	124 33.5	500	ND	3.1	X	1.6
95	Rowley	69 04.0	79 03.8	400	ND	36	E	3
Arctic Mainland - Mackenzie Delta								
165	Kilagmiotak	69 27.5	134 11.9	370	ND	1.4	X	0.2
173	Niglintgak	69 19.4	135 20.1	152	ND	1.8	E	0.2
176	Ya Ya	69 12.8	134 42.8	410	411±15	12		0.3
167	Unipkat	69 11.6	135 20.5	88	ND	2	E	0.1
63	Reindeer 1	69 06.1	134 36.9	362	350±5	13	E	0.2
177	Titalik	69 05.5	135 06.3	65	ND	1.0		0.2
179	Reindeer 2	65 05.3	134 39.0	340	338±8	5		0.3
178	Parsons	68 59.8	133 31.8	360	341±15	3	E	0.3
192	Kugpik	68 52.9	135 18.3	60	ND	0.7		0.1
193	Ikhil	68 46.6	134 07.8	330	341±8	0.3	E	1
89	Beaverhouse	68 22.3	135 33.0	195	ND	7	E	1.5

TABLE 2 Permafrost Thickness (con't)

EPB #	Site Name	Latitude N	Longitude W	Depth to 0°C m.	Thickness Frozen m.	Drill to Measurement Ratio[2]		Distance to Water Body km.
Arctic Mainland - Other								
77	Horton River	69 51.4	127 15.9	141	ND	14	E	7
76	Kugaluk	68 32.0	131 31.3	102	ND	4	E	0.5
62	N. Cath.	66 11.2	138 41.6	89	ND	25	E	6
0	Muskox 1	67 05.5	115 13.0	160	ND	7		.05
0	Muskox 2	67 05.5	115 16.5	350	ND	0.1		1
190	Hackett R. 1	65 55.2	108 28.0	>500	ND	ND		2
	Hackett R. 2	65 55.2	108 28.0	>500	ND	ND		2
100	Hume R.	65 52.0	129 11.0	35	ND	3		0.2
151	W. Whitefish	65 33.4	124 35.7	96	ND	18	E	2
0	Norman Wells 1	65 16.9	126 50.5	62	ND	ND		0.3
88	Norman Wells 2	65 17.2	126 51.9	(143)	ND	ND		0.9
	Norman Wells 3	65 17.1	126 52.0	(76)	ND	ND		0.6
	Norman Wells 4	65 17.1	126 52.8	(58)	ND	ND		0.2
	Norman Wells 5	65 17.0	126 50.8	(128)	ND	ND		0.3
	Norman Wells 6	65 15.5	126 53.3	(67)	ND	ND		0.4
	Norman Wells 7	65 15.4	126 52.9	(52)	ND	ND		0.5
94	Dahadinni	63 53.0	124 39.3	53	ND	3	E	35
66	Yellowknife	62 30.5	114 25.3	NIL	ND	18		0.08
70	Providence	61 26.2	117 22.5	NIL	ND	78		18

Notes:
1. ND -- Not Determined.
2. Ratio of "Time since drilling completed to drilling time" i.e. $\frac{t-s}{s}$ (see text).
3. E Depth to 0°C based on logarithmic return equation (see text).
4. X Depth to 0°C extrapolated.

ACKNOWLEDGEMENTS

The authors would like to acknowledge, with grateful thanks, the many people who have assisted in the acquisition of the data included in this report and in the preparation of this report. It would take many pages to list everyone who has had a hand in this programme to date; such as the D.I.N.A. personnel who have allowed the preservation of wells; the companies who have made wells available; company and government people who have provided logistic support; the pilots who have flown us around often in very remote areas; the summer students and industry people who have helped install cables, erect signs and log wells. To all of them we offer our thanks.

Particular thanks to Dr. H.J. Berry and his regional conservation engineers for their assistance in well preservation; to Mr. Gordon Hood of Panarctic Oils and Mr. John Hnatiuk of Gulf Oil Canada for the enthusiam that they have shown in making wells available for this work; to Polar Continental Shelf Project for continuing to provide logistic support in the Arctic Islands; to the Environmental-Social Committee on Northern Pipelines for supporting our work in the Western Arctic; and to the other members of our group Dr. A.M. Jessop, Mr. T.J. Lewis and Mr. V. Allen for providing a great deal of time and effort in establishing this programme and making it the success it is.

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DATA LISTINGS

SECTION II

Measured Temperature Versus Depth

EARTH PHYSICS BRANCH HOLE NO. -0 RESOLUTE BAY (MISENER, 1955)

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LATITUDE 74 DEGREES 41.00 MINUTES NORTH LONGITUDE 94 DEGREES 53.80 MINUTES WEST

ELEVATION 10 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG
0 0 55

DEPTH (M)	TEMP (C)
15.2	-12.20
30.5	-13.10
45.7	-13.00
61.0	-12.60
76.2	-12.10
91.4	-11.60
106.7	-11.00
121.9	-10.40
137.2	-9.90
152.4	-9.30
167.6	-8.60
182.9	-8.10
198.1	-7.40

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
LOGGING OF THIS HOLE IS COMPLETE

-DRILLED TO A TOTAL DEPTH OF 200 METERS

RESULTS FROM MISENER, A.D.
TRANS. AGU, VOL. 36, 1055-1060 (1955)

EARTH PHYSICS BRANCH HOLE NO. -0 NORMAN WELLS CANOL 33X

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LATITUDE 65 DEGREES 16.90 MINUTES NORTH LONGITUDE 126 DEGREES 50.50 MINUTES WEST

ELEVATION 61 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG
0 5 60

DEPTH (M)	TEMP (C)
137.2	4.61
182.9	7.33
213.4	9.16
243.8	12.20
276.1	13.10
307.5	16.20
373.4	20.20
408.4	21.60

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
LOGGING OF THIS HOLE IS COMPLETE

IMPERIAL CANOL 33X
-WELL SPUDDED 15 11 44
-DRILLING FOR 17 DAYS TO A TOTAL DEPTH OF 415 METERS
-DRILLING STOPPED 2 12 44

RESULTS FROM GARLAND, G.D. AND LENNOX, D.H.
GEOPHYSICAL JOUR. 6, 245-262 (1962).

EARTH PHYSICS BRANCH HOLE NO. -0 MUSKOX SOUTH

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LATITUDE 67 DEGREES .50 MINUTES NORTH LONGITUDE 115 DEGREES 13.00 MINUTES WEST

ELEVATION 536 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG

DEPTH (M)	TEMP (C)
20.7	-6.86
51.2	-4.46
81.7	-3.15
112.2	-1.82
142.6	-.52
173.1	.52
203.6	1.49
234.1	2.23
264.6	3.12
295.0	3.94
325.5	4.76
356.0	5.49
386.5	6.28
417.0	7.13
447.4	7.81
477.9	8.44
508.4	9.13
538.9	9.75
569.4	10.82
599.8	10.84
630.3	11.42
660.8	12.02
691.3	12.60
721.8	13.14
752.2	13.59
782.7	14.05
813.2	14.49
843.7	14.92
874.2	15.37
904.6	15.83
935.1	16.30
965.6	16.80
996.1	17.30
1026.6	17.79
1042.4	17.93

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

G.S.C. MUSKOX SOUTH
-WELL SPUDDED 14 5 63
-DRILLING FOR 110 DAYS TO A TOTAL DEPTH OF 1219 METERS
-DRILLING STOPPED 1 9 63

TEMPERATURES FROM HOBSON, G.O., BECK, A.E., AND FINDLAY, D.C.
G.S.C. PAPER 66-13, P. 108-120 (1966).
DRILLING DATA FROM FINDLAY, D.C. AND SMITH, C.H. THE MUSKOX DRILLING PROJECT
G.S.C. PAPER 64-44 (1965).

EARTH PHYSICS BRANCH HOLE NO. -0 MUSKOX NORTH

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LATITUDE 67 DEGREES 5.50 MINUTES NORTH LONGITUDE 115 DEGREES 16.50 MINUTES WEST

ELEVATION 513 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG

DEPTH (M)	TEMP (C)
30.5	2.15
61.6	1.19
91.6	.65
121.9	.10
152.4	.08
182.9	.03
213.4	0.00
244.1	.07
274.6	.32
304.8	.68
335.6	1.15
396.2	2.08
427.3	2.58
457.0	3.20
488.1	3.86
518.2	4.28
548.3	4.42
578.8	5.58
609.3	6.32
639.9	7.08
670.6	7.94
701.0	8.74
731.5	9.47
762.0	10.05
792.5	10.78
823.0	11.58
853.4	12.42
883.9	13.18
914.4	13.93
944.9	14.43
975.4	15.05
1005.8	16.58
1036.3	17.35

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

G.S.C. MUSKOX NORTH
-WELL SPUDDED 10 5 63
-DRILLING FOR 95 DAYS TO A TOTAL DEPTH OF 1095 METERS
-DRILLING STOPPED 13 8 73

TEMPERATURES FROM HOBSON, G.D., BECK, A.E., AND FINDLAY, D.C.
G.S.C. PAPER 66-13, P. 108-120 (1966).
DRILLING DATA FROM FINDLAY, D.C. AND SMITH, C.H. THE MUSKOX DRILLING PROJECT
G.S.C. PAPER 64-44 (1965).

EARTH PHYSICS BRANCH HOLE NO. 55 LOBITOS RESOLUTE BAY L-41

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LATITUDE 74 DEGREES 40.70 MINUTES NORTH LONGITUDE 94 DEGREES 44.60 MINUTES WEST

ELEVATION 61 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG 1 10 70		DATE OF LOG 12 5 71		DATE OF LOG 27 4 73	
DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)
15.2	-14.71	15.2	-15.05	15.2	-15.91
30.5	-14.35	30.5	-14.45	22.9	-14.93
45.7	-14.07	45.7	-14.19	30.5	-14.54
61.8	-13.65	61.0	-13.84	38.1	-14.36
76.2	-13.38	76.2	-13.52	45.7	-14.17
91.4	-13.12	91.4	-13.28	53.3	-14.01
106.7	-12.88	106.7	-13.03	61.3	-13.76
121.9	-12.66	121.9	-12.77	68.6	-13.63
137.2	-12.34	137.2	-12.46	76.5	-13.45
152.4	-12.05	152.4	-12.21	84.1	-13.35
167.6	-11.79	167.6	-11.86	91.4	-13.24
				99.1	-13.10
				107.0	-12.95
				114.6	-12.83
				122.2	-12.70
				129.5	-12.60
				137.2	-12.37
				144.8	-12.27
				152.4	-12.15
				160.0	-12.03
				167.6	-11.84
				171.6	-11.76

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
LOGGING OF THIS HOLE IS COMPLETE AND IT HAS BEEN OFFICIALLY ABANDONED BY THE EARTH PHYSICS BRANCH

LOBITOS ET AL CORNWALLIS RESOLUTE BAY L-41
-WELL SPUDDED 4 9 63
-DRILLING FOR 102 DAYS TO A TOTAL DEPTH OF 1475 METERS
-WELL ABANDONED 15 12 63

WELL ORIGINALLY PLUGGED BACK TO 873 M AND FILLED WITH DIESEL FUEL IN DEC. 1963.
LATER AN ICE PLUG OF UNKNOWN THICKNESS FORMED AT 15 M AND ATTEMPTS TO OPEN
HOLE WERE UNSUCCESSFUL UNTIL APR. 1970 WHEN THE HOLE WAS OPENED TO 168 M.

EARTH PHYSICS BRANCH HOLE NO. 62 NORTH CATH B-62

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LATITUDE 66 DEGREES 11.20 MINUTES NORTH LONGITUDE 138 DEGREES 41.60 MINUTES WEST

ELEVATION 535 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DEPTH (M)	DATE 16 7 66 TEMP (C)	DATE 15 7 67 TEMP (C)	DATE 26 7 69 TEMP (C)	DATE 15 7 70 TEMP (C)
15.2	-2.15	-2.25	-2.12	-2.07
61.0	-.79	-1.08	-1.28	-1.31
106.7	1.22	1.09	.89	.93
152.4	3.62	3.48	3.35	3.31
198.1	5.70	5.54	5.32	5.31
243.8	8.25	8.38	8.01	7.98
289.6	10.78	10.70	10.54	10.51
335.3	12.90	12.72	12.70	12.66
381.0	14.83	14.76	14.65	14.63
426.7	16.32	16.24	16.18	16.19
472.4	17.91	17.78	17.64	17.64
518.2	19.55	19.57	19.49	19.51
563.9	20.91	20.89	20.84	20.84
609.6	22.60	22.62	22.58	22.57
655.3	24.20	24.23	24.20	24.20
701.0	25.91	25.95	25.94	25.92
746.8		27.79	27.76	27.72
792.5	29.25	29.25	29.23	29.22

TEMPERATURE RESULTS ARE OBTAINED FROM A MULTI-THERMISTOR CABLE
LOGGING OF THIS HOLE IS COMPLETE AND IT HAS BEEN OFFICIALLY ABANDONED BY THE EARTH PHYSICS BRANCH

SOCONY MOBIL WESTERN MINERALS N. CATH YT B-62
-WELL SPUDDED 16 4 65
-DRILLING FOR 69 DAYS TO A TOTAL DEPTH OF 2138 METERS
-WELL ABANDONED 25 6 65

EARTH PHYSICS BRANCH HOLE NO. 63 REINDEER D-27

****

LATITUDE 69 DEGREES 6.10 MINUTES NORTH LONGITUDE 134 DEGREES 36.90 MINUTES WEST

ELEVATION 29 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DEPTH (M)	DATE 9 7 66 TEMP (C)	DATE 2 7 67 TEMP (C)	DATE 2 7 68 TEMP (C)	DATE 14 7 69 TEMP (C)	DATE 29 7 70 TEMP (C)	DATE 12 8 71 TEMP (C)	DATE 19 7 72 TEMP (C)
3.0				8.95	19.00	6.91	23.00
18.3	-.09		-5.66	-5.77	-5.92	-6.36	-6.42
48.8	-.16		-4.84	-5.10	-5.23	-5.32	-5.39
79.2	-.19	-2.86	-4.32	-4.69	-4.87	-4.95	-5.00
109.7	-.17	-.95	-3.18	-3.66	-3.93	-4.19	-4.40
140.2	-.25	-1.13	-2.44	-3.29	-3.61	-3.79	-3.93
170.7	-.40	-2.13	-2.95	-3.28	-3.42	-3.50	-3.57
201.2	-.41	-1.76	-2.41	-2.68	-2.82	-2.91	-2.97
231.6	-.42	-1.32	-1.83	-2.08	-2.23	-2.30	-2.35
262.1	-.26	-.46	-.78	-1.48	-1.66	-1.71	-1.77
292.6	-.12	-.37	-.51	-.71	-.91	-1.01	-1.10
323.1	-.22	-.34	-.38	-.42	-.50	-.54	-.59
353.6	.50	-.05	-.18	-.20	-.23	-.24	-.25
384.0	2.53	1.27	.90	.73	.66	.58	.53
414.5	3.28	2.05	1.71	1.55	1.45	1.40	1.36
445.0	3.95	2.76	2.43	2.27	2.17	2.12	2.09
475.5	4.75	3.55	3.23	3.07	2.96	2.91	2.88
506.0	5.42	4.24	3.92	3.78	3.69	3.63	3.60
536.4	6.14	4.98	4.65	4.51	4.44	4.36	4.33
566.9	6.89	5.72	5.43	5.26	5.17	5.13	5.09
597.4	7.74	6.66	6.36	6.23	6.14	6.11	6.07

TEMPERATURE RESULTS ARE OBTAINED FROM A MULTI-THERMISTOR CABLE
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

B.A., SHELL, I.O.E. REINDEER D-27
-WELL SPUDDED 8 7 65
-DRILLING FOR 181 DAYS TO A TOTAL DEPTH OF 3861 METERS
-WELL ABANDONED 5 1 66

N.B. CABLE INSTALLED BY E.P.B. MEASUREMENTS BY E.P.B. AND U.B.C.

EARTH PHYSICS BRANCH HOLE NO. 66 YELLOWKNIFE

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LATITUDE 62 DEGREES 30.50 MINUTES NORTH LONGITUDE 114 DEGREES 25.30 MINUTES WEST

ELEVATION 207 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG
5 8 68

DEPTH (M)	TEMP (C)
7.6	2.23
15.2	1.89
23.2	2.23
30.8	2.45
46.0	3.00
61.6	3.54
92.0	4.40
122.8	5.04
153.6	5.55
184.4	5.99
214.9	6.39
245.7	6.77
276.5	7.15
307.2	7.53
337.7	7.91
368.5	8.28
399.3	8.66
430.1	9.05
460.6	9.44
491.3	9.84
522.1	10.24
552.9	10.65
583.4	11.05
614.2	11.46
645.0	11.88
675.7	12.30
706.2	12.72
737.0	13.14
767.8	13.57
798.6	14.00
829.1	14.44
859.8	14.87
890.6	15.31
921.4	15.75

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
LOGGING OF THIS HOLE IS COMPLETE

RODSTROM YELLOWKNIFE
-WELL SPUDDED 2 4 65
-DRILLING FOR 64 DAYS TO A TOTAL DEPTH OF 951 METERS
-WELL ABANDONED 5 6 65

EARTH PHYSICS BRANCH HOLE NO. 70 PROVIDENCE A-47

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LATITUDE 61 DEGREES 26.20 MINUTES NORTH LONGITUDE 117 DEGREES 22.50 MINUTES WEST

ELEVATION 162 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG 6 8 68		DATE OF LOG 19 7 69		DATE OF LOG 29 7 70	
DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)
15.4	.74	14.9	.67	15.0	.77
23.0	.96	22.9	.77	29.9	.97
30.7	1.14	30.5	.96	44.9	1.59
38.4	1.37	38.1	1.20	59.9	2.46
46.1	1.73	45.4	1.57	74.6	3.33
53.7	2.13	53.0	1.99	89.5	4.30
61.4	2.66	61.3	2.45	104.8	5.52
69.1	3.05	68.6	2.90	119.8	6.77
76.8	3.64	75.9	3.39	134.7	7.94
84.5	4.11	84.1	3.93	149.7	8.96
92.1	4.59	91.7	4.42	164.7	10.13
99.8	5.10	98.8	4.87	179.6	11.39
107.5	5.76	107.0	5.46	194.9	12.63
115.2	6.41	114.0	6.13	209.9	13.84
122.8	7.05	122.2	6.75	224.3	14.98
130.5	7.65	129.2	7.34	239.5	15.89
138.2	8.17	137.5	7.90	254.2	17.08
145.9	8.79	144.8	8.46	269.2	18.11
153.6	9.36	152.4	8.91	284.4	19.38
161.2	9.95	160.0	9.55	299.1	20.58
168.9	10.56	167.3	10.12	314.4	21.75
176.6	11.17	175.3	10.75	329.4	22.43
184.3	11.69	183.2	11.30	344.3	23.14
191.9	12.38	190.5	11.75	359.3	23.70
199.6	12.99	198.1	12.51	374.3	24.16
207.3	13.71	205.7	13.20	389.2	24.63
215.0	14.30	213.1	13.79	404.2	24.91
222.7	14.82	220.7	14.38	419.2	25.21
230.3	15.37	228.9	14.89	433.9	25.66
238.0	15.90	236.2	15.34	448.8	26.10
245.7	16.39	243.8	15.90	463.8	26.42
253.4	17.03	251.2	16.35	479.1	26.79
261.0	17.59	258.8	16.95	493.7	27.18
268.7	18.24	266.7	17.55	495.5	27.25
276.4	18.82	274.3	18.13		
284.1	19.34	281.9	18.67		
291.8	19.97	289.9	19.11		
299.4	20.58	296.9	19.76		
307.1	21.11	304.8	20.37		

DATE OF LOG 6 8 68		DATE OF LOG 19 7 69	
DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)
314.8	21.75	312.1	20.91
322.4	22.14	319.7	21.54
330.1	22.48	327.7	21.97
337.8	22.90	335.3	22.30
345.5	23.19	342.6	22.73
353.2	23.45	350.5	22.57
360.9	23.74	358.1	23.28
368.5	23.99	365.5	23.55
376.2	24.23	373.1	23.82
383.9	24.46	381.0	24.07
391.5	24.67	388.3	24.28
399.2	24.80	396.2	24.52
406.9	25.01	403.9	24.69
414.6	25.11	411.2	24.82
422.3	25.27	419.1	24.96
430.0	25.52	426.7	25.13
437.6	25.76	434.6	25.28
445.3	25.98	442.0	25.52
453.0	26.20	457.2	25.97
460.6	26.35	465.1	26.19
468.3	26.54	472.4	26.33
476.0	26.75	479.8	26.51
483.7	26.88	487.7	26.65
491.4	27.09	495.8	26.82
497.8	27.26	502.6	27.02
		509.6	27.23

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
LOGGING OF THIS HOLE IS COMPLETE AND IT HAS BEEN OFFICIALLY ABANDONED

I.O.E. PROVIDENCE A-47
-WELL SPUDDED 11 3 68
-DRILLING FOR 11 DAYS TO A TOTAL DEPTH OF 504 METERS
-WELL ABANDONED 22 3 68

EARTH PHYSICS BRANCH HOLE NO. 73 WINTER HARBOUR

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LATITUDE 74 DEGREES 48.10 MINUTES NORTH LONGITUDE 110 DEGREES 30.60 MINUTES WEST

ELEVATION 22 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DEPTH (M)	DATE 24 7 62 TEMP (C)	DATE 27 7 63 TEMP (C)	DATE 23 7 64 TEMP (C)	DATE 6 4 68 TEMP (C)	DATE 4 5 71 TEMP (C)	DATE 9 5 72 TEMP (C)
25.0	-11.60	-13.99	-14.37	-14.57	-14.35	-14.25
39.9	-11.50	-14.06	-14.44	-14.62	-14.56	-14.46
60.0	-10.70	-13.62	-14.13	-14.68	-14.50	-14.48
79.9	-10.10	-13.04	-13.04	-14.04	-14.08	-14.08
100.0	-10.20	-13.73	-13.17	-13.58	-13.62	
125.0	-9.50	-12.22	-12.70	-13.14	-13.19	
150.0	-8.30	-11.11	-11.60	-12.09	-12.15	
175.0	-6.90	-9.87	-10.40	-10.93	-10.98	-10.99
199.9	-5.90	-8.81	-9.32	-9.82	-9.89	-9.91
224.9	-4.80	-7.65	-8.14	-8.65	-8.73	-8.75
249.9	-3.60	-6.33	-6.84	-7.30	-7.47	-7.49
280.1	-2.30	-5.50	-5.96	-6.36	-6.44	
310.0	-1.70	-4.78	-5.29	-5.78	-5.85	
339.9	-1.50	-3.88	-4.48	-5.05	-5.15	
370.0	-1.30	-2.95	-3.64	-4.25	-4.36	
399.9	-.80	-2.51	-2.95	-3.48	-3.59	
430.1	-.40	-1.85	-2.18	-2.65	-2.70	-2.74
465.1	1.30	-1.29	-1.60	-1.87	-1.92	-1.94
499.9	2.40	-.05	-.55	-1.07	-1.13	-1.14
534.9			.69	.27	.19	.16
570.0	4.50	2.42	1.95	1.47	1.38	1.36
605.0	5.20	3.45	3.03	2.60	2.52	2.50

TEMPERATURE RESULTS ARE OBTAINED FROM A MULTI-THERMISTOR CABLE
LOGGING OF THIS HOLE IS COMPLETE

DOME ET AL. WINTER HARBOUR NO. 1
-WELL SPUDDED 10 9 61
-DRILLING FOR 195 DAYS TO A TOTAL DEPTH OF 3823 METERS
-WELL ABANDONED 24 3 62

N.B. CABLE INSTALLED BY UNITED STATES GEOLOGICAL SURVEY. READINGS BEFORE 1968 BY U.S.G.S. STARTING 1968 READINGS BY E.P.B.

EARTH PHYSICS BRANCH HOLE NO. 76 KUGALUK N-02

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LATITUDE 68 DEGREES 32.00 MINUTES NORTH LONGITUDE 131 DEGREES 31.30 MINUTES WEST

ELEVATION 213 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG 23 7 70		DATE OF LOG 6 8 71		DATE OF LOG 21 7 72	
DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)
14.9	-2.95	15.3	-3.38	17.7	-3.33
30.2	-2.29	30.6	-2.63	33.5	-2.56
44.8	-1.79	45.9	-1.98	49.4	-1.99
59.8	-1.29	61.2	-1.39	64.6	-1.37
74.7	-.76	76.8	-.79	79.9	-.73
89.6	-.26	91.8	-.24	95.1	-.21
104.6	.22	107.4	.23	110.3	.29
119.5	.73	122.7	.78	125.9	.66
134.8	1.22	137.7	1.29	142.0	1.25
149.4	1.69	153.3	1.76	157.3	1.76
165.0	2.17	168.9	2.23	172.8	2.22
179.3	2.59	183.9	2.66	188.4	2.68
194.5	3.01	199.2	3.07	204.2	3.11
209.2	3.38	214.2	3.49	220.1	3.47
224.1	3.79	230.1	3.92	235.3	3.94
239.1	4.18	244.5	4.27	250.9	4.31
253.7	4.56	260.4	4.69	266.7	4.72
269.2	4.95	275.4	5.08	281.9	5.17
284.2	5.37	290.7	5.50	297.2	5.55
298.8	5.74	306.3	5.91	313.9	5.92
314.1	6.12	321.6	6.30	329.8	6.32
329.0	6.52	336.9	6.72	345.0	6.75
343.7	6.91	352.2	7.12	361.2	7.19
358.6	7.29	367.5	7.51	376.4	7.58
373.5	7.69	382.8	7.91	392.0	7.97
388.5	8.06	398.1	8.30	407.8	8.31
403.4	8.44	413.4	8.70	423.7	8.77
418.1	8.83	428.7	9.09	438.9	9.14
433.3	9.22	444.0	9.51	454.8	9.50
448.2	9.62	459.0	9.92	470.0	9.95
463.2	10.03	474.3	10.32	485.9	10.37
478.1	10.42	489.9	10.75	501.1	10.80
493.4	10.83	505.2	11.21	516.9	11.27
508.0	11.27	520.2	11.63	532.5	11.68
522.9	11.67	535.8	12.05	548.0	12.12
538.2	12.07	551.1	12.50	563.3	12.54
552.8	12.50	566.4	12.91	579.1	12.95
567.8	12.90	581.7	13.33	594.4	13.37
583.0	13.30	597.0	13.73	609.9	13.76
597.7	13.69	612.3	14.14	625.5	14.19
612.6	14.09	627.3	14.53	641.0	14.60
627.2	14.48	642.6	14.98	656.5	14.97
642.5	14.88	650.3	15.26	672.1	15.28
653.2	15.29				

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

C.P.O.G. KUGALUK N-02
-WELL SPUDDED 2 4 69
-DRILLING FOR 257 DAYS TO A TOTAL DEPTH OF 2452 METERS
-DRILLING STOPPED 15 12 69
-WELL ABANDONED 18 12 69

EARTH PHYSICS BRANCH HOLE NO. 77 HORTON RIVER

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LATITUDE 69 DEGREES 51.40 MINUTES NORTH LONGITUDE 127 DEGREES 15.90 MINUTES WEST

ELEVATION 34 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG 26 9 70		DATE OF LOG 14 8 71		DATE OF LOG 18 7 72	
DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)
21.3	-6.10	15.6	-7.08	11.3	-8.19
36.6	-5.67	30.6	-6.73	20.1	-7.65
51.8	-5.08	46.2	-6.19	27.7	-7.25
67.1	-4.18	61.2	-5.39	36.0	-7.00
82.3	-3.47	68.9	-4.89	43.9	-6.72
97.5	-2.56	76.5	-4.35	51.5	-6.41
112.8	-1.45	84.2	-3.86	58.8	-6.02
128.0	.04	91.8	-3.35	66.8	-5.70
143.3	1.41	100.1	-2.79	74.4	-5.12
158.5	2.77	107.4	-2.19	82.6	-4.53
173.7	4.08	115.1	-1.53	90.2	-3.96
189.0	5.18	122.4	-.95	97.8	-3.51
204.2	6.35	130.4	-.16	105.5	-2.89
219.5	7.17	138.3	.48	113.4	-2.38
234.7	8.03	145.4	1.17	121.0	-1.68
249.9	8.88	153.0	1.91	129.2	-.94
265.2	9.70	161.0	2.55	136.9	-.35
280.4	10.45	168.3	3.10	144.8	.45
295.7	11.13	176.3	3.76	152.1	1.14
310.9	11.92	183.9	4.30	160.0	1.79
326.1	12.65	191.3	4.91	167.6	2.30
341.4	13.62	198.9	5.51	175.6	3.11
350.5	13.90	206.6	6.08	183.5	3.65
		214.2	6.49	191.4	4.24
		222.2	6.93	199.3	4.87
		229.5	7.36	206.7	5.41
		237.5	7.80	214.6	5.93
		244.8	8.20	222.5	6.36
		260.4	9.10	230.1	6.83
		276.9	9.89	238.0	7.27
		291.0	10.56	246.0	7.66
		306.0	11.26	253.6	8.08
		321.6	12.08	261.5	8.53
		336.6	12.83	269.4	8.98
		344.3	13.36	277.1	9.36
		351.9	13.56	285.0	9.74
				292.9	10.10
				300.8	10.46

DATE OF LOG 18 7 72	
DEPTH (M)	TEMP (C)
308.5	10.87
316.1	11.25
324.3	11.65
332.2	12.03
340.2	12.59
348.1	13.13
355.4	13.29
363.3	13.48

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

ELF HORTON RIVER G-02
-WELL SPUDDED 9 11 69
-DRILLING FOR 65 DAYS TO A TOTAL DEPTH OF 2478 METERS
-DRILLING STOPPED 15 1 70
-WELL ABANDONED 22 1 70

EARTH PHYSICS BRANCH HOLE NO. 86 HOODOO DOME H-37

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LATITUDE 78 DEGREES 6.50 MINUTES NORTH LONGITUDE 99 DEGREES 45.60 MINUTES WEST

ELEVATION 156 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG 9 5 71		DATE OF LOG 12 5 72		DATE OF LOG 13 5 73	
DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)
16.2	-13.63	33.5	-14.31	15.2	-15.79
31.4	-11.31	63.7	-12.37	30.2	-15.00
61.9	-11.19	94.2	-10.37	46.0	-14.01
92.4	-9.17	124.7	-8.42	61.0	-12.99
122.8	-6.99	155.1	-6.76	76.2	-11.91
153.3	-5.37	185.6	-4.89	91.4	-10.81
183.8	-3.80	215.8	-3.29	106.7	-9.83
214.3	-2.23	246.3	-1.44	122.2	-8.79
244.8	-.98	276.8	.03	137.2	-8.12
275.2	1.09	307.2	1.68	152.4	-7.22
305.7	2.55	337.7	3.14	167.6	-6.52
336.2	3.86	368.2	4.45	182.6	-5.47
366.7	5.17	398.4	5.59	198.1	-4.60
397.2	6.41	428.9	6.40	213.4	-3.72
427.6	7.09	459.0	6.92	228.6	-2.78
458.1	7.54	489.5	7.60	244.5	-1.87
488.6	8.22	520.0	8.41	259.1	-1.05
519.1	9.02	550.5	8.95	274.6	-.37
549.6	9.56	580.6	9.40	289.9	.44
580.0	9.99	611.1	10.14	304.8	1.17
				320.3	2.11
				335.3	2.74
				350.5	3.43
				365.5	4.09
				381.0	4.76
				396.5	5.34
				411.5	5.80
				427.0	6.15
				442.3	6.42
				457.2	6.69
				472.4	7.00
				487.4	7.34
				502.9	7.82
				518.5	8.16
				533.4	8.48
				548.9	8.74

DATE OF LOG 13 5 73	
DEPTH (M)	TEMP (C)
563.9	8.96
579.1	9.20
594.4	9.45
609.6	9.82
624.8	10.18
639.8	10.41
655.3	10.67

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

PANARCTIC HOODOO DOME H-37
-WELL SPUDDED 20 12 69
-DRILLING FOR 240 DAYS TO A TOTAL DEPTH OF 3375 METERS
-WELL ABANDONED 17 8 70

EARTH PHYSICS BRANCH HOLE NO. 87 WILKINS E-60

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LATITUDE 77 DEGREES 59.30 MINUTES NORTH LONGITUDE 111 DEGREES 21.70 MINUTES WEST

ELEVATION 64 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG
9 5 71

DEPTH (M)	TEMP (C)
16.2	-12.34
31.4	-11.23
92.4	-10.06
122.8	-8.80
153.3	-7.32
183.8	-5.77
214.3	-4.23
244.8	-2.03
275.2	.27
305.7	3.09
336.2	5.18
366.7	6.74
397.2	8.14
427.6	8.88
458.1	9.99
488.6	11.50
519.1	13.03
549.6	14.56
580.0	16.00

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
THIS HOLE IS BLOCKED AT PRESENT AND FURTHER LOGGING MAY NOT BE POSSIBLE

ELF WILKINS E-60
-WELL SPUDDED 11 10 70
-DRILLING FOR 106 DAYS TO A TOTAL DEPTH OF 3395 METERS
-WELL ABANDONED 25 1 71

EARTH PHYSICS BRANCH HOLE NO. 98 NORMAN WELLS BEAR ISLAND NO. 7

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LATITUDE 65 DEGREES 15.40 MINUTES NORTH LONGITUDE 126 DEGREES 52.90 MINUTES WEST

ELEVATION 52 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG
0 0 66

DEPTH (M)	TEMP (C)
0.0	-3.80
30.5	-1.30
61.0	.30
91.4	2.40
121.9	4.20
152.4	5.30
182.9	6.60
213.4	7.80
243.8	9.20
274.3	10.20
304.8	13.00
335.3	16.90
365.8	20.60
396.2	22.80
426.7	24.60
457.2	26.10
487.7	27.60
518.2	28.80
548.6	29.60
579.1	30.20

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
LOGGING OF THIS HOLE IS COMPLETE

IMPERIAL CANOL BEAR ISLAND NO. 7
-WELL SPUDDED 12 1 44
-DRILLING FOR 41 DAYS TO A TOTAL DEPTH OF 649 METERS
-DRILLING STOPPED 22 2 44

RESULTS FROM LOG TAKEN BY SCHLUMBERGER IN 1966.

EARTH PHYSICS BRANCH HOLE NO. 88 NORMAN WELLS CANOL 7X

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LATITUDE 65 DEGREES 17.00 MINUTES NORTH LONGITUDE 126 DEGREES 50.80 MINUTES WEST

ELEVATION 61 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG
0 0 66

DEPTH (M)	TEMP (C)
0.0	-6.60
30.5	-4.10
61.0	-3.70
91.4	-2.30
121.9	-.20
152.4	1.10
182.9	3.30
213.4	5.70
243.8	7.90
274.3	10.00
304.8	12.00
335.3	14.70
365.8	16.10
396.2	16.80
411.5	17.20

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
LOGGING OF THIS HOLE IS COMPLETE

IMPERIAL CANOL 7X
-WELL SPUDDED 10 7 42
-DRILLING FOR 15 DAYS TO A TOTAL DEPTH OF 448 METERS
-DRILLING STOPPED 25 7 42

RESULTS FROM LOG TAKEN BY SCHLUMBERGER IN 1966.

EARTH PHYSICS BRANCH HOLE NO. 88 NORMAN WELLS BEAR ISLAND NO. 13

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LATITUDE 65 DEGREES 15.50 MINUTES NORTH LONGITUDE 126 DEGREES 53.30 MINUTES WEST

ELEVATION 54 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG
0 0 66

DEPTH (M)	TEMP (C)
0.0	-4.10
30.5	-1.90
61.0	-.30
91.4	1.40
121.9	3.20
152.4	4.60
182.9	6.10
213.4	7.40
243.8	8.60
274.3	11.30
304.8	14.40
335.3	17.70
365.8	20.20
396.2	22.20
426.7	24.00
457.2	25.80
487.7	27.20
518.2	28.40
548.6	29.20
579.1	29.80

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
LOGGING OF THIS HOLE IS COMPLETE

IMPERIAL CANOL BEAR ISLAND NO. 13
-WELL SPUDDED 30 4 44
-DRILLING FOR 23 DAYS TO A TOTAL DEPTH OF 610 METERS
-DRILLING STOPPED 23 5 44

RESULTS FROM LOG TAKEN BY SCHLUMBERGER IN 1966.

EARTH PHYSICS BRANCH HOLE NO. 88 NORMAN WELLS CANOL NO. 18X

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LATITUDE 65 DEGREES 17.10 MINUTES NORTH LONGITUDE 126 DEGREES 52.00 MINUTES WEST

ELEVATION 61 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG
0 0 66

DEPTH (M)	TEMP (C)
0.0	-4.10
30.5	-2.30
61.0	-.90
91.4	.30
121.9	2.30
152.4	3.90
182.9	5.60
213.4	7.80
243.8	9.70
274.3	11.60
304.8	13.60
335.3	15.10
365.8	15.80
396.2	17.40

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
LOGGING OF THIS HOLE IS COMPLETE

IMPERIAL CANOL NO. 18X
-WELL SPUDDED 28 8 42
-DRILLING FOR 13 DAYS TO A TOTAL DEPTH OF 464 METERS
-DRILLING STOPPED 10 9 42

RESULTS FROM LOG TAKEN BY SCHLUMBERGER IN 1966.

EARTH PHYSICS BRANCH HOLE NO. 88 NORMAN WELLS CANOL NO. 19X

****

LATITUDE 65 DEGREES 17.10 MINUTES NORTH LONGITUDE 126 DEGREES 52.80 MINUTES WEST

ELEVATION 53 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG
0 0 66

DEPTH (M)	TEMP (C)
61.0	.20
91.4	1.40
121.9	2.80
152.4	4.70
182.9	6.30
213.4	8.30
243.8	10.50
274.3	12.60
304.8	14.70
335.3	17.00
365.8	18.30
396.2	19.20

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
LOGGING OF THIS HOLE IS COMPLETE

IMPERIAL CANOL NO. 19X
-WELL SPUDDED 19 1 43
-DRILLED TO A TOTAL DEPTH OF 475 METERS
-WELL ABANDONED 8 6 43

RESULTS FROM LOG TAKEN BY SCHLUMBERGER IN 1966.

EARTH PHYSICS BRANCH HOLE NO. 88 NORMAN WELLS CANOL NO. 30X

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LATITUDE 65 DEGREES 17.20 MINUTES NORTH LONGITUDE 126 DEGREES 51.90 MINUTES WEST

ELEVATION 65 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG
0 0 66

DEPTH (M)	TEMP (C)
0.0	-8.30
30.5	-4.40
61.0	-4.40
91.4	-3.20
121.9	-1.30
152.4	.50
182.9	2.40
213.4	4.80
243.8	7.00
274.3	9.90
304.8	11.50
335.3	14.10
365.8	15.70
381.0	16.20

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
LOGGING OF THIS HOLE IS COMPLETE

IMPERIAL CANOL 30X
-WELL SPUDDED 24 4 44
-DRILLING FOR 15 DAYS TO A TOTAL DEPTH OF 410 METERS
-DRILLING STOPPED 9 5 44

RESULTS FROM LOG TAKEN BY SCHLUMBERGER IN 1966.

EARTH PHYSICS BRANCH HOLE NO. 89 BEAVER HOUSE CREEK H-13

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LATITUDE 68 DEGREES 22.30 MINUTES NORTH LONGITUDE 135 DEGREES 33.00 MINUTES WEST

ELEVATION 68 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG 10 8 71		DATE OF LOG 22 6 73	
DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)
16.0	-2.72	14.9	-5.72
46.8	-2.69	29.8	-5.26
93.0	-2.01	44.7	-5.06
108.1	-1.42	59.5	-4.87
123.1	-.67	74.4	-4.60
154.3	.82	89.6	-4.30
184.7	2.16	104.2	-3.79
200.4	2.86	119.1	-3.22
231.2	4.25	134.0	-2.39
260.7	5.75	149.1	-1.67
291.0	6.86	164.0	-.96
306.3	7.43	178.6	-.57
336.6	8.22	193.5	.46
352.2	8.55	208.4	1.07
382.5	8.91	223.2	1.89
398.1	9.54	238.1	2.50
413.1	10.10	253.0	3.16
428.4	10.35	267.9	4.06
443.7	10.63	282.8	4.70
474.6	11.50	297.7	5.40
489.6	11.84	312.5	5.95
505.2	12.53	327.4	6.43
520.2	13.41	342.3	6.92
535.5	14.12	357.2	7.26
566.4	15.49	372.1	7.51
581.4	16.20	387.2	7.76
612.3	17.59	401.8	8.25
627.3	18.04	416.7	8.82
642.9	18.40	431.6	9.19
657.9	18.82	446.5	9.48
673.5	19.43	461.4	9.85
688.5	19.99	476.3	10.26
703.8	20.80	491.1	10.60
719.5	21.70	506.0	11.19
734.4	22.64	520.9	11.95
749.7	23.29	535.8	12.70
765.0	23.53	550.7	13.45
785.1	23.79	565.6	14.12

DATE OF LOG 10 8 71		DATE OF LOG 22 6 73	
DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)
800.5	24.29	580.4	14.81
816.2	24.59	595.3	15.59
831.6	24.94	610.2	16.28
847.3	25.26	625.1	16.79
862.7	25.54	640.0	17.26
877.8	25.82	654.8	17.63
892.9	26.13	669.7	18.10
908.2	26.40	684.6	18.69
923.9	26.66	699.5	19.39
939.9	26.94	714.4	20.23
954.7	27.27	729.3	21.20
970.1	27.82	744.1	22.11
985.5	28.39	759.0	22.66
1000.9	28.90	774.2	22.96
1016.6	29.19	788.8	23.27
1031.4	29.47	803.7	23.69
1046.8	29.72	818.5	23.99
1062.5	30.08	833.4	24.32
1077.9	30.37	848.3	24.63
1093.6	30.72	863.2	24.95
1108.7	31.08	878.1	25.21
1123.8	31.50	893.0	25.55
1131.5	31.83	907.8	25.82
1139.5	32.19	922.7	26.07
1154.9	32.51		
1169.9	32.81		
1185.6	33.40		
1200.7	34.06		
1216.1	34.59		
1231.8	35.13		
1247.2	35.61		
1262.3	36.02		
1277.7	36.37		
1293.1	36.76		
1305.4	37.04		

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

SHELL BEAVER HOUSE CREEK H-13
-WELL SPUDDED 23 11 70
-DRILLING FOR 124 DAYS TO A TOTAL DEPTH OF 3748 METERS
-WELL ABANDONED 27 3 71

EARTH PHYSICS BRANCH HOLE NO. 91 JAMESON BAY C-31

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LATITUDE 76 DEGREES 40.20 MINUTES NORTH LONGITUDE 116 DEGREES 43.70 MINUTES WEST

ELEVATION 58 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG 10 5 72		DATE OF LOG 29 4 73	
DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)
34.4	-15.11	15.2	-14.51
64.9	-14.34	30.8	-14.54
95.7	-13.61	46.0	-15.14
126.5	-12.31	61.3	-14.79
157.0	-10.55	76.5	-14.41
187.5	-8.43	91.7	-14.04
217.6	-6.11	107.0	-13.56
248.1	-4.03	122.2	-12.96
278.3	-3.23	137.5	-12.13
308.8	-2.65	152.7	-11.14
339.2	-2.00	167.6	-10.14
369.7	-1.33	183.2	-9.02
399.9	-.90	198.4	-7.87
430.4	-.76	213.7	-6.63
460.6	.11	228.6	-5.74
490.7	.71	243.8	-4.63
521.2	1.21	259.4	-3.94
551.4	1.78	274.3	-3.48
581.6	2.59	290.2	-3.27
612.0	3.39	305.1	-3.02
642.2	4.24	320.3	-2.77
672.7	6.11	335.6	-2.47
676.0	6.35	350.8	-2.26
		366.1	-1.99
		381.3	-1.76
		396.2	-1.46
		411.8	-1.31
		427.9	-1.18
		442.3	-.82
		457.8	-.36
		472.7	-.03
		487.7	.46
		502.9	.72

DATE OF LOG 29 4 73	
DEPTH (M)	TEMP (C)
518.5	1.00
533.7	1.27
548.9	1.53
563.9	1.89
579.4	2.32
594.7	2.71
609.9	3.13
625.1	3.63
640.7	4.16
655.6	4.58
670.9	5.72
686.1	6.39
701.7	6.89
716.6	7.88
731.8	8.19

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

ELF JAMESON BAY C-31
-WELL SPUDDED 11 3 71
-DRILLING FOR 81 DAYS TO A TOTAL DEPTH OF 2538 METERS
-WELL ABANDONED 16 5 71

EARTH PHYSICS BRANCH HOLE NO. 92 GARNIER O-21

****

LATITUDE 73 DEGREES 40.90 MINUTES NORTH LONGITUDE 90 DEGREES 36.80 MINUTES WEST

ELEVATION 369 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DEPTH (M)	DATE 10 7 71 TEMP (C)
15.2	-.24
30.5	-.22
61.0	-.36
91.4	-.39
121.9	-.37
152.4	-.42
182.9	-.42
213.4	-.48
243.8	-.50
274.3	-.55
304.8	-.52
335.3	-.58
365.8	-.55
396.2	-.62
426.7	-1.54
457.2	-.73
487.7	-.79
518.2	1.06
548.6	.69
579.1	.57
609.6	1.21

TEMPERATURE RESULTS ARE OBTAINED FROM A MULTI-THERMISTOR CABLE
LOGGING OF THIS HOLE IS COMPLETE

PANARCTIC DEMINEX GARNIER O-21
-WELL SPUDDED 23 5 71
-DRILLING FOR 47 DAYS TO A TOTAL DEPTH OF 1986 METERS
-WELL ABANDONED 9 7 71

N.B. CABLE DESTROYED IN FREEZEBACK. NO FURTHER RESULTS POSSIBLE.

EARTH PHYSICS BRANCH HOLE NO. 94 DAHADINNI M-43A

****

LATITUDE 63 DEGREES 53.00 MINUTES NORTH LONGITUDE 124 DEGREES 39.30 MINUTES WEST

ELEVATION 248 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG 25 3 72		DATE OF LOG 28 7 72		DATE OF LOG 25 6 73	
DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)
32.9	-.28	18.3	-.47	14.9	-1.01
63.4	1.44	33.5	-.26	29.8	-.40
93.6	2.78	48.2	.20	45.0	-.04
124.1	4.27	63.7	1.20	59.6	.69
154.5	5.93	78.6	1.85	74.9	1.41
185.0	7.47	94.2	2.61	89.5	2.12
215.2	8.76	109.4	3.29	104.7	2.74
230.1	9.52	124.4	4.02	119.3	3.52
		139.9	4.75	134.5	4.24
		155.1	5.68	149.1	5.14
		170.1	6.47	164.6	5.89
		185.3	7.34	178.9	6.77
		200.6	8.03	193.9	7.74
		216.1	8.56	208.8	8.79
		231.3	9.27	223.7	9.36
				232.6	9.66

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

CANDEX ET AL DAHADINNI M-43A
-WELL SPUDDED 2 2 71
-DRILLING FOR 214 DAYS TO A TOTAL DEPTH OF 3131 METERS
-WELL ABANDONED 4 9 71

EARTH PHYSICS BRANCH HOLE NO. 95 ROWLEY M-04

****

LATITUDE 69 DEGREES 4.00 MINUTES NORTH LONGITUDE 79 DEGREES 3.80 MINUTES WEST

ELEVATION 48 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG 20 5 72

DEPTH (M)	TEMP (C)
15.2	-7.81
33.5	-8.19
45.7	-8.19
64.0	-8.08
76.2	-7.86
93.9	-7.63
106.7	-7.28
124.4	-6.91
137.2	-6.48
155.1	-6.00
167.6	-5.59
185.3	-5.14
198.1	-4.64
216.4	-4.13
228.6	-3.71
246.6	-3.23
259.1	-2.77
276.8	-2.41
289.6	-2.04
307.2	-1.61
320.0	-1.52
338.0	-1.40
350.5	-1.22
368.5	-1.03
381.0	-.60
399.3	.35
411.5	.78
429.5	1.03
435.9	1.12

DATE OF LOG 12 7 72

DEPTH (M)	TEMP (C)
10.7	-2.46
19.2	-3.31
26.8	-8.00
34.4	-8.13
42.4	-8.18
50.0	-8.16
57.9	-8.12
65.5	-8.05
73.5	-7.96
81.1	-7.87
89.0	-7.75
96.9	-7.62
104.5	-7.45
112.2	-7.29
120.1	-7.11
128.0	-6.90
135.9	-6.70
143.9	-6.50
151.5	-6.28
159.1	-6.03
167.0	-5.79
175.0	-5.56
182.3	-5.35
190.5	-5.13
197.8	-4.88
205.7	-4.64
213.7	-4.35
221.3	-4.14
228.9	-3.90
237.1	-3.67
244.8	-3.45
252.4	-3.23
260.3	-3.01
268.2	-2.79
275.8	-2.58

DATE OF LOG 2 5 73

DEPTH (M)	TEMP (C)
14.9	-8.23
30.8	-8.17
45.7	-8.20
61.9	-8.09
76.8	-7.91
92.4	-7.67
107.6	-7.32
122.8	-6.94
138.1	-6.54
153.6	-6.08
168.9	-5.65
184.1	-5.18
199.0	-4.70
214.0	-4.19
229.5	-3.72
245.1	-3.27
260.3	-2.84
275.2	-2.42
290.8	-2.10
306.0	-1.63
321.0	-1.51
335.9	-1.39
351.1	-1.22
366.4	-.97
381.6	-.67
396.9	.21
412.4	.77
427.6	1.02
437.1	1.16

DATE OF LOG 12 7 72

DEPTH (M)	TEMP (C)
283.8	-2.38
291.4	-2.20
299.6	-2.02
307.2	-1.79
314.9	-1.59
322.8	-1.52
330.7	-1.49
338.3	-1.44
345.9	-1.37
353.6	-1.27
361.5	-1.20
369.4	-1.09
377.3	-1.03
385.0	-.85
392.6	-.65
400.5	-.43
408.4	.30
419.1	.61
424.0	.78
431.6	.93
439.8	1.04
447.1	1.16
455.1	1.13

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

AQUITAINE ET AL ROWLEY M-04
-WELL SPUDDED 5 8 71
-DRILLING FOR 21 DAYS TO A TOTAL DEPTH OF 535 METERS
-DRILLING STOPPED 26 8 71
-WELL ABANDONED 2 9 71

EARTH PHYSICS BRANCH HOLE NO. 97 FOSHEIM N-27

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LATITUDE 79 DEGREES 36.90 MINUTES NORTH LONGITUDE 84 DEGREES 43.30 MINUTES WEST

ELEVATION 562 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DEPTH (M)	DATE 25 12 71 TEMP (C)	DATE 26 12 71 TEMP (C)	DATE 27 12 71 TEMP (C)	DATE 30 12 71 TEMP (C)
1.5	3.08	.14	.28	-.05
32.0	7.57	4.59	1.81	.30
62.5	5.23	3.74	.67	-.29
93.0	6.13	5.07	3.54	2.06
123.4	6.25	5.51	3.55	1.48
153.9	5.82	4.75	3.10	1.54
184.4	8.22	7.78	6.45	
214.9	9.77	9.25	7.71	6.25
245.4	8.83	8.19	6.70	5.44
275.8	10.64	10.16	8.81	7.52
306.3	11.52	10.79	9.17	7.95
336.8	12.27	12.09	11.15	10.11
367.3	12.69	12.63	11.91	10.98

TEMPERATURE RESULTS ARE OBTAINED FROM A MULTI-THERMISTOR CABLE
LOGGING OF THIS HOLE IS COMPLETE

PANARCTIC FOSHEIM N-27
-WELL SPUDDED 25 3 71
-DRILLING FOR 275 DAYS TO A TOTAL DEPTH OF 4274 METERS
-WELL ABANDONED 25 12 71

CABLE DESTROYED IN FREEZEBACK. NO FURTHER MEASUREMENTS POSSIBLE.
CIRCULATION STOPPED AT 1600 HRS ON 24 12 71. THE FOUR TEMPERATURE LOGS WERE TAKEN ON THE DATES INDICATED AT 22, 33, 70, AND 142 HOURS AFTER STOPPING CIRCULATION.

EARTH PHYSICS BRANCH HOLE NO. 98 STORKERSON BAY A-15

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LATITUDE 72 DEGREES 54.00 MINUTES NORTH LONGITUDE 124 DEGREES 33.50 MINUTES WEST

ELEVATION 14 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG
10 5 72

DEPTH (M)	TEMP (C)
36.6	-12.83
67.1	-12.61
97.5	-12.28
128.0	-11.75
158.5	-10.99
189.0	-10.22
219.5	-9.33
249.9	-8.81
280.4	-7.80
310.9	-7.20
341.4	-5.15
371.9	-5.79

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

ELF ET AL STORKERSON BAY A-15
-WELL SPUDDED 23 10 71
-DRILLING FOR 48 DAYS TO A TOTAL DEPTH OF 2048 METERS
-WELL ABANDONED 10 12 71

EARTH PHYSICS BRANCH HOLE NO. 99 DEVON E-45

****

LATITUDE 75 DEGREES 4.30 MINUTES NORTH LONGITUDE 91 DEGREES 48.30 MINUTES WEST

ELEVATION 244 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG 18 5 72		DATE OF LOG 6 5 73	
DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)
33.5	-12.61	15.5	-14.09
64.0	-12.45	31.1	-13.77
94.5	-12.07	46.9	-13.73
		62.2	-13.60
		77.4	-13.45
		93.0	-13.24
		106.1	-12.99

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

IOE PANARCTIC ET AL DEVON ISLAND E-45
-WELL SPUDDED 16 12 71
-DRILLING FOR 75 DAYS TO A TOTAL DEPTH OF 1838 METERS
-DRILLING STOPPED 29 2 72
-WELL ABANDONED 5 3 72

N.B. MULTITHERMISTOR CABLE INSTALLED ON OUTSIDE SURFACE CASING
BY I.O.E. FOR COMPARISON.

EARTH PHYSICS BRANCH HOLE NO. 100 HUME RIVER D-53

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LATITUDE 65 DEGREES 52.00 MINUTES NORTH LONGITUDE 129 DEGREES 11.00 MINUTES WEST

ELEVATION 84 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG 25 3 72		DATE OF LOG 28 7 72		DATE OF LOG 26 6 73	
DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)
33.5	-.20	18.3	-.14	15.2	-1.17
63.7	2.65	33.5	-.05	29.9	-.25
94.2	3.84	48.5	.81		
124.7	6.04	63.4	1.53		
154.8	8.12	79.2	2.20		
185.3	9.60	97.2	3.16		
215.8	11.06	109.4	3.86		
246.3	12.70	124.7	4.91		
277.1	14.48	139.9	5.77		
281.9	14.76	155.1	6.93		
		170.4	7.79		
		185.6	8.38		
		201.2	9.34		
		216.4	9.99		
		231.6	10.73		
		246.9	11.53		
		262.1	12.37		
		277.4	13.24		

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
THIS HOLE IS BLOCKED AT PRESENT AND FURTHER LOGGING MAY NOT BE POSSIBLE

ARCO CLARKE ET AL HUME RIVER D-53
-WELL SPUDDED 20 1 72
-DRILLING FOR 62 DAYS TO A TOTAL DEPTH OF 1268 METERS
-WELL ABANDONED 11 2 72

EARTH PHYSICS BRANCH HOLE NO. 151 WEST WHITEFISH RIVER H-34

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LATITUDE 65 DEGREES 33.40 MINUTES NORTH LONGITUDE 124 DEGREES 35.70 MINUTES WEST

ELEVATION 227 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG 29 7 72		DATE OF LOG 26 6 73	
DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)
18.3	-1.29	14.8	-2.70
34.1	-.79	30.0	-2.16
48.5	-.48	44.6	-1.36
63.7	-.65	59.4	-1.28
78.6	-.29	74.6	-.73
93.9	-.23	89.1	-.22
109.4	-.19	104.0	.16
124.7	.69	119.1	.58
139.9	1.09	133.7	1.31
155.1	1.64	148.5	1.59
170.7	2.08	163.7	2.47
185.9	2.58	178.6	2.60
200.9	3.26	193.1	3.25
216.1	3.75	208.0	3.78
231.6	4.18	223.1	4.21
246.9	4.65	237.7	4.51
262.1	5.13	252.8	5.10
277.7	5.57	267.4	5.22
292.9	5.97	282.2	5.60
308.5	6.50	297.4	5.84
323.7	6.89	311.9	6.94
338.9	7.37	326.8	7.06
354.2	7.94	341.7	7.49

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

ARCO WEST WHITEFISH RIVER H-34
-WELL SPUDDED 14 3 72
-DRILLING FOR 25 DAYS TO A TOTAL DEPTH OF 1654 METERS
-WELL ABANDONED 8 4 72

EARTH PHYSICS BRANCH HOLE NO. 155 KRISTOFFER BAY B-06

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LATITUDE 78 DEGREES 15.30 MINUTES NORTH LONGITUDE 102 DEGREES 32.00 MINUTES WEST

ELEVATION 15 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG 11 5 72

DEPTH (M)	TEMP (C)
31.1	-10.60
61.6	-10.56
92.0	-9.08
122.5	-7.83
153.0	-6.28
183.2	-4.84
213.7	-3.51
243.8	-2.47
274.3	-1.26
304.5	-1.17
335.0	-1.63
365.5	.52
395.6	2.84
426.1	4.11
456.6	5.96

DATE OF LOG 14 9 72

DEPTH (M)	TEMP (C)
55.5	-10.22
86.0	-9.44
116.4	-8.33
146.9	-7.28
177.4	-6.39
207.9	-5.56
238.4	-4.28
268.8	-2.83
299.3	-1.83
314.6	-1.44
329.8	-1.22
345.0	-1.17
360.3	-1.00
390.8	.56
421.2	1.89
451.7	3.67
482.2	5.00
512.7	6.22
543.2	8.22
573.6	9.56
604.1	11.00
634.6	12.39
665.1	13.50

DATE OF LOG 13 5 73

DEPTH (M)	TEMP (C)
15.2	-16.72
30.5	-15.27
45.7	-14.53
61.0	-14.01
75.9	-13.49
91.4	-12.79
106.7	-12.20
121.9	-11.58
136.9	-11.00
152.4	-10.50
167.6	-9.98
182.9	-9.51
197.8	-8.98
213.4	-8.52
228.6	-7.87
243.8	-7.06
259.1	-6.45
274.3	-5.82
289.6	-5.21
304.5	-4.72
320.0	-4.12
335.3	-3.64
350.5	-3.26
365.8	-2.78
381.0	-2.04
396.2	-1.23
411.8	-.61
426.4	.06
442.0	1.16
457.5	2.05
472.1	2.82
487.7	3.65
503.2	4.50
518.2	5.34

DATE OF LOG 13 5 73

DEPTH (M)	TEMP (C)
533.4	6.25
548.6	7.04
563.9	7.77
579.1	8.53
594.4	9.32
609.6	10.12
624.8	10.91
640.1	11.51
655.3	12.09
670.9	12.75
685.8	13.38
701.0	14.02
716.6	14.72
731.5	15.40
746.8	16.03
762.0	16.67
777.5	17.26
792.5	17.85

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

PANARCTIC TENNECO ET AL KRISTOFFER BAY B-06
- -WELL SPUDDED 9 11 71
- -DRILLING FOR 119 DAYS TO A TOTAL DEPTH OF 3925 METERS
- -DRILLING STOPPED 8 3 72
- -WELL ABANDONED 17 3 72

N.B. LOG OF 14 09 72 TAKEN BY PANARCTIC.

EARTH PHYSICS BRANCH HOLE NO. 158 BROCK I-20

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LATITUDE 77 DEGREES 59.70 MINUTES NORTH LONGITUDE 114 DEGREES 33.90 MINUTES WEST

ELEVATION 16 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG 16 9 72		DATE OF LOG 12 5 73	
DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)
73.2	-9.11	15.3	-13.16
85.3	-8.72	30.5	-13.05
100.6	-8.06	45.8	-14.21
115.8	-7.39	61.1	-14.06
131.1	-6.67	76.7	-13.30
146.3	-5.89	91.9	-12.41
161.5	-5.11	107.2	-11.59
176.8	-4.22	122.2	-10.53
192.0	-3.61	137.7	-9.74
207.3	-3.00	152.7	-8.88
222.5	-2.89	168.0	-7.64
231.6	-2.50	182.9	-6.94
237.7	-1.89	198.5	-6.25
240.8	-1.67	213.5	-5.81
253.0	-2.39	229.4	-5.31
268.2	-2.00	244.6	-4.93
283.5	-1.56	259.6	-4.59
298.7	-1.44	274.9	-4.19
313.9	-1.39	290.4	-3.78
329.2	-1.17	305.4	-3.36
344.4	-1.06	320.7	-3.15
359.7	-.44	336.3	-2.84
390.1	1.11	351.2	-2.47
420.6	2.50	366.2	-2.03
451.1	3.39	382.1	-1.36
481.6	5.11	397.0	-.42
512.1	6.56	412.3	.17
542.5	8.33	427.3	.58
573.0	9.94	442.8	1.15
603.5	11.67	458.1	2.30
634.0	13.22	473.4	3.22
664.5	15.00	488.7	4.02
694.9	15.89	503.9	4.80
		519.2	5.59
		534.8	6.97
		549.7	7.65

DATE OF LOG 12 5 73	
DEPTH (M)	TEMP (C)
565.0	8.59
580.3	9.68
595.5	10.65
610.8	11.56
625.8	12.32
641.1	13.29
656.6	14.35
671.9	15.10
687.2	15.62
702.4	16.05
718.3	16.56
733.0	17.12
748.3	17.70
763.5	18.39
779.4	19.14

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

PANARCTIC BROCK I-20
- -WELL SPUDDED 14 4 72
- -DRILLING FOR 73 DAYS TO A TOTAL DEPTH OF 3177 METERS
- -DRILLING STOPPED 26 6 72
- -WELL ABANDONED 28 6 72

N.B. LOG OF 16 09 72 TAKEN BY PANARCTIC.

EARTH PHYSICS BRANCH HOLE NO. 165 KILAGMIOTAK F-48

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LATITUDE 69 DEGREES 27.50 MINUTES NORTH LONGITUDE 134 DEGREES 11.90 MINUTES WEST

ELEVATION 20 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG 1 4 73		DATE OF LOG 19 6 73		DATE OF LOG 4 2 74	
DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)
16.5	-6.81	14.9	-6.80	18.9	-8.73
31.1	-4.94	29.8	-5.85	34.7	-7.21
45.7	-4.21	44.7	-5.40	65.2	-6.40
61.0	-4.21	59.5	-5.43	95.7	-5.95
77.1	-3.90	74.7	-5.29	126.2	-5.20
91.4	-3.21	89.3	-4.88	156.4	-4.65
107.6	-2.68	104.2	-4.63	186.5	-4.16
121.9	-1.42	119.4	-3.74	217.0	-3.80
137.2	-.67	134.0	-2.66	247.2	-3.04
152.4	-.58	148.8	-1.18	277.4	-2.07
167.6	-.52	163.7	-.91	307.8	-1.38
182.9	-.60	178.6	-1.19	323.1	-1.04
198.1	-.58	193.5	-.84		
213.4	-.56	208.4	-.70		
228.6	-.58	223.2	-.76		
243.8	-.59	238.1	-.77		
259.1	-.58	253.0	-.67		
274.3	-.59	268.2	-.71		
289.6	-.62	282.8	-.66		
304.8	-.63	297.7	-.66		
320.0	-.63	312.5	-.66		
335.3	-.22	327.4	-.27		
350.5	-.25				
365.8	-.28				
381.0	-.36				

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

GULF MOBIL KILAGMIOTAK F-48
- -WELL SPUDDED 4 2 72
- -DRILLING FOR 268 DAYS TO A TOTAL DEPTH OF 4772 METERS
- -DRILLING STOPPED 21 8 72
- -WELL ABANDONED 12 10 72

EARTH PHYSICS BRANCH HOLE NO. 166 MOKKA A-02

****

LATITUDE 79 DEGREES 32.20 MINUTES NORTH LONGITUDE 87 DEGREES 1.20 MINUTES WEST

ELEVATION 253 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE
14 4 73

DEPTH (M)	TEMP (C)
0.0	-2.80
15.2	-4.40
30.5	-6.10
45.7	-7.80
61.0	-7.80
76.2	-7.20
91.4	-6.70
106.7	-6.10
152.4	-6.10
167.6	-5.60
182.9	-6.70
198.1	-5.60
213.4	-5.60
228.6	-6.70
243.8	-6.70
259.1	-5.00
274.3	-5.00
289.6	-4.40
320.0	-5.60
350.5	-3.90
381.0	-4.40
411.5	-3.90
442.0	-3.90

TEMPERATURE RESULTS ARE OBTAINED FROM A MULTI-THERMISTOR CABLE
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

IMPERIAL PANARCTIC ET AL MOKKA A-02
-WELL SPUDDED 17 10 72
-DRILLING FOR 170 DAYS TO A TOTAL DEPTH OF 3300 METERS
-DRILLING STOPPED 5 4 73
-WELL ABANDONED 15 4 73

N.B. CABLE INSTALLED ON OUTSIDE OF CASING BY IMPERIAL OIL.

EARTH PHYSICS BRANCH HOLE NO. 167 UNIPKAT I-22

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LATITUDE 69 DEGREES 11.70 MINUTES NORTH LONGITUDE 135 DEGREES 20.50 MINUTES WEST

ELEVATION 5 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG 1 4 73		DATE OF LOG 25 4 73		DATE OF LOG 20 6 73		DATE OF LOG 3 11 73		DATE OF LOG 4 2 74	
DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)
15.2	-.19	15.2	-1.90	14.9	-.78	15.2	-2.22	14.6	-1.45
30.5	.72	30.5	-.70	30.1	-.31	30.5	-1.33	29.9	-.99
45.7	2.65	45.7	1.00	59.5	1.56	45.7	-1.33	60.4	.27
61.0	4.59	61.0	2.40	89.3	3.74	61.0	-.83	90.8	1.81
76.2	6.18	76.2	4.10	119.1	5.35	76.2	.44	121.3	3.42
91.4	6.93	91.4	5.10	148.8	6.42	91.4	1.39	151.8	4.84
106.7	8.14	106.7	5.90	178.6	7.56	106.7	1.94	182.3	5.98
121.9	8.87	121.9	6.80	208.4	8.93	121.9	2.78	212.8	7.35
137.2	8.94	137.2	7.00	238.1	9.78	137.2	3.33	243.2	8.19
152.4	9.88	152.4	7.80	267.9	10.66	152.4	4.06	273.7	9.18
182.9	10.83	167.6	8.40	297.7	11.16	167.6	4.78	304.5	9.61
213.4	11.87	182.9	8.80	327.4	11.69	182.9	5.33	335.0	10.49
243.8	12.50	198.1	9.60	357.2	12.33	198.1	6.22	365.5	11.29
274.3	13.45	213.4	9.90	387.2	13.32	213.4	6.83	395.9	12.06
304.8	13.72	228.6	10.40	416.7	13.79	228.6	7.22	426.4	12.63
335.3	14.21	243.8	10.78	446.5	14.27	243.8	7.78	456.9	13.23
365.8	15.03	259.1	11.20	476.3	14.91	259.1	8.06	487.7	14.04
396.2	15.76	274.3	11.50	506.3	15.62	274.3	8.61	518.2	14.58
426.7	16.15	289.6	11.80	535.8	16.15	289.6	8.89	548.6	15.39
457.2	16.66	304.8	12.00	565.6	17.08	304.8	9.22		
487.7	17.55			595.3	17.68	335.3	9.78		
518.2	17.83			625.1	18.38	365.8	10.56		
548.6	18.76			654.8	18.95	396.2	11.33		
579.1	19.23			684.6	19.55	426.7	11.89		
609.6	20.22			714.4	20.20	457.2	12.44		
640.1	20.52					487.7	13.11		
670.6	21.12					518.2	13.67		
701.0	21.77					548.6	14.44		
731.5	23.07					579.1	15.22		
762.0	23.85					609.6	16.00		
						640.1	16.67		
						670.6	17.22		
						701.0	17.78		
						731.5	18.61		

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

SHELL UNIPKAT I-22
-WELL SPUDDED 8 9 72
-DRILLING FOR 179 DAYS TO A TOTAL DEPTH OF 4361 METERS
-WELL ABANDONED 6 3 73

N.B. LOGS OF 25 4 73 AND 03 11 73 BY SHELL USING ATKINS THERMISTOR

EARTH PHYSICS BRANCH HOLE NO. 168 DUNDAS C-80

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LATITUDE 74 DEGREES 39.00 MINUTES NORTH LONGITUDE 113 DEGREES 23.00 MINUTES WEST

ELEVATION 240 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG 28 4 73	
DEPTH (M)	TEMP (C)
20.7	-12.90
44.5	-12.54
95.1	-11.37
141.0	-9.49
177.6	-8.75
212.0	-7.86
243.7	-6.66
276.4	-5.62
307.3	-4.80
338.2	-3.60
369.1	-2.88
399.6	-2.61
430.1	-1.73
460.6	-1.16
491.0	-.72
521.5	.03
551.7	1.65
582.5	2.93
613.0	3.91
643.4	4.97
652.6	5.21

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

PANARCTIC DOME DUNDAS C-80
  -WELL SPUDDED 14 10 72
  -DRILLING FOR 97 DAYS TO A TOTAL DEPTH OF 4000 METERS
  -WELL ABANDONED 19 1 73

EARTH PHYSICS BRANCH HOLE NO. 169 LOUISE BAY O-25

****

LATITUDE 78 DEGREES 44.90 MINUTES NORTH LONGITUDE 102 DEGREES 42.00 MINUTES WEST

ELEVATION 69 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG
11 5 73

DEPTH (M)	TEMP (C)
30.2	-9.85
61.4	-8.37
91.6	-6.72
122.5	-4.80
153.0	-3.18
183.6	-1.44
213.5	.29
244.3	2.15
274.9	3.83
305.7	5.60
336.0	7.32
366.5	9.09
397.0	10.69
427.6	12.31
458.1	14.02
488.7	15.77
519.2	17.64
549.7	19.88
580.3	21.96
610.8	23.87
641.4	26.35
672.2	28.63

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

PANARCTIC LOUISE BAY O-25
-WELL SPUDDED 23 11 72
-DRILLING FOR 65 DAYS TO A TOTAL DEPTH OF 2281 METERS
-WELL ABANDONED 27 1 73

EARTH PHYSICS BRANCH HOLE NO. 170 THOR P-38

****

LATITUDE 78 DEGREES 7.80 MINUTES NORTH LONGITUDE 103 DEGREES 15.20 MINUTES WEST

ELEVATION 5 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG 13 9 72		DATE OF LOG 11 5 73	
DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)
25.3	-14.72	15.0	-16.54
55.8	-13.72	30.8	-15.86
86.3	-12.67	45.8	-15.33
116.7	-11.78	61.1	-14.78
147.2	-10.28	76.4	-14.17
177.7	-8.39	91.6	-13.68
208.2	-6.78	106.9	-13.23
238.7	-5.33	122.2	-12.58
269.1	-3.44	137.4	-11.77
299.6	-1.56	152.7	-10.92
317.9	-.28	168.0	-10.06
348.4	1.94	183.2	-9.22
378.9	3.61	198.5	-8.37
394.1	4.44	213.8	-7.48
424.6	6.11	228.8	-6.66
455.1	7.78	244.6	-5.62
485.5	9.33	259.6	-4.51
500.8	10.11	274.9	-3.37
		290.1	-2.41
		305.4	-1.43
		320.4	-.47
		336.0	.44
		350.9	1.35
		366.5	2.23
		381.8	3.05
		397.0	3.88
		412.3	4.63
		427.6	5.45
		442.8	6.27
		458.4	7.07
		473.1	7.79
		488.7	8.56
		503.9	9.29
		519.2	9.91
		534.5	10.51
		549.7	11.18

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

PANARCTIC TENNECO ET AL THOR P-38
-WELL SPUDDED 6 4 72
-DRILLING FOR 28 DAYS TO A TOTAL DEPTH OF 1829 METERS
-DRILLING STOPPED 4 5 72
-WELL ABANDONED 10 5 72

N.B. LOG OF 13 09 72 TAKEN BY PANARCTIC.
DEPTHS ADJUSTED FOR TOOL ERRORS AT 311 M. AND 411 M.

EARTH PHYSICS BRANCH HOLE NO. 172 DRAKE B-44

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LATITUDE 76 DEGREES 23.10 MINUTES NORTH LONGITUDE 108 DEGREES 16.10 MINUTES WEST

ELEVATION 4 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG
7 5 73

DEPTH (M)	TEMP (C)
15.8	-14.23
31.4	-13.32
47.5	-12.04
62.8	-11.01
78.3	-9.63
93.3	-8.35
108.5	-6.86
123.4	-5.57
138.7	-3.68
153.6	-2.25
169.2	-.86
184.7	.27
199.9	1.60
215.2	2.34
230.4	3.16
245.7	3.94
260.9	4.66
275.8	5.51
291.1	6.25
306.3	6.89
321.3	7.55
336.5	8.06
346.3	8.40

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

PANARCTIC TENNECO ET AL DRAKE B-44
-WELL SPUDDED 23 9 72
-DRILLING FOR 29 DAYS TO A TOTAL DEPTH OF 1396 METERS
-WELL ABANDONED 22 10 72

EARTH PHYSICS BRANCH HOLE NO. 173 NIGLINTGAK H-30

****

LATITUDE 69 DEGREES 19.40 MINUTES NORTH LONGITUDE 135 DEGREES 20.10 MINUTES WEST

ELEVATION 2 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG 20 4 73		DATE OF LOG 19 6 73		DATE OF LOG 3 11 73		DATE OF LOG 4 2 74	
DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)
13.4	3.30	14.9	-.42	15.2	-1.44	29.0	-1.50
28.7	4.80	29.8	.06	30.5	-1.33	59.4	-1.07
43.9	3.50	44.7	-.22	45.7	-1.33	89.9	-.85
59.1	3.80	59.8	-.39	61.0	-1.33	120.4	.04
74.4	4.70	74.4	-.01	76.2	-1.22	150.9	1.12
89.6	5.90	89.3	.87	91.4	-.89	181.4	2.33
104.9	7.10	104.2	2.28	106.7	-.44	211.8	2.83
120.1	8.10	119.1	3.86	121.9	.56	242.3	3.36
135.3	8.10	134.0	4.25	137.2	1.11	263.0	3.61
150.6	8.00	148.8	4.26	152.4	1.39		
165.8	8.40	164.0	4.55	167.6	1.67		
181.1	8.60	178.6	4.79	182.9	1.94		
196.3	8.70	193.5	5.03	198.1	2.22		
211.5	9.00	208.4	5.31	213.4	2.50		
226.8	9.40	223.2	5.70	228.6	2.78		
242.0	9.40	238.1	5.95	243.8	3.06		
257.3	9.80	253.0	6.04	259.1	3.33		
272.5	9.90	267.9	6.13	274.3	3.44		
287.7	9.80	282.8	6.12				
		297.7	6.12				

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

SHELL NIGLINTGAK H-30
- -WELL SPUDDED 24 10 72
- -DRILLING FOR 165 DAYS TO A TOTAL DEPTH OF 2377 METERS
- -WELL ABANDONED 7 4 73

N.B. LOGS OF 20 4 73 AND 3 11 73 DONE BY SHELL USING ATKINS THERMISTOR.

EARTH PHYSICS BRANCH HOLE NO. 175 GEMINI E-10

****

LATITUDE 79 DEGREES 59.40 MINUTES NORTH. LONGITUDE 84 DEGREES 4.20 MINUTES WEST

ELEVATION 126 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG
30 4 73

DEPTH (M)	TEMP (C)
34.4	-3.54
69.8	-7.78
101.5	-5.44
132.3	-3.58
162.8	-3.74
193.2	-1.60
223.4	-.31
254.2	-.43
284.7	.79
315.2	-.06
345.6	.11
376.4	-.07
406.9	.24
436.8	1.48
467.9	4.75
498.0	6.85
528.2	8.27
559.0	9.79
589.5	11.59
620.3	12.95
650.1	14.30
680.6	15.79
711.4	16.66
741.9	17.61
772.4	18.79
802.5	19.75

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

PANARCTIC GEMINI E-10
-WELL SPUDDED 14 10 72
-DRILLING FOR 145 DAYS TO A TOTAL DEPTH OF 3845 METERS
-DRILLING STOPPED 8 3 73
-WELL ABANDONED 15 3 73

EARTH PHYSICS BRANCH HOLE NO. 176 YA YA P-53

****

LATITUDE 69 DEGREES 12.80 MINUTES NORTH LONGITUDE 134 DEGREES 42.70 MINUTES WEST

ELEVATION 36 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG 19 6 73		DATE OF LOG 4 2 74	
DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)
14.9	-5.40	32.3	-6.77
29.8	-5.07	62.8	-5.91
59.6	-4.04	93.3	-5.31
89.5	-3.45	123.7	-4.44
119.3	-1.46	154.2	-3.98
149.4	-1.63	185.0	-3.58
178.9	-.67	215.5	-3.01
208.8	-.64	246.0	-2.30
238.6	-.52	276.5	-1.96
268.4	-.41	306.9	-1.25
298.2	-.39	337.4	-1.01
328.1	-.43	367.9	-.71
357.9	-.47	398.7	-.40
387.7	-.58	429.2	.58
417.5	1.18		
447.4	2.13		
477.2	2.81		
507.0	3.58		
536.8	4.32		
566.7	4.73		

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

GULF MOBIL YA YA P-53
  -WELL SPUDDED 8 12 72
  -DRILLING FOR 25 DAYS TO A TOTAL DEPTH OF 3033 METERS
  -DRILLING STOPPED 2 1 73
  -WELL ABANDONED 20 3 73

EARTH PHYSICS BRANCH HOLE NO. 177 TITALIK K-26

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LATITUDE 69 DEGREES 5.50 MINUTES NORTH LONGITUDE 135 DEGREES 6.30 MINUTES WEST

ELEVATION 12 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG
20 6 73

DEPTH (M)	TEMP (C)
14.9	.48
30.1	-.09
44.7	-.24
59.6	-.20
74.6	.76
89.8	2.26
104.4	2.94
119.6	3.44
134.5	3.76
149.4	4.33
164.0	4.78
178.9	5.11
193.9	5.56
198.9	5.83

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

GULF IMPERIAL SHELL TITALIK K-26
-WELL SPUDDED 17 10 72
-DRILLING FOR 126 DAYS TO A TOTAL DEPTH OF 3840 METERS
-WELL ABANDONED 20 2 73

EARTH PHYSICS BRANCH HOLE NO. 178 PARSONS N-10

****

LATITUDE 68 DEGREES 59.80 MINUTES NORTH LONGITUDE 133 DEGREES 31.80 MINUTES WEST

ELEVATION 68 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG 21 6 73		DATE OF LOG 3 2 74	
DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)
14.8	-.14	12.2	-4.95
29.7	-.36	27.4	-4.30
59.3	-.29	42.7	-4.18
89.2	-.44	57.9	-4.10
118.9	-.55	72.8	-3.81
148.3	-.71	88.4	-3.55
178.2	-.35	103.3	-3.36
207.5	-.39	118.6	-3.28
237.5	-.11	149.0	-2.41
266.9	-.03	179.8	-1.28
296.5	.28	210.3	-.97
326.1	.49	240.8	-.87
356.1	4.80	271.3	-.45
385.5	5.35	301.4	-.37
415.1	6.12	316.7	-.33
444.7	6.81	332.2	-.35
474.4	7.49	347.5	.19
504.4	8.44	362.7	1.33
533.7	9.03	393.2	2.25
563.6	9.91	423.7	3.07
593.3	10.53	454.2	3.86
623.0	11.38	484.6	4.65
652.9	11.44	515.1	5.34
		545.6	6.31

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

GULF MOBIL PARSONS N-10
-WELL SPUDDED 24 2 73
-DRILLING FOR 94 DAYS TO A TOTAL DEPTH OF 3205 METERS
-WELL ABANDONED 29 5 73

EARTH PHYSICS BRANCH HOLE NO. 179 REINDEER F-36

****

LATITUDE 69 DEGREES 5.30 MINUTES NORTH LONGITUDE 134 DEGREES 39.00 MINUTES WEST

ELEVATION 10 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG 20 6 73		DATE OF LOG 3 2 74	
DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)
15.0	-1.28	21.9	-5.81
30.0	-.81	37.2	-5.58
45.0	-.40	67.7	-5.73
60.0	-.71	98.1	-5.22
75.0	-.43	128.6	-4.88
90.0	-.28	159.1	-4.19
105.0	-.13	189.6	-3.20
120.0	-.92	220.1	-2.27
135.0	-.44	250.5	-1.76
150.0	-.34	281.3	-.97
165.0	-.42	311.8	-.53
180.0	-.40	327.1	-.43
195.0	-.59	342.3	.21
210.0	-.68		
225.0	-.23		
240.0	-.19		
255.0	-.24		
270.0	-.25		
285.0	-.21		
300.0	-.07		
315.0	-.13		
330.0	-.00		
345.0	2.12		

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

GULF IMPERIAL SHELL REINDEER F-36
-WELL SPUDDED 13 3 73
-DRILLING FOR 54 DAYS TO A TOTAL DEPTH OF 1829 METERS
-DRILLING STOPPED 6 5 73
-WELL ABANDONED 15 5 73

EARTH PHYSICS BRANCH HOLE NO. 190 HACKETT RIVER 190-1

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LATITUDE 65 DEGREES 55.00 MINUTES NORTH LONGITUDE 108 DEGREES 28.20 MINUTES WEST

ELEVATION 425 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DEPTH (M)	TEMP (C) DATE 20 8 73
13.1	-7.44
26.1	-6.95
39.0	-7.04
51.7	-7.24
64.3	-7.14
76.7	-7.12
89.0	-7.16
101.3	-7.18
125.7	-7.12
149.8	-6.85
173.7	-6.71
197.8	-6.61

TEMPERATURE RESULTS ARE OBTAINED FROM A MULTI-THERMISTOR CABLE
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

COMINCO HACKETT RIVER ECL-73-6 CABLE 119
  -DRILLED TO A TOTAL DEPTH OF 295 METERS
  -DRILLING STOPPED 29 7 73

HOLE INCLINED 60 DEGREES AT SURFACE TO 50 DEGREES AT BOTTOM. DEPTHS ARE
 CORRECTED TO VERTICAL. LENGTH OF HOLE = 295 M.

EARTH PHYSICS BRANCH HOLE NO. 190 HACKETT RIVER 190-2

****

LATITUDE 65 DEGREES 55.00 MINUTES NORTH LONGITUDE 108 DEGREES 28.20 MINUTES WEST

ELEVATION 425 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DEPTH (M)	TEMP (C)
	DATE 20 8 73
12.3	-7.99
24.4	-7.32
36.1	-7.32
47.6	-7.32
58.7	-7.02
69.4	-7.34
79.9	-6.84
90.0	-7.21
109.5	-7.24
128.0	-7.26
145.9	-6.94
163.8	-6.94

TEMPERATURE RESULTS ARE OBTAINED FROM A MULTI-THERMISTOR CABLE
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

COMINCO HACKETT RIVER ECL-73-3 CABLE 118
-DRILLED TO A TOTAL DEPTH OF 252 METERS
-DRILLING STOPPED 3 7 73

HOLE INCLINED 55 DEGREES AT SURFACE TO 40 DEGREES AT BOTTOM. DEPTHS ARE CORRECTED TO VERTICAL. LENGTH OF HOLE = 252 M.

EARTH PHYSICS BRANCH HOLE NO. 192 KUGPIK O-13

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LATITUDE 68 DEGREES 52.80 MINUTES NORTH LONGITUDE 135 DEGREES 18.20 MINUTES WEST

ELEVATION 2 METERS

SUMMARY OF DEPTH-TEMPERATURE LOGS

DATE OF LOG 4 11 73		DATE OF LOG 5 2 74	
DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)
12.2	-1.11	14.9	-4.06
27.4	-.56	30.2	-.94
42.7	.83	60.7	1.47
57.9	4.44	91.1	3.86
73.2	6.11	121.6	5.34
88.4	7.22	152.4	6.58
103.6	8.06	182.9	7.66
118.9	8.33	213.4	8.63
134.1	8.88	243.8	9.48
149.4	9.56	274.6	9.84
164.6	10.11	305.1	10.48
179.8	10.56	335.6	11.33
195.1	11.11	366.1	11.99
210.3	11.39	396.5	12.55
225.6	11.67	427.3	13.23
240.8	11.94	457.8	13.83
256.0	11.67	488.6	14.99
271.3	11.78	519.1	15.54
286.5	12.22	549.6	16.27
301.8	12.33		
332.2	13.06		
362.7	13.61		
393.2	14.22		
423.7	14.72		
454.2	15.28		
484.6	16.39		
515.1	16.67		
545.6	17.50		
576.1	18.06		
606.6	18.87		
637.0	22.22		
667.5	22.50		
698.0	23.50		
728.5	24.22		

TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

SHELL KUGPIK O-13
-WELL SPUDDED 26 3 73
-DRILLING FOR 188 DAYS TO A TOTAL DEPTH OF 3689 METERS
-DRILLING STOPPED 30 9 73

N.B. LOG OF 04 11 73 BY SHELL USING ATKINS BRIDGE.

EARTH PHYSICS BRANCH HOLE NO. 193 IKHIL I-37

****

LATITUDE 68 DEGREES 46.60 MINUTES NORTH LONGITUDE 134 DEGREES 7.80 MINUTES WEST

ELEVATION 125 METERS

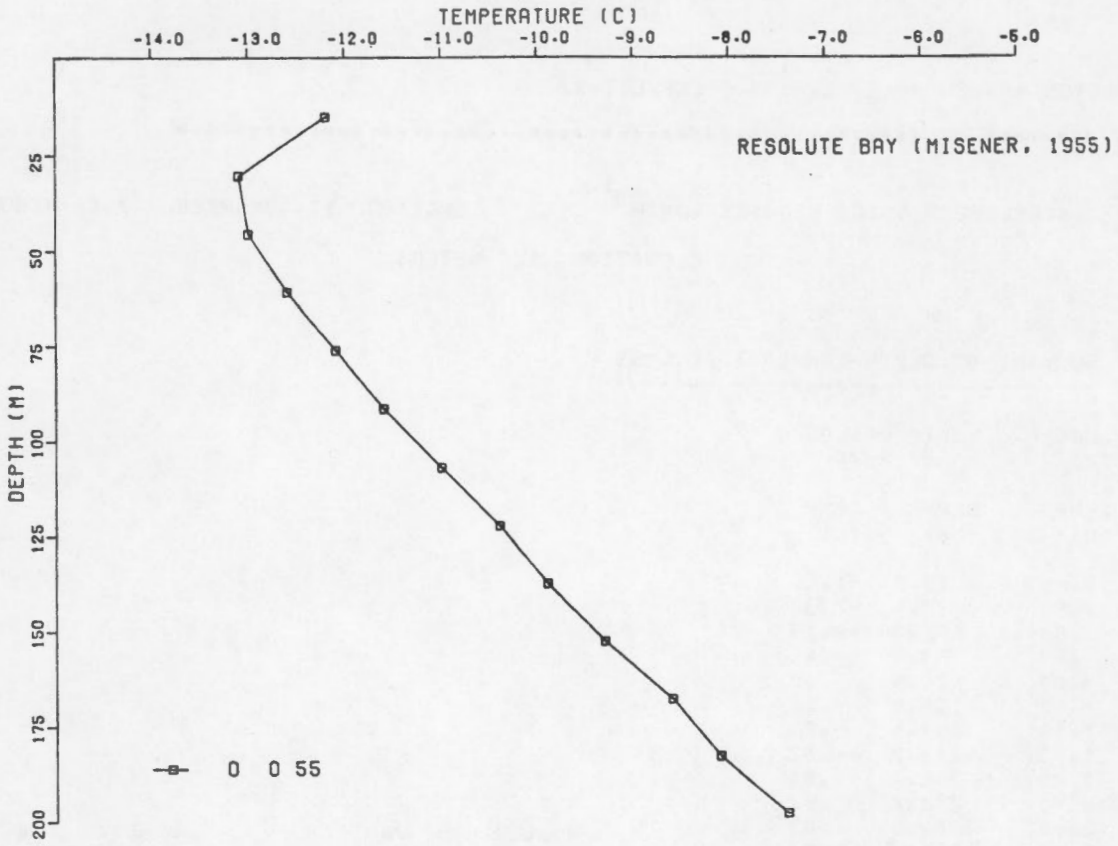
SUMMARY OF DEPTH-TEMPERATURE LOGS

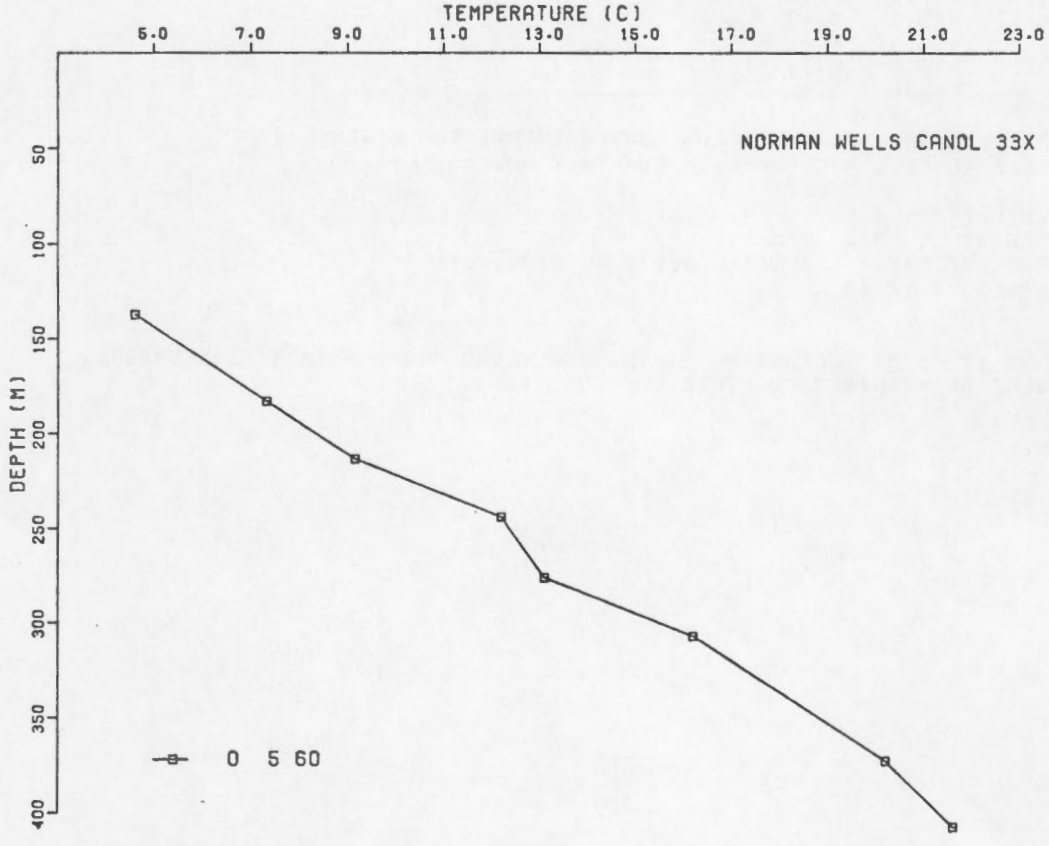
DATE OF LOG 19 12 73		DATE OF LOG 3 2 74	
DEPTH (M)	TEMP (C)	DEPTH (M)	TEMP (C)
0.0	5.60	12.2	-7.65
30.5	3.90	27.4	-7.32
61.0	.60	57.9	-2.15
91.4	.60	89.0	-.45
121.9	.60	119.5	-.10
152.4	.60	150.0	-.12
182.9	1.10	180.4	-.04
213.4	1.70	211.2	-.02
243.8	2.20	241.7	-.01
274.3	3.30	272.2	.52
304.8	2.80	303.0	.07
335.3	2.80	318.2	.03
365.8	7.50	333.8	.24
396.2	8.30	349.0	3.87
426.7	10.00	364.5	4.71
457.2	10.60	395.0	5.81
487.7	11.70	425.5	7.69
518.2	12.80	456.0	8.09
548.6	13.30	486.5	9.15
		516.9	9.98

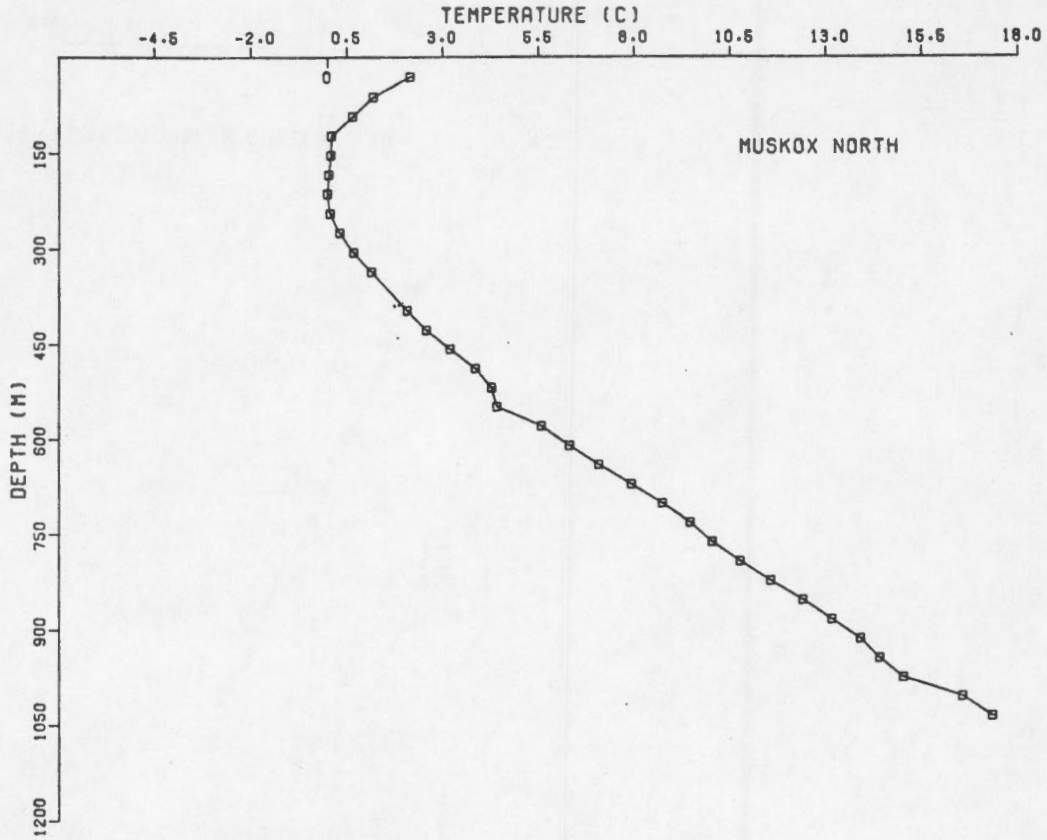
TEMPERATURE RESULTS ARE OBTAINED FROM SINGLE THERMISTOR LOGS
FURTHER TEMPERATURE LOGS ARE EXPECTED FOR THIS HOLE

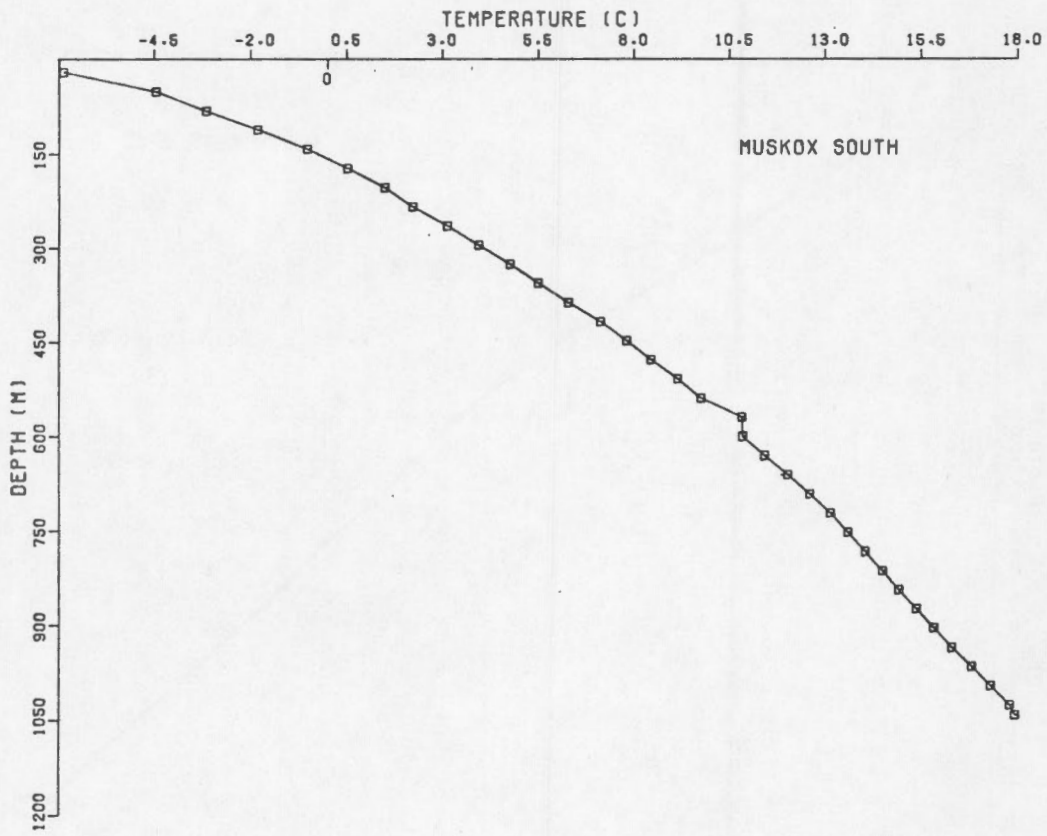
GULF MOBIL IKHIL I-37
-WELL SPUDDED 10 4 73
-DRILLING FOR 237 DAYS TO A TOTAL DEPTH OF 4704 METERS
-WELL ABANDONED 3 12 73

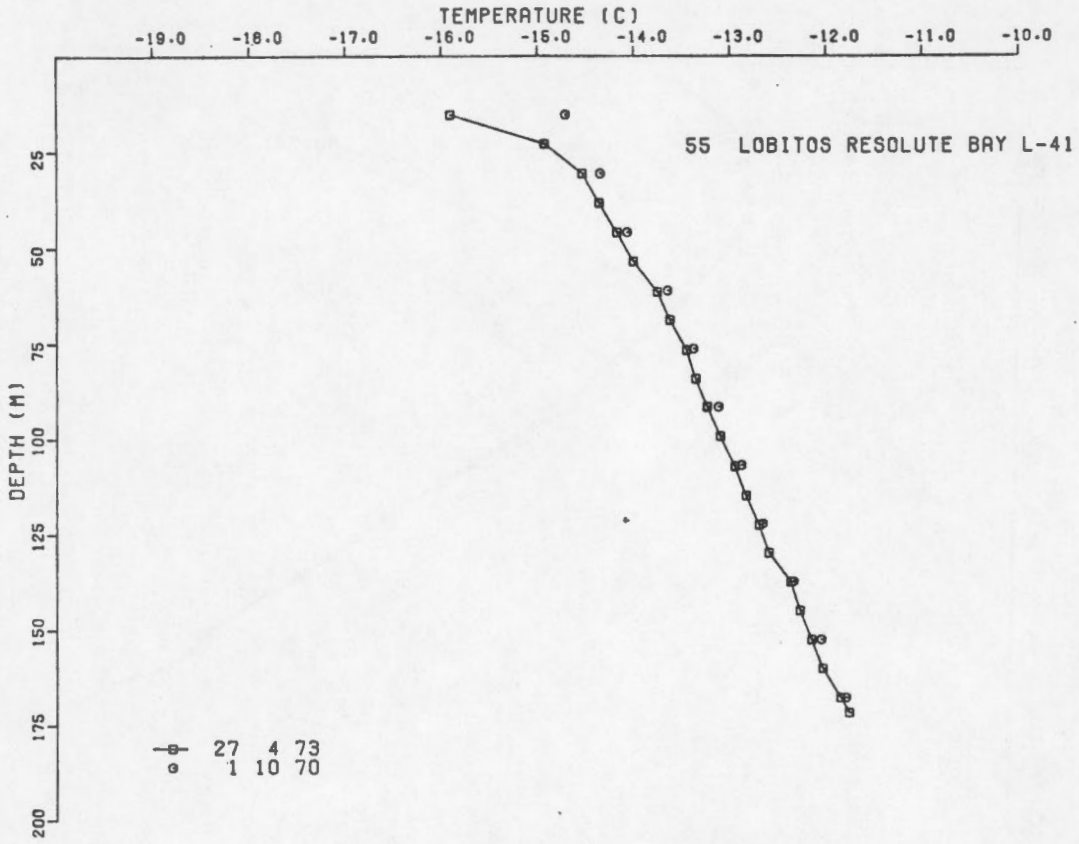
N.B. LOG OF 19 12 73 BY GULF USING E.P.B. CABLE AND PROBE WITH ATKINS BRIDGE.
ABSOLUTE VALUE OF READINGS FOR THIS LOG UNCERTAIN.

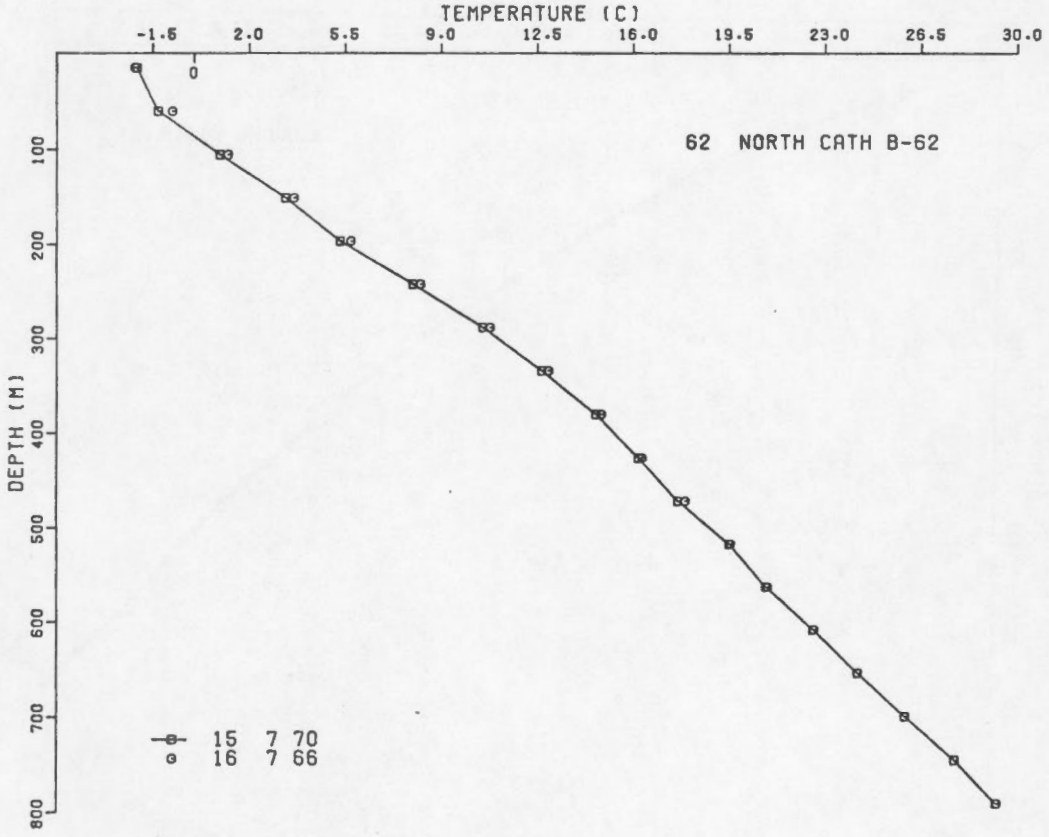

TEMPERATURE (C)
-14.0
-13.0
-12.0
-11.0
-10.0
-9.0
-8.0
-7.0
-6.0
-5.0
RESOLUTE BAY (MISENER, 1955)
DEPTH (M)
25
50
75
100
125
150
175
200
0 0 55

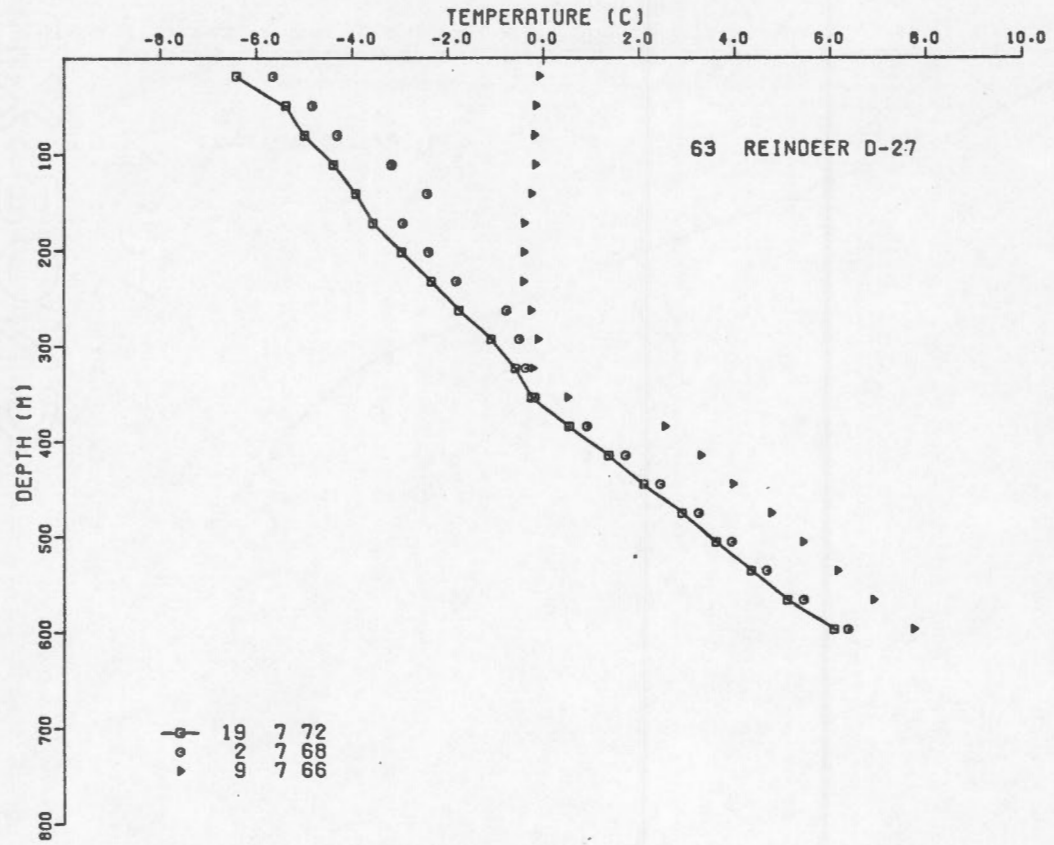

TEMPERATURE (C)
5.0
7.0
9.0
11.0
13.0
15.0
17.0
19.0
21.0
23.0
NORMAN WELLS CANOL 33X
DEPTH (M)
50
100
150
200
250
300
350
400
0 5 60

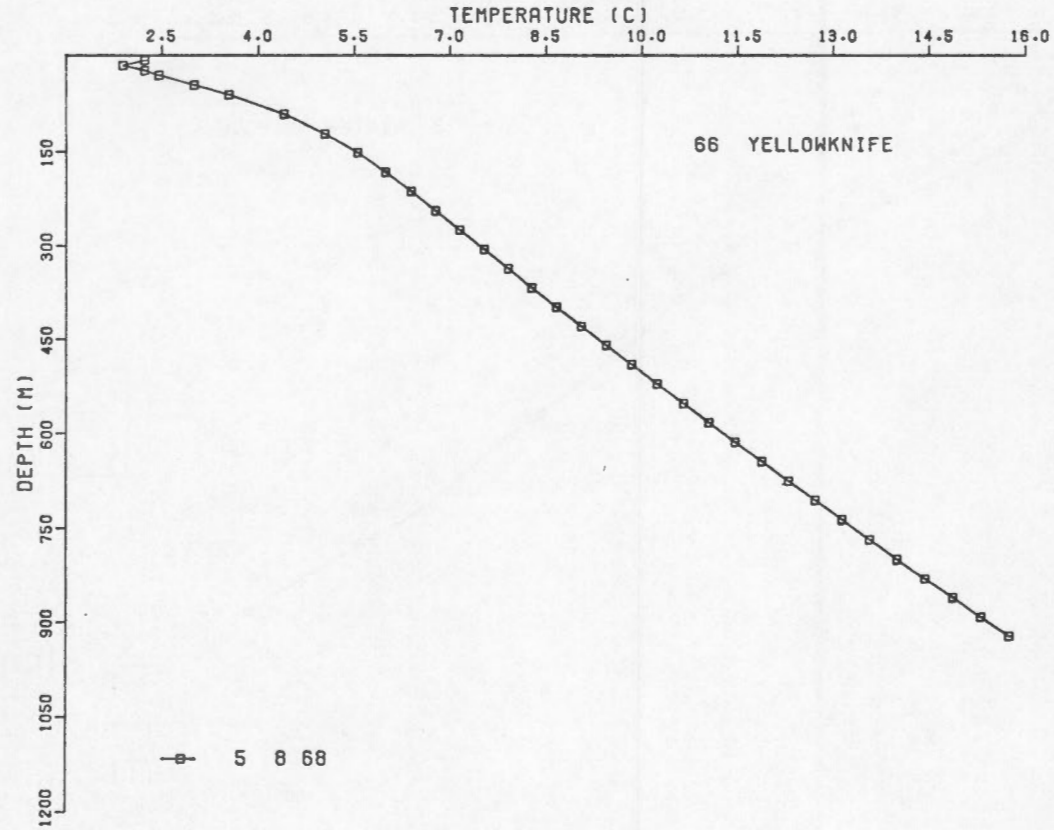

TEMPERATURE (C)
-4.5
-2.0
0.5
3.0
5.5
8.0
10.5
13.0
15.5
18.0
0
150
300
450
600
750
900
1050
1200
DEPTH (M)
MUSKOX NORTH

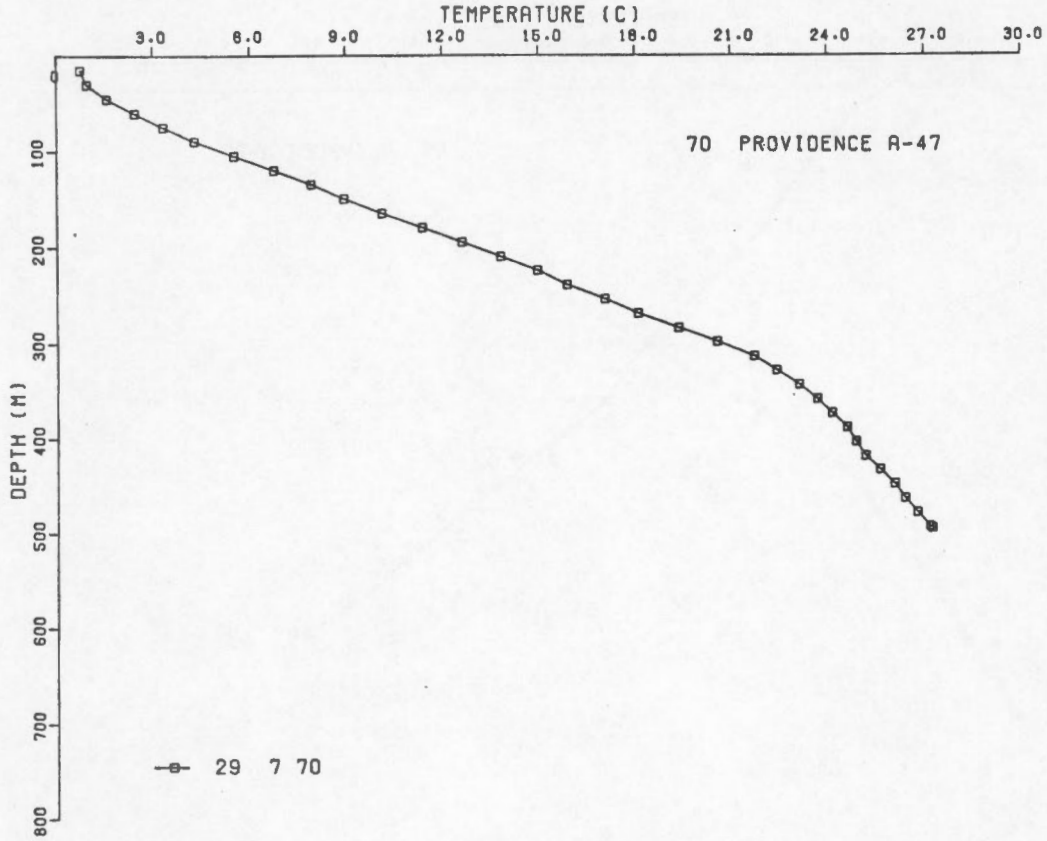

TEMPERATURE (C)
-4.5
-2.0
0.5
3.0
5.5
8.0
10.5
13.0
15.5
18.0
0
150
300
450
600
750
900
1050
1200
DEPTH (M)
MUSKOX SOUTH

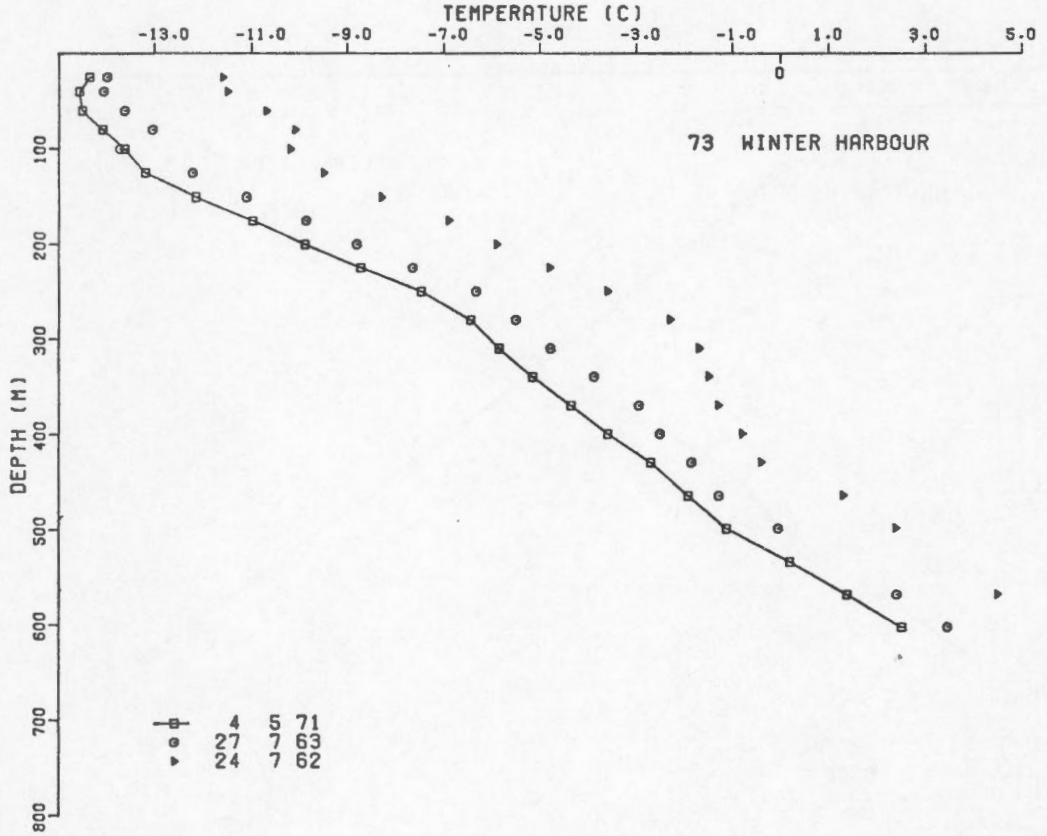

TEMPERATURE (C)
-19.0
-18.0
-17.0
-16.0
-15.0
-14.0
-13.0
-12.0
-11.0
-10.0
55 LOBITOS RESOLUTE BAY L-41
DEPTH (M)
25
50
75
100
125
150
175
200
27 4 73
1 10 70

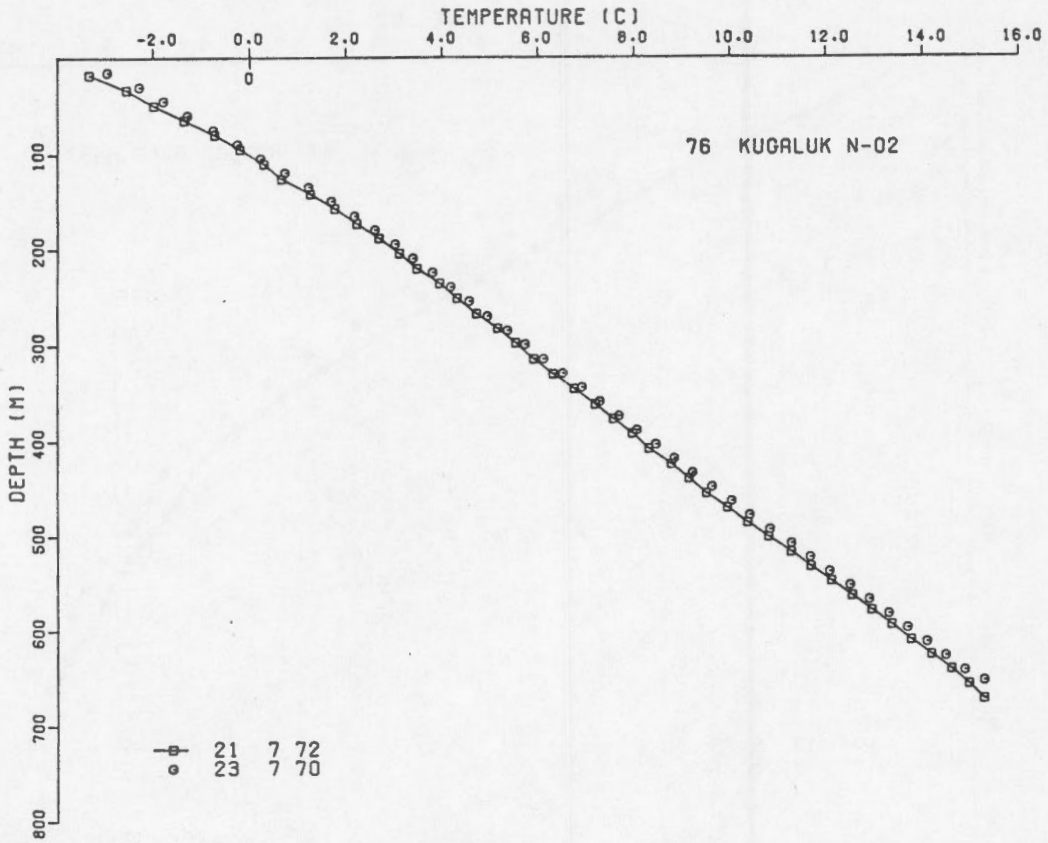

TEMPERATURE (C)
-1.5
2.0
5.5
9.0
12.5
16.0
19.5
23.0
26.5
30.0
0
62 NORTH CATH B-62
DEPTH (M)
100
200
300
400
500
600
700
800
15 7 70
16 7 66

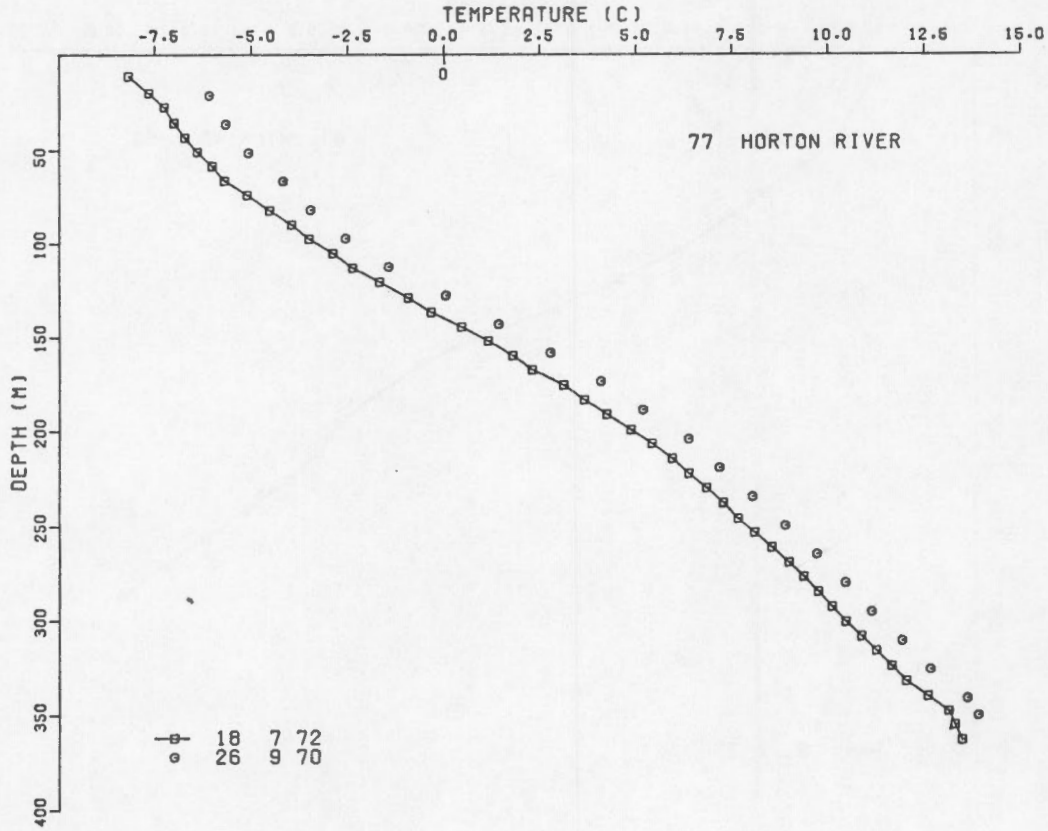

TEMPERATURE (C)
-8.0 -6.0 -4.0 -2.0 0.0 2.0 4.0 6.0 8.0 10.0
63 REINDEER D-27
DEPTH (M)
100 200 300 400 500 600 700 800
19 7 72
2 7 68
9 7 66

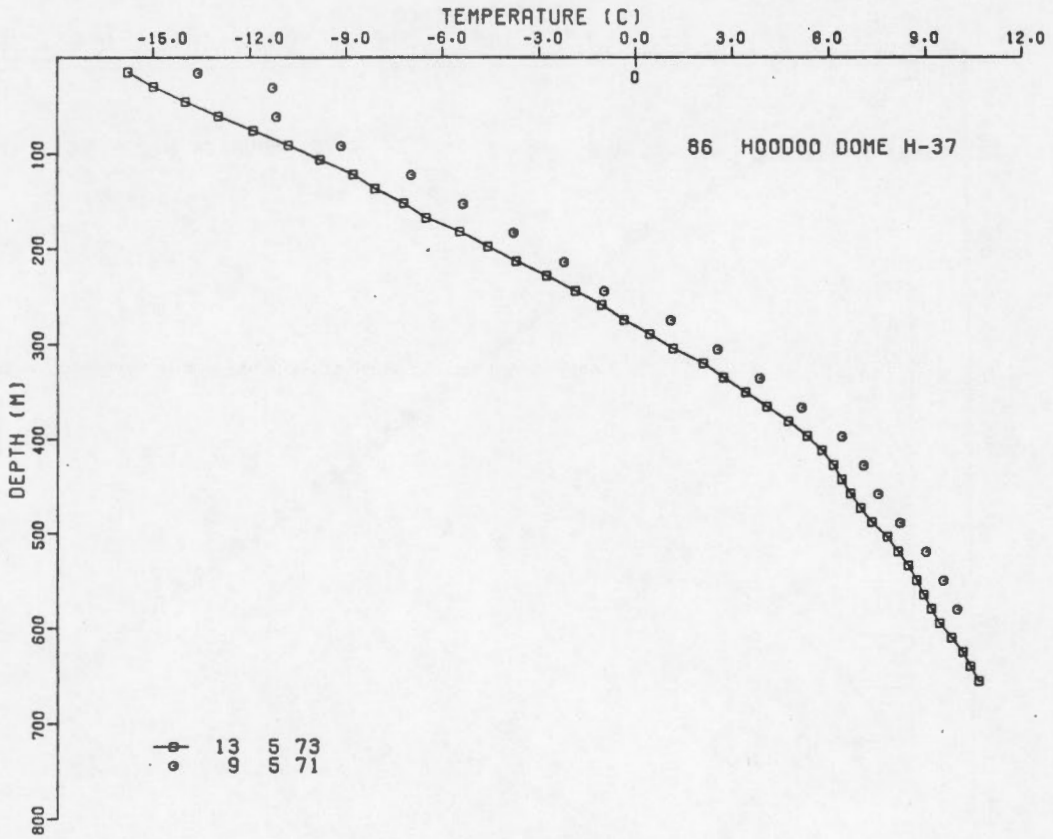

TEMPERATURE (C)
2.5 4.0 5.5 7.0 8.5 10.0 11.5 13.0 14.5 16.0
66 YELLOWKNIFE
DEPTH (M)
150 300 450 600 750 900 1050 1200
5 8 68

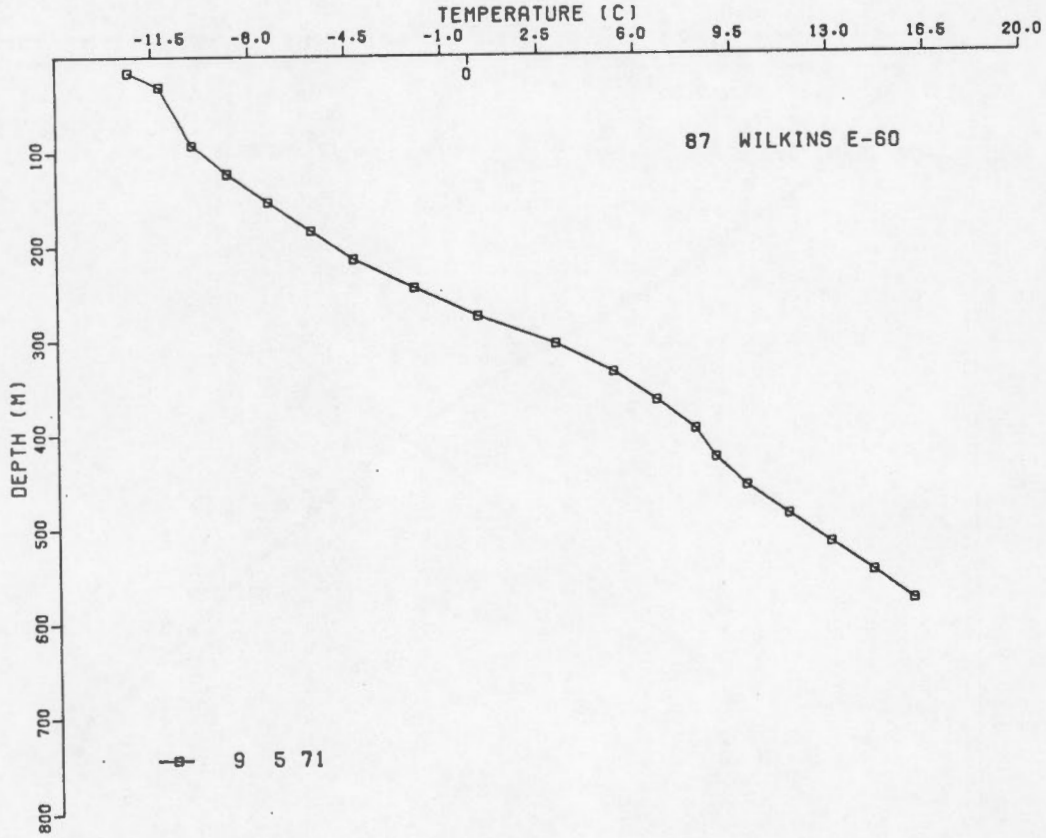

TEMPERATURE (C)
3.0
6.0
9.0
12.0
15.0
18.0
21.0
24.0
27.0
30.0
DEPTH (M)
100
200
300
400
500
600
700
800
70 PROVIDENCE A-47
29 7 70

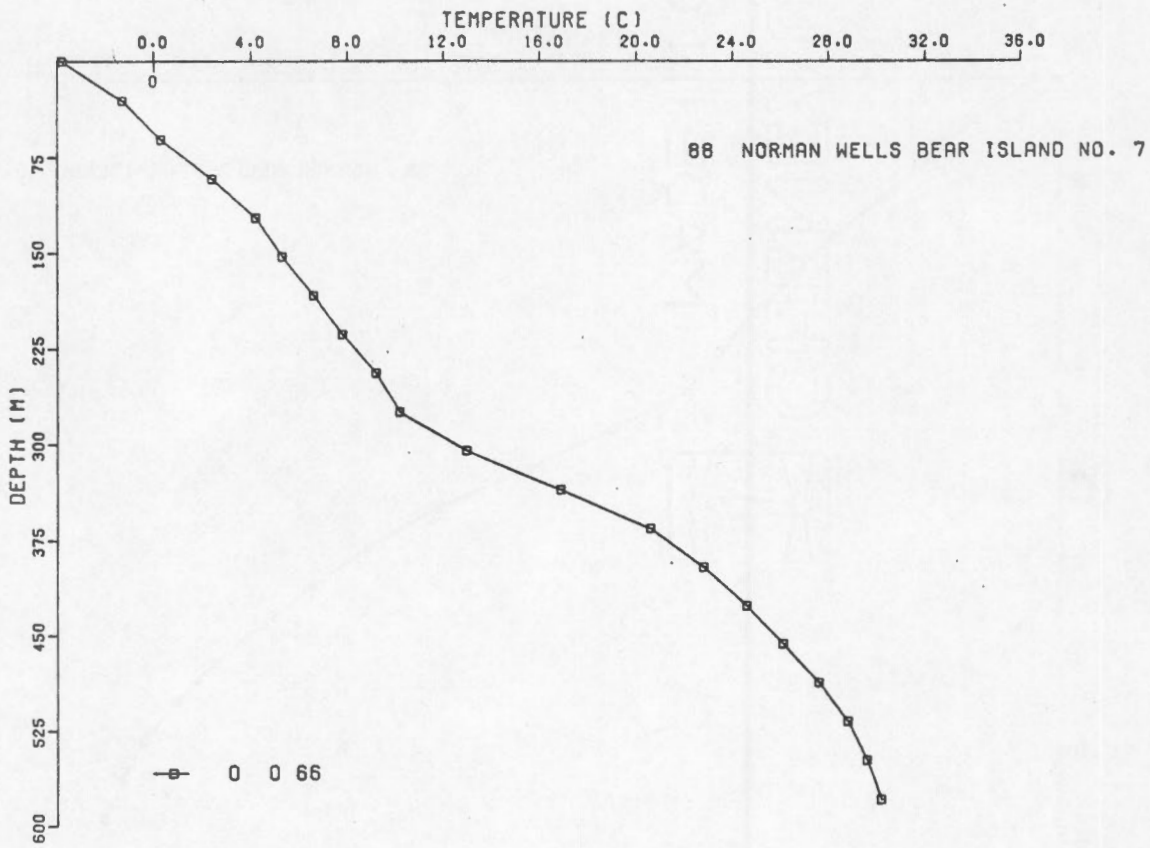

TEMPERATURE (C)
-13.0
-11.0
-9.0
-7.0
-5.0
-3.0
-1.0
0
1.0
3.0
5.0
DEPTH (M)
100
200
300
400
500
600
700
800
73 WINTER HARBOUR
4 5 71
27 7 63
24 7 62

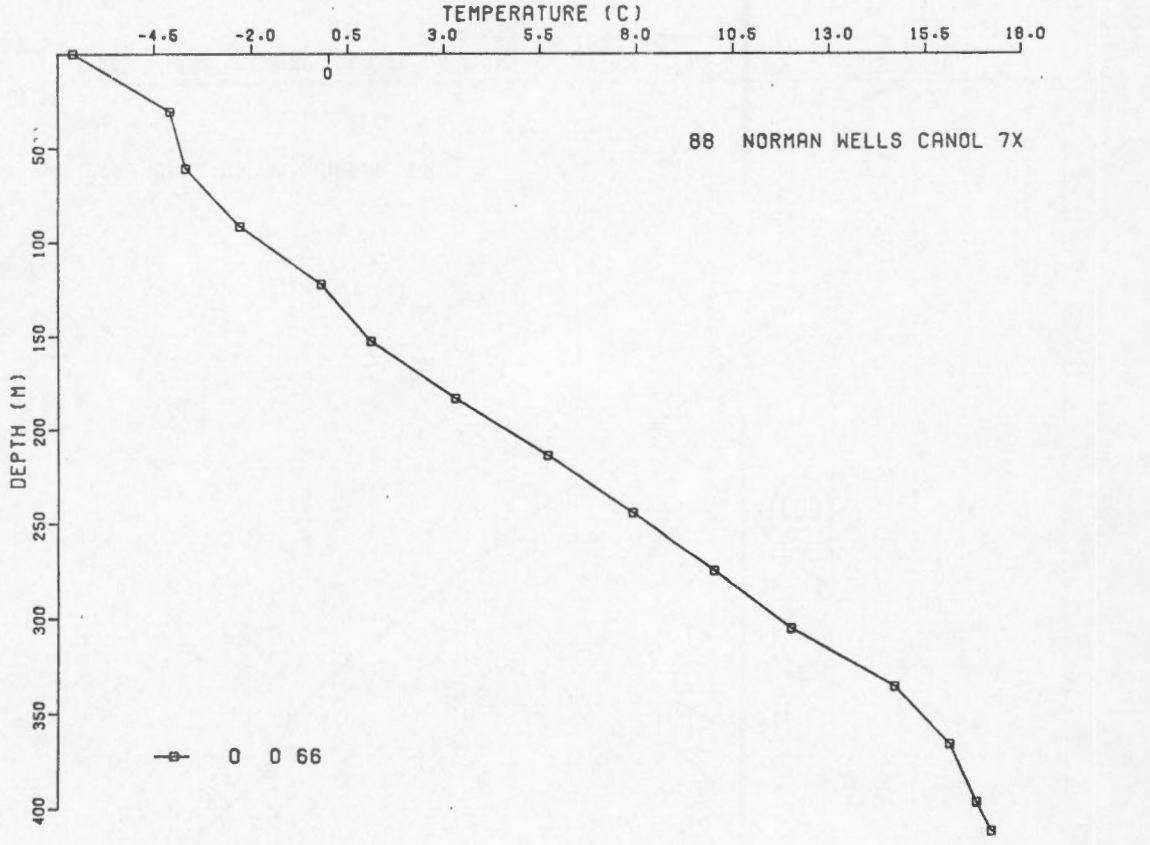

TEMPERATURE (C)
-2.0
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
16.0
0
76 KUGALUK N-02
DEPTH (M)
100
200
300
400
500
600
700
800
21 7 72
23 7 70

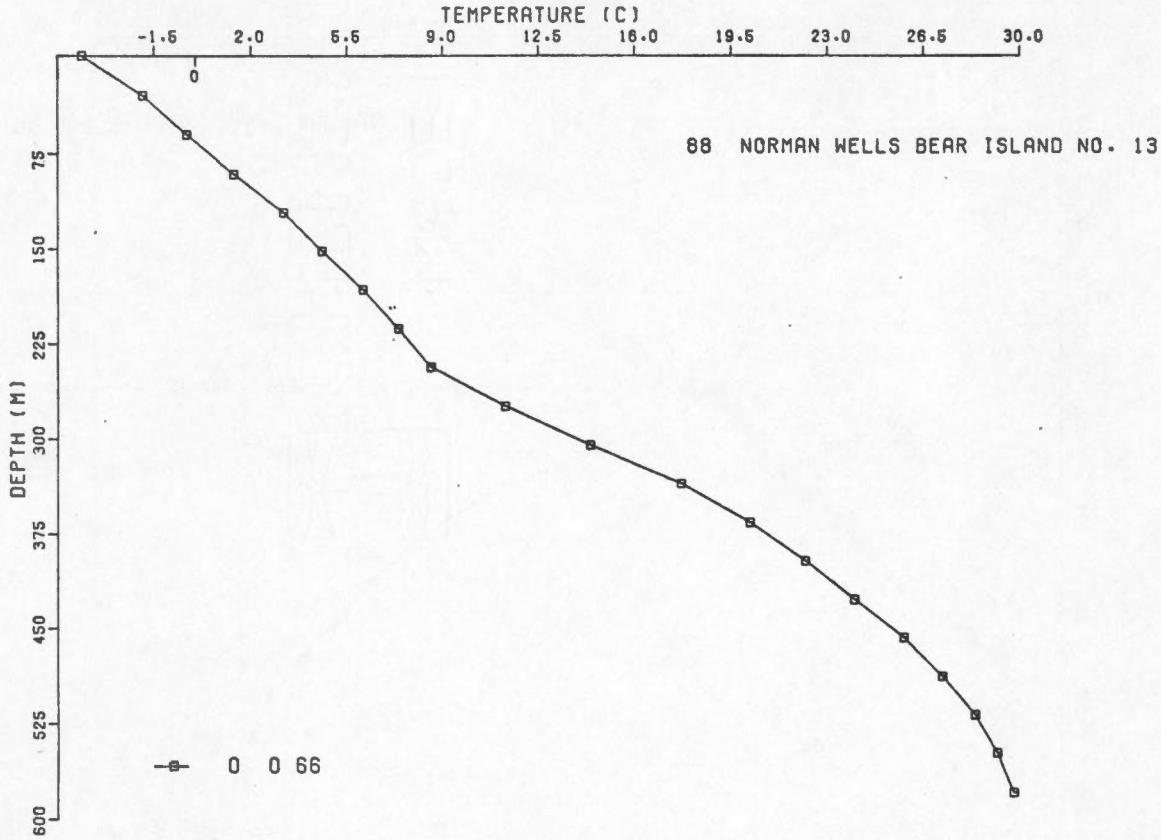

TEMPERATURE (C)
-7.5
-5.0
-2.5
0.0
2.5
5.0
7.5
10.0
12.5
15.0
0
77 HORTON RIVER
DEPTH (M)
50
100
150
200
250
300
350
400
18 7 72
26 9 70

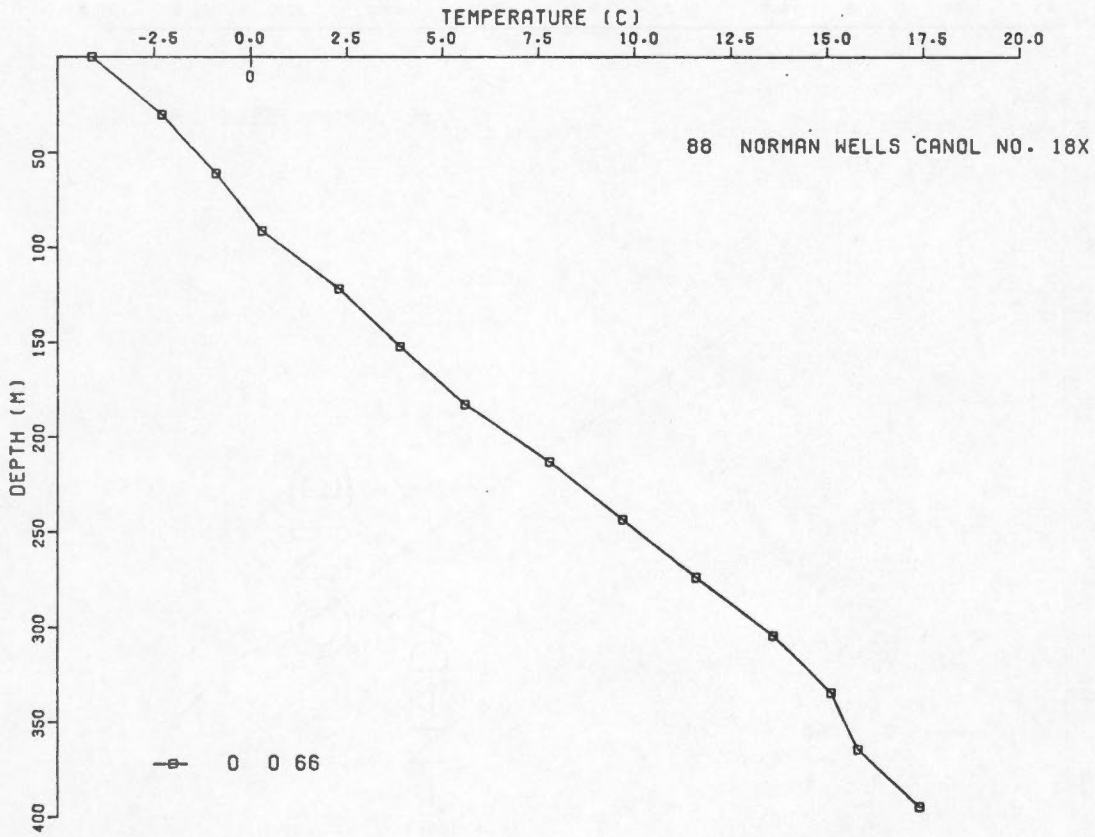

TEMPERATURE (C)
-15.0 -12.0 -9.0 -6.0 -3.0 0.0 3.0 6.0 9.0 12.0
0
86 HOODOO DOME H-37
DEPTH (M)
100 200 300 400 500 600 700 800
13 5 73
9 5 71

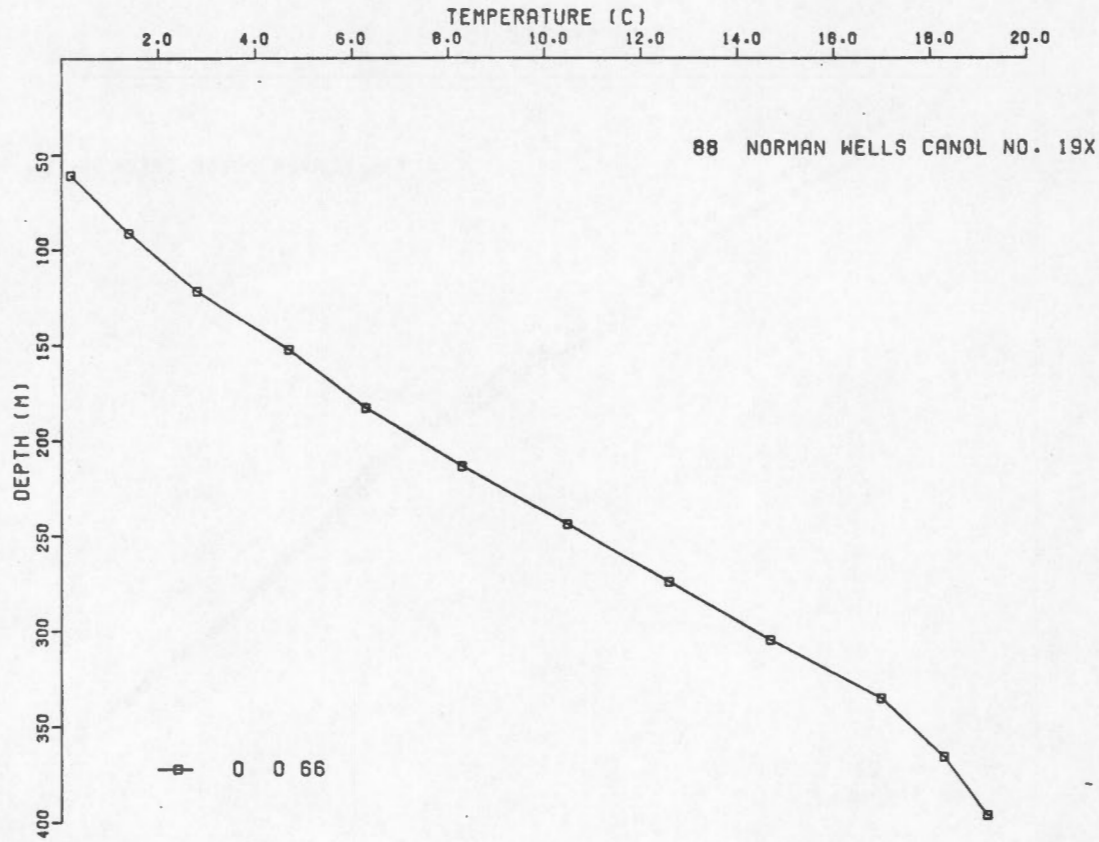

TEMPERATURE (C)
-11.5 -8.0 -4.5 -1.0 2.5 6.0 9.5 13.0 16.5 20.0
0
87 WILKINS E-60
DEPTH (M)
100 200 300 400 500 600 700 800
9 5 71

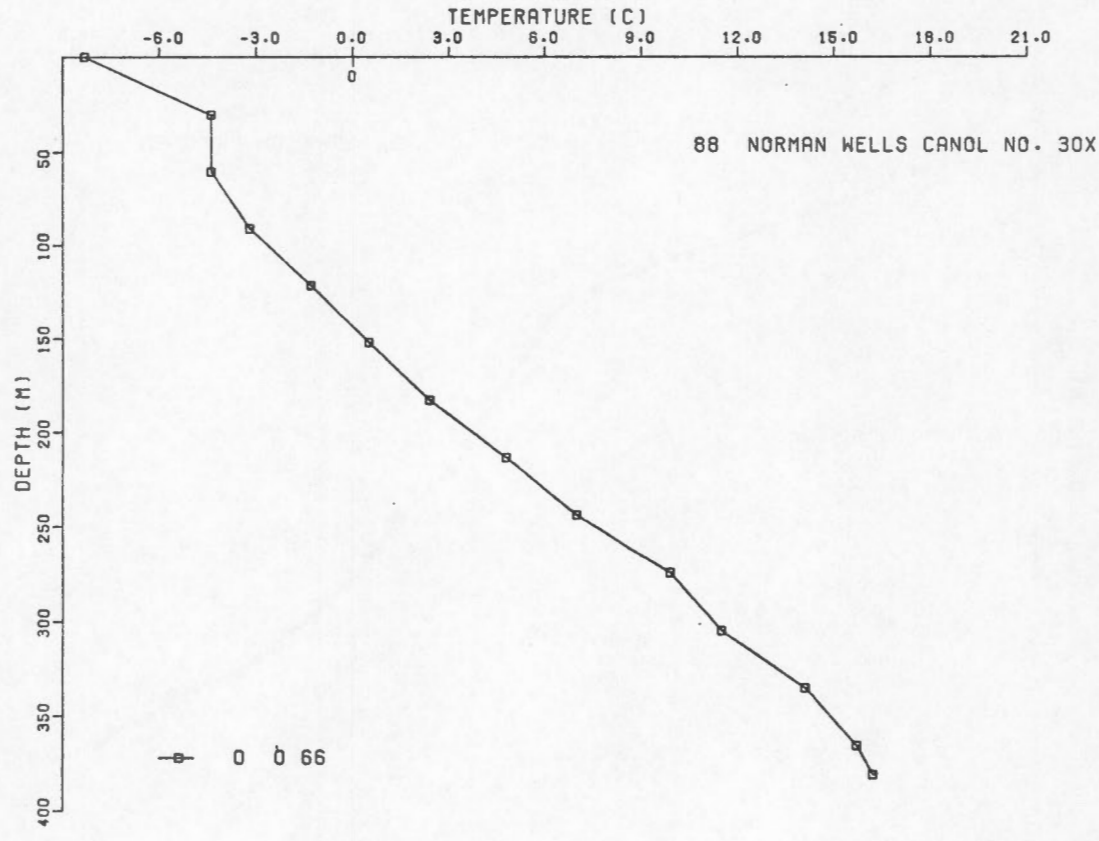

TEMPERATURE (C)
0.0
4.0
8.0
12.0
16.0
20.0
24.0
28.0
32.0
36.0
0
88 NORMAN WELLS BEAR ISLAND NO. 7
DEPTH (M)
75
150
225
300
375
450
525
600
0 0 66

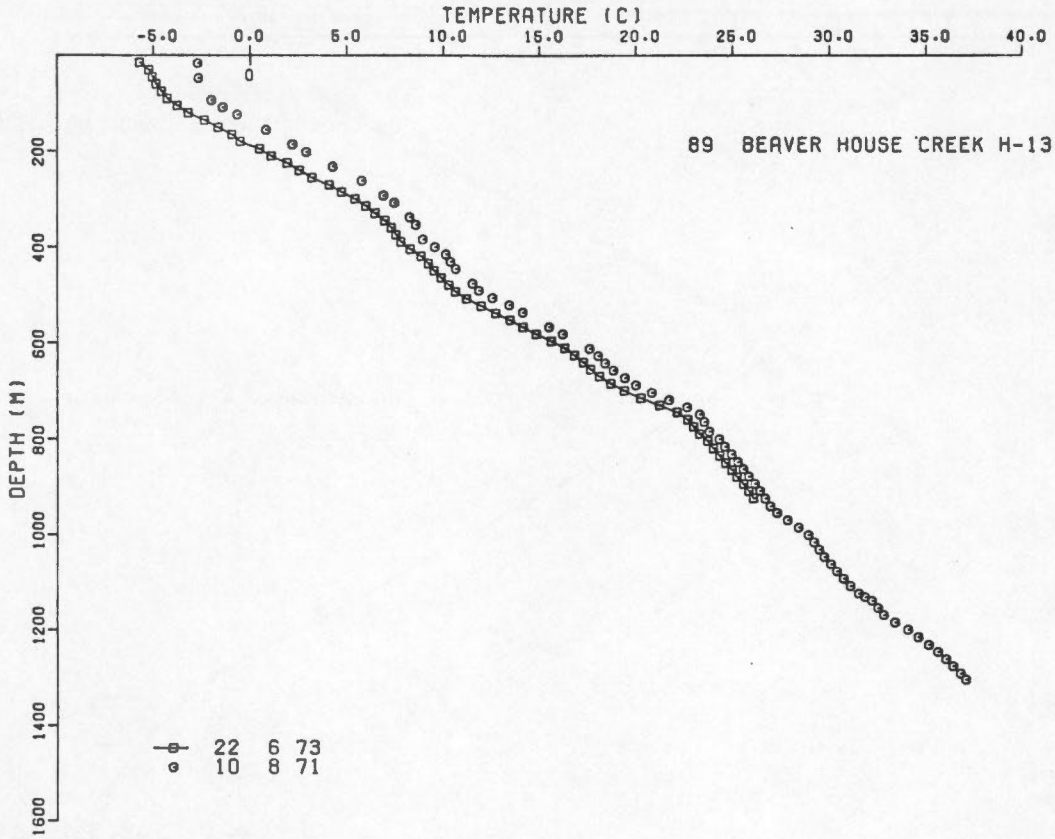

TEMPERATURE (C)
-4.5
-2.0
0.5
3.0
5.5
8.0
10.5
13.0
15.5
18.0
0
88 NORMAN WELLS CANOL 7X
DEPTH (M)
50
100
150
200
250
300
350
400
0 0 66

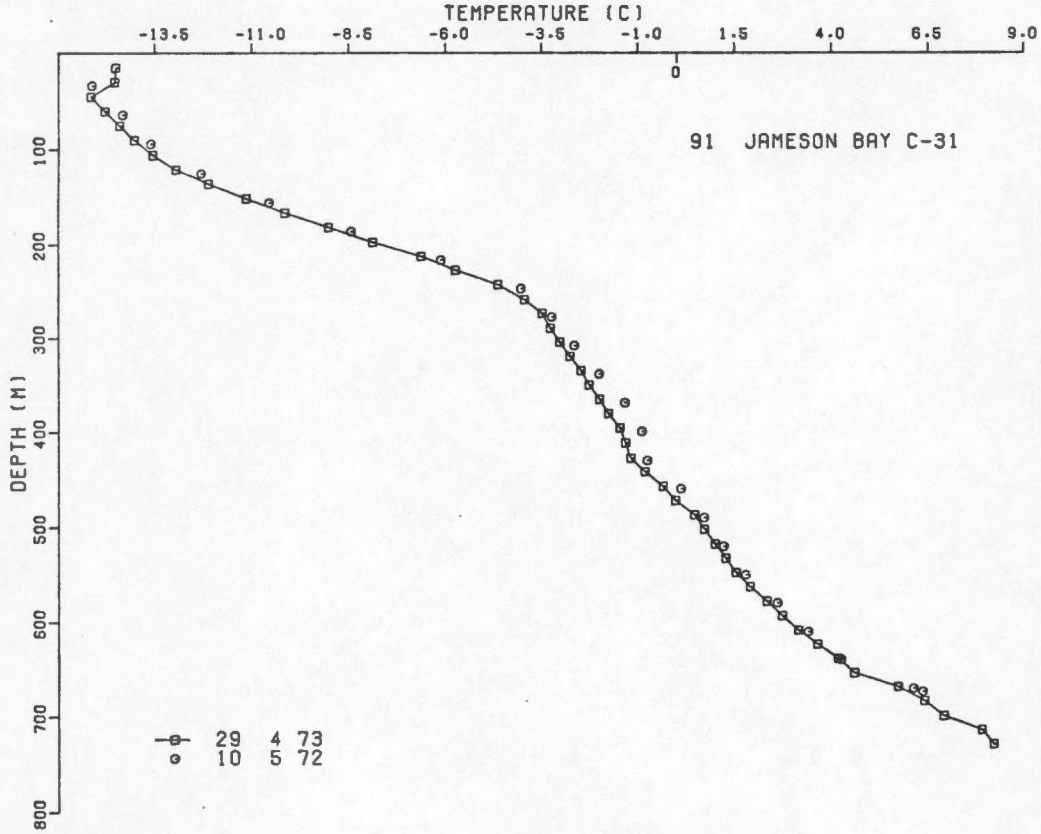

TEMPERATURE (C)
-1.5
2.0
5.5
9.0
12.5
16.0
19.5
23.0
26.5
30.0
0
88 NORMAN WELLS BEAR ISLAND NO. 13
DEPTH (M)
75
150
225
300
375
450
525
600
0 0 66

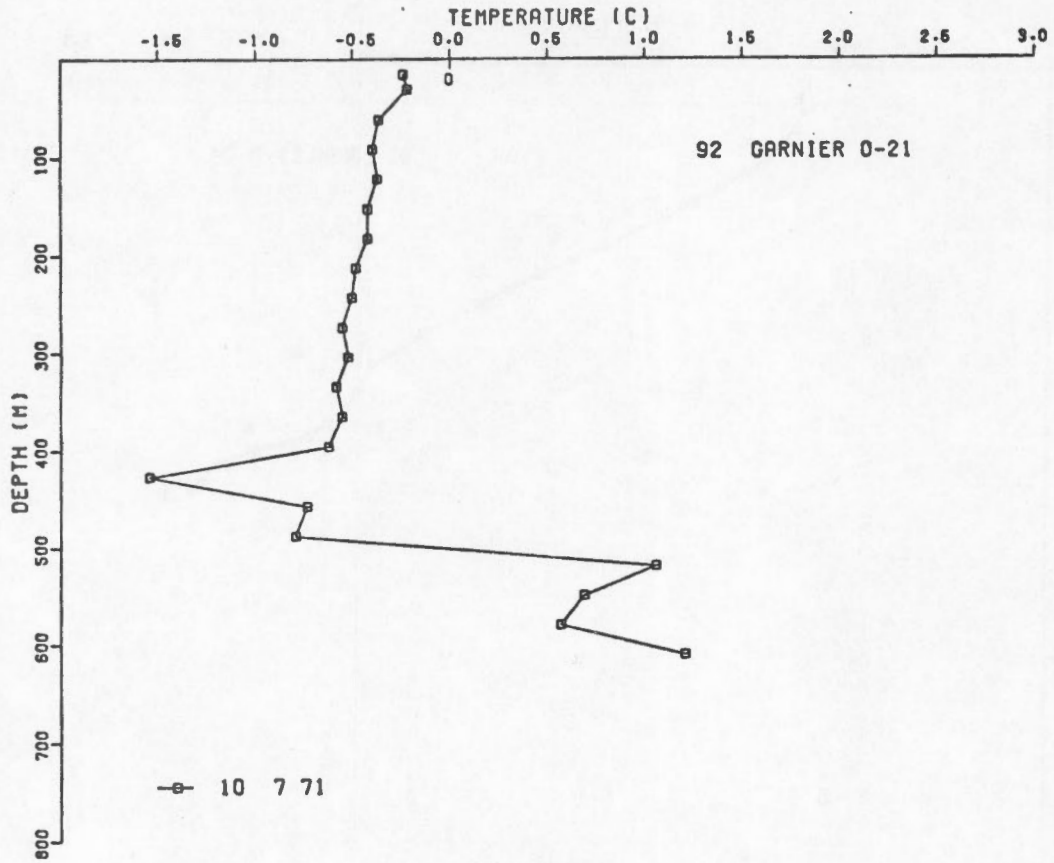

TEMPERATURE (C)
-2.5
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
0
88 NORMAN WELLS CANOL NO. 18X
DEPTH (M)
50
100
150
200
250
300
350
400
0 0 66

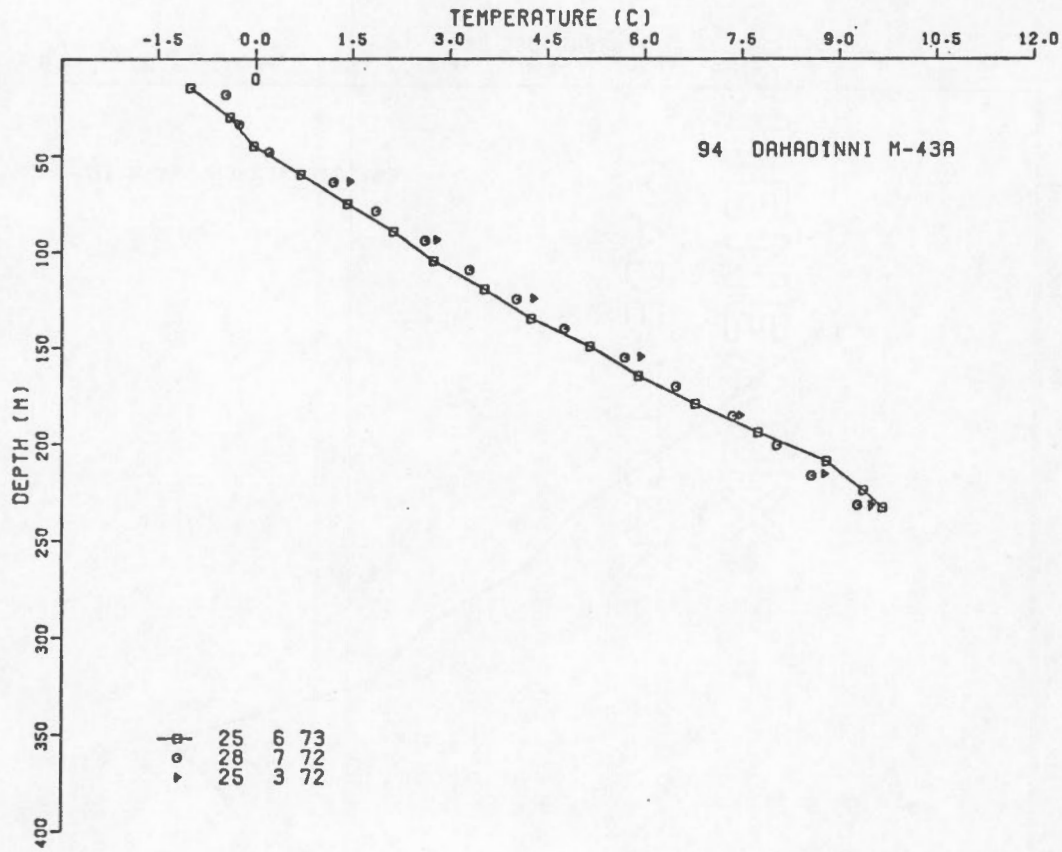

TEMPERATURE (C)
2.0
4.0
6.0
8.0
10.0
12.0
14.0
16.0
18.0
20.0
88 NORMAN WELLS CANOL NO. 19X
DEPTH (M)
50
100
150
200
250
300
350
400
0 0 66

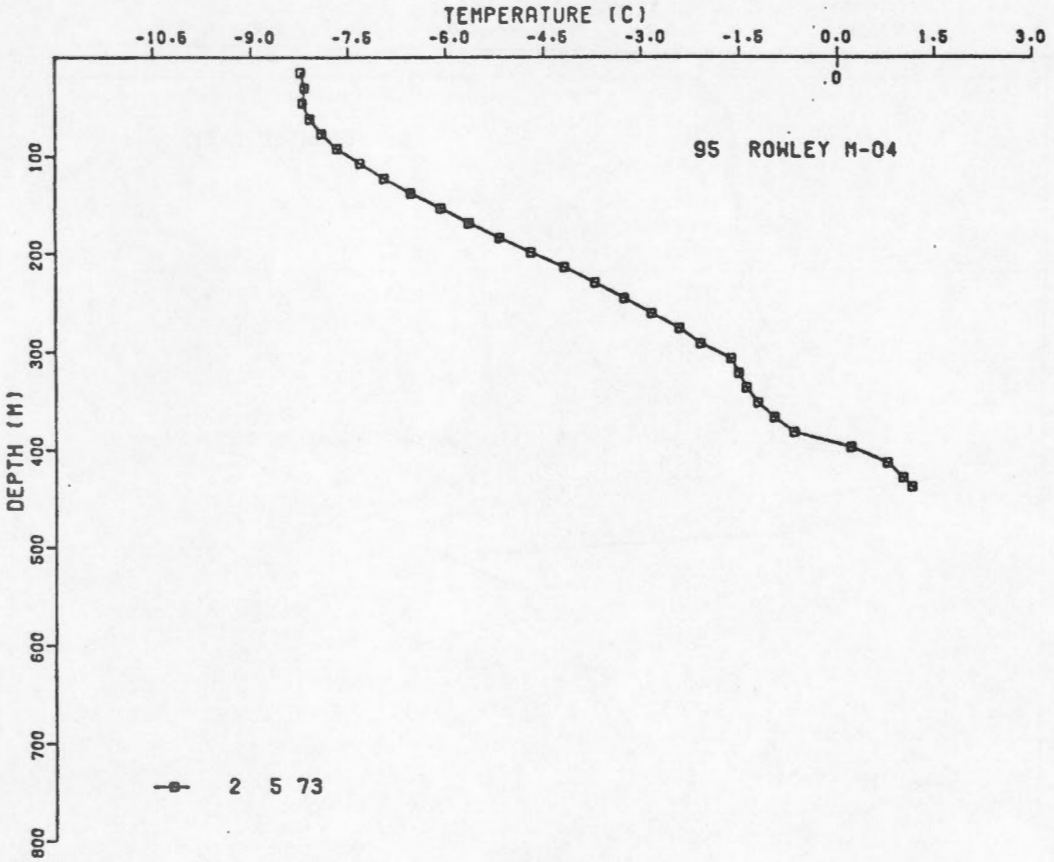

TEMPERATURE (C)
-6.0
-3.0
0.0
3.0
6.0
9.0
12.0
15.0
18.0
21.0
0
88 NORMAN WELLS CANOL NO. 30X
DEPTH (M)
50
100
150
200
250
300
350
400
0 0 66

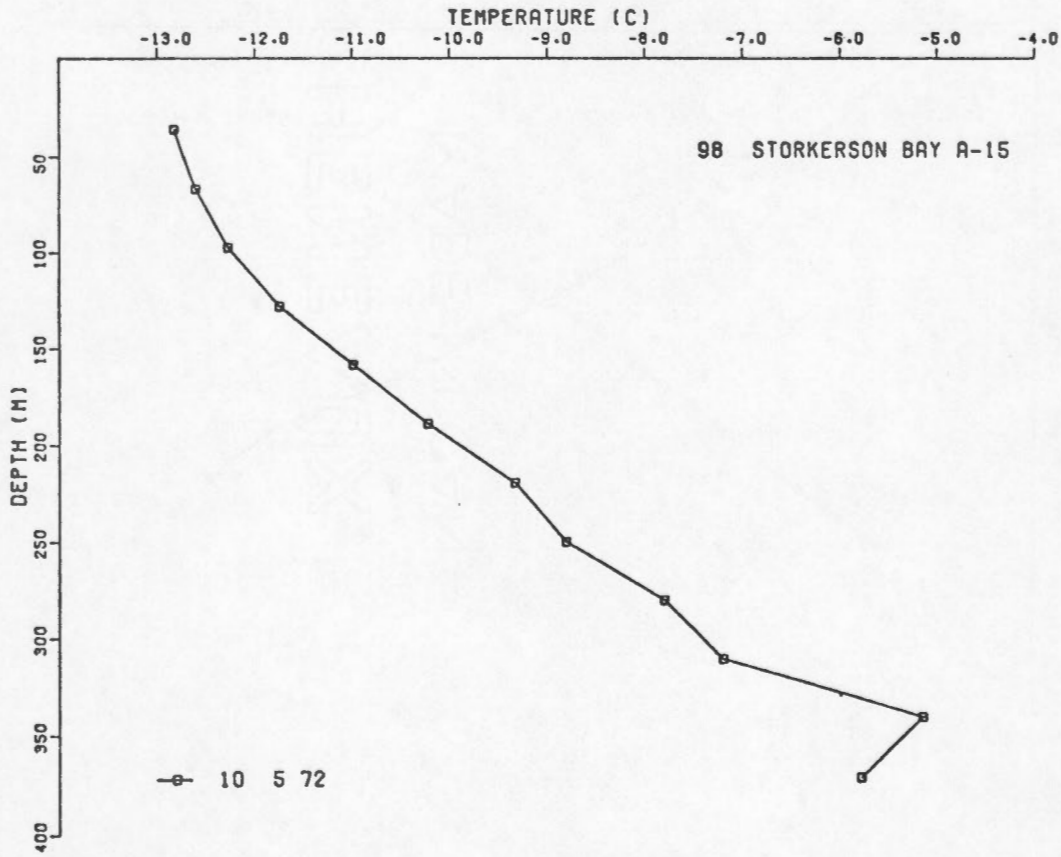

TEMPERATURE (C)
-5.0
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
0
89 BEAVER HOUSE CREEK H-13
DEPTH (M)
200
400
600
800
1000
1200
1400
1600
22 6 73
10 8 71

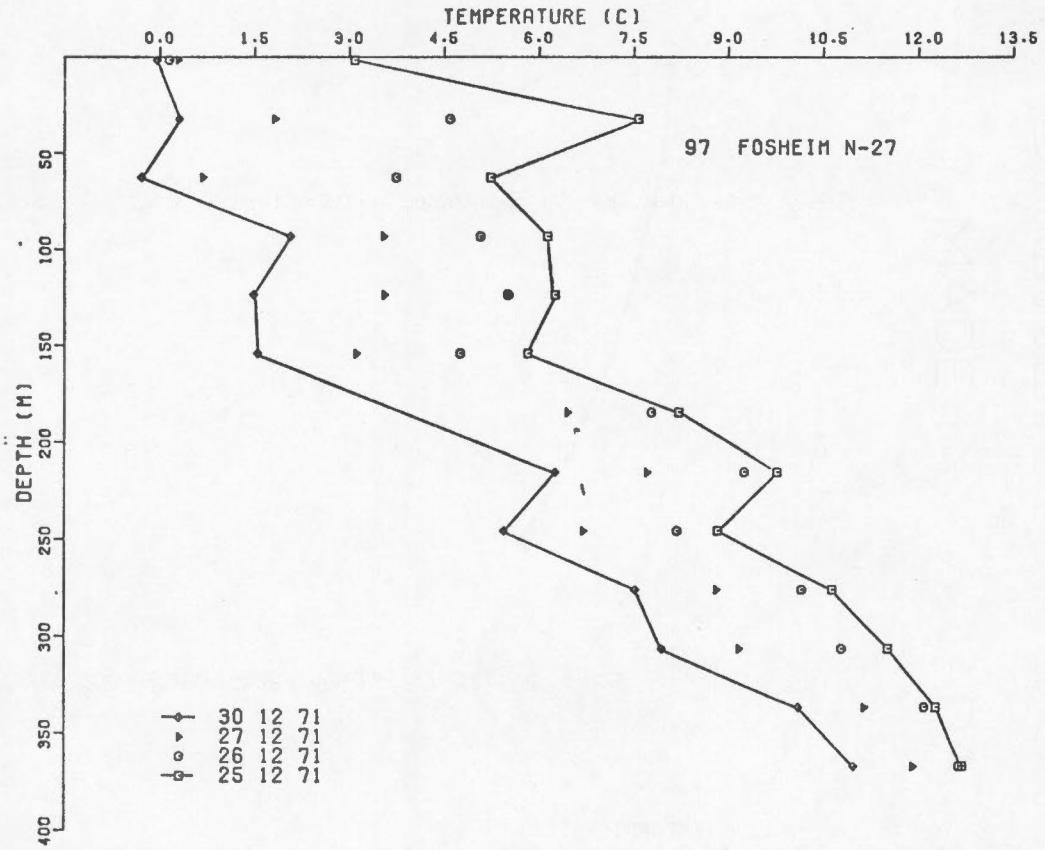

TEMPERATURE (C)
-13.5
-11.0
-8.5
-6.0
-3.5
-1.0
1.5
4.0
6.5
9.0
0
91 JAMESON BAY C-31
DEPTH (M)
100
200
300
400
500
600
700
800
29 4 73
10 5 72

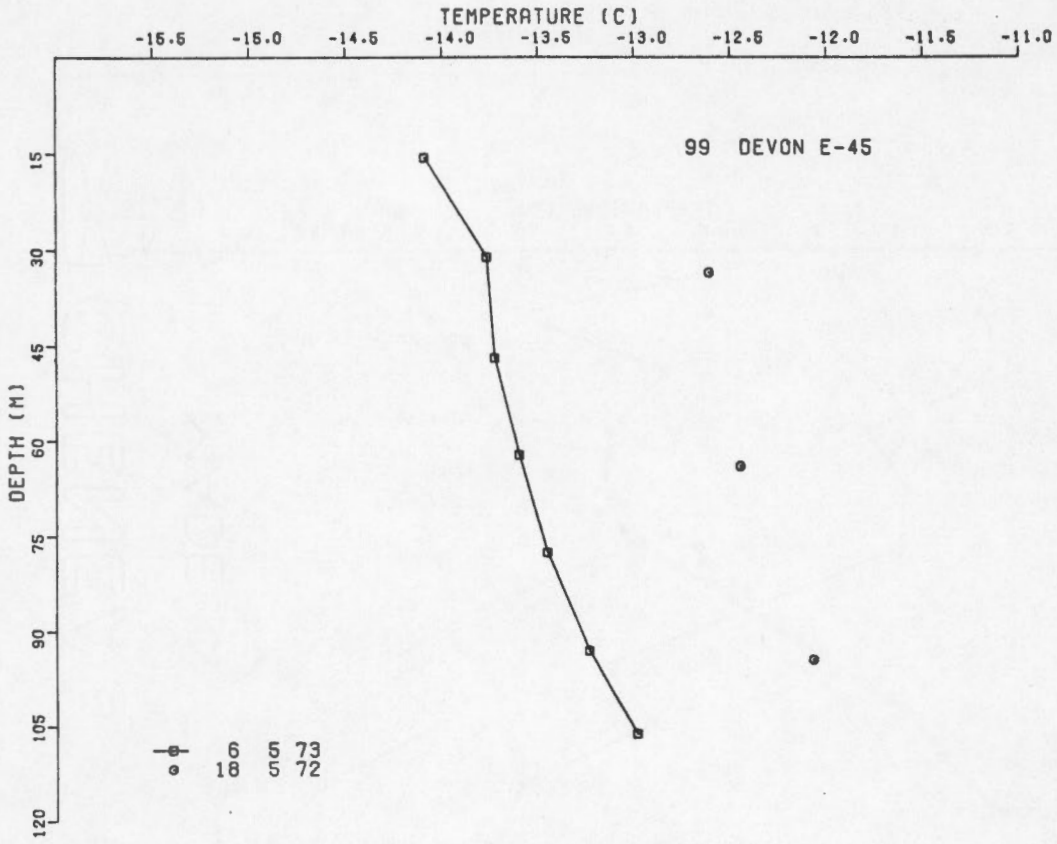

TEMPERATURE (C)
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0
92 GARNIER O-21
DEPTH (M)
100
200
300
400
500
600
700
800
10 7 71

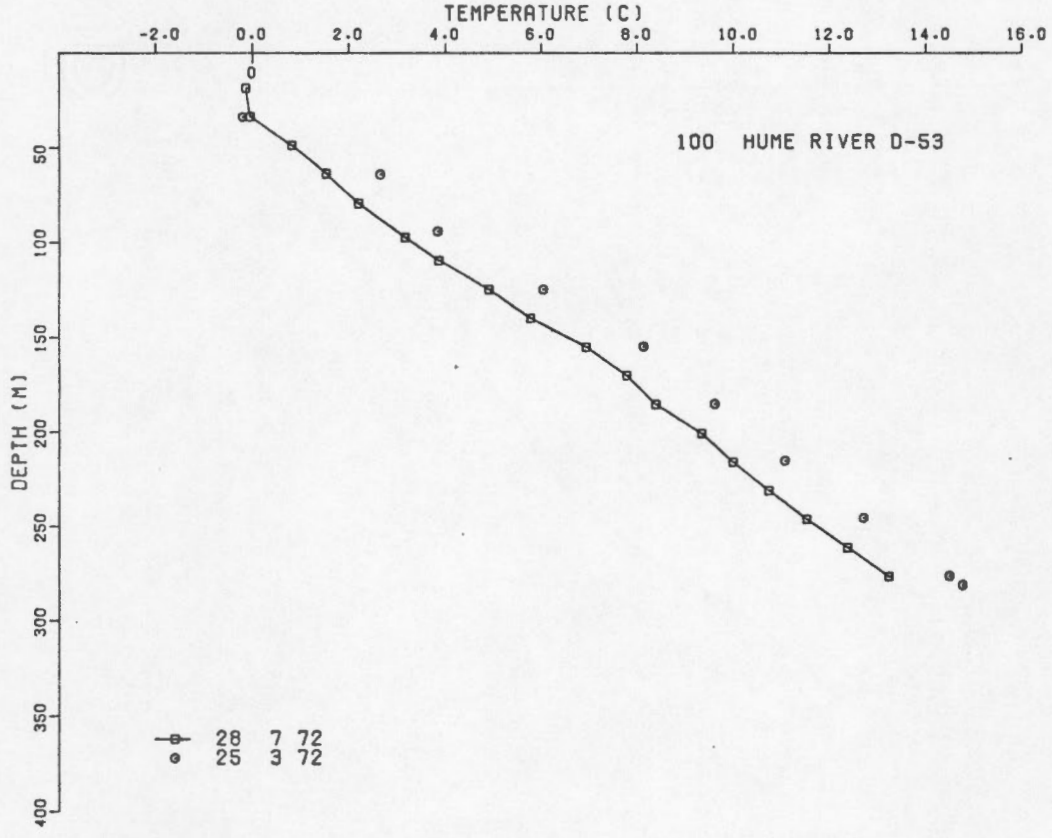

TEMPERATURE (C)
-1.5
0.0
1.5
3.0
4.5
6.0
7.5
9.0
10.5
12.0
0
94 DAHADINNI M-43A
DEPTH (M)
50
100
150
200
250
300
350
400
25 6 73
28 7 72
25 3 72

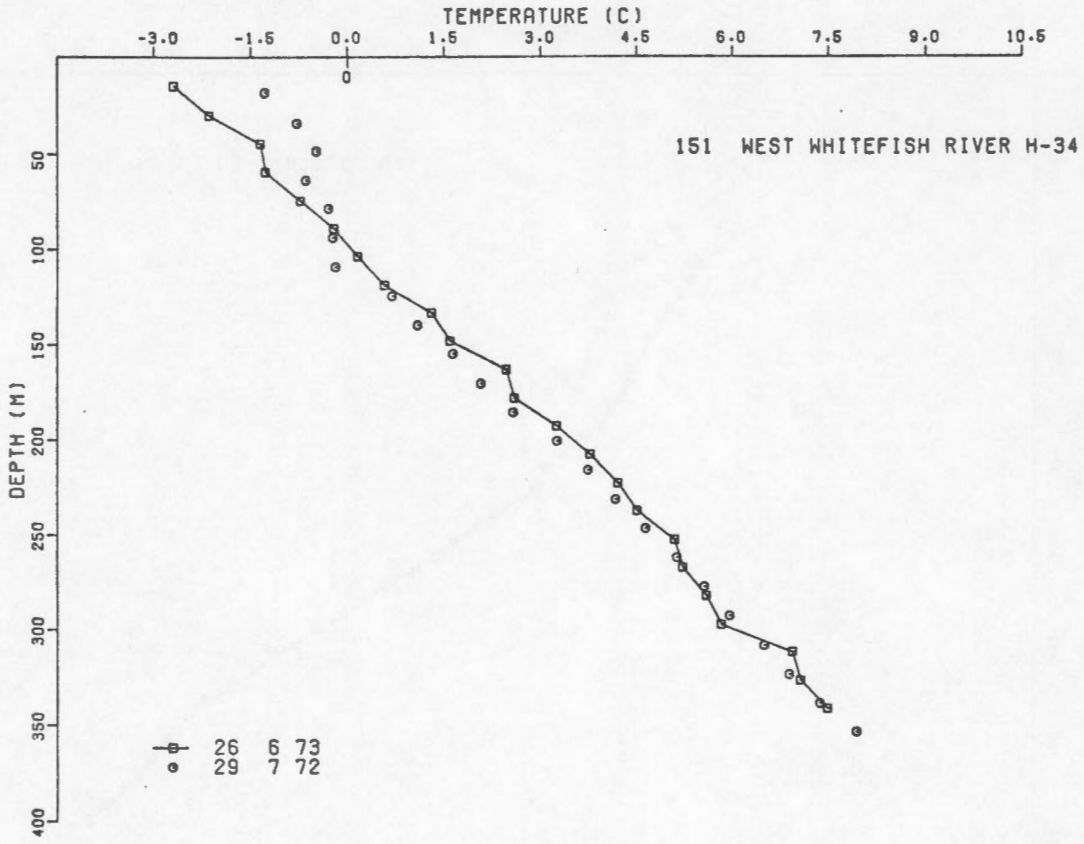

TEMPERATURE (C)
-10.5
-9.0
-7.5
-6.0
-4.5
-3.0
-1.5
0.0
1.5
3.0
.0
95 ROWLEY M-04
DEPTH (M)
100
200
300
400
500
600
700
800
2 5 73

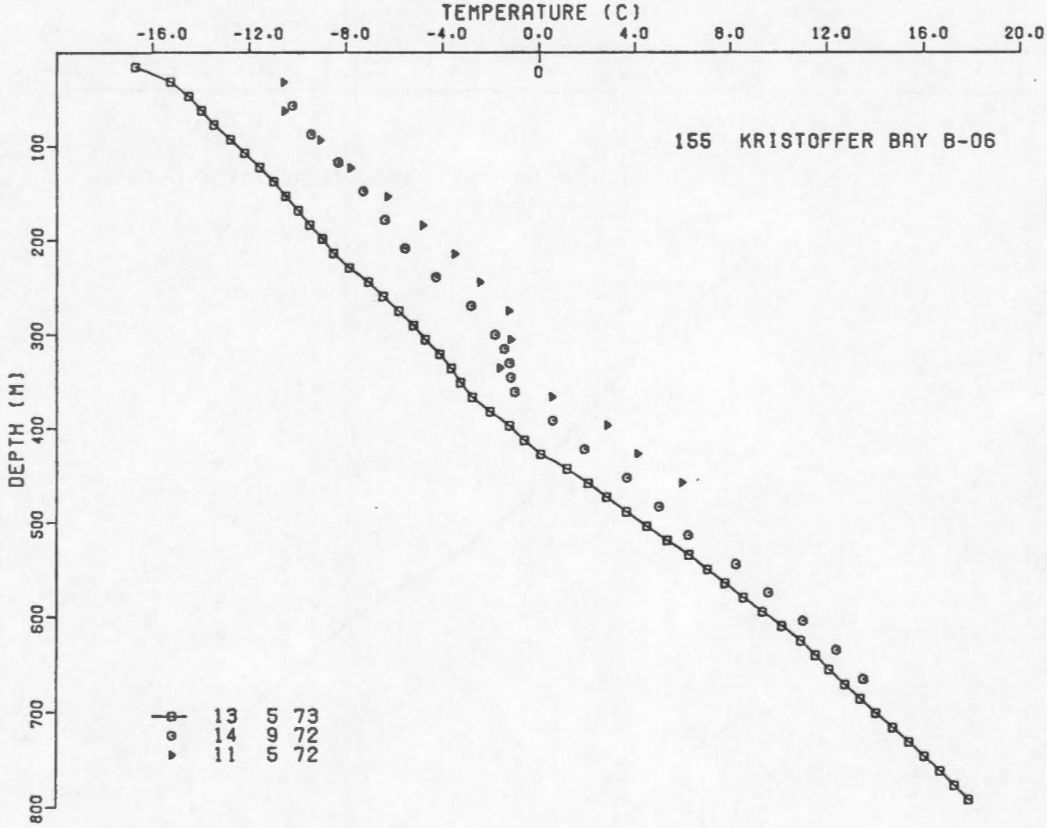

TEMPERATURE (C)
-13.0
-12.0
-11.0
-10.0
-9.0
-8.0
-7.0
-6.0
-5.0
-4.0
98 STORKERSON BAY A-15
DEPTH (M)
50
100
150
200
250
300
350
400
10 5 72

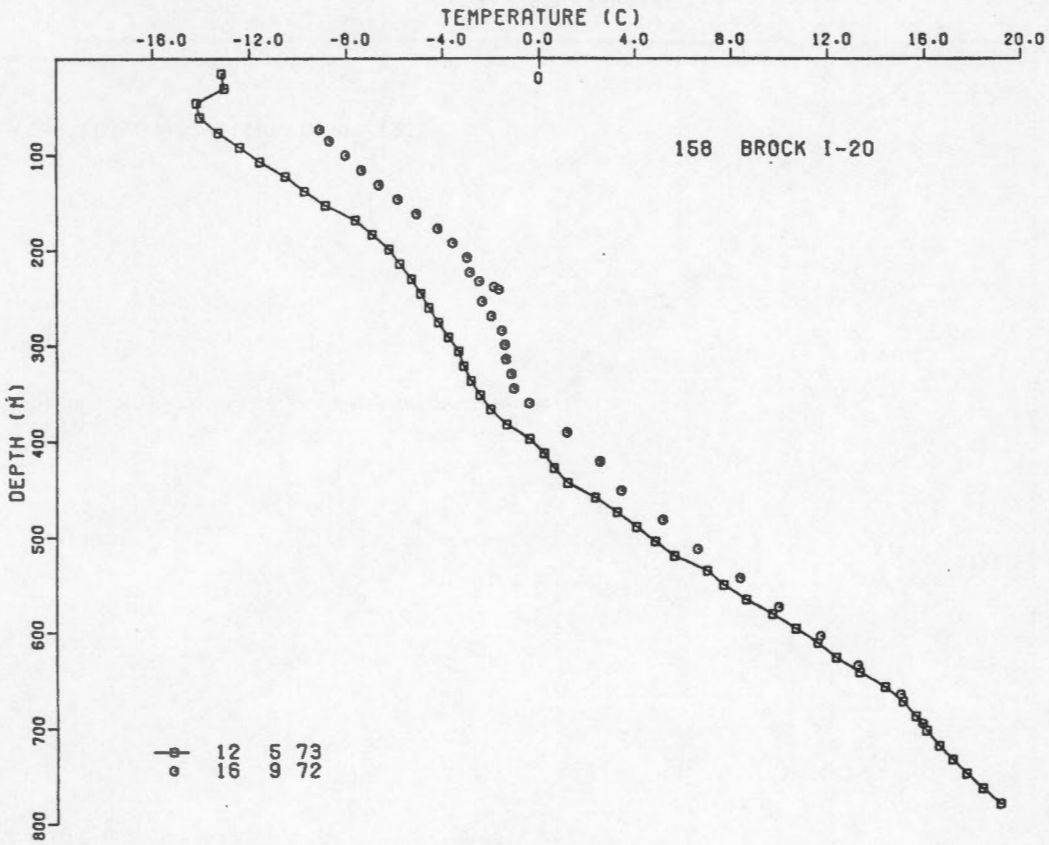

TEMPERATURE (C)
0.0
1.5
3.0
4.5
6.0
7.5
9.0
10.5
12.0
13.5
DEPTH (M)
50
100
150
200
250
300
350
400
97 FOSHEIM N-27
30 12 71
27 12 71
26 12 71
25 12 71

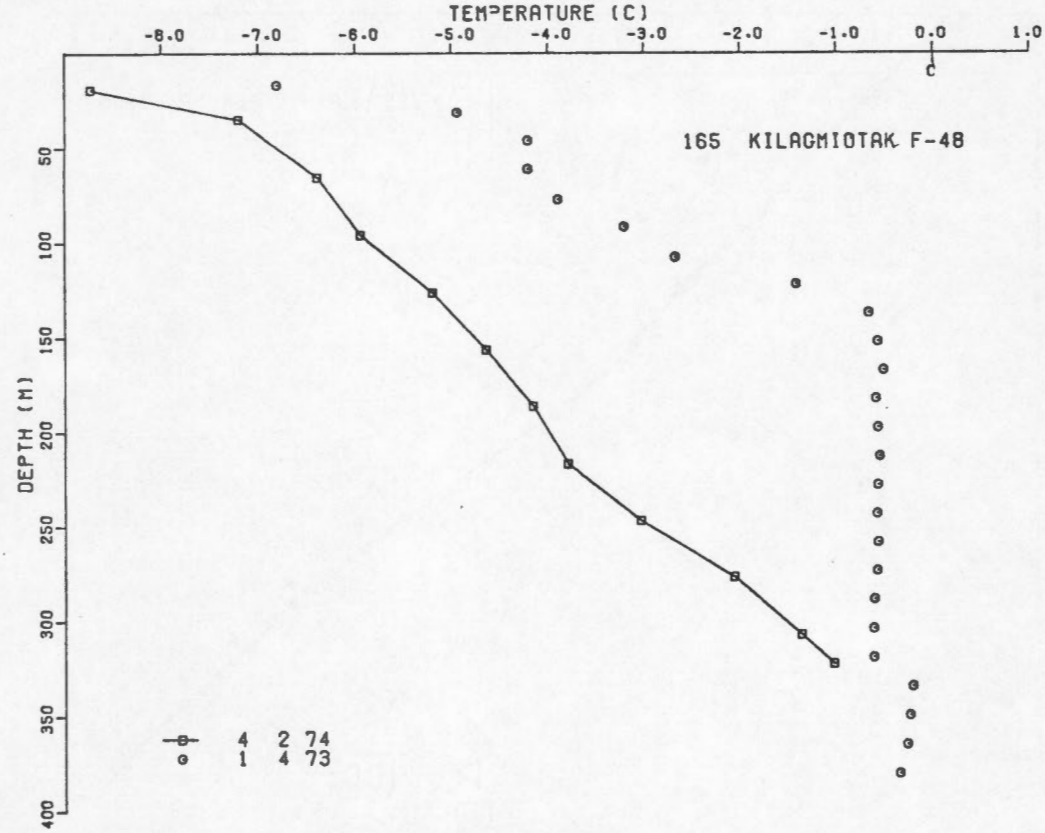

TEMPERATURE (C)
-15.5 -15.0 -14.5 -14.0 -13.5 -13.0 -12.5 -12.0 -11.5 -11.0
99 DEVON E-45
DEPTH (M)
15 30 45 60 75 90 105 120
6 5 73
18 5 72

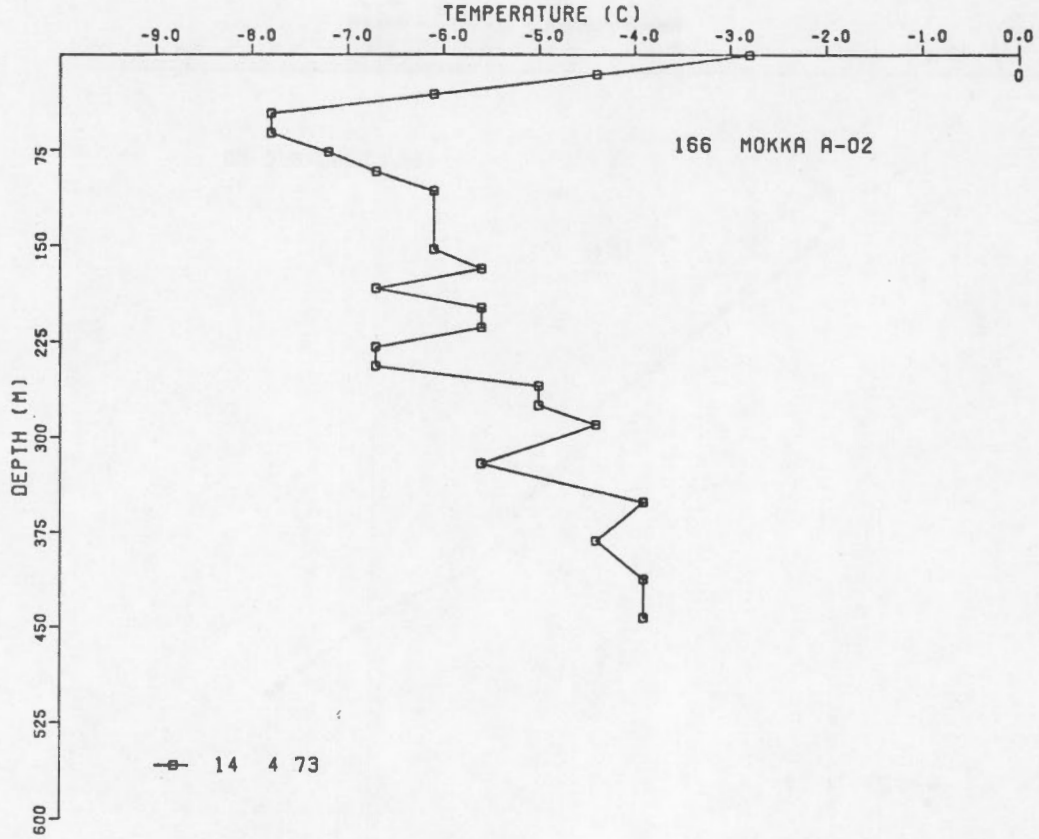

TEMPERATURE (C)
-2.0 0.0 2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0
100 HUME RIVER D-53
DEPTH (M)
0 50 100 150 200 250 300 350 400
28 7 72
25 3 72

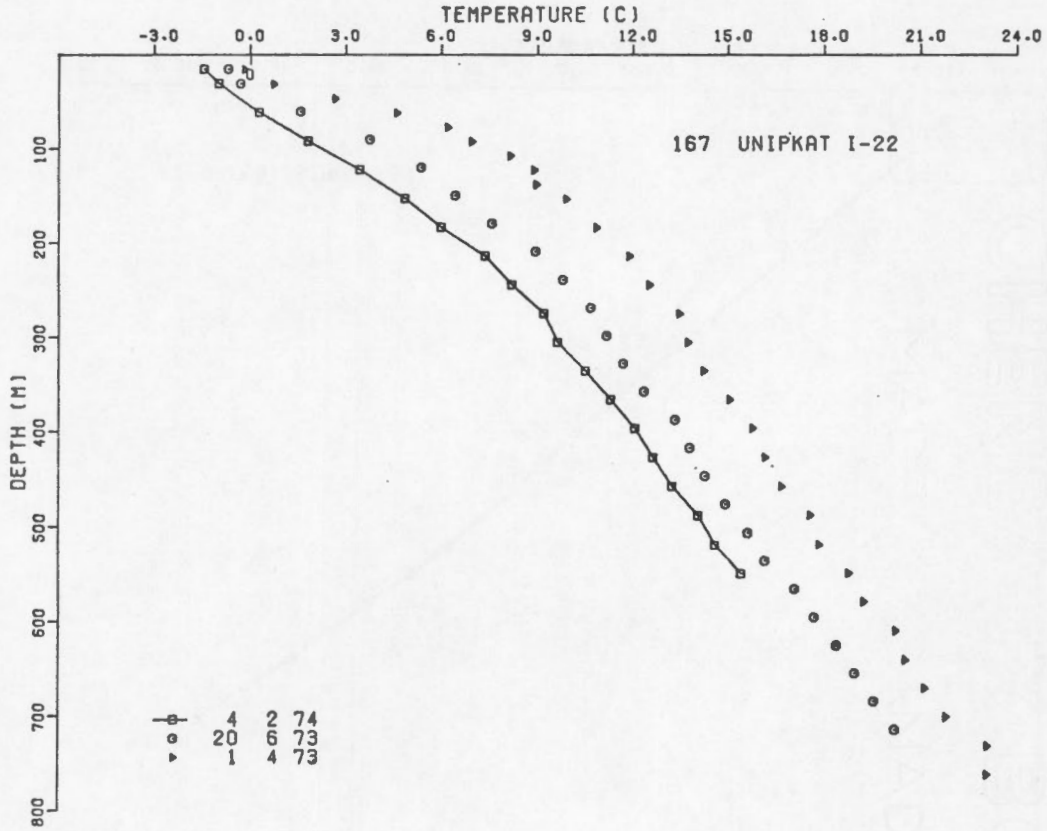

TEMPERATURE (C)
-3.0 -1.5 0.0 1.5 3.0 4.5 6.0 7.5 9.0 10.5
0
151 WEST WHITEFISH RIVER H-34
DEPTH (M)
50 100 150 200 250 300 350 400
26 6 73
29 7 72

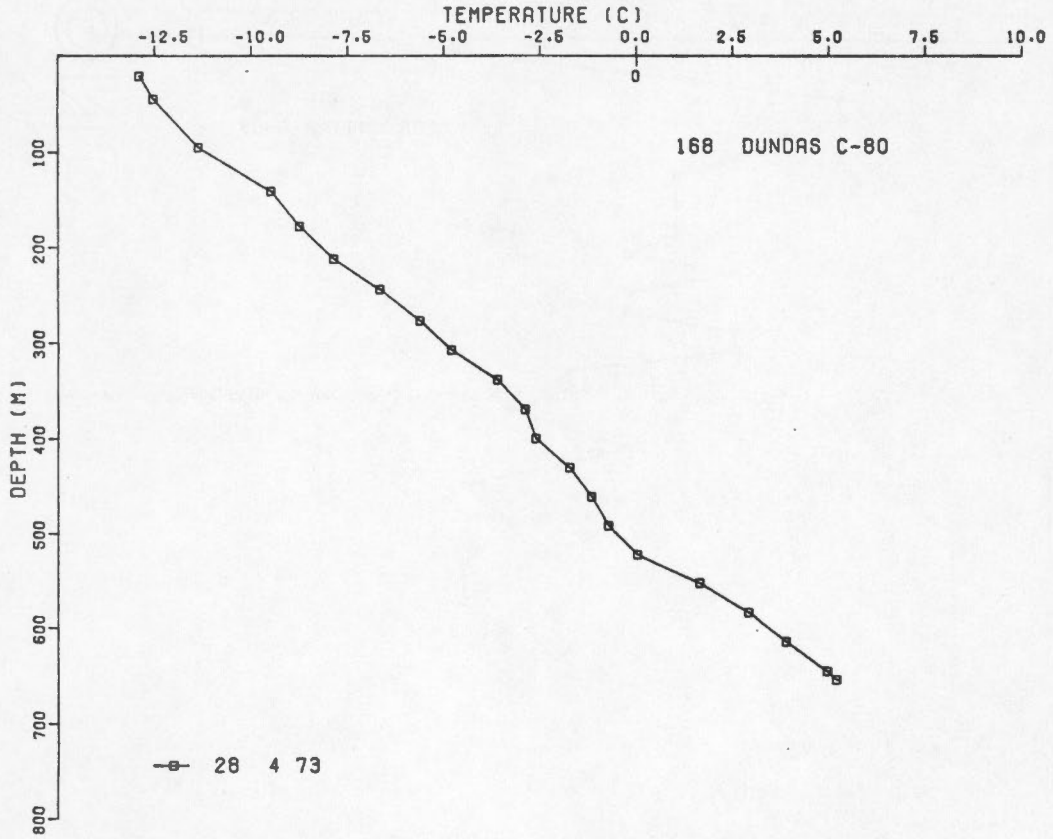

TEMPERATURE (C)
-16.0 -12.0 -8.0 -4.0 0.0 4.0 8.0 12.0 16.0 20.0
0
155 KRISTOFFER BAY B-06
DEPTH (M)
100 200 300 400 500 600 700 800
13 5 73
14 9 72
11 5 72

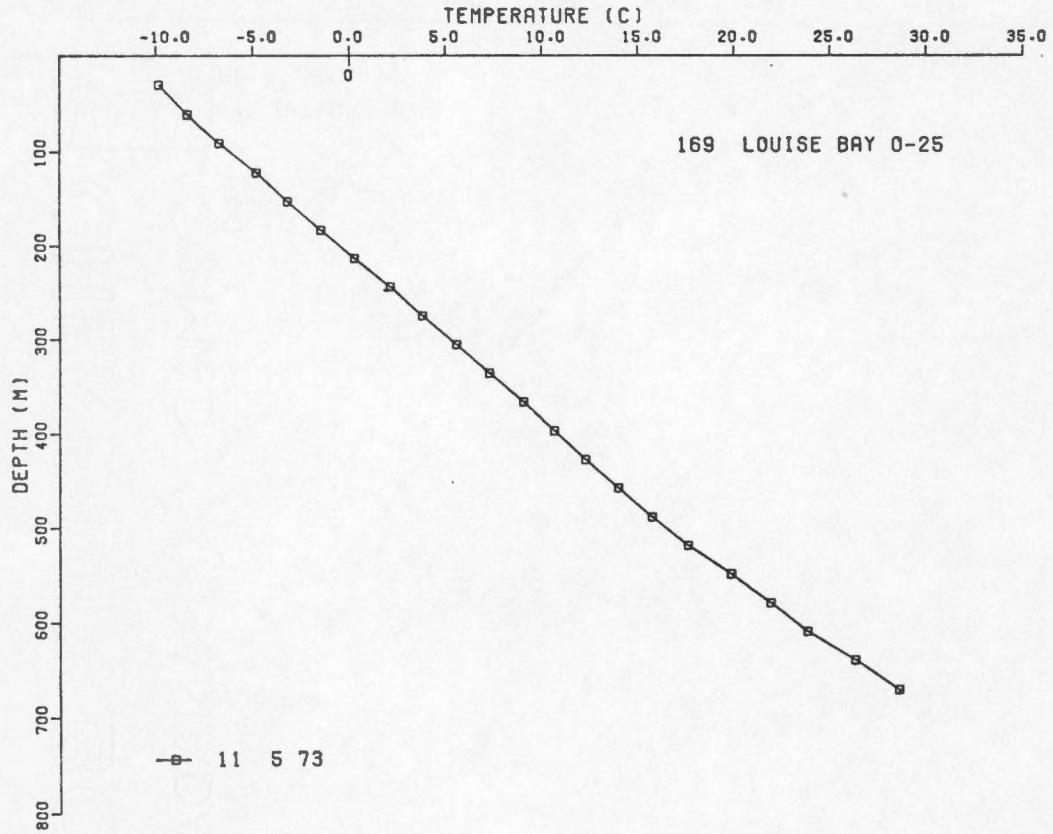

TEMPERATURE (C)
-16.0 -12.0 -8.0 -4.0 0.0 4.0 8.0 12.0 16.0 20.0
0
158 BROCK I-20
DEPTH (M)
100 200 300 400 500 600 700 800
12 5 73
16 9 72

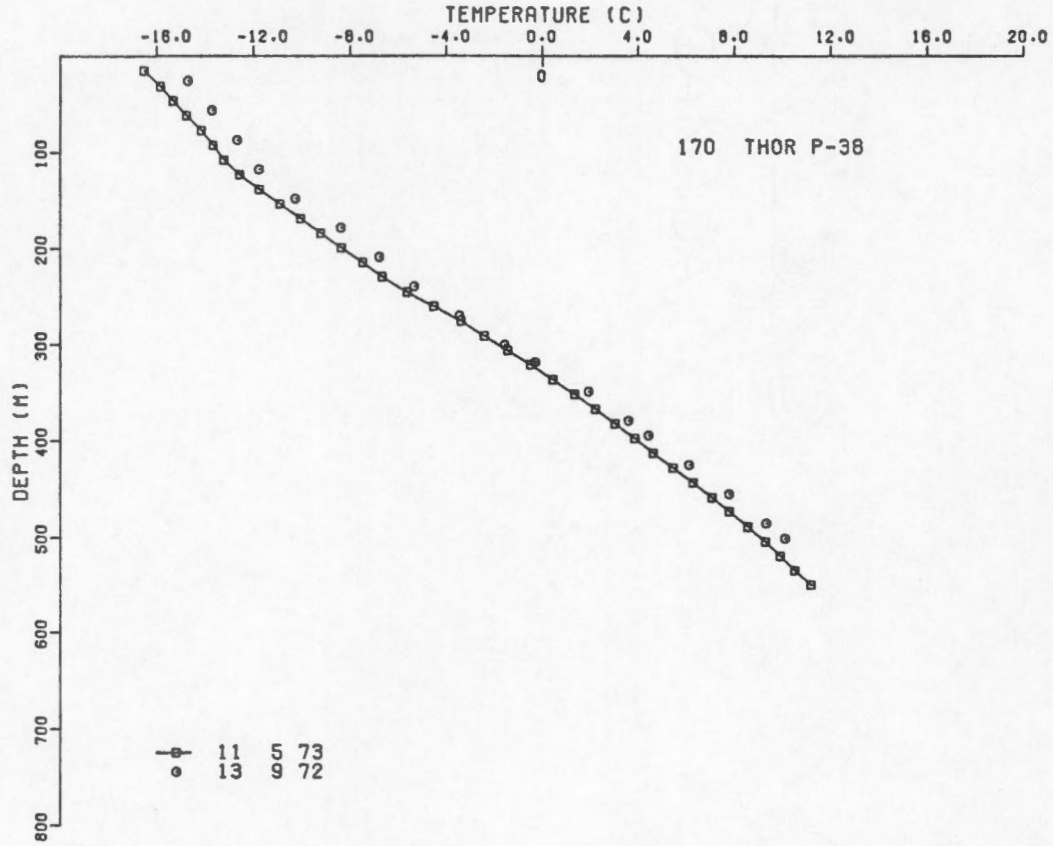

TEMPERATURE (C)
-8.0 -7.0 -6.0 -5.0 -4.0 -3.0 -2.0 -1.0 0.0 1.0
C
165 KILAGMIOTAK F-48
DEPTH (M)
50 100 150 200 250 300 350 400
4 2 74
1 4 73

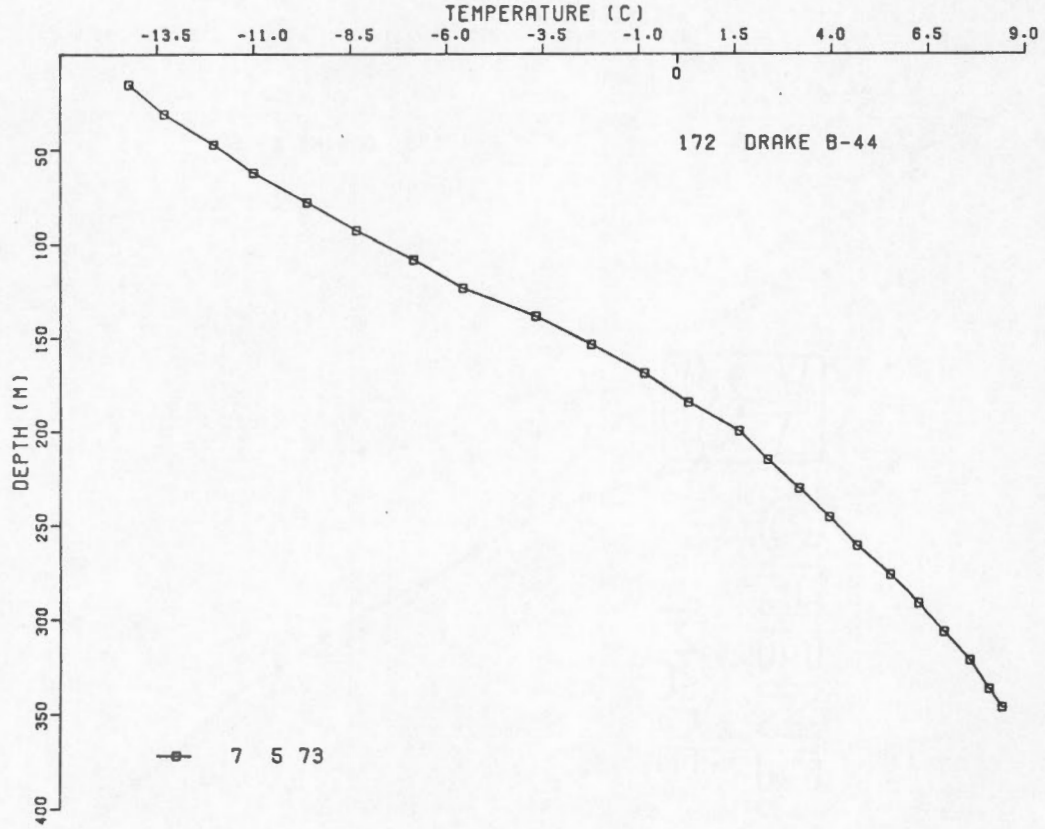

TEMPERATURE (C)
-9.0
-8.0
-7.0
-6.0
-5.0
-4.0
-3.0
-2.0
-1.0
0.0
0
166 MOKKA A-02
DEPTH (M)
75
150
225
300
375
450
525
600
14 4 73

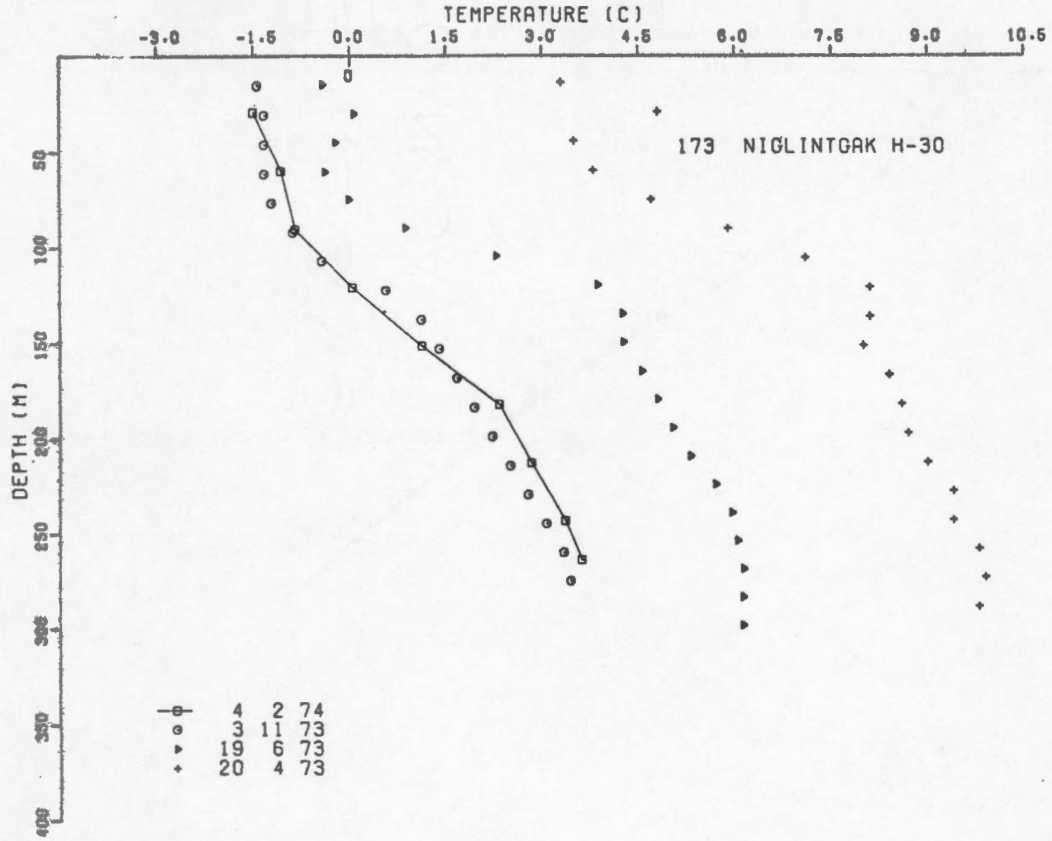

TEMPERATURE (C)
-3.0
0.0
3.0
6.0
9.0
12.0
15.0
18.0
21.0
24.0
167 UNIPKAT I-22
DEPTH (M)
100
200
300
400
500
600
700
800
4 2 74
20 6 73
1 4 73

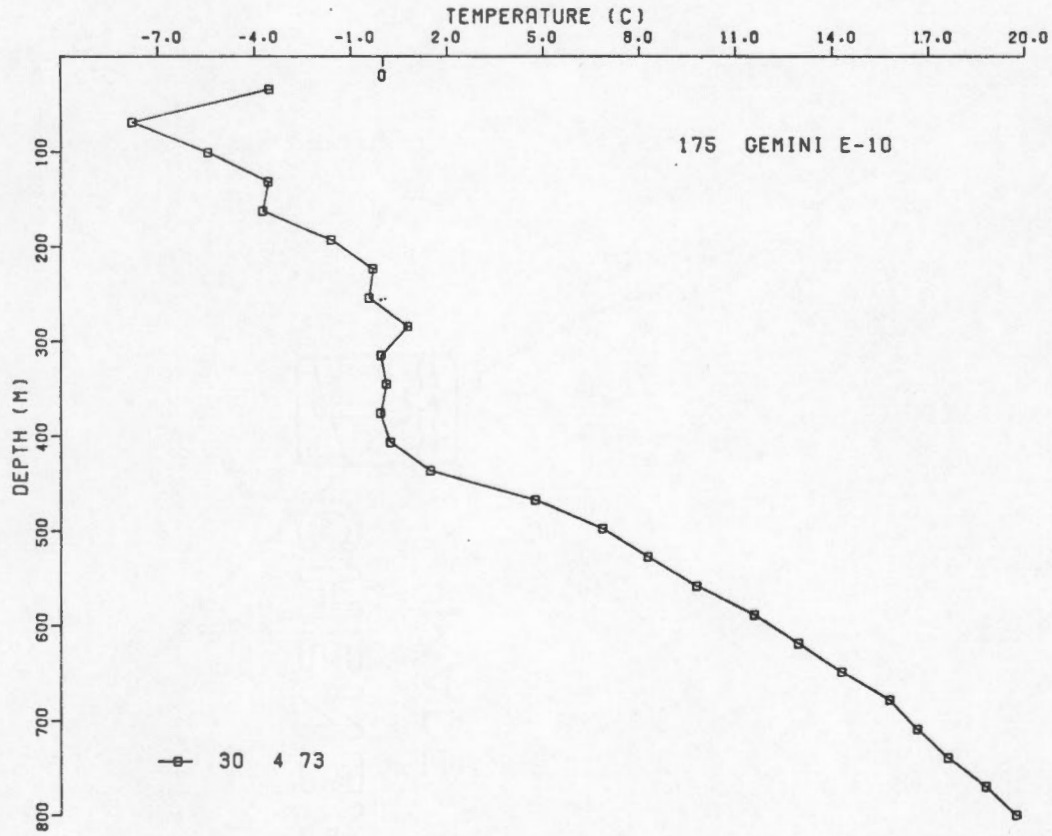

TEMPERATURE (C)
-12.5
-10.0
-7.5
-5.0
-2.5
0.0
2.5
5.0
7.5
10.0
0
168 DUNDAS C-80
DEPTH (M)
100
200
300
400
500
600
700
800
28 4 73

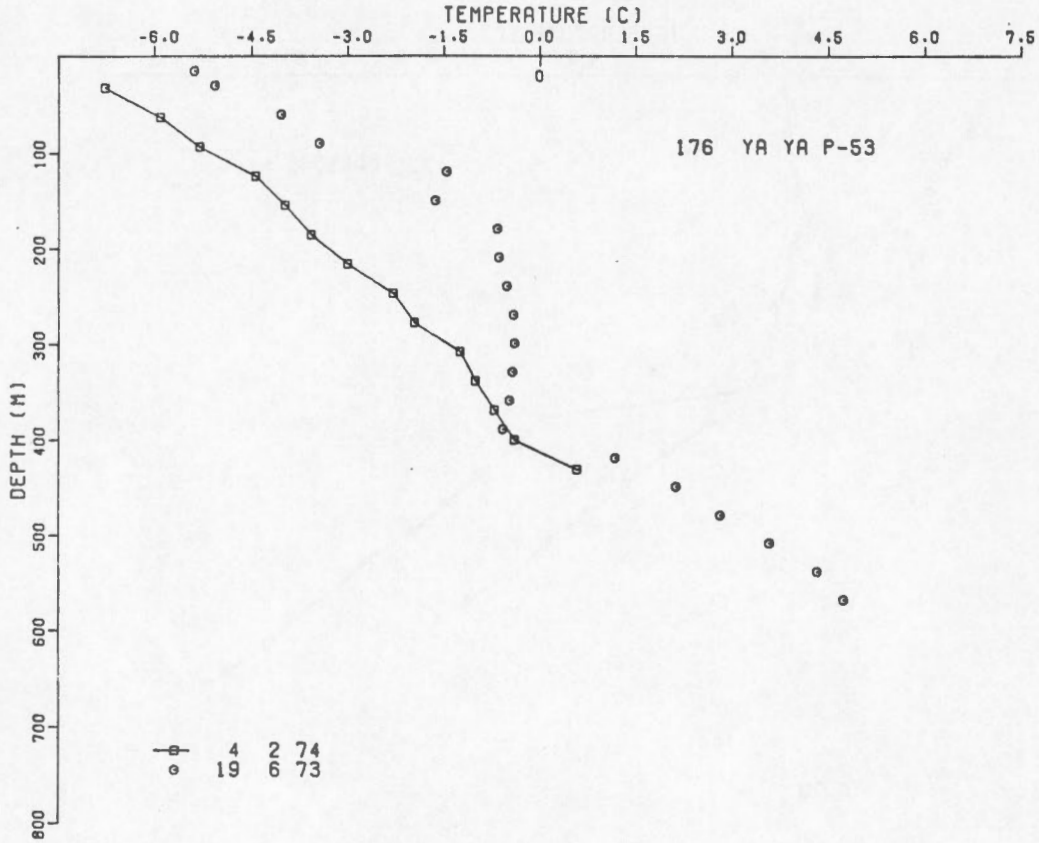

TEMPERATURE (C)
-10.0
-5.0
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
0
169 LOUISE BAY 0-25
DEPTH (M)
100
200
300
400
500
600
700
800
11 5 73

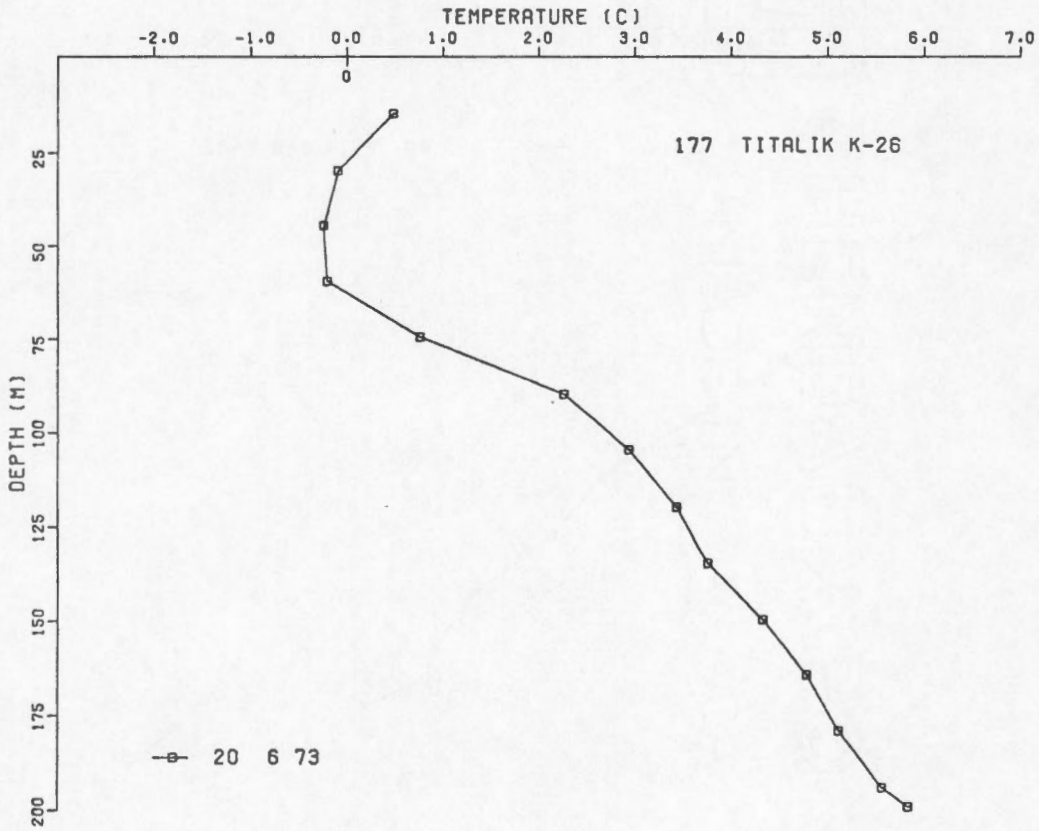

TEMPERATURE (C)
-16.0
-12.0
-8.0
-4.0
0.0
4.0
8.0
12.0
16.0
20.0
0
170 THOR P-38
DEPTH (M)
100
200
300
400
500
600
700
800
11 5 73
13 9 72

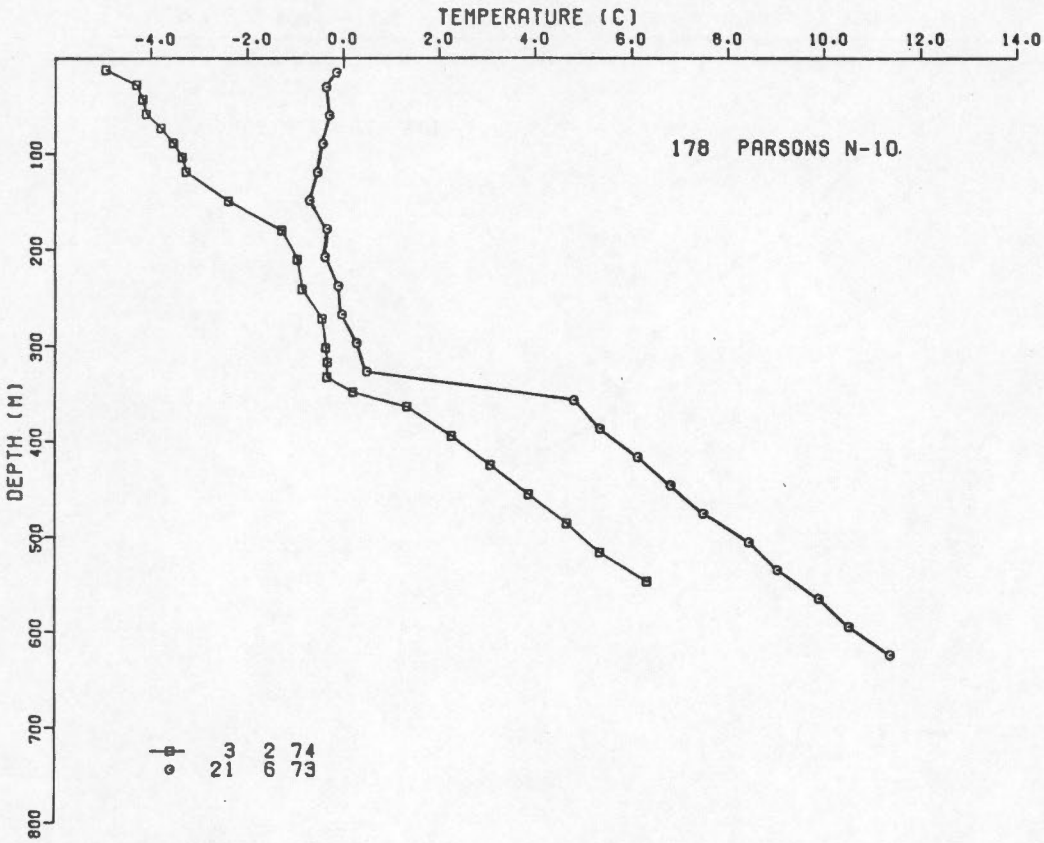

TEMPERATURE (C)
-13.5
-11.0
-8.5
-6.0
-3.5
-1.0
1.5
4.0
6.5
9.0
0
172 DRAKE B-44
DEPTH (M)
50
100
150
200
250
300
350
400
7 5 73

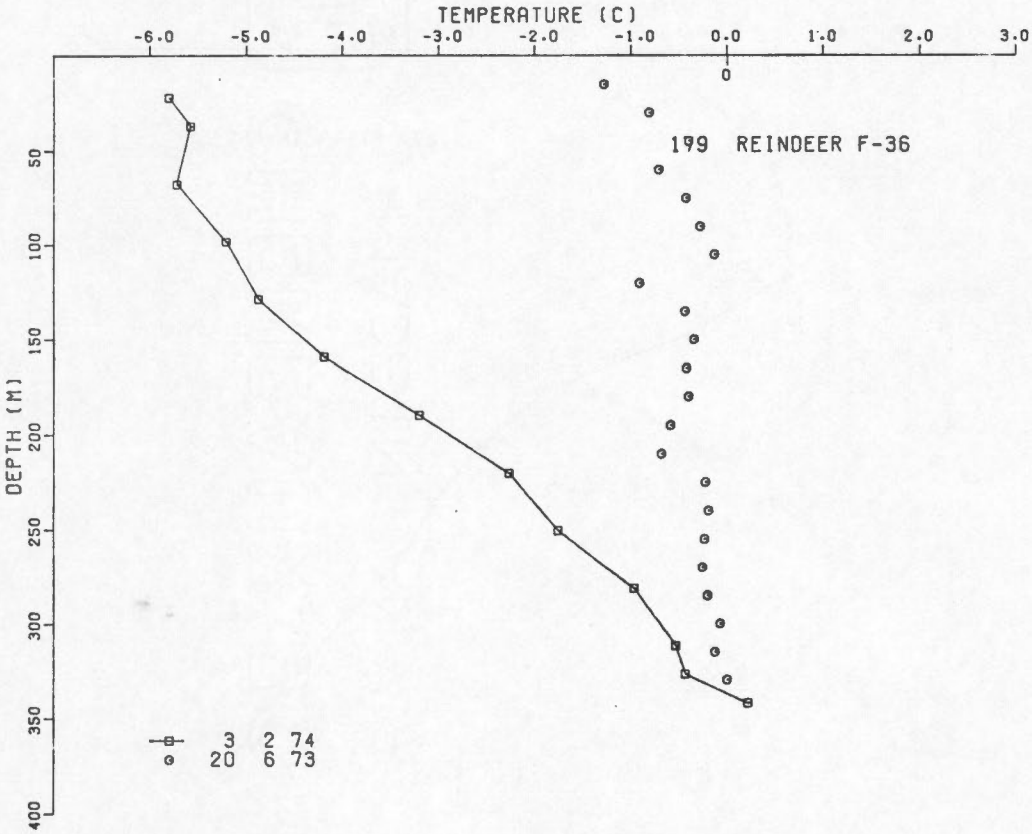

TEMPERATURE (C)
-3.0
-1.5
0.0
1.5
3.0
4.5
6.0
7.5
9.0
10.5
173 NIGLINTGAK H-30
DEPTH (M)
50
100
150
200
250
300
350
400
4 2 74
3 11 73
19 6 73
20 4 73

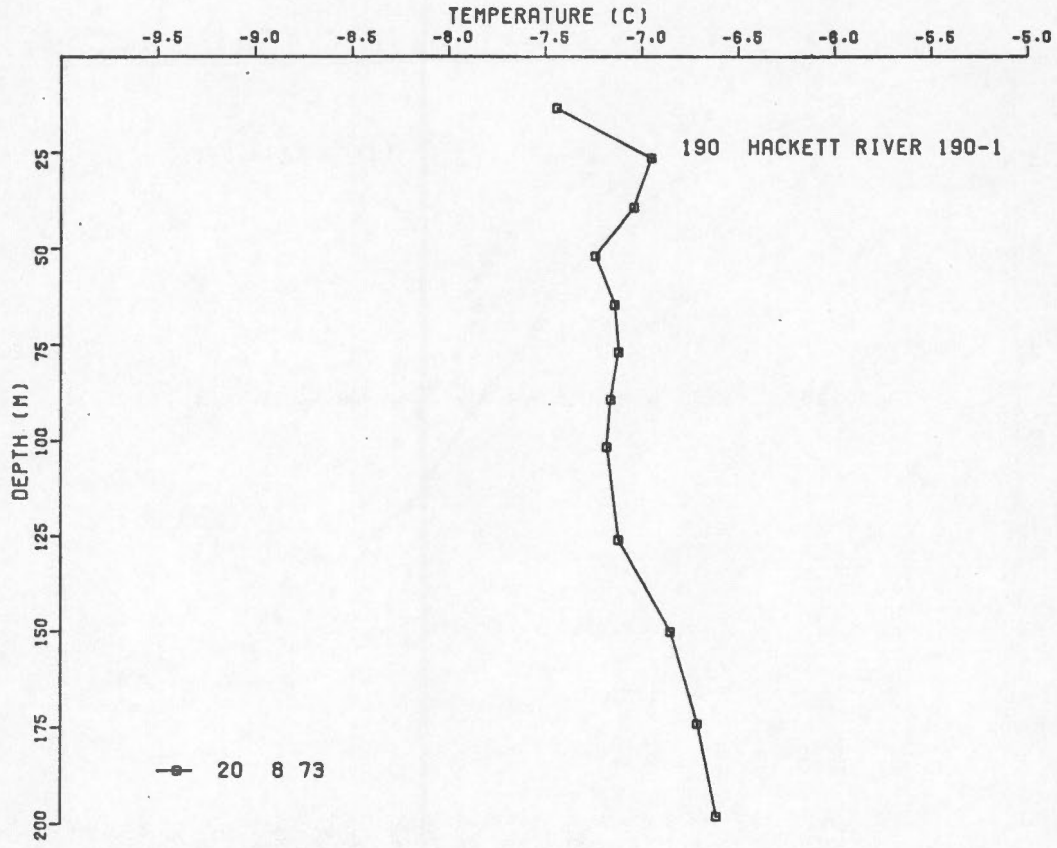

TEMPERATURE (C)
-7.0
-4.0
-1.0
2.0
5.0
8.0
11.0
14.0
17.0
20.0
0
175 GEMINI E-10
DEPTH (M)
100
200
300
400
500
600
700
800
30 4 73

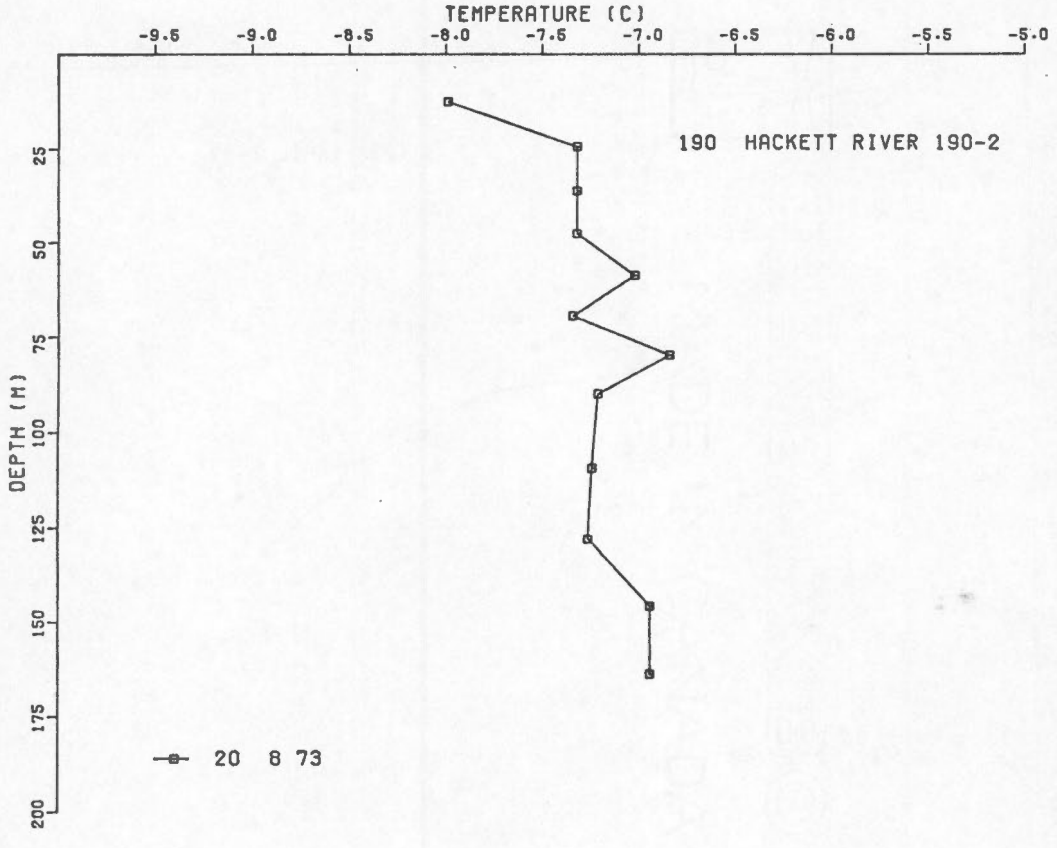

TEMPERATURE (C)
-6.0 -4.5 -3.0 -1.5 0.0 1.5 3.0 4.5 6.0 7.5
0
176 YA YA P-53
DEPTH (M)
100 200 300 400 500 600 700 800
4 2 74
19 6 73

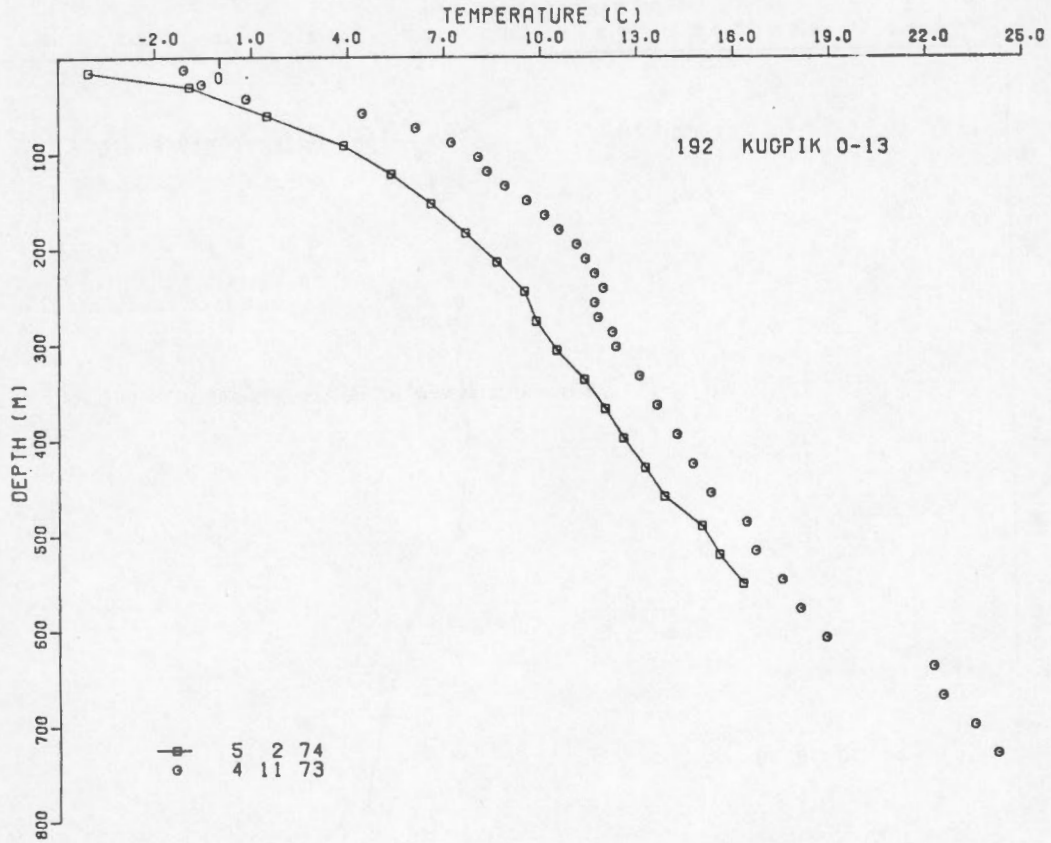

TEMPERATURE (C)
-2.0 -1.0 0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0
0
177 TITALIK K-26
DEPTH (M)
25 50 75 100 125 150 175 200
20 6 73

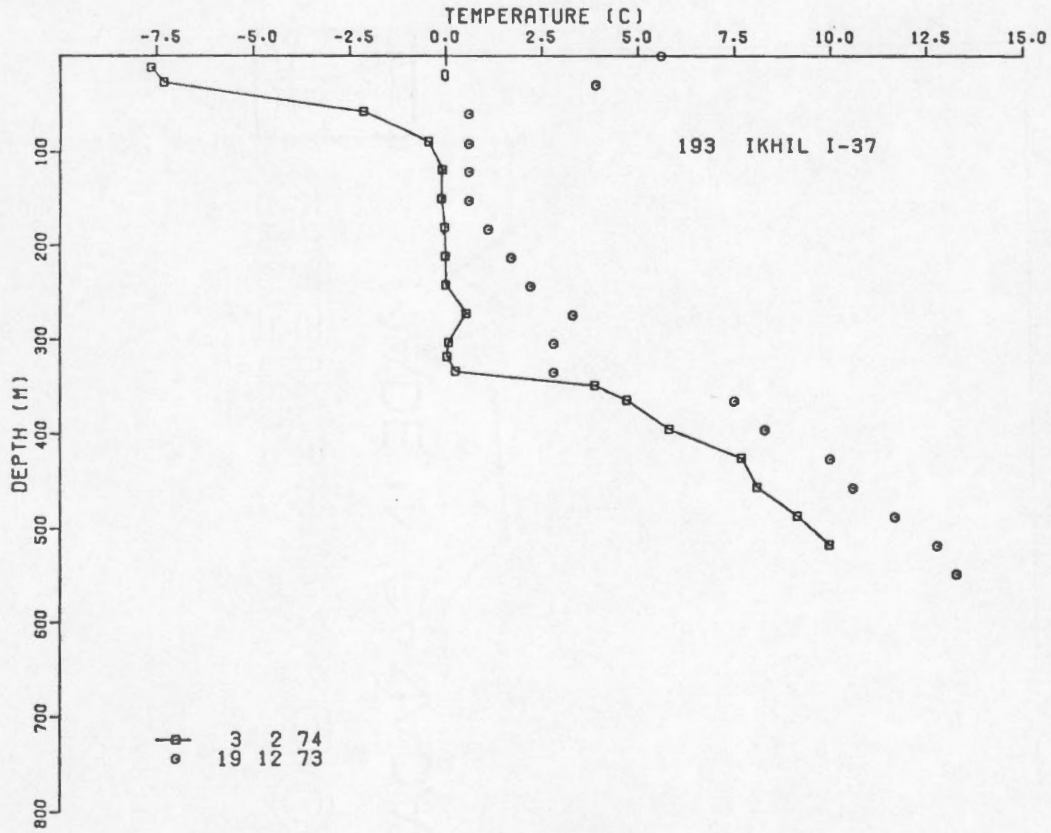

TEMPERATURE (C)
-4.0
-2.0
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
178 PARSONS N-10
DEPTH (M)
100
200
300
400
500
600
700
800
3 2 74
21 6 73


TEMPERATURE (C)
-6.0
-5.0
-4.0
-3.0
-2.0
-1.0
0.0
1.0
2.0
3.0
0
199 REINDEER F-36
DEPTH (M)
50
100
150
200
250
300
350
400
3 2 74
20 6 73


TEMPERATURE (C)
-9.5
-9.0
-8.5
-8.0
-7.5
-7.0
-6.5
-6.0
-5.5
-5.0
DEPTH (M)
25
50
75
100
125
150
175
200
190 HACKETT RIVER 190-1
20 8 73


TEMPERATURE (C)
-9.5
-9.0
-8.5
-8.0
-7.5
-7.0
-6.5
-6.0
-5.5
-5.0
DEPTH (M)
25
50
75
100
125
150
175
200
190 HACKETT RIVER 190-2
20 8 73


TEMPERATURE (C)
-2.0
1.0
4.0
7.0
10.0
13.0
16.0
19.0
22.0
25.0
0
192 KUGPIK 0-13
DEPTH (M)
100
200
300
400
500
600
700
800
5 2 74
4 11 73


TEMPERATURE (C)
-7.5
-5.0
-2.5
0.0
2.5
5.0
7.5
10.0
12.5
15.0
0
193 IKHIL I-37
DEPTH (M)
100
200
300
400
500
600
700
800
3 2 74
19 12 73

SECTION III

Interpolated temperature gradient versus Depth

EARTH PHYSICS BRANCH HOLE NO. -0 RESOLUTE BAY (MISENER, 1955)

****

LATITUDE 74 DEGREES 41.00 MINUTES NORTH LONGITUDE 94 DEGREES 53.80 MINUTES WEST

ELEVATION 10 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG
0 0 55

DEPTH (M)	GRADIENT (C/KM)
22.9	-59.06
38.1	6.56
53.3	26.25
68.6	32.81
83.8	32.81
99.1	39.37
114.3	39.37
129.5	32.81
144.8	39.37
160.0	45.93
175.3	32.81
190.5	45.93

EARTH PHYSICS BRANCH HOLE NO. -0 NORMAN WELLS CANOL 33X

****

LATITUDE 65 DEGREES 16.90 MINUTES NORTH LONGITUDE 126 DEGREES 50.50 MINUTES WEST

ELEVATION 61 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG
0 5 60

DEPTH (M)	GRADIENT (C/KM)
160.0	59.49
198.1	60.04
228.6	99.74
260.0	27.86
291.8	98.74
340.5	60.76
390.9	39.94

EARTH PHYSICS BRANCH HOLE NO. -0 MUSKOX SOUTH

****

LATITUDE 67 DEGREES .50 MINUTES NORTH LONGITUDE 115 DEGREES 13.00 MINUTES WEST

ELEVATION 536 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG

DEPTH (M)	GRADIENT (C/KM)
36.0	78.77
66.4	42.81
96.9	43.90
127.4	42.39
157.9	34.19
188.4	32.05
218.8	24.02
249.3	29.43
279.8	26.74
310.3	26.80
340.8	24.15
371.2	25.85
401.7	27.72
432.2	22.44
462.7	20.54
493.2	22.83
523.6	20.41
554.1	34.91
584.6	.72
615.1	19.06
645.6	19.72
676.0	18.83
706.5	17.75
737.0	14.93
767.5	14.89
798.0	14.73
828.4	13.91
858.9	14.93
889.4	14.93
919.9	15.35
950.4	16.67
980.8	16.24
1011.3	16.14
1034.5	8.64

EARTH PHYSICS BRANCH HOLE NO. -0 MUSKOX NORTH

****

LATITUDE 67 DEGREES 5.50 MINUTES NORTH LONGITUDE 115 DEGREES 16.50 MINUTES WEST

ELEVATION 513 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG

DEPTH (M)	GRADIENT (C/KM)
46.0	-30.88
76.6	-17.99
106.8	-18.14
137.2	-.66
167.6	-1.64
198.1	-.98
228.8	2.27
259.4	8.20
289.7	11.93
320.2	15.27
365.9	15.33
411.8	16.08
442.2	20.86
472.6	21.23
503.1	13.99
533.2	4.64
563.6	38.06
594.1	24.28
624.6	24.81
655.2	28.07
685.8	26.25
716.3	23.95
746.8	19.03
777.2	23.95
807.7	26.25
838.2	27.56
868.7	24.93
899.2	24.61
929.6	16.40
960.1	20.34
990.6	50.20
1021.1	25.26

EARTH PHYSICS BRANCH HOLE NO. 55 LOBITOS RESOLUTE BAY L-41

****

LATITUDE 74 DEGREES 40.70 MINUTES NORTH LONGITUDE 94 DEGREES 44.60 MINUTES WEST

ELEVATION 61 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG 1 10 70		DATE OF LOG 12 5 71		DATE OF LOG 27 4 73	
DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)
22.9	23.62	22.9	39.37	19.1	128.74
38.1	18.37	38.1	17.06	26.7	51.44
53.3	27.56	53.3	22.97	34.3	23.10
68.6	17.72	68.6	21.00	41.9	24.28
83.8	17.06	83.8	15.75	49.5	22.05
99.1	15.75	99.1	16.40	57.3	31.55
114.3	14.44	114.3	17.06	64.9	17.77
129.5	21.00	129.5	20.34	72.5	22.33
144.8	19.03	144.8	16.40	80.3	12.47
160.0	17.06	160.0	22.97	87.8	16.27
				95.3	17.72
				103.0	19.31
				110.8	14.96
				118.4	17.72
				125.9	14.08
				133.4	29.92
				141.0	12.60
				148.6	15.88
				156.2	15.35
				163.8	24.80
				169.6	22.21

EARTH PHYSICS BRANCH HOLE NO. 62 NORTH CATH B-62

****

LATITUDE 66 DEGREES 11.20 MINUTES NORTH LONGITUDE 138 DEGREES 41.60 MINUTES WEST

ELEVATION 535 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DEPTH (M)	DATE 16 7 66 GRADIENT (C/KM)	DATE 15 7 67 GRADIENT (C/KM)	DATE 26 7 69 GRADIENT (C/KM)	DATE 15 7 70 GRADIENT (C/KM)
38.1	29.75	25.59	18.37	16.62
83.8	43.96	47.46	47.46	48.99
129.5	52.49	52.27	53.81	52.06
175.3	45.49	45.06	43.09	43.74
221.0	55.77	62.12	58.84	58.40
266.7	55.34	50.74	55.34	55.34
312.4	46.37	44.18	47.24	47.03
358.1	42.21	44.62	42.65	43.09
403.9	32.59	32.37	33.46	34.12
449.6	34.78	33.68	31.93	31.71
495.3	35.87	39.15	40.46	40.90
541.0	29.75	28.87	29.53	29.09
586.7	36.96	37.84	38.06	37.84
632.5	35.00	35.21	35.43	35.65
678.2	37.40	37.62	38.06	37.62
723.9		40.24	39.81	39.37
769.6		31.93	32.15	32.81

EARTH PHYSICS BRANCH HOLE NO. 63 REINDEER D-27

****

LATITUDE 69 DEGREES 6.10 MINUTES NORTH LONGITUDE 134 DEGREES 36.90 MINUTES WEST

ELEVATION 29 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DEPTH (M)	DATE 9 7 66 GRADIENT (C/KM)	DATE 2 7 67 GRADIENT (C/KM)	DATE 2 7 68 GRADIENT (C/KM)	DATE 14 7 69 GRADIENT (C/KM)	DATE 29 7 70 GRADIENT (C/KM)	DATE 12 8 71 GRADIENT (C/KM)	DATE 19 7 72 GRADIENT (C/KM)
10.7				-965.88		-870.73	
33.5	-2.30		26.90	21.98	22.64	34.12	33.79
64.0	-.98		17.06	13.45	11.81	12.14	12.80
94.5	.66	62.66	37.40	33.79	30.84	24.93	19.69
125.0	-2.62	-5.91	24.28	12.14	10.50	13.12	15.42
155.4	-4.92	-32.81	-16.73	.33	6.23	9.51	11.81
185.9	-.33	12.14	17.72	19.69	19.69	19.36	19.69
216.4	-.33	14.44	19.03	19.69	19.36	20.01	20.34
246.9	5.25	28.22	34.45	19.69	18.70	19.36	19.03
277.4	4.59	2.95	8.86	25.26	24.61	22.97	21.98
307.8	-3.28	.98	4.27	9.51	13.45	15.42	16.73
338.3	23.62	9.51	6.56	7.22	8.86	9.84	11.15
368.8	66.60	43.31	35.43	30.51	29.20	26.90	25.59
399.3	24.61	25.59	26.57	26.90	25.92	26.90	27.23
429.8	21.98	23.29	23.62	23.62	23.62	23.62	23.95
460.2	26.25	25.92	26.25	26.25	25.92	25.92	25.92
490.7	21.98	22.64	22.64	23.29	23.95	23.62	23.62
521.2	23.62	24.28	23.95	23.95	24.61	23.95	23.95
551.7	24.61	24.28	25.59	24.61	23.95	25.26	24.93
582.2	27.89	30.84	30.51	31.82	31.82	32.15	32.15

EARTH PHYSICS BRANCH HOLE NO. 66 YELLOWKNIFE

****

LATITUDE 62 DEGREES 30.50 MINUTES NORTH LONGITUDE 114 DEGREES 25.30 MINUTES WEST

ELEVATION 207 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG
5 8 68

DEPTH (M)	GRADIENT (C/KM)
11.4	-44.62
19.2	42.90
27.0	28.87
38.4	36.09
53.8	34.74
76.8	28.22
107.4	20.79
138.2	16.57
169.0	14.29
199.6	13.12
230.3	12.34
261.1	12.34
291.8	12.34
322.5	12.47
353.1	12.02
383.9	12.34
414.7	12.67
445.3	12.80
475.9	12.99
506.7	12.99
537.5	13.32
568.1	13.12
598.8	13.32
629.6	13.64
660.4	13.64
691.0	13.78
721.6	13.64
752.4	13.97
783.2	13.97
813.8	14.44
844.5	13.97
875.2	14.29
906.0	14.29

EARTH PHYSICS BRANCH HOLE NO. 70 PROVIDENCE A-47

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LATITUDE 61 DEGREES 26.20 MINUTES NORTH LONGITUDE 117 DEGREES 22.50 MINUTES WEST

ELEVATION 162 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG 6 8 68		DATE OF LOG 19 7 69		DATE OF LOG 29 7 70	
DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)
19.2	28.64	18.9	11.99	22.4	13.30
26.9	22.91	26.7	25.33	37.4	41.76
34.5	30.19	34.3	31.23	52.4	57.95
42.2	47.52	41.8	50.85	67.2	59.34
49.9	51.69	49.2	54.86	82.0	64.88
57.6	68.87	57.2	55.65	97.2	80.02
65.3	51.43	64.9	61.93	112.3	83.32
72.9	75.90	72.2	66.57	127.2	78.11
80.6	61.84	80.0	65.50	142.2	68.15
88.3	63.01	87.9	64.83	157.2	78.25
96.0	65.75	95.3	64.62	172.2	84.19
103.6	86.01	102.9	71.69	187.3	81.14
111.3	84.49	110.5	94.72	202.4	80.85
119.0	83.19	118.1	75.70	217.1	78.89
126.7	79.03	125.7	83.88	231.9	59.79
134.4	66.92	133.4	68.29	246.9	81.03
142.0	80.85	141.1	76.28	261.7	69.09
149.7	74.86	148.6	59.06	276.8	83.10
157.4	77.07	156.2	83.99	291.8	81.92
165.1	79.03	163.7	77.92	306.7	76.23
172.7	79.34	171.3	79.75	321.9	45.74
180.4	67.31	179.2	69.78	336.9	47.44
188.1	90.74	186.8	60.42	351.8	37.29
195.8	78.64	194.3	100.00	366.8	30.54
203.5	94.52	201.9	91.21	381.7	31.41
211.1	76.81	209.4	79.97	396.7	18.98
218.8	67.05	216.9	77.95	411.7	20.11
226.5	71.21	224.8	61.61	426.5	30.29
234.2	70.04	232.6	61.24	441.3	29.73
241.8	64.31	240.0	73.62	456.3	21.11
249.5	82.67	247.5	61.93	471.4	24.43
257.2	72.65	255.0	78.74	486.4	26.33
264.9	85.41	262.7	75.59	494.6	41.15
272.6	75.25	270.5	76.25		
280.2	67.70	278.1	71.52		
287.9	81.63	285.9	54.76		
295.6	79.81	293.4	92.86		
303.3	69.00	300.8	76.47		

DATE OF LOG 6 8 68		DATE OF LOG 19 7 69	
DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)
310.9	83.13	308.5	74.91
318.6	50.51	315.9	82.15
326.3	44.40	323.7	54.39
334.0	55.07	331.5	42.91
341.7	38.28	338.9	58.92
349.3	33.07	346.6	-19.81
357.0	38.41	354.3	93.57
364.7	32.42	361.8	35.82
372.4	30.46	369.3	35.70
380.0	30.98	377.0	31.17
387.7	27.34	384.7	28.84
395.4	16.92	392.3	31.29
403.1	26.95	400.1	21.92
410.7	12.50	407.5	17.22
418.4	21.87	415.1	18.42
426.1	31.51	422.9	21.26
433.8	31.90	430.7	19.18
441.5	28.25	438.3	32.95
449.1	28.63	449.6	29.53
456.8	19.66	461.2	27.63
464.5	25.65	468.8	18.86
472.2	26.69	476.1	25.02
479.8	16.79	483.7	17.92
487.5	27.99	491.3	23.65
494.6	26.59	498.8	26.25
		506.1	28.67

EARTH PHYSICS BRANCH HOLE NO. 73 WINTER HARBOUR

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LATITUDE 74 DEGREES 48.10 MINUTES NORTH LONGITUDE 110 DEGREES 30.60 MINUTES WEST

ELEVATION 22 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DEPTH (M)	DATE 24 7 62 GRADIENT (C/KM)	DATE 27 7 63 GRADIENT (C/KM)	DATE 23 7 64 GRADIENT (C/KM)	DATE 6 4 68 GRADIENT (C/KM)	DATE 4 5 71 GRADIENT (C/KM)	DATE 9 5 72 GRADIENT (C/KM)
32.5	6.70	-4.69	-4.69	-3.35	-14.06	-14.06
50.0	39.77	21.87	15.41	-2.98	2.98	-.99
70.0	30.28	29.28	55.02	32.30	21.20	20.19
89.9	-4.97	-34.30	-6.46	22.87	22.87	
112.5	28.01	60.42	18.80	17.60	17.20	
137.5	48.01	44.41	44.01	42.01	41.61	
162.5	56.01	49.61	48.01	46.41	46.81	
187.5	40.01	42.41	43.21	44.41	43.61	43.21
212.4	44.01	46.41	47.21	46.81	46.41	46.41
237.4	48.01	52.81	52.01	54.01	50.41	50.41
265.0	43.08	27.51	29.16	31.15	34.13	
295.0	20.09	24.10	22.43	19.42	19.75	
324.9	6.70	30.13	27.12	24.44	23.43	
354.9	6.63	30.82	27.84	26.51	26.18	
385.0	16.74	14.73	23.10	25.78	25.78	
415.0	13.26	21.87	25.52	27.51	29.49	
447.6	48.50	15.98	16.55	22.25	22.25	22.82
482.5	31.66	35.69	30.22	23.02	22.74	23.02
517.4			35.38	38.23	37.66	37.09
552.5			35.95	34.23	33.95	34.23
587.5	19.97	29.38	30.81	32.24	32.52	32.52

EARTH PHYSICS BRANCH HOLE NO. 76 KUGALUK N-02

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LATITUDE 68 DEGREES 32.00 MINUTES NORTH LONGITUDE 131 DEGREES 31.30 MINUTES WEST

ELEVATION 213 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG 23 7 70		DATE OF LOG 6 8 71		DATE OF LOG 21 7 72	
DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)
22.6	43.50	23.0	48.95	25.6	48.64
37.5	34.38	38.3	41.96	41.5	35.96
52.3	33.08	53.6	38.62	57.0	40.94
67.2	36.02	69.0	38.51	72.2	41.86
82.2	33.28	84.3	37.01	87.5	34.12
97.1	32.00	99.6	30.12	102.7	32.48
112.1	34.21	115.1	35.49	118.1	24.06
127.2	32.02	130.2	34.28	134.0	36.65
142.1	32.12	145.5	29.99	149.7	33.20
157.2	31.01	161.1	29.99	165.0	29.59
172.1	29.46	176.4	29.14	180.6	29.66
186.9	27.62	191.6	26.73	196.3	26.88
201.9	25.17	206.7	27.61	212.1	22.90
216.7	27.52	222.2	27.28	227.7	31.10
231.6	25.58	237.3	24.54	243.1	23.80
246.4	26.53	252.5	26.21	258.8	25.62
261.5	24.82	267.9	26.01	274.3	29.33
276.7	28.20	283.1	27.32	289.6	24.87
291.5	25.15	298.5	26.46	305.6	22.37
306.4	24.93	314.0	25.16	321.9	25.30
321.5	26.65	329.3	27.58	337.4	28.41
336.3	26.74	344.6	26.40	353.1	26.80
351.1	25.51	359.9	25.55	368.8	25.46
366.1	26.78	375.2	26.21	384.2	25.35
381.0	24.37	390.5	24.97	399.9	21.26
395.9	25.98	405.8	26.47	415.7	29.09
410.7	26.46	421.1	25.49	431.3	24.48
425.7	25.33	436.4	27.45	446.8	22.90
440.8	27.05	451.5	27.41	462.4	29.00
455.7	27.38	466.7	26.27	477.9	26.69
470.6	25.91	482.1	27.62	493.5	28.48
485.7	26.97	497.6	29.80	509.0	29.40
500.7	30.35	512.7	27.87	524.7	26.63
515.5	26.65	528.0	27.17	540.3	27.79
530.6	26.44	543.5	29.02	555.7	28.15
545.5	29.12	558.8	26.99	571.2	25.62
560.3	26.51	574.1	27.65	586.7	27.30
575.4	26.77	589.4	25.75	602.1	25.54
590.3	26.46	604.7	27.19	617.7	27.15
605.1	26.58	619.8	26.07	633.2	26.57
619.9	26.66	635.0	28.89	648.8	23.93
634.8	26.25	646.5	37.64	664.3	19.81
647.8	37.92				

EARTH PHYSICS BRANCH HOLE NO. 77 HORTON RIVER

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LATITUDE 69 DEGREES 51.40 MINUTES NORTH LONGITUDE 127 DEGREES 15.90 MINUTES WEST

ELEVATION 34 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG 26 9 70		DATE OF LOG 14 8 71		DATE OF LOG 18 7 72	
DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)
29.0	27.95	23.1	23.47	15.7	60.64
44.2	38.78	38.4	34.47	23.9	52.49
59.4	58.92	53.7	53.08	31.9	30.26
74.7	46.85	65.0	65.62	39.9	35.46
89.9	59.19	72.7	70.98	47.7	41.86
105.2	73.03	80.3	64.18	55.2	52.63
120.4	97.64	88.0	65.75	62.8	40.25
135.6	90.49	95.9	68.28	70.6	76.90
150.9	88.98	103.7	81.41	78.5	71.21
166.1	85.76	111.2	86.01	86.4	75.07
181.4	72.11	118.7	79.37	94.0	59.06
196.6	77.23	126.4	99.18	101.7	81.36
211.8	53.61	134.3	80.45	109.4	63.98
227.1	56.36	141.8	98.99	117.2	91.34
242.3	55.64	149.2	96.60	125.1	89.92
257.6	54.07	157.0	80.20	133.0	78.61
272.8	49.08	164.6	74.06	140.8	99.94
288.0	44.42	172.3	83.97	148.4	94.87
303.3	52.03	180.1	70.58	156.1	81.77
318.5	48.03	187.6	82.63	163.8	66.93
333.8	63.19	195.1	78.95	171.6	102.97
345.9	31.28	202.7	74.11	179.5	67.38
		210.4	52.81	187.5	74.32
		218.2	55.56	195.4	79.62
		225.8	58.67	203.0	73.68
		233.5	55.81	210.6	66.37
		241.1	54.05	218.5	54.26
		252.6	57.86	226.3	61.55
		268.7	47.40	234.1	55.14
		284.0	48.01	242.0	48.71
		298.5	46.88	249.8	56.30
		313.8	52.48	257.6	56.15
		329.1	50.08	265.5	56.41
		340.4	68.49	273.3	50.13
		348.1	26.80	281.0	48.46
				289.0	44.80
				296.9	46.18
				304.6	52.76

DATE OF LOG 18 7 72	
DEPTH (M)	GRADIENT (C/KM)
312.3	50.26
320.2	48.73
328.3	48.20
336.2	70.29
344.1	68.01
351.7	22.15
359.4	23.60

EARTH PHYSICS BRANCH HOLE NO. 86 HOODOO DOME H-37

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LATITUDE 78 DEGREES 6.50 MINUTES NORTH LONGITUDE 99 DEGREES 45.60 MINUTES WEST

ELEVATION 156 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG 9 5 71		DATE OF LOG 12 5 72		DATE OF LOG 13 5 73	
DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)
23.8	152.23	48.6	64.29	22.7	52.69
46.6	3.94	78.9	65.62	38.1	62.27
77.1	66.27	109.4	63.98	53.5	68.63
107.6	71.52	139.9	54.46	68.6	70.87
138.1	53.15	170.4	61.35	83.8	72.05
168.6	51.51	200.7	53.02	99.1	64.44
199.0	51.51	231.0	60.70	114.5	66.65
229.5	41.01	261.5	48.23	129.7	45.20
260.0	67.91	292.0	54.13	144.8	58.53
290.5	47.90	322.5	47.90	160.0	46.00
321.0	42.98	353.0	42.98	175.1	70.84
351.4	42.98	383.3	37.78	190.3	55.58
381.9	40.68	413.6	26.57	205.7	58.14
412.4	22.31	443.9	17.23	221.0	61.48
442.9	14.76	474.3	22.31	236.5	57.04
473.4	22.31	504.7	26.57	251.8	56.18
503.8	26.25	535.2	17.72	266.9	43.87
534.3	17.72	565.6	14.91	282.2	52.89
564.8	14.11	595.9	24.28	297.3	48.88
				312.6	60.53
				327.8	42.25
				342.9	45.41
				358.0	44.19
				373.2	42.91
				388.8	37.57
				404.0	30.67
				419.3	22.64
				434.6	17.39
				449.7	18.41
				464.8	20.34
				479.9	22.76
				495.1	31.07
				510.7	21.68
				525.9	21.16
				541.2	16.73
				556.4	14.80
				571.5	15.68
				586.7	16.40
				602.0	24.67
				617.2	23.49
				632.3	15.40
				647.5	16.66

EARTH PHYSICS BRANCH HOLE NO. 87 WILKINS E-60

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LATITUDE 77 DEGREES 59.30 MINUTES NORTH LONGITUDE 111 DEGREES 21.70 MINUTES WEST

ELEVATION 64 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG
9 5 71

DEPTH (M)	GRADIENT (C/KM)
23.8	72.83
61.9	19.19
107.6	41.34
138.1	48.56
168.6	50.85
199.0	50.52
229.5	72.18
260.0	75.46
290.5	92.52
321.0	68.57
351.4	51.18
381.9	45.93
412.4	24.28
442.9	36.42
473.4	49.54
503.8	50.20
534.3	50.20
564.8	47.24

EARTH PHYSICS BRANCH HOLE NO. 88 NORMAN WELLS BEAR ISLAND NO. 7

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LATITUDE 65 DEGREES 15.40 MINUTES NORTH LONGITUDE 126 DEGREES 52.90 MINUTES WEST

ELEVATION 52 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG
0 0 66

DEPTH (M)	GRADIENT (C/KM)
15.2	82.02
45.7	52.49
76.2	68.90
106.7	59.06
137.2	36.09
167.6	42.65
198.1	39.37
228.6	45.93
259.1	32.81
289.6	91.86
320.0	127.95
350.5	121.39
381.0	72.18
411.5	59.06
442.0	49.21
472.4	49.21
502.9	39.37
533.4	26.25
563.9	19.69

EARTH PHYSICS BRANCH HOLE NO. 88 NORMAN WELLS CANOL 7X

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LATITUDE 65 DEGREES 17.00 MINUTES NORTH LONGITUDE 126 DEGREES 50.80 MINUTES WEST

ELEVATION 61 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG
0 0 66

DEPTH (M)	GRADIENT (C/KM)
15.2	82.02
45.7	13.12
76.2	45.93
106.7	68.90
137.2	42.65
167.6	72.18
198.1	78.74
228.6	72.18
259.1	68.90
289.6	65.62
320.0	88.58
350.5	45.93
381.0	22.97
403.9	26.25

EARTH PHYSICS BRANCH HOLE NO. 88 NORMAN WELLS BEAR ISLAND NO. 13

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LATITUDE 65 DEGREES 15.50 MINUTES NORTH LONGITUDE 126 DEGREES 53.30 MINUTES WEST

ELEVATION 54 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG
0 0 66

DEPTH (M)	GRADIENT (C/KM)
15.2	72.18
45.7	52.49
76.2	55.77
106.7	59.06
137.2	45.93
167.6	49.21
198.1	42.65
228.6	39.37
259.1	88.58
289.6	101.71
320.0	108.27
350.5	82.02
381.0	65.62
411.5	59.06
442.0	59.06
472.4	45.93
502.9	39.37
533.4	26.25
563.9	19.69

EARTH PHYSICS BRANCH HOLE NO. 88 NORMAN WELLS CANOL NO. 18X

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LATITUDE 65 DEGREES 17.10 MINUTES NORTH LONGITUDE 126 DEGREES 52.00 MINUTES WEST

ELEVATION 61 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG
0 0 66

DEPTH (M)	GRADIENT (C/KM)
15.2	59.06
45.7	45.93
76.2	39.37
106.7	65.62
137.2	52.49
167.6	55.77
198.1	72.18
228.6	62.34
259.1	62.34
289.6	65.62
320.0	49.21
350.5	22.97
381.0	52.49

EARTH PHYSICS BRANCH HOLE NO. 88 NORMAN WELLS CANOL NO. 19X

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LATITUDE 65 DEGREES 17.10 MINUTES NORTH LONGITUDE 126 DEGREES 52.80 MINUTES WEST

ELEVATION 53 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG
0 0 66

DEPTH (M)	GRADIENT (C/KM)
76.2	39.37
106.7	45.93
137.2	62.34
167.6	52.49
198.1	65.62
228.6	72.18
259.1	68.90
289.6	68.90
320.0	75.46
350.5	42.65
381.0	29.53

EARTH PHYSICS BRANCH HOLE NO. 88 NORMAN WELLS CANOL NO. 30X

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LATITUDE 65 DEGREES 17.20 MINUTES NORTH LONGITUDE 126 DEGREES 51.90 MINUTES WEST

ELEVATION 65 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG
0 0 66

DEPTH (M)	GRADIENT (C/KM)
15.2	127.95
45.7	0.00
76.2	39.37
106.7	62.34
137.2	59.06
167.6	62.34
198.1	78.74
228.6	72.18
259.1	95.14
289.6	52.49
320.0	85.30
350.5	52.49
373.4	32.81

EARTH PHYSICS BRANCH HOLE NO. 89 BEAVER HOUSE CREEK H-13

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LATITUDE 68 DEGREES 22.30 MINUTES NORTH LONGITUDE 135 DEGREES 33.00 MINUTES WEST

ELEVATION 68 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG 10 8 71		DATE OF LOG 22 6 73	
DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)
31.4	1.30	22.3	31.33
69.9	14.65	37.2	13.38
100.5	38.92	52.1	12.30
115.6	49.78	67.0	18.08
138.7	47.75	82.0	20.36
169.5	44.03	96.9	34.86
192.6	44.85	111.6	37.99
215.8	45.22	126.5	55.82
246.0	50.74	141.5	47.10
275.9	36.70	156.6	48.27
298.7	37.19	171.3	29.10
321.5	26.17	186.0	66.69
344.4	20.63	200.9	40.94
367.4	12.11	215.8	55.13
390.3	40.31	230.7	40.59
405.6	37.34	245.6	44.37
420.8	16.47	260.5	60.91
436.1	18.10	275.3	42.76
459.2	28.12	290.2	46.83
482.1	22.74	305.1	37.31
497.4	44.34	320.0	31.93
512.7	58.55	334.9	33.48
527.9	46.47	349.7	22.81
551.0	44.29	364.6	16.87
573.9	47.41	379.7	16.14
596.9	44.94	394.5	33.90
619.8	29.87	409.3	37.85
635.1	23.45	424.2	25.01
650.4	27.61	439.0	19.70
665.7	39.02	453.9	24.82
681.0	37.61	468.8	27.16
696.2	53.13	483.7	23.33
711.6	57.09	498.6	39.52
726.9	62.68	513.5	50.76
742.1	42.74	528.3	50.36
757.4	15.42	543.2	50.96
775.1	13.01	558.1	44.89
792.8	33.00	573.0	46.46

DATE OF LOG 10 8 71		DATE OF LOG 22 6 73	
DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)
808.3	18.67	587.9	52.44
823.9	23.00	602.8	46.36
839.4	20.07	617.6	34.15
855.0	18.19	632.5	31.46
870.2	18.76	647.4	25.14
885.3	20.81	662.3	31.33
900.5	17.61	677.2	39.60
916.1	16.05	692.0	46.93
931.9	17.56	706.9	56.36
947.3	22.46	721.8	65.01
962.4	35.60	736.7	61.52
977.8	37.16	751.6	37.25
993.2	33.39	766.6	19.37
1008.8	18.44	781.5	21.58
1024.0	18.51	796.2	28.24
1039.1	16.37	811.1	19.83
1054.6	22.95	826.0	21.87
1070.2	18.97	840.9	20.98
1085.7	22.30	855.8	21.92
1101.1	23.60	870.6	16.91
1116.2	28.30	885.5	23.13
1127.6	42.05	900.4	18.29
1135.5	44.91	915.3	16.61
1147.2	20.85		
1162.4	20.15		
1177.8	37.46		
1193.2	43.55		
1208.4	34.50		
1224.0	34.27		
1239.5	31.12		
1254.8	27.17		
1270.0	22.93		
1285.4	25.34		
1299.2	22.90		

EARTH PHYSICS BRANCH HOLE NO. 91 JAMESON BAY C-31

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LATITUDE 76 DEGREES 40.20 MINUTES NORTH LONGITUDE 116 DEGREES 43.70 MINUTES WEST

ELEVATION 58 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG
10 5 72

DEPTH (M)	GRADIENT (C/KM)
49.7	25.26
80.3	23.71
111.1	42.23
141.7	57.74
172.2	69.55
202.5	76.88
232.9	68.24
263.2	26.51
293.5	19.03
324.0	21.33
354.5	21.98
384.8	14.25
415.1	4.59
445.5	28.83
475.6	19.88
506.0	16.40
536.3	18.89
566.5	26.84
596.8	26.25
627.1	28.17
657.5	61.35
674.4	71.58

DATE OF LOG
29 4 73

DEPTH (M)	GRADIENT (C/KM)
23.0	-1.54
38.4	-39.44
53.6	23.16
68.9	24.61
84.1	24.41
99.4	31.76
114.6	39.04
129.8	54.72
145.1	64.37
160.2	67.09
175.4	72.37
190.8	75.13
206.0	81.76
221.1	59.39
236.2	72.90
251.6	44.45
266.9	30.67
282.2	13.19
297.6	16.54
312.7	16.99
328.0	19.16
343.2	13.71
358.4	17.98
373.7	15.16
388.8	20.15
404.0	9.33
419.9	8.48
435.1	25.06
450.0	29.46
465.3	22.03
480.2	33.08

DATE OF LOG
29 4 73

DEPTH (M)	GRADIENT (C/KM)
495.3	16.86
510.7	17.63
526.1	17.78
541.3	17.59
556.4	23.97
571.7	27.66
587.0	25.59
602.3	27.62
617.5	32.55
632.9	34.35
648.2	27.65
663.2	74.93
678.5	44.36
693.9	31.91
709.1	66.49
724.2	20.41

EARTH PHYSICS BRANCH HOLE NO. 92 GARNIER O-21

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LATITUDE 73 DEGREES 40.90 MINUTES NORTH LONGITUDE 90 DEGREES 36.80 MINUTES WEST

ELEVATION 369 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DEPTH (M)	GRADIENT (C/KM)
	DATE 10 7 71
22.9	1.38
45.7	-4.76
76.2	-1.05
106.7	.82
137.2	-1.64
167.6	0.00
198.1	-1.97
228.6	-.66
259.1	-1.64
289.6	.98
320.0	-1.97
350.5	.98
381.0	-2.30
411.5	-30.18
442.0	26.57
472.4	-1.97
502.9	60.70
533.4	-12.14
563.9	-3.94
594.4	21.00

EARTH PHYSICS BRANCH HOLE NO. 94 DAHADINNI M-43A

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LATITUDE 63 DEGREES 53.00 MINUTES NORTH LONGITUDE 124 DEGREES 39.30 MINUTES WEST

ELEVATION 248 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG 25 3 72		DATE OF LOG 28 7 72		DATE OF LOG 25 6 73	
DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)
48.2	56.69	25.9	14.04	22.4	40.73
78.5	44.27	40.8	31.10	37.4	24.00
108.8	48.88	55.9	64.46	52.3	50.17
139.3	54.33	71.2	43.99	67.3	47.34
169.8	50.59	86.4	48.31	82.2	48.56
200.1	42.98	101.8	44.95	97.1	40.63
222.7	50.35	116.9	48.61	112.0	53.25
		132.1	46.96	126.9	47.27
		147.5	61.02	141.8	61.78
		162.6	53.23	156.9	48.47
		177.7	57.35	171.8	61.29
		192.9	44.82	186.4	65.01
		208.3	34.42	201.3	70.50
		223.7	46.39	216.2	38.11
				228.2	33.14

EARTH PHYSICS BRANCH HOLE NO. 95 ROWLEY M-04

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LATITUDE 69 DEGREES 4.00 MINUTES NORTH LONGITUDE 79 DEGREES 3.80 MINUTES WEST

ELEVATION 48 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG 20 5 72

DEPTH (M)	GRADIENT (C/KM)
24.4	-20.78
39.6	0.00
54.9	6.01
70.1	18.04
85.0	13.01
100.3	27.34
115.5	20.93
130.8	33.59
146.2	26.69
161.4	32.81
176.5	25.45
191.7	39.06
207.3	27.89
222.5	34.45
237.6	26.69
252.8	36.81
267.9	20.36
283.2	28.90
298.4	24.32
313.6	7.03
329.0	6.67
344.3	14.40
359.5	10.57
374.8	34.41
390.1	51.95
405.4	35.27
420.5	13.90
432.7	14.06

DATE OF LOG 12 7 72

DEPTH (M)	GRADIENT (C/KM)
14.9	-99.60
23.0	-615.48
30.6	-17.06
38.4	-6.31
46.2	2.62
53.9	5.05
61.7	9.19
69.5	11.36
77.3	11.81
85.0	15.14
93.0	16.40
100.7	22.31
108.4	21.00
116.1	22.71
124.1	26.50
132.0	25.24
139.9	25.24
147.7	28.87
155.3	32.81
163.1	30.28
171.0	29.02
178.6	28.71
186.4	26.73
194.2	34.18
201.8	30.28
209.7	36.59
217.5	27.56
225.1	31.50
233.0	27.95
240.9	28.87
248.6	28.87
256.3	27.76
264.3	27.76
272.0	27.56
279.8	25.24

DATE OF LOG 2 5 73

DEPTH (M)	GRADIENT (C/KM)
22.9	3.79
38.3	-2.08
53.8	6.75
69.3	12.19
84.6	15.50
100.0	23.23
115.2	24.41
130.5	26.84
145.8	29.33
161.2	28.28
176.5	30.77
191.6	32.14
206.5	34.42
221.7	30.11
237.3	29.14
252.7	27.62
267.8	28.46
283.0	20.71
298.4	30.84
313.5	8.10
328.4	7.63
343.5	11.55
358.8	16.21
374.0	19.69
389.2	57.61
404.6	36.35
420.0	15.94
432.4	14.71

DATE OF LOG 12 7 72

DEPTH (M)	GRADIENT (C/KM)
287.6	23.62
295.5	21.87
303.4	30.18
311.0	26.25
318.8	8.83
326.7	3.79
334.5	6.56
342.1	9.19
349.8	13.12
357.5	8.83
365.5	13.88
373.4	7.57
381.2	23.62
388.8	26.25
396.5	27.76
404.5	92.12
413.8	29.06
421.5	34.86
427.8	19.69
435.7	13.37
443.5	16.40
451.1	-3.79

EARTH PHYSICS BRANCH HOLE NO. 97 FOSHEIM N-27

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LATITUDE 79 DEGREES 36.90 MINUTES NORTH LONGITUDE 84 DEGREES 43.30 MINUTES WEST

ELEVATION 562 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DEPTH (M)	DATE 25 12 71 GRADIENT (C/KM)	DATE 26 12 71 GRADIENT (C/KM)	DATE 27 12 71 GRADIENT (C/KM)	DATE 30 12 71 GRADIENT (C/KM)
16.8	147.31	146.00	50.20	11.48
47.2	-76.77	-27.89	-37.40	-19.36
77.7	29.53	43.64	94.16	77.10
108.2	3.94	14.44	.33	-19.03
138.7	-14.11	-24.93	-14.76	1.97
169.2	78.74	99.41	109.91	
199.6	50.85	48.23	41.34	
230.1	-30.84	-34.78	-33.14	-26.57
260.6	59.38	64.63	69.23	68.24
291.1	28.87	20.67	11.81	14.11
321.6	24.61	42.65	64.96	70.87
352.0	13.78	17.72	24.93	28.54

EARTH PHYSICS BRANCH HOLE NO. 98 STORKERSON BAY A-15

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LATITUDE 72 DEGREES 54.00 MINUTES NORTH LONGITUDE 124 DEGREES 33.50 MINUTES WEST

ELEVATION 14 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG
10 5 72

DEPTH (M)	GRADIENT (C/KM)
51.8	7.22
82.3	10.83
112.8	17.39
143.3	24.93
173.7	25.26
204.2	29.20
234.7	17.06
265.2	33.14
295.7	19.69
326.1	67.26
356.6	-21.00

EARTH PHYSICS BRANCH HOLE NO. 99 DEVON E-45

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LATITUDE 75 DEGREES 4.30 MINUTES NORTH LONGITUDE 91 DEGREES 48.30 MINUTES WEST

ELEVATION 244 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG 18 5 72		DATE OF LOG 6 5 73	
DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)
48.8	5.25	23.3	20.84
79.2	12.47	39.0	2.46
		54.6	8.40
		69.8	9.51
		85.2	14.09
		99.5	18.92

EARTH PHYSICS BRANCH HOLE NO. 100 HUME RIVER O-53

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LATITUDE 65 DEGREES 52.00 MINUTES NORTH LONGITUDE 129 DEGREES 11.00 MINUTES WEST

ELEVATION 84 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG 25 3 72		DATE OF LOG 28 7 72		DATE OF LOG 26 6 73	
DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)
48.6	94.32	25.9	5.84	22.6	63.22
78.9	39.01	41.0	57.65		
109.4	72.18	55.9	48.01		
139.8	69.16	71.3	42.34		
170.1	48.56	88.2	53.44		
200.6	47.80	103.3	57.09		
231.0	53.71	117.0	68.64		
261.7	58.05	132.3	56.96		
279.5	57.80	147.5	75.85		
		162.8	56.23		
		178.0	39.11		
		193.4	61.76		
		208.8	42.52		
		224.0	48.49		
		239.3	52.36		
		254.5	55.25		
		269.7	57.28		

EARTH PHYSICS BRANCH HOLE NO. 151 WEST WHITEFISH RIVER H-34

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LATITUDE 65 DEGREES 33.40 MINUTES NORTH LONGITUDE 124 DEGREES 35.70 MINUTES WEST

ELEVATION 227 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG 29 7 72		DATE OF LOG 26 6 73	
DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)
26.2	31.36	22.4	36.17
41.3	21.36	37.3	54.98
56.1	-10.89	52.0	5.32
71.2	23.70	67.0	36.04
86.3	4.33	81.8	35.14
101.7	2.57	96.5	25.26
117.0	57.81	111.5	27.86
132.3	26.12	126.4	49.97
147.5	35.96	141.1	19.47
162.9	28.11	156.1	57.96
178.3	33.14	171.1	8.47
193.4	45.33	185.8	44.91
208.5	32.02	200.5	35.23
223.9	27.79	215.5	28.78
239.3	30.84	230.4	20.57
254.5	32.02	245.2	38.62
269.9	27.92	260.1	8.65
285.3	26.05	274.8	25.26
300.7	34.48	289.8	15.71
316.1	25.66	304.6	75.64
331.3	31.50	319.4	8.62
346.6	37.07	334.2	28.57

EARTH PHYSICS BRANCH HOLE NO. 155 KRISTOFFER BAY B-06

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LATITUDE 78 DEGREES 15.30 MINUTES NORTH LONGITUDE 102 DEGREES 32.00 MINUTES WEST

ELEVATION 15 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG 11 5 72

DEPTH (M)	GRADIENT (C/KM)
46.3	1.31
76.8	48.56
107.3	41.01
137.8	50.85
168.1	47.72
198.4	43.64
228.8	34.47
259.1	39.70
289.4	2.98
319.7	-15.09
350.2	70.54
380.5	76.88
410.9	41.67
441.4	60.70

DATE OF LOG 14 9 72

DEPTH (M)	GRADIENT (C/KM)
70.7	25.59
101.2	36.42
131.7	34.45
162.2	29.20
192.6	27.23
223.1	41.99
253.6	47.57
284.1	32.81
306.9	25.59
322.2	14.44
337.4	3.28
352.7	11.15
375.5	51.18
406.0	43.64
436.5	58.40
467.0	43.64
497.4	40.03
527.9	65.62
558.4	43.96
588.9	47.24
619.4	45.60
649.8	36.42

DATE OF LOG 13 5 73

DEPTH (M)	GRADIENT (C/KM)
22.9	94.95
38.1	49.08
53.3	33.60
68.4	35.08
83.7	44.97
99.1	38.98
114.3	40.29
129.4	38.77
144.6	32.68
160.0	33.92
175.3	31.04
190.3	35.15
205.6	29.59
221.0	42.59
236.2	53.02
251.5	40.49
266.7	41.34
281.9	39.57
297.0	33.34
312.3	38.28
327.7	31.69
342.9	25.00
358.1	31.17
373.4	48.56
388.6	53.08
404.0	40.01
419.1	46.07
434.2	70.83
449.7	56.80
464.8	52.90
479.9	53.33
495.5	54.94
510.7	55.77

DATE OF LOG 13 5 73

DEPTH (M)	GRADIENT (C/KM)
525.8	59.91
541.0	52.10
556.3	47.77
571.5	49.67
586.7	51.84
602.0	52.56
617.2	51.57
632.5	39.89
647.7	37.93
663.1	42.39
678.3	41.85
693.4	42.06
708.8	45.16
724.1	45.80
739.1	40.88
754.4	42.39
769.8	37.83
785.0	39.70

EARTH PHYSICS BRANCH HOLE NO. 158 BROCK I-20

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LATITUDE 77 DEGREES 59.70 MINUTES NORTH LONGITUDE 114 DEGREES 33.90 MINUTES WEST

ELEVATION 16 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG 16 9 72

DEPTH (M)	GRADIENT (C/KM)
79.2	31.99
93.0	43.31
108.2	43.96
123.4	47.24
138.7	51.18
153.9	51.18
169.2	58.40
184.4	40.03
199.6	40.03
214.9	7.22
227.1	42.65
234.7	100.07
239.3	72.18
246.9	-59.06
260.6	25.59
275.8	28.87
291.1	7.87
306.3	3.28
321.6	14.44
336.8	7.22
352.0	40.68
374.9	50.85
405.4	45.60
435.9	29.20
466.3	56.43
496.8	47.57
527.3	58.07
557.8	52.82
588.3	56.76
618.7	50.85
649.2	58.40
679.7	29.20

DATE OF LOG 12 5 73

DEPTH (M)	GRADIENT (C/KM)
22.9	7.53
38.2	-76.16
53.4	9.43
68.9	49.24
84.3	58.41
99.6	53.37
114.7	71.10
130.0	50.27
145.2	57.46
160.3	81.27
175.5	47.04
190.7	44.17
206.0	29.27
221.4	31.36
237.0	25.28
252.1	22.38
267.2	26.52
282.7	26.20
297.9	28.47
313.0	13.29
328.5	19.77
343.7	24.92
358.7	29.33
374.1	42.07
389.6	63.01
404.7	38.64
419.8	27.40
435.1	36.79
450.5	75.44
465.8	60.05
481.0	52.45
496.3	50.69
511.6	52.19
527.0	88.34
542.3	45.77

DATE OF LOG 12 5 73

DEPTH (M)	GRADIENT (C/KM)
557.4	61.36
572.6	71.25
587.9	63.65
603.2	59.59
618.3	50.58
633.4	63.65
648.8	68.18
664.3	49.05
679.5	34.18
694.8	27.90
710.4	32.43
725.7	37.58
740.6	38.57
755.9	44.79
771.5	47.17

EARTH PHYSICS BRANCH HOLE NO. 165 KILAGMIOTAK F-48

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LATITUDE 69 DEGREES 27.50 MINUTES NORTH LONGITUDE 134 DEGREES 11.90 MINUTES WEST

ELEVATION 20 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG 1 4 73		DATE OF LOG 19 6 73		DATE OF LOG 4 2 74	
DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)
23.8	127.82	22.3	63.87	26.8	96.22
38.4	49.90	37.2	30.46	50.0	26.54
53.3	0.00	52.1	-2.08	80.5	14.60
69.0	19.19	67.1	9.22	110.9	24.57
84.3	48.17	82.0	28.42	141.3	18.36
99.5	32.81	96.7	16.61	171.5	16.14
114.8	87.95	111.8	58.63	201.8	11.78
129.5	49.21	126.7	73.63	232.1	25.19
144.8	5.91	141.4	99.64	262.3	32.11
160.0	3.94	156.3	18.15	292.6	22.90
175.3	-5.25	171.1	-18.89	315.5	21.98
190.5	1.31	186.0	23.62		
205.7	1.31	200.9	9.68		
221.0	-1.31	215.8	-4.37		
236.2	-.66	230.7	-.87		
251.5	.66	245.6	7.13		
266.7	-.66	260.6	-2.50		
281.9	-1.97	275.5	2.81		
297.2	-.66	290.2	0.00		
312.4	0.00	305.1	0.00		
327.7	26.90	320.0	26.35		
342.9	-1.97				
358.1	-1.97				
373.4	-5.25				

EARTH PHYSICS BRANCH HOLE NO. 166 MOKKA A-02

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LATITUDE 79 DEGREES 32.20 MINUTES NORTH LONGITUDE 87 DEGREES 1.20 MINUTES WEST

ELEVATION 253 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DEPTH (M)	GRADIENT (C/KM)
	DATE 14 4 73
7.6	-104.99
22.9	-111.55
38.1	-111.55
53.3	0.00
68.6	39.37
83.8	32.81
99.1	39.37
129.5	0.00
160.0	32.81
175.3	-72.18
190.5	72.18
205.7	0.00
221.0	-72.18
236.2	0.00
251.5	111.55
266.7	0.00
281.9	39.37
304.8	-39.37
335.3	55.77
365.8	-16.40
396.2	16.40
426.7	0.00

EARTH PHYSICS BRANCH HOLE NO. 167 UNIPKAT I-22

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LATITUDE 69 DEGREES 11.70 MINUTES NORTH LONGITUDE 135 DEGREES 20.50 MINUTES WEST

ELEVATION 5 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG 1 4 73		DATE OF LOG 25 4 73		DATE OF LOG 20 6 73		DATE OF LOG 3 11 73		DATE OF LOG 4 2 74	
DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)
22.9	59.71	22.9	78.74	22.5	25.56	22.9	58.40	22.3	30.45
38.1	126.64	38.1	111.55	44.8	63.51	38.1	0.00	45.1	41.37
53.3	127.30	53.3	91.86	74.4	73.04	53.3	32.81	75.6	50.46
68.6	104.33	68.6	111.55	104.2	54.02	68.6	83.33	106.1	52.92
83.8	49.21	83.8	65.62	133.9	36.00	83.8	62.34	136.6	46.69
99.1	79.40	99.1	52.49	163.7	38.42	99.1	36.09	167.0	37.30
114.3	47.90	114.3	59.06	193.5	45.87	114.3	55.12	197.5	44.85
129.5	4.59	129.5	13.12	223.3	28.54	129.5	36.09	228.0	27.49
144.8	61.68	144.8	52.49	253.0	29.58	144.8	47.90	258.5	32.64
167.6	31.17	160.0	39.37	282.8	16.96	160.0	47.24	289.1	13.77
198.1	34.12	175.3	26.25	312.5	17.58	175.3	36.09	319.7	28.94
228.6	20.67	190.5	52.49	342.3	21.79	190.5	58.40	350.2	26.38
259.1	31.17	205.7	19.69	372.2	32.81	205.7	40.03	380.7	25.10
289.6	8.86	221.0	32.81	402.0	15.78	221.0	25.59	411.2	18.93
320.0	16.08	236.2	19.69	431.6	16.24	236.2	36.75	441.7	19.65
350.5	26.90	251.5	32.81	461.4	21.49	251.5	18.37	472.3	26.38
381.0	23.95	266.7	19.69	491.3	23.62	266.7	36.09	502.9	17.52
411.5	12.80	281.9	19.69	521.0	18.05	281.9	18.37	533.4	26.77
442.0	16.73	297.2	13.12	550.7	31.23	297.2	21.65		
472.4	29.20			580.4	20.27	320.0	18.37		
502.9	9.19			610.2	23.47	350.5	25.59		
533.4	30.51			640.0	19.16	381.0	25.26		
563.9	15.42			669.7	19.95	411.5	18.37		
594.4	32.48			699.5	21.86	442.0	18.04		
624.8	9.84					472.4	21.98		
655.3	19.69					502.9	18.37		
685.8	21.33					533.4	25.26		
716.3	42.65					563.9	25.59		
746.8	-.66					594.4	25.59		
						624.8	21.98		
						655.3	18.04		
						685.8	18.37		
						716.3	27.23		

EARTH PHYSICS BRANCH HOLE NO. 168 DUNDAS C-80

****

LATITUDE 74 DEGREES 39.00 MINUTES NORTH LONGITUDE 113 DEGREES 23.00 MINUTES WEST

ELEVATION 240 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG
28 4 73

DEPTH (M)	GRADIENT (C/KM)
32.6	15.06
69.8	23.18
118.0	40.92
159.3	20.13
194.8	25.88
227.9	37.86
260.1	31.86
291.9	26.63
322.8	38.63
353.7	23.38
384.4	8.99
414.8	28.94
445.3	18.64
475.8	14.47
506.3	24.51
536.6	53.72
567.1	41.45
597.7	32.09
628.2	34.97
648.0	26.25

EARTH PHYSICS BRANCH HOLE NO. 169 LOUISE BAY O-25

****

LATITUDE 78 DEGREES 44.90 MINUTES NORTH LONGITUDE 102 DEGREES 42.00 MINUTES WEST

ELEVATION 69 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG
11 5 73

DEPTH (M)	GRADIENT (C/KM)
45.8	47.54
76.5	54.64
107.0	62.25
137.7	52.98
168.3	56.87
198.5	57.77
228.9	60.46
259.6	55.01
290.3	57.48
320.8	56.69
351.2	58.09
381.8	52.29
412.3	53.24
442.8	56.02
473.4	57.17
503.9	61.16
534.5	73.31
565.0	68.04
595.5	62.64
626.1	81.20
656.8	73.82

EARTH PHYSICS BRANCH HOLE NO. 170 THOR P-38

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LATITUDE 78 DEGREES 7.80 MINUTES NORTH LONGITUDE 103 DEGREES 15.20 MINUTES WEST

ELEVATION 5 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG 13 9 72		DATE OF LOG 11 5 73	
DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)
40.5	32.81	22.9	42.82
71.0	34.45	38.3	35.28
101.5	29.20	53.4	36.08
132.0	49.21	68.7	40.01
162.5	62.01	84.0	32.28
192.9	52.82	99.3	29.47
223.4	47.57	114.5	42.43
253.9	62.01	129.8	53.04
284.4	61.68	145.1	55.40
308.8	69.99	160.3	56.51
333.1	72.83	175.6	55.14
363.6	54.79	190.9	55.20
386.5	54.46	206.2	58.35
409.3	54.79	221.3	55.19
439.8	54.79	236.7	65.05
470.3	50.85	252.1	74.17
493.2	51.18	267.2	74.72
		282.5	62.80
		297.8	64.57
		312.9	63.95
		328.2	58.30
		343.4	61.01
		358.7	56.63
		374.1	53.83
		389.4	53.76
		404.7	49.38
		419.9	53.76
		435.2	53.50
		450.6	51.88
		465.8	49.11
		480.9	49.31
		496.3	47.41
		511.6	40.67
		526.8	39.29
		542.1	44.07

EARTH PHYSICS BRANCH HOLE NO. 172 DRAKE B-44

****

LATITUDE 76 DEGREES 23.10 MINUTES NORTH LONGITUDE 109 DEGREES 16.10 MINUTES WEST

ELEVATION 4 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG
7 5 73

DEPTH (M)	GRADIENT (C/KM)
23.6	58.35
39.5	79.11
55.2	67.91
70.6	88.71
85.8	85.70
100.9	97.83
116.0	86.04
131.1	123.95
146.2	96.22
161.4	89.42
176.9	72.69
192.3	86.88
207.6	48.43
222.8	53.81
238.0	51.12
253.3	47.83
268.4	56.71
283.5	48.23
298.7	42.45
313.8	43.86
328.9	33.33
341.4	34.96

EARTH PHYSICS BRANCH HOLE NO. 173 NIGLINTGAK H-30

****

LATITUDE 69 DEGREES 19.40 MINUTES NORTH LONGITUDE 135 DEGREES 20.10 MINUTES WEST

ELEVATION 2 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG 20 4 73		DATE OF LOG 19 6 73		DATE OF LOG 3 11 73		DATE OF LOG 4 2 74	
DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)
21.0	98.43	22.3	32.47	22.9	7.22	44.2	14.24
36.3	-85.30	37.2	-19.30	38.1	0.00	74.7	7.12
51.5	19.69	52.2	-10.80	53.3	0.00	105.2	29.10
66.8	59.06	67.1	25.60	68.6	7.22	135.6	35.63
82.0	78.74	81.9	59.18	83.8	21.65	166.1	39.57
97.2	78.74	96.7	95.00	99.1	29.53	196.6	16.54
112.5	65.62	111.6	106.02	114.3	65.62	227.1	17.19
127.7	0.00	126.5	26.30	129.5	36.09	252.7	12.25
143.0	-6.56	141.4	.94	144.8	18.37		
158.2	26.25	156.4	18.71	160.0	18.37		
173.4	13.12	171.3	16.95	175.3	17.72		
188.7	6.56	186.0	15.77	190.5	18.37		
203.9	19.69	200.9	18.62	205.7	18.37		
219.2	26.25	215.8	26.42	221.0	18.37		
234.4	0.00	230.7	16.77	236.2	18.37		
249.6	26.25	245.6	5.78	251.5	17.72		
264.9	6.56	260.5	6.39	266.7	7.22		
280.1	-6.56	275.3	-.54				
		290.2	0.00				

EARTH PHYSICS BRANCH HOLE NO. 175 GEMINI E-10

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LATITUDE 79 DEGREES 59.40 MINUTES NORTH LONGITUDE 84 DEGREES 4.20 MINUTES WEST

ELEVATION 126 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG
30 4 73

DEPTH (M)	GRADIENT (C/KM)
52.1	-119.89
85.6	73.82
116.9	60.58
147.5	-5.51
178.0	70.18
208.3	43.02
238.8	-3.96
269.4	39.83
299.9	-27.62
330.4	5.54
361.0	-5.81
391.7	9.94
421.8	41.75
452.3	105.08
483.0	69.56
513.1	47.03
543.6	49.41
574.2	58.99
604.9	44.44
635.2	44.93
665.4	49.08
696.0	28.13
726.6	31.30
757.1	38.58
787.5	31.85

EARTH PHYSICS BRANCH HOLE NO. 176 YA YA P-53

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LATITUDE 69 DEGREES 12.80 MINUTES NORTH LONGITUDE 134 DEGREES 42.70 MINUTES WEST

ELEVATION 36 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG 19 6 73		DATE OF LOG 4 2 74	
DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)
22.4	21.67	47.5	28.25
44.7	34.62	78.0	19.72
74.6	19.89	108.5	28.54
104.4	66.59	139.0	15.09
134.4	-5.71	169.6	13.09
164.2	32.71	200.3	18.70
193.9	.87	230.7	23.39
223.7	4.22	261.2	10.93
253.5	3.52	291.7	23.39
283.3	.60	322.2	7.97
313.2	-1.11	352.7	9.68
343.0	-1.54	383.3	10.26
372.8	-3.56	413.9	31.92
402.6	58.98		
432.5	31.70		
462.3	22.96		
492.1	25.86		
521.9	24.66		
551.8	13.82		

EARTH PHYSICS BRANCH HOLE NO. 177 TITALIK K-26

****

LATITUDE 69 DEGREES 5.50 MINUTES NORTH LONGITUDE 135 DEGREES 6.30 MINUTES WEST

ELEVATION 12 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG
20 6 73

DEPTH (M)	GRADIENT (C/KM)
22.5	-37.94
37.4	-10.18
52.2	2.62
67.1	64.81
82.2	98.49
97.1	46.55
112.0	32.48
127.1	21.67
142.0	38.31
156.7	30.69
171.5	22.34
186.4	30.46
196.4	52.37

EARTH PHYSICS BRANCH HOLE NO. 178 PARSONS N-10

****

LATITUDE 68 DEGREES 59.80 MINUTES NORTH LONGITUDE 133 DEGREES 31.80 MINUTES WEST

ELEVATION 68 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG 21 6 73		DATE OF LOG 3 2 74	
DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)
22.2	-14.82	19.8	42.19
44.5	2.29	35.1	8.27
74.3	-4.74	50.3	4.92
104.1	-3.71	65.4	19.95
133.6	-5.62	80.6	16.34
163.2	12.16	95.9	12.52
192.9	-1.36	110.9	5.31
222.5	9.18	133.8	28.81
252.2	2.69	164.4	36.38
281.7	10.35	195.1	10.47
311.3	7.32	225.6	3.28
341.1	143.92	256.0	13.58
370.8	18.57	286.4	2.65
400.3	26.10	309.1	2.56
429.9	23.22	324.5	-.84
459.6	22.90	339.9	35.43
489.4	31.71	355.1	74.28
519.0	20.03	378.0	30.45
548.7	29.33	408.4	26.77
578.5	21.18	438.9	26.08
608.1	28.66	469.4	25.69
637.9	1.94	499.9	22.83
		530.4	31.63

EARTH PHYSICS BRANCH HOLE NO. 179 REINDEER F-36

****

LATITUDE 69 DEGREES 5.30 MINUTES NORTH LONGITUDE 134 DEGREES 39.00 MINUTES WEST

ELEVATION 10 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG 20 6 73		DATE OF LOG 3 2 74	
DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)
22.5	31.01	29.6	14.57
37.5	27.61	52.4	-4.69
52.5	-20.96	82.9	16.73
67.5	19.20	113.4	11.09
82.5	9.74	143.9	22.54
97.5	9.87	174.3	32.48
112.5	-52.21	204.8	30.68
127.5	31.94	235.3	16.67
142.5	6.33	265.9	25.56
157.5	-5.33	296.6	14.34
172.5	1.46	319.4	6.56
187.5	-12.67	334.7	42.52
202.5	-6.27		
217.5	30.54		
232.5	2.20		
247.5	-2.80		
262.5	-1.27		
277.5	3.27		
292.5	8.85		
307.5	-3.73		
322.5	8.47		
337.5	141.30		

EARTH PHYSICS BRANCH HOLE NO. 190 HACKETT RIVER 190-1

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LATITUDE 65 DEGREES 55.00 MINUTES NORTH LONGITUDE 108 DEGREES 28.20 MINUTES WEST

ELEVATION 425 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DEPTH (M)	GRADIENT (C/KM)
	DATE 20 8 73
19.6	37.69
32.6	-7.00
45.4	-15.72
58.0	7.95
70.5	1.61
82.9	-3.25
95.2	-1.63
113.5	2.46
137.7	11.18
161.8	5.85
185.8	4.15

EARTH PHYSICS BRANCH HOLE NO. 190 HACKETT RIVER 190-2

****

LATITUDE 65 DEGREES 55.00 MINUTES NORTH LONGITUDE 108 DEGREES 28.20 MINUTES WEST

ELEVATION 425 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE
20 8 73

DEPTH (M)	GRADIENT (C/KM)
18.4	55.60
30.3	0.00
41.9	0.00
53.1	27.02
64.1	-29.73
74.7	47.96
84.9	-36.44
99.8	-1.54
118.8	-1.08
136.9	17.86
154.9	0.00

EARTH PHYSICS BRANCH HOLE NO. 192 KUGPIK O-13

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LATITUDE 68 DEGREES 52.80 MINUTES NORTH LONGITUDE 135 DEGREES 18.20 MINUTES WEST

ELEVATION 2 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG 4 11 73		DATE OF LOG 5 2 74	
DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)
19.8	36.09	22.6	205.18
35.1	91.21	45.4	78.94
50.3	236.88	75.9	78.28
65.5	109.58	106.4	48.82
80.8	72.83	137.0	40.12
96.0	55.12	167.6	35.50
111.3	17.72	198.1	31.82
126.5	36.09	228.6	27.92
141.7	44.62	259.2	11.73
157.0	36.09	289.9	20.90
172.2	29.53	320.3	28.05
187.5	36.09	350.8	21.62
202.7	18.37	381.3	18.41
217.9	18.37	411.9	21.93
233.2	17.72	442.6	19.65
248.4	-17.72	473.2	37.81
263.7	7.22	503.8	18.04
278.9	28.87	534.3	24.05
294.1	7.22		
317.0	23.95		
347.5	18.04		
378.0	20.01		
408.4	16.40		
438.9	18.37		
469.4	36.42		
499.9	9.19		
530.4	27.23		
560.8	18.37		
591.3	26.57		
621.8	109.91		
652.3	9.19		
682.8	32.81		
713.2	23.62		

EARTH PHYSICS BRANCH HOLE NO. 193 IKHIL I-37

****

LATITUDE 68 DEGREES 46.60 MINUTES NORTH LONGITUDE 134 DEGREES 7.80 MINUTES WEST

ELEVATION 125 METERS

TEMPERATURE GRADIENT VERSUS DEPTH

DATE OF LOG 19 12 73		DATE OF LOG 3 2 74	
DEPTH (M)	GRADIENT (C/KM)	DEPTH (M)	GRADIENT (C/KM)
15.2	-55.77	19.8	21.33
45.7	-108.27	42.7	169.75
76.2	0.00	73.5	54.46
106.7	0.00	104.2	11.61
137.2	0.00	134.7	-.56
167.6	16.40	165.2	2.66
198.1	19.69	195.8	.62
228.6	16.40	226.5	.26
259.1	36.09	256.9	17.52
289.6	-16.40	287.6	-14.88
320.0	0.00	310.6	-2.56
350.5	154.20	326.0	13.77
381.0	26.25	341.4	237.99
411.5	55.77	356.8	53.97
442.0	19.69	379.8	36.02
472.4	36.09	410.3	61.75
502.9	36.09	440.7	13.29
533.4	16.40	471.2	34.58
		501.7	27.30

SECTION IV

Logarithmic Return to Equilibrium

EARTH PHYSICS BRANCH HOLE NO. 55 LOBITOS RESOLUTE BAY L-41

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LATITUDE 74 DEGREES 40.70 MINUTES NORTH LONGITUDE 94 DEGREES 44.60 MINUTES WEST

ELEVATION 61 METERS

LOGARITHMIC RETURN TO EQUILIBRIUM

DEPTH (M)	EQUILIBRIUM TEMPERATURE (C)	DELTA T(EQ) (C)	SOURCE FUNCTION (C)	DELTA S.F. (C)	TIME TO T(EQ)+0.1 (YEARS)
50	-14.37	.21	9.36	5.90	26.01
100	-13.28	.26	5.95	7.29	16.50
150	-12.38	.26	5.55	7.33	15.38

EARTH PHYSICS BRANCH HOLE NO. 62 NORTH CATH B-62

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LATITUDE 66 DEGREES 11.20 MINUTES NORTH LONGITUDE 138 DEGREES 41.60 MINUTES WEST

ELEVATION 535 METERS

LOGARITHMIC RETURN TO EQUILIBRIUM

DEPTH (M)	EQUILIBRIUM TEMPERATURE (C)	DELTA T(EQ) (C)	SOURCE FUNCTION (C)	DELTA S.F. (C)	TIME TO T(EQ)+0.1 (YEARS)
61.0	-1.45	.01	3.91	.11	7.29
152.4	3.25	.02	2.26	.18	4.18
243.8	7.98	.12	2.07	1.18	3.82
335.3	12.60	.02	1.69	.19	3.11
426.7	16.14	.01	1.04	.07	1.87
518.2	19.50	.02	.39	.22	.65
609.6	22.57	.01	.21	.15	.31
701.0	25.34	.01	-.14	.13	-.36
792.5	29.22	.01	.20	.07	.29

EARTH PHYSICS BRANCH HOLE NO. 63 REINDEER D-27

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LATITUDE 69 DEGREES 6.10 MINUTES NORTH LONGITUDE 134 DEGREES 36.90 MINUTES WEST

ELEVATION 29 METERS

LOGARITHMIC RETURN TO EQUILIBRIUM

DEPTH (M)	EQUILIBRIUM TEMPERATURE (C)	DELTA T(EQ) (C)	SOURCE FUNCTION (C)	DELTA S.F. (C)	TIME TO T(EQ)+0.1 (YEARS)
18.3	-7.20	.09	10.28	.31	50.73
79.2	-5.63	.11	8.07	.36	39.77
140.2	-3.97	.29	6.04	.98	29.73
201.2	-3.21	.06	4.20	.19	20.56
262.1	-1.71	.18	2.46	.61	11.98
323.1	-.54	.03	.52	.10	2.33
384.0	.31	.01	3.24	.03	15.82
445.0	1.87	.00	3.04	.02	14.81
506.0	3.38	.00	2.96	.01	14.45
566.9	4.88	.00	2.93	.02	14.27

EARTH PHYSICS BRANCH HOLE NO. 70 PROVIDENCE A-47

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LATITUDE 61 DEGREES 26.20 MINUTES NORTH LONGITUDE 117 DEGREES 22.50 MINUTES WEST

ELEVATION 162 METERS

LOGARITHMIC RETURN TO EQUILIBRIUM

DEPTH (M)	EQUILIBRIUM TEMPERATURE (C)	DELTA T(EQ) (C)	SOURCE FUNCTION (C)	DELTA S.F. (C)	TIME TO T(EQ)+0.1 (YEARS)
50	1.84	.03	1.18	.62	.34
100	5.05	.07	.69	1.50	.19
150	8.83	.10	3.14	2.02	.93
200	12.84	.15	1.92	3.12	.56
250	16.47	.19	3.05	3.99	.90
300	20.29	.27	3.50	5.60	1.04
350	22.92	.32	4.53	6.65	1.35
400	24.71	.09	1.25	1.92	.36
450	25.92	.15	2.03	3.18	.60

EARTH PHYSICS BRANCH HOLE NO. 73 WINTER HARBOUR

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LATITUDE 74 DEGREES 48.10 MINUTES NORTH LONGITUDE 110 DEGREES 30.60 MINUTES WEST

ELEVATION 22 METERS

LOGARITHMIC RETURN TO EQUILIBRIUM

DEPTH (M)	EQUILIBRIUM TEMPERATURE (C)	DELTA T(EQ) (C)	SOURCE FUNCTION (C)	DELTA S.F. (C)	TIME TO T(EQ)+0.1 (YEARS)
39.9	-14.90	.11	3.37	.26	17.72
79.9	-14.29	.10	4.31	.22	22.77
125.0	-13.51	.04	4.09	.08	21.60
175.0	-11.29	.03	4.49	.07	23.70
224.9	-9.01	.02	4.31	.06	22.77
280.1	-6.83	.08	4.59	.17	24.28
339.9	-5.33	.04	3.99	.08	21.04
399.9	-3.66	.06	3.01	.13	15.79
465.1	-2.23	.07	3.54	.17	18.63
534.9	-.01	.01	3.38	.04	17.80
605.0	2.38	.02	2.94	.06	15.43

EARTH PHYSICS BRANCH HOLE NO. 76 KUGALUK N-02

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LATITUDE 68 DEGREES 32.00 MINUTES NORTH LONGITUDE 131 DEGREES 31.30 MINUTES WEST

ELEVATION 213 METERS

LOGARITHMIC RETURN TO EQUILIBRIUM

DEPTH (M)	EQUILIBRIUM TEMPERATURE (C)	DELTA T(EQ) (C)	SOURCE FUNCTION (C)	DELTA S.F. (C)	TIME TO T(EQ)+0.1 (YEARS)
50	-2.08	.04	.61	.07	3.99
100	-.08	.02	.21	.04	1.14
150	1.49	.06	.29	.11	1.74
200	2.96	.04	.26	.07	1.48
250	4.27	.05	.27	.10	1.58
300	5.60	.06	.24	.11	1.36
350	6.89	.08	.26	.15	1.51
400	8.14	.09	.30	.18	1.81
450	9.41	.13	.38	.25	2.33
500	10.80	.13	.34	.26	2.08
550	12.21	.14	.32	.27	1.89
600	13.55	.14	.31	.28	1.83
650	14.88	.21	.43	.41	2.71

EARTH PHYSICS BRANCH HOLE NO. 77 HORTON RIVER

****

LATITUDE 69 DEGREES 51.40 MINUTES NORTH LONGITUDE 127 DEGREES 15.90 MINUTES WEST

ELEVATION 34 METERS

LOGARITHMIC RETURN TO EQUILIBRIUM

DEPTH (M)	EQUILIBRIUM TEMPERATURE (C)	DELTA T(EQ) (C)	SOURCE FUNCTION (C)	DELTA S.F. (C)	TIME TO T(EQ)+0.1 (YEARS)
50	-6.93	.10	7.88	.63	13.95
100	-3.55	.18	5.28	1.18	9.31
150	.74	.24	5.84	1.62	10.31
200	4.69	.24	6.10	1.57	10.77
250	7.68	.22	5.47	1.44	9.65
300	10.23	.19	5.11	1.28	9.01
350	12.97	.10	4.11	.65	7.23

EARTH PHYSICS BRANCH HOLE NO. 86 HOODOO DOME H-37

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LATITUDE 78 DEGREES 6.50 MINUTES NORTH LONGITUDE 99 DEGREES 45.60 MINUTES WEST

ELEVATION 156 METERS

LOGARITHMIC RETURN TO EQUILIBRIUM

DEPTH (M)	EQUILIBRIUM TEMPERATURE (C)	DELTA T(EQ) (C)	SOURCE FUNCTION (C)	DELTA S.F. (C)	TIME TO T(EQ)+0.1 (YEARS)
50	-15.07	.08	5.92	.19	38.60
100	-11.17	.09	3.91	.21	25.38
150	-8.35	.08	4.32	.18	28.10
200	-5.27	.01	3.56	.02	23.10
250	-1.99	.04	2.13	.10	13.71
300	.27	.02	3.11	.03	20.15
350	2.88	.00	2.44	.00	15.69
400	4.89	.04	2.44	.10	15.71
450	6.12	.00	2.01	.01	12.90
500	7.31	.03	1.87	.07	11.94
550	8.34	.01	1.90	.02	12.19

EARTH PHYSICS BRANCH HOLE NO. 89 BEAVER HOUSE CREEK H-13

****

LATITUDE 68 DEGREES 22.30 MINUTES NORTH LONGITUDE 135 DEGREES 33.00 MINUTES WEST

ELEVATION 68 METERS

LOGARITHMIC RETURN TO EQUILIBRIUM

DEPTH (M)	EQUILIBRIUM TEMPERATURE (C)	DELTA T(EQ) (C)	SOURCE FUNCTION (C)	DELTA S.F. (C)	TIME TO T(EQ)+0.1 (YEARS)
50	-5.64	.00	4.55	.00	15.30
100	-4.54	.00	4.25	.00	14.27
150	-2.25	.00	4.34	.00	14.58
200	.15	.00	4.09	.00	13.72
250	2.42	.00	4.23	.00	14.19
300	5.01	.00	3.32	.00	11.09
350	6.71	.00	2.71	.00	9.04
400	7.80	.00	2.75	.00	9.17
450	9.23	.00	2.39	.00	7.97
500	10.58	.00	2.61	.00	8.68
550	13.05	.00	2.60	.00	8.65
600	15.48	.00	2.37	.00	7.88
650	17.22	.00	2.10	.00	6.97
700	19.09	.00	2.29	.00	7.60
750	22.06	.00	1.87	.00	6.17
800	23.40	.00	1.33	.00	4.35
850	24.49	.00	1.24	.00	4.06
900	25.52	.00	1.13	.00	3.66

EARTH PHYSICS BRANCH HOLE NO. 91 JAMESON BAY C-31

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LATITUDE 76 DEGREES 40.20 MINUTES NORTH LONGITUDE 116 DEGREES 43.70 MINUTES WEST

ELEVATION 58 METERS

LOGARITHMIC RETURN TO EQUILIBRIUM

DEPTH (M)	EQUILIBRIUM TEMPERATURE (C)	DELTA T(EQ) (C)	SOURCE FUNCTION (C)	DELTA S.F. (C)	TIME TO T(EQ)+0.1 (YEARS)
50	-15.42	.00	3.42	.00	7.47
100	-14.17	.00	3.60	.00	7.89
150	-11.73	.00	3.79	.00	8.31
200	-8.06	.00	2.89	.00	6.30
250	-4.77	.00	3.89	.00	8.51
300	-3.43	.00	3.02	.00	6.59
350	-2.85	.00	5.30	.00	11.65
400	-2.01	.00	5.42	.00	11.91
450	-1.03	.00	4.09	.00	8.96
500	.46	.00	1.97	.00	4.26
550	1.34	.00	2.01	.00	4.36
600	2.62	.00	2.22	.00	4.82
650	4.09	.00	3.08	.00	6.72

EARTH PHYSICS BRANCH HOLE NO. 94 DAHADINNI M-43A

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LATITUDE 63 DEGREES 53.00 MINUTES NORTH LONGITUDE 124 DEGREES 39.30 MINUTES WEST

ELEVATION 248 METERS

LOGARITHMIC RETURN TO EQUILIBRIUM

DEPTH (M)	EQUILIBRIUM TEMPERATURE (C)	DELTA T(EQ) (C)	SOURCE FUNCTION (C)	DELTA S.F. (C)	TIME TO T(EQ)+0.1 (YEARS)
50	-.14	.11	1.08	.21	6.04
100	2.22	.03	1.24	.06	6.96
150	4.84	.06	1.13	.11	6.32
200	8.17	.11	-.14	.21	-1.16

EARTH PHYSICS BRANCH HOLE NO. 95 ROWLEY M-04

****

LATITUDE 69 DEGREES 4.00 MINUTES NORTH LONGITUDE 79 DEGREES 3.80 MINUTES WEST

ELEVATION 48 METERS

LOGARITHMIC RETURN TO EQUILIBRIUM

DEPTH (M)	EQUILIBRIUM TEMPERATURE (C)	DELTA T(EQ) (C)	SOURCE FUNCTION (C)	DELTA S.F. (C)	TIME TO T(EQ)+0.1 (YEARS)
50	-8.18	.01	.28	.11	.13
100	-7.52	.07	.23	1.19	.10
150	-6.22	.15	.08	2.56	.02
200	-4.72	.18	.60	3.04	.32
250	-3.14	.17	-.61	2.80	-.38
300	-1.83	.19	-.73	3.21	-.45
350	-1.23	.08	-.52	1.33	-.33
400	.31	.73	-3.86	12.03	-2.25

EARTH PHYSICS BRANCH HOLE NO. 99 DEVON E-45

****

LATITUDE 75 DEGREES 4.30 MINUTES NORTH LONGITUDE 91 DEGREES 48.30 MINUTES WEST

ELEVATION 244 METERS

LOGARITHMIC RETURN TO EQUILIBRIUM

DEPTH (M)	EQUILIBRIUM TEMPERATURE (C)	DELTA T(EQ) (C)	SOURCE FUNCTION (C)	DELTA S.F. (C)	TIME TO T(EQ)+0.1 (YEARS)
50	-14.07	.00	2.27	.00	4.56

EARTH PHYSICS BRANCH HOLE NO. 100 HUME RIVER D-53

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LATITUDE 65 DEGREES 52.00 MINUTES NORTH LONGITUDE 129 DEGREES 11.00 MINUTES WEST

ELEVATION 84 METERS

LOGARITHMIC RETURN TO EQUILIBRIUM

DEPTH (M)	EQUILIBRIUM TEMPERATURE (C)	DELTA T(EQ) (C)	SOURCE FUNCTION (C)	DELTA S.F. (C)	TIME TO T(EQ)+0.1 (YEARS)
50	.64	.00	.77	.00	1.23
100	2.83	.00	1.55	.00	2.55
150	5.88	.00	2.07	.00	3.43
200	8.73	.00	1.71	.00	2.83
250	11.06	.00	2.01	.00	3.33

EARTH PHYSICS BRANCH HOLE NO. 151 WEST WHITEFISH RIVER H-34

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LATITUDE 65 DEGREES 33.40 MINUTES NORTH LONGITUDE 124 DEGREES 35.70 MINUTES WEST

ELEVATION 227 METERS

LOGARITHMIC RETURN TO EQUILIBRIUM

DEPTH (M)	EQUILIBRIUM TEMPERATURE (C)	DELTA T(EQ) (C)	SOURCE FUNCTION (C)	DELTA S.F. (C)	TIME TO T(EQ)+0.1 (YEARS)
50	-1.63	.00	5.52	.00	3.75
100	.15	.00	-1.80	.00	-1.26
150	1.76	.00	-1.52	.00	-1.07
200	3.60	.00	-1.85	.00	-1.30
250	5.08	.00	-1.61	.00	-1.14
300	5.97	.00	1.17	.00	.77

EARTH PHYSICS BRANCH HOLE NO. 155 KRISTOFFER BAY B-06

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LATITUDE 78 DEGREES 15.30 MINUTES NORTH LONGITUDE 102 DEGREES 32.00 MINUTES WEST

ELEVATION 15 METERS

LOGARITHMIC RETURN TO EQUILIBRIUM

DEPTH (M)	EQUILIBRIUM TEMPERATURE (C)	DELTA T(EQ) (C)	SOURCE FUNCTION (C)	DELTA S.F. (C)	TIME TO T(EQ)+0.1 (YEARS)
50	-15.50	.00	4.55	.00	14.67
100	-12.28	1.29	3.67	1.84	11.82
150	-10.66	1.14	4.28	1.63	13.80
200	-9.43	.91	5.22	1.30	16.85
250	-7.26	.92	4.95	1.31	15.97
300	-4.92	1.04	3.79	1.48	12.21
350	-3.35	.72	2.81	1.02	8.99
400	-1.85	.44	4.65	.63	14.99
450	.87	.42	4.47	.59	14.40

EARTH PHYSICS BRANCH HOLE NO. 158 BROCK I-20

****

LATITUDE 77 DEGREES 59.70 MINUTES NORTH LONGITUDE 114 DEGREES 33.90 MINUTES WEST

ELEVATION 16 METERS

LOGARITHMIC RETURN TO EQUILIBRIUM

DEPTH (M)	EQUILIBRIUM TEMPERATURE (C)	DELTA T(EQ) (C)	SOURCE FUNCTION (C)	DELTA S.F. (C)	TIME TO T(EQ)+0.1 (YEARS)
100	-13.81	.00	8.91	.00	17.73
150	-10.62	.00	7.65	.00	15.20
200	-7.58	.00	6.68	.00	13.27
250	-6.03	.00	5.95	.00	11.79
300	-4.49	.00	4.75	.00	9.40
350	-3.29	.00	3.82	.00	7.55
400	-1.19	.00	4.28	.00	8.45
450	.91	.00	3.82	.00	7.53
500	3.94	.00	3.18	.00	6.27
550	7.17	.00	2.41	.00	4.73
600	10.65	.00	1.27	.00	2.44
650	13.78	.00	.59	.00	1.07

EARTH PHYSICS BRANCH HOLE NO. 165 KILAGMIOTAK F-48

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LATITUDE 69 DEGREES 27.50 MINUTES NORTH LONGITUDE 134 DEGREES 11.90 MINUTES WEST

ELEVATION 20 METERS

LOGARITHMIC RETURN TO EQUILIBRIUM

DEPTH (M)	EQUILIBRIUM TEMPERATURE (C)	DELTA T(EQ) (C)	SOURCE FUNCTION (C)	DELTA S.F. (C)	TIME TO T(EQ)+0.1 (YEARS)
50	-9.59	.17	6.74	.27	49.14
100	-9.04	.64	7.45	1.02	54.36
150	-9.08	1.22	11.31	1.93	82.67
200	-7.51	1.29	9.37	2.05	68.47
250	-5.37	.93	6.49	1.47	47.27
300	-2.50	.37	2.55	.58	18.32

EARTH PHYSICS BRANCH HOLE NO. 167 UNIPKAT I-22

****

LATITUDE 69 DEGREES 11.70 MINUTES NORTH LONGITUDE 135 DEGREES 20.50 MINUTES WEST

ELEVATION 5 METERS

LOGARITHMIC RETURN TO EQUILIBRIUM

DEPTH (M)	EQUILIBRIUM TEMPERATURE (C)	DELTA T(EQ) (C)	SOURCE FUNCTION (C)	DELTA S.F. (C)	TIME TO T(EQ)+0.1 (YEARS)
50	-1.63	.45	2.15	.34	10.32
100	.54	.37	3.27	.28	15.77
150	2.94	.39	3.11	.30	15.02
200	5.27	.31	2.84	.23	13.70
250	7.01	.34	2.61	.26	12.56
300	8.23	.31	2.50	.23	12.00
350	9.46	.37	2.39	.30	11.49
400	10.75	.39	2.36	.31	11.35
450	11.74	.39	2.24	.31	10.75
500	12.83	.44	2.25	.35	10.81
550	13.49	.51	2.51	.36	12.06
600	14.80	.49	2.42	.34	11.63
650	16.02	.52	2.23	.36	10.71
700	16.94	.56	2.30	.39	11.02

EARTH PHYSICS BRANCH HOLE NO. 170 THOR P-38

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LATITUDE 78 DEGREES 7.80 MINUTES NORTH LONGITUDE 103 DEGREES 15.20 MINUTES WEST

ELEVATION 5 METERS

LOGARITHMIC RETURN TO EQUILIBRIUM

DEPTH (M)	EQUILIBRIUM TEMPERATURE (C)	DELTA T(EQ) (C)	SOURCE FUNCTION (C)	DELTA S.F. (C)	TIME TO T(EQ)+0.1 (YEARS)
50	-15.94	.00	10.40	.00	7.94
100	-14.12	.00	9.50	.00	7.25
150	-11.65	.00	7.90	.00	6.02
200	-8.93	.00	8.81	.00	6.72
250	-5.58	.00	4.91	.00	3.73
300	-1.92	.00	2.00	.00	1.49
350	.86	.00	6.01	.00	4.57
400	3.58	.00	6.07	.00	4.62
450	6.12	.00	7.08	.00	5.39
500	8.52	.00	7.93	.00	6.05

EARTH PHYSICS BRANCH HOLE NO. 173 NIGLINTGAK H-30

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LATITUDE 69 DEGREES 19.40 MINUTES NORTH LONGITUDE 135 DEGREES 20.10 MINUTES WEST

ELEVATION 2 METERS

LOGARITHMIC RETURN TO EQUILIBRIUM

DEPTH (M)	EQUILIBRIUM TEMPERATURE (C)	DELTA T(EQ) (C)	SOURCE FUNCTION (C)	DELTA S.F. (C)	TIME TO T(EQ)+0.1 (YEARS)
50	-2.49	.23	2.16	.15	9.53
100	-2.17	.19	3.22	.12	14.32
150	-.04	.37	2.98	.24	13.25
200	1.25	.37	2.77	.24	12.29
250	2.12	.35	2.76	.23	12.25

EARTH PHYSICS BRANCH HOLE NO. 176 YA YA P-53

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LATITUDE 69 DEGREES 12.80 MINUTES NORTH LONGITUDE 134 DEGREES 42.70 MINUTES WEST

ELEVATION 36 METERS

LOGARITHMIC RETURN TO EQUILIBRIUM

DEPTH (M)	EQUILIBRIUM TEMPERATURE (C)	DELTA T(EQ) (C)	SOURCE FUNCTION (C)	DELTA S.F. (C)	TIME TO T(EQ)+0.1 (YEARS)
50	-7.74	.00	24.01	.00	16.41
100	-6.96	.00	30.01	.00	20.52
150	-5.93	.00	30.75	.00	21.02
200	-5.35	.00	33.50	.00	22.91
250	-3.63	.00	22.46	.00	15.35
300	-2.20	.00	12.87	.00	8.78
350	-1.21	.00	5.38	.00	3.65
400	-.74	.00	6.34	.00	4.31

EARTH PHYSICS BRANCH HOLE NO. 178 PARSONS N-10

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LATITUDE 68 DEGREES 59.80 MINUTES NORTH LONGITUDE 133 DEGREES 31.80 MINUTES WEST

ELEVATION 68 METERS

LOGARITHMIC RETURN TO EQUILIBRIUM

DEPTH (M)	EQUILIBRIUM TEMPERATURE (C)	DELTA T(EQ) (C)	SOURCE FUNCTION (C)	DELTA S.F. (C)	TIME TO T(EQ)+0.1 (YEARS)
50	-5.03	.00	2.78	.00	7.02
100	-4.09	.00	2.13	.00	5.35
150	-2.76	.00	1.22	.00	3.01
200	-1.24	.00	.51	.00	1.18
250	-.90	.00	.48	.00	1.11
300	-.53	.00	.49	.00	1.14
350	-.44	.00	2.57	.00	6.49
400	1.67	.00	2.39	.00	6.02
450	3.02	.00	2.30	.00	5.80
500	4.23	.00	2.40	.00	6.04

EARTH PHYSICS BRANCH HOLE NO. 179 REINDEER F-36

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LATITUDE 69 DEGREES 5.30 MINUTES NORTH LONGITUDE 134 DEGREES 39.00 MINUTES WEST

ELEVATION 10 METERS

LOGARITHMIC RETURN TO EQUILIBRIUM

DEPTH (M)	EQUILIBRIUM TEMPERATURE (C)	DELTA T(EQ) (C)	SOURCE FUNCTION (C)	DELTA S.F. (C)	TIME TO T(EQ)+0.1 (YEARS)
50	-7.12	.00	8.13	.00	11.96
100	-6.64	.00	7.93	.00	11.66
150	-5.56	.00	6.42	.00	9.42
200	-3.53	.00	3.58	.00	5.22
250	-2.21	.00	2.45	.00	3.55
300	-.88	.00	1.00	.00	1.41

EARTH PHYSICS BRANCH HOLE NO. 192 KUGPIK O-13

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LATITUDE 68 DEGREES 52.80 MINUTES NORTH LONGITUDE 135 DEGREES 18.20 MINUTES WEST

ELEVATION 2 METERS

LOGARITHMIC RETURN TO EQUILIBRIUM

DEPTH (M)	EQUILIBRIUM TEMPERATURE (C)	DELTA T(EQ) (C)	SOURCE FUNCTION (C)	DELTA S.F. (C)	TIME TO T(EQ)+0.1 (YEARS)
50	-1.25	.00	2.09	.00	10.49
100	.83	.00	3.84	.00	19.55
150	3.48	.00	3.34	.00	16.94
200	5.31	.00	3.22	.00	16.35
250	7.40	.00	2.39	.00	12.07
300	8.49	.00	2.09	.00	10.53
350	9.97	.00	1.87	.00	9.36
400	10.98	.00	1.83	.00	9.18
450	12.19	.00	1.65	.00	8.22
500	13.91	.00	1.44	.00	7.14

EARTH PHYSICS BRANCH HOLE NO. 193 IKHIL I-37

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LATITUDE 68 DEGREES 46.60 MINUTES NORTH LONGITUDE 134 DEGREES 7.80 MINUTES WEST

ELEVATION 125 METERS

LOGARITHMIC RETURN TO EQUILIBRIUM

DEPTH (M)	EQUILIBRIUM TEMPERATURE (C)	DELTA T(EQ) (C)	SOURCE FUNCTION (C)	DELTA S.F. (C)	TIME TO T(EQ)+0.1 (YEARS)
50	-10.90	.00	4.79	.00	30.75
100	-1.63	0.00	.84	0.00	5.14
150	-1.12	.00	.65	.00	3.91
200	-2.08	.00	1.32	.00	8.28
250	-3.07	.00	2.07	.00	13.14
300	-3.77	.00	2.51	.00	15.97
350	2.31	.00	1.04	.00	6.43
400	2.75	.00	2.17	.00	13.79
450	4.58	.00	2.22	.00	14.07
500	5.83	.00	2.38	.00	15.15